

*STAFF STUDY No. 7*

# Canada and World Trade

*by M. G. Clark*



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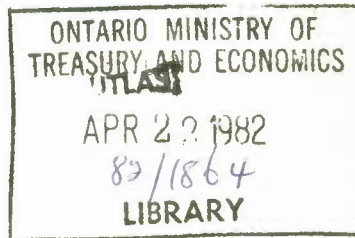
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CANADA AND WORLD TRADE

by  
M. G. Clark



Staff Study No. 7

Economic Council of Canada

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## CANADA AND WORLD TRADE

### I - INTRODUCTION

Participation in international trade enables nations to achieve larger and more specialized production units than would otherwise be possible. Among the advantages provided by scale and specialization are increased productivity, higher real incomes and improved standards of living. These advantages result from the fact that costs per unit of output tend to fall as volume rises. The efficiency of production depends on a division of labour which permits workers and employers to concentrate their efforts on the things they do best.

The extent to which nations participate in international trade is determined by a range of complex factors operating as ends, means and conditions. Some of the more important of these factors are the nature of indigenous resources, the growth of foreign demand, the size of the domestic market, the competitive strength of domestic producers compared with foreign producers at given rates of exchange, the level of both domestic and foreign barriers against trade and proximity to foreign markets. A rough indication of the degree to which industrialized countries now participate in international trade is provided in Appendix B, Table B-1. In general, countries with relatively small domestic markets appear to participate in trade to a greater extent than do countries with larger domestic markets.

Historically, international trade has been of prime importance in the economic life of Canada. In recent years merchandise exports have accounted for around 50 per cent of the output of goods in Canada and imports around 50 per cent of the total expenditure on goods. The degree to which different sectors of Canada's economy participate in international trade is, however, uneven. By and large Canadian industries producing raw or lightly processed industrial materials export the bulk of their output and secure the advantages of specialization and scale. Conversely Canadian producers of highly processed industrial materials and manufactured goods are generally oriented to the relatively small domestic market and do not obtain the maximum economies of specialization and scale. The cost disadvantages resulting from the latter situation are increased in comparison with the United States at least by two related facts: there tend to be more Canadian producers in relation to the size of the market than in the United States; and not infrequently Canadian plants produce a wider variety of products in relation to total output than American plants.<sup>1/</sup>

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<sup>1/</sup> See (a) D. H. Fullerton and H. A. Hampson, Canadian Secondary Manufacturing Industry, Royal Commission on Canada's Economic Prospects, Ottawa, 1957; and (b) Final Report, Royal Commission on Canada's Economic Prospects, Ottawa, 1957; Chapter 12.

The extent and pattern of Canada's participation in world trade has, of course, been influenced by trade barriers. Tariffs and other formal barriers to trade are instruments of commercial policy which affect the degree of international specialization achieved by national economies, the composition of exports and imports, productivity, costs, and standards of living. In a study prepared for the Royal Commission on Canada's Economic Prospects, Professor J. H. Young began a penetrating analysis of the economic effects of tariffs by observing that "the Canadian economy has developed under the influence of two sets of restrictions on trade: the set imposed by Canada, and that imposed by other countries".<sup>1/</sup> While barriers to trade are not by any means wholly responsible for shaping the development of the Canadian economy, they have been a significant influence.

Within this general framework this paper attempts to do four things; first, review the recent trends in world trade and Canada's performance in the light of them; second, describe some of the more important developments which have influenced recent world trends; third, outline some opportunities the Kennedy Round of Trade Negotiations could provide for improving Canada's performance in world trade; and fourth, consider briefly the question of institutional or noneconomic barriers to Canadian exports. The paper is limited largely to describing these trends, developments and opportunities. It does not attempt to make a detailed and comprehensive analysis of the many complex factors which affect Canada's participation in international trade. Nor does it attempt to examine the advantages, disadvantages and adjustment problems that could arise from a substantial reduction of the barriers Canada maintains against imports. Indeed there is obviously considerable scope for further research in these areas.

The main points to emerge from the paper may be summarized as follows:

- (a) World trade has grown rapidly since the last war, trade between the industrial countries has accounted for a large and growing share of world trade and trade in manufactured goods has grown faster than industrial materials and primary products.
- (b) During the last decade Canada's exports have grown more slowly than world exports and therefore its share of world exports declined fractionally. Similarly, Canada's exports to the industrial markets have grown less rapidly than exports from all countries. Canada's exports of manufactured goods to the

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<sup>1/</sup> See J. H. Young, Canadian Commercial Policy, Royal Commission on Canada's Economic Prospects, Queen's Printer, 1958: Ottawa, p. 63.



industrial markets have also grown more slowly than exports from other countries. In particular, Canada's exports of manufactures to the United States and European Free Trade Association (EFTA) --its two largest markets --have increased much more slowly than the exports of other countries. Perhaps even more significant is the fact that manufactured goods account for a smaller share of Canada's exports and a larger share of Canada's imports than of any other industrialized country. Since 1960, however, Canada's exports of manufactures have grown faster than world exports and substantially faster than its own earlier rate.

- (c) It appears that the Kennedy Round of Trade Negotiations, if successful, could provide important opportunities for Canadian industry to increase exports of manufactured goods and more highly processed forms of industrial materials. A large percentage of the tariff items covering exports of manufactured goods and highly processed forms of paper and base metals to the United States, Britain, European Economic Community (EEC) and Japan could be reduced to 10 per cent or less with only a small portion remaining above 15 per cent. In addition-- and for the first time in a post-war multilateral negotiation-- it is possible for countries to try to negotiate the reduction and elimination of a wide range of foreign nontariff barriers which are retarding their exports.

It will be helpful at this point to make clear two sets of terms which are used throughout this paper. The first set relates to the classification of countries as "industrial" and "other". The industrial countries include Austria, Belgium-Luxembourg, Britain, Canada, Denmark, France, Germany, Italy, Japan, Netherlands, Norway, Sweden, Switzerland and United States. Sometimes these fourteen countries are grouped in five industrial markets: Canada, EEC, EFTA, Japan and United States. The classification of a country as "industrial" or "other" in this paper is generally based on their per capita production of manufactures and the proportion of manufactures in their exports.<sup>1/</sup>

The second set of terms relates to commodities. Exports and imports have been classified in three groups: "primary products", "industrial materials" and "manufactured goods". In broad terms the primary products group includes foodstuffs, beverages, tobacco, raw materials and fuels. Industrial materials comprise lumber, pulp, newsprint

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<sup>1/</sup> See A. Maizels, Industrial Growth and World Trade, National Institute of Economic and Social Research, Cambridge University Press, 1963, p. 60.

and other papers, base metals worked and not worked, natural and synthetic rubber, vegetable oils and fats and synthetic textile fibres. Manufactured goods consist of chemicals, machinery and transport equipment, manufactures classified by material and miscellaneous manufactures. A detailed list of the products included in each of these three groups is set out in Appendix A. The groups are based on the Standard International Trade Classification. The allocation of products to the groups was guided generally by the degree of processing or manufacturing and the form of international trade statistics.

The division of commodity trade into three groups involved difficult problems of classification which could only be resolved by arbitrarily allocating certain products to one of the groups. Among difficult commodities to classify are chemicals. The bulk of Canada's chemical exports might be classified as industrial materials while a substantial amount of imports are manufactures. By and large, chemical products contain large amounts of value added including technology and science and, on balance, it was decided to consider them as manufactures. Despite obvious shortcomings, this classification probably provides a more accurate picture of Canada's performance in world trade than the more common division between primary products and manufactures only. In this later two-group division the movement of manufactures is sometimes distorted by placing in that group certain industrial materials such as newsprint, aluminum ingot and unwrought nickel.

II - TRENDS IN WORLD TRADE1. Growth of Exports

World trade has grown rapidly since the end of the last war. By 1948 world exports of commodities had increased to \$57 billion, thereby regaining the level reached in 1928.<sup>1/</sup> Exports continued to grow during the next fifteen years and totalled nearly \$152 billion in 1963 --an increase of 164 per cent.<sup>2/</sup> For the first time in nearly one hundred years world trade grew faster than world production for more than ten consecutive years.<sup>3/</sup> The average annual rate of growth of world exports declined from 7.5 per cent in the period 1948-53 to 5.5 per cent in 1953-58 and then accelerated to 7.1 per cent between 1958 and 1963.

During the last decade, eleven industrial countries (Japan, Italy, Germany, Austria, Belgium, Netherlands, Sweden, Denmark, Switzerland, Norway and France) increased exports more rapidly than the world average and secured a larger share of world exports. In contrast the exports of three industrial countries (Britain, Canada and the United States) grew less rapidly than the world average and their shares declined (see Table 1). Over the last eighty-odd years Canada secured a substantially larger share of world exports.<sup>4/</sup> Within this general trend, however, the Canadian share reached a peak of 6.2 per cent in 1952, declined to around 4.7 per cent from 1954 to 1959, declined further to 4.2 per cent in 1962 and remained at that level in 1963. In terms of dollar value

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<sup>1/</sup> With a few exceptions, the statistics used in this paper are current values. Unless otherwise indicated, all values in the paper are United States dollars. In several cases it would have been more appropriate to use volume figures instead of current values. It was not feasible, however, to secure volume figures for these purposes, especially in regard to analysis of the direction and composition of trade.

<sup>2/</sup> See Appendix B, Table B-2.

<sup>3/</sup> In the Presidential Address, entitled "Integration and Growth of the World Economy in Historical Perspective", delivered at the 76th Annual Meeting of the American Economic Association, Boston, 1963, Professor Gottfried Haberler said "It seems that for the first time in almost a hundred years world trade has grown faster than world production for a period of more than ten years. I mention this fact for two reasons, first, to convey an idea of the rapidity of the growth and, second, because so much has been made of the alleged fact that since the late nineteenth century international trade has in most countries grown less fast than national income. You will remember that years ago Werner Sombart tried to establish a 'historical law' of the 'declining importance of international trade'. This alleged tendency has held a strange fascination for many economists." American Economic Review, March 1964, p. 1.

<sup>4/</sup> See J. R. Downs, Export Projections to 1970, Table A-5, Staff Study No. 8, Economic Council of Canada: Queen's Printer, Ottawa, 1964.

however, Canada's exports increased from more than \$4 billion in 1954 to nearly \$6.5 billion in 1963.<sup>1/2/</sup>

Table 1  
Exports of Industrial Countries, 1954-63  
(Per cent of current values)

	Rate of Growth	Shares	
	1954 to 1963	1954	1963
World	76.4	100.	100.
Japan	234.4	1.9	3.6
Italy	208.1	1.9	3.3
Germany (F.G.R.)	161.0	6.5	9.6
Austria	117.4	0.7	0.9
Belgium	110.4	2.7	3.2
Netherlands	105.6	2.8	3.3
Sweden	102.3	1.9	2.1
Denmark	97.4	1.1	1.3
Switzerland	96.7	1.4	1.6
Norway	84.0	0.67	0.71
France	83.8	5.1	5.3
Canada	60.1	4.7	4.2
Britain	53.8	8.6	7.5
United States	53.3	17.4	15.1

Source: UN Yearbook of International Trade Statistics, 1962.  
UN Monthly Bulletin of Statistics, September, 1964.

Exports are an important part of total demand for goods in most industrial countries and their increase should accelerate the rate of economic growth. Table 2 shows that during the past decade the industrial countries which had the highest rates of economic growth have generally been those that expanded their exports -- and undoubtedly their imports -- most rapidly.

<sup>1/</sup> See Appendix B, Table B-2.

<sup>2/</sup> Most of the trends identified in Part II are for the period 1954-63. It is recognized of course that this is a relatively short period in which to attempt to identify trends. It is doubtful however if selection of a longer period would have been helpful because of the short-term economic effects of the war. The selection of 1954 represents a compromise between securing the longest period possible consistent with avoiding most of the distortions brought about by the war.

Table 2

Growth of Real Gross National Product and Export Volume of  
Industrial Countries, 1953-54 to 1962-63

(Per cent per year)

	GNP		Exports	
	Rank	Growth	Rank	Growth
Japan	1	9.6	1	17.2
Germany (F.G.R.)	2	7.3	3	11.2
Italy	3	6.0	2	15.3
Austria	4	5.9	4	10.0
France	5	5.1	8	7.9
Denmark	6	4.2	9	6.9
Netherlands	7	4.2	6	8.2
Sweden	8	4.0	7	8.0
Canada	9	3.8	11	4.4
Norway	10	3.5	10	6.6
United States	11	3.1	13	2.8
Belgium	12	2.9	5	8.3
Britain	13	2.5	12	3.1

Note: Figures for Austria, Denmark and Norway are for period 1953-54 to 1961-62.

Source: Real GNP - Economic Council of Canada.  
Export Volume - OECD, Foreign Trade, Series A.

## 2. Direction of Exports and Imports

The industrial countries account for a large and growing share of world trade. In the past decade exports of industrial countries have grown by 7.4 per cent a year while the exports of other countries have increased by 5.2 per cent annually. Over the same period imports by industrial countries grew at an annual rate of 7.7 per cent and those of other countries by 5.5 per cent. As a result of these disparate rates of growth the industrial countries increased their share of world exports from 57 per cent in 1954 to nearly 62 per cent in 1963, and of world imports from 55 per cent in 1954 to 60 per cent in 1963 (see Table 3).<sup>1/</sup>

<sup>1/</sup> The data shows that total world imports grew more rapidly than world exports. There is no ready explanation for this discrepancy.

Table 3

## Growth and Share of World Exports and Imports, 1954 and 1963

(Billions of \$ U.S. and per cent)

	1954		1963		Increase		
	\$	%	\$	%	\$	%	%*
Exports from:							
Industrial Countries	49.4	57.4	93.8	61.7	44.4	89.9	(7.4)
Other Countries	36.7	42.6	58.1	38.3	21.4	58.3	(5.2)
Total Exports	86.1	100.	151.9	100.	65.8	76.4	(6.5)
Imports to:							
Industrial Countries	49.1	55.5	95.6	60.0	46.5	94.7	(7.7)
Other Countries	39.4	44.5	63.9	40.0	24.5	62.2	(5.5)
Total Imports	88.5	100.	159.5	100.	71.0	80.2	(6.8)

Note: Export values are on an f.o.b. basis while imports are c.i.f. for all countries except Canada and the United States which are also f.o.b.

\* Average annual percentage increase in brackets.

Source: UN Yearbook of International Trade Statistics, 1962.  
UN Monthly Bulletin of Statistics, September, 1964.

A "particularly striking characteristic of world trade" is that the industrial countries "tend to export far more to the countries within their own group than they do to countries outside the group".<sup>1/</sup> Exports by industrial countries between 1954 and 1963 to their own group grew twice as fast as their exports to other countries -- 9.3 per cent and 4.7 per cent per year respectively. The exports of industrial countries to each other accounted for 53 per cent of their total exports in 1954 and nearly 63 per cent in 1963 (see Table 4).

Table 4

## Exports from Industrial Countries, 1954 and 1963

(Billions of \$ U.S. and per cent)

	1954		1963		Increase		
	\$	%	\$	%	\$	%	%*
To:							
Industrial Countries	26.5	53.4	59.1	62.7	32.6	123.0	(9.3)
Other Countries	23.1	46.6	35.0	37.3	11.9	51.5	(4.7)
World	49.6	100.	94.1	100.	44.5	89.7	(7.4)

Note: \* Average annual percentage increase in brackets.

Source: UN Yearbook of International Trade Statistics, 1962.  
UN World Trade Annual, 1963.

<sup>1/</sup> See United Nations, A Review of Trends in World Trade, E/Cong. 46/12, 26 February, 1964, p. 20.

Among the industrial markets, the EEC is by far the largest importer, with EFTA second and the United States third. The most rapidly growing markets over the past decade were Japan, EEC and United States, in that order. As a result of different rates of growth, the EEC replaced EFTA as the largest market and Japan became a bigger market than Canada. Table 5 provides an indication of the size and growth of the industrial markets.<sup>1/</sup>

Table 5  
Imports by Industrial Markets, 1954 and 1963  
(Billions of \$ U.S.)

	EEC	EFTA	U.S.	Japan	Canada
	\$	\$	\$	\$	\$
1954	12.0	12.2	10.2	2.4	4.2
1963	24.6	19.3	17.0	6.7	6.1
Average annual Percentage Increase	8.3%	5.2%	5.8%	12.2%	4.2%

Note: Excludes intra EEC and EFTA trade.

Source: UN Commodity Trade Statistics.

In the past decade around 85 per cent of Canada's exports have gone to the industrial markets. Imports by these markets from Canada increased from slightly more than \$3.5 billion in 1954 to almost \$5.8 billion in 1963. Despite this substantial increase, imports by each industrial market from Canada have grown less rapidly than the average for imports from all countries (see Table 6). In addition, the growth of imports to each of these markets from Canada is substantially below that of other industrial countries, except in the case of Japan where imports from the United States have grown at a slower rate. By way of example, United States imports from Canada increased by 5.5 per cent a year while imports from EFTA increased by 8.4 per cent, from the EEC 12 per cent, from Japan 21 per cent and from all other countries 8.6 per cent. Similarly, the EEC's imports from Canada grew at an annual rate of 7.3 per cent compared to 10 per cent from EFTA and 12.1 per cent from the United States. EFTA's imports from Canada also grew much more slowly than those of the United States and EEC. As a result of these relatively slow rates of growth, Canada's share of the total imports of each industrial market declined fractionally.<sup>1/</sup>

<sup>1/</sup> See Appendix B, Table B-4

Table 6

Rates of Growth of Imports to Industrial Markets  
by Origin and Destination, 1954-63

(Per cent per year of current values)

From \ To	Canada	U.S.	EFTA	EEC	Japan
	%	%	%	%	%
Canada	-	5.5	3.9	7.3	11.2
United States	3.4	-	7.3	12.1	10.5
EFTA	3.5	8.4	-	10.0	16.6
EEC	10.2	12.0	8.1	-	15.6
Japan	22.3	21.0	16.1	23.0	-
Other	5.8	8.6	3.2	6.2	12.7
Average for all Imports	4.2	5.8	5.2	8.3	12.2

Note: Excludes intra EEC and EFTA trade.

Source: UN Commodity Trade Statistics.

### 3. Composition of World Trade

Manufactured goods have been the most rapidly growing commodities in world trade. Table 7 shows that from 1954 to 1963 imports by the industrial countries of manufactured goods increased by \$23.7 billion (196 per cent), primary products by \$15.1 billion (54 per cent) and industrial materials by \$5.6 billion (70 per cent). The annual rate of growth of imports of manufactures during these years was nearly triple the rate of primary products and more than double that of industrial materials. The proportion of manufactured goods to total imports by these countries increased from 25 per cent in 1954 to nearly 38 per cent in 1963 while primary products declined from 57 per cent to 45 per cent and industrial materials decreased from nearly 17 per cent to 15 per cent. The imports of manufactured goods and industrial materials by these countries from Canada grew at annual rates of 8.9 and 3.3 per cent respectively or more slowly than imports from all countries. At the same time imports of primary products from Canada increased by 6.6 per cent a year or more rapidly than imports from all countries.

Table 7

Composition of Imports by Industrial Countries, 1954 and 1963

(Billions of \$ U.S. and per cent)

	1954		1963		Increase		
	\$	%	\$	%	\$	%	%*
Primary Products	27.8	57.2	42.9	45.4	15.1	54.4	( 4.9)
Industrial Materials	8.1	16.6	13.7	14.5	5.6	70.4	( 6.1)
Manufactured Goods	12.1	25.0	35.8	37.9	23.7	196.2	(12.8)

Note: \* Average annual percentage increase in brackets.

Source: UN Commodity Trade Statistics.



In 1963 manufactured goods accounted for a smaller share of Canada's exports and a larger share of Canada's imports than of any other industrialized country. Moreover manufactures account for a significantly smaller share of Canada's exports than of other countries who are also large producers of industrial materials and primary products such as Sweden and Norway (see Table 8).

Table 8

Imports and Exports of Industrial Countries by Commodity Groups, 1963  
(Per cent of current values)

	Manufactured Goods		Industrial Materials		Primary Products	
	Exports	Imports	Exports	Imports	Exports	Imports
Switzerland	89	58	3	12	7	30
Germany (F.G.R.)	78	31	11	16	10	45
Japan	76	21	16	7	8	72
Britain	74	24	10	16	13	60
Italy	72	36	6	18	22	46
France	61	37	13	15	26	48
United States	58	33	8	20	31	45
Austria	53	59	34	8	11	32
Belgium-Luxembourg	53	50	27	13	18	37
Sweden	50	58	38	11	12	31
Netherlands	48	52	9	12	42	34
Denmark	38	53	3	14	58	33
Norway	31	63	41	9	27	28
Canada	19	63	39	8	42	27

Source: UN Commodity Trade Statistics.  
OECD Foreign Trade, Series B.

Although manufactured goods accounted for a larger share of the exports of all industrialized countries except the United States in 1963 than in 1954, the increase in manufactures as a proportion of Canadian exports was relatively small compared to that of other countries such as Denmark, Norway and Sweden (see Table 9).<sup>1/</sup> In this period the proportion of manufactures in Canadian exports increased from 17 to 19 per cent. In the same period, Denmark made substantial progress towards changing the emphasis of its exports from the traditional agricultural products to manufactured goods. Primary products as a share of Danish exports declined from 75 per cent to 58 per cent while manufactures increased from 22 per cent to 38 per cent. Similarly the emphasis of Swedish exports changed from the traditional primary products (e.g., iron-ore) and industrial materials (e.g., wood pulp) towards manufactured products. In 1954 Swedish exports of industrial

<sup>1/</sup> The proportion of manufactured goods in the imports of these countries also increased during this period. This development in the composition of both imports and exports seems to reflect a growing specialization in the production of manufactures.

materials accounted for 45 per cent of total exports, manufactured goods 37 per cent and primary commodities 18 per cent, whereas in 1963 manufactures were 50 per cent, industrial materials 38 per cent and primary commodities 12 per cent.

Table 9

Portion of Manufactured Goods in Exports of Industrial Countries  
1954 and 1963

(Per cent of current values)

	1954	1963	Increase
	%	%	%
Denmark	22	38	72.7
Norway	21	31	47.6
Sweden	37	50	35.1
Italy	54	72	33.3
Austria	42	53	26.2
Netherlands	39	48	23.1
France	51	61	19.6
Belgium-Luxembourg	45	53	17.8
Canada	17	19	11.8
Japan	71	76	7.0
Germany (F.G.R.)	73	78	6.8
Britain	73	74	1.4
United States	62	58	-6.5

Note: 1954 Statistics for Switzerland are not available.

Source: UN Commodity Trade Statistics.  
OECD, Foreign Trade, Series B.

EFTA imports more manufactured goods than any other market with the EEC a close second and the United States third. From 1954 to 1963 the most rapidly growing markets were Japan, the United States and EEC in that order. Table 10 outlines the size and growth of the industrial markets for manufactures.<sup>1/</sup>

Table 10

Imports of Manufactured Goods by Industrial Markets, 1954-63

(Billions of \$ U.S.)

	EFTA	EEC	U.S.A.	Canada	Japan
	\$	\$	\$	\$	\$
1954	2.6	2.0	1.6	2.4	0.3
1963	6.7	6.5	5.5	3.8	1.4
Average Annual Percentage Increase	11.1%	14.2%	14.8%	5.1%	19.6%

Note: Excludes intra EEC and EFTA Trade.

Source: UN Commodity Trade Statistics.

<sup>1/</sup> See Appendix B, Table B-5

Around 75 per cent of Canada's exports of manufactured goods went to the industrial markets in the past decade. Canadian exports of manufactures to these markets increased from \$500 million in 1954 to nearly \$950 million in 1963. Table 11 shows, however, that Canadian exports to the United States and EFTA have grown less rapidly than the average for all countries. For example, United States imports of manufactured goods from Canada grew at an average annual rate of 8.1 per cent while those from EFTA increased by 10.9 per cent, from EEC by 16.2 per cent and from all countries 14.8 per cent. This relatively slow rate of growth reduced Canada's share of United States imports of manufactures from 21 per cent in 1954 to 12 per cent in 1963.<sup>1/</sup> Similarly EFTA imports of manufactures from Canada increased by 6.8 per cent a year compared to 13.1 per cent from the United States, 11 per cent from the EEC and 11 per cent from all countries and Canada's share of total EFTA imports declined. On the other hand, Japan and the EEC's imports of manufactures from Canada increased by 39 per cent and 22 per cent respectively a year -- substantially above the average for all countries -- and its share of these markets increased. Such imports by the EEC and especially Japan were, however, at low levels in 1954 and those to Japan are still very small.

Table 11

Rate of Growth of Imports of Manufactured Goods  
to Industrial Markets by Origin and Destination  
1954-63

(Per cent per year of current values)

To	Canada	U.S.	EFTA	EEC	Japan
From	%	%	%	%	%
Canada	-	8.1	6.8	22.0	39.0
United States	4.4	-	13.1	15.4	17.7
EFTA	3.7	10.9	-	12.6	18.2
EEC	13.2	16.2	11.0	-	25.0
Japan	26.0	24.0	19.1	26.0	-
Other	14.9	17.2	9.6	15.8	28.0
Average for All Imports	5.1	14.8	11.1	14.2	19.6

Note: Excludes intra EFTA and EEC Trade.

Source: UN Commodity Trade Statistics.

The classification of manufactured goods followed in this paper can be easily divided into four categories -- machinery and transport equipment, chemicals,

<sup>1/</sup> See Appendix B, Table B-5

manufactures classified by materials and miscellaneous manufactures.<sup>1/</sup> In 1963 machinery and transport equipment accounted for 47 per cent of the imports of manufactures by the industrial countries, manufactures classified by material 24 per cent, miscellaneous manufactures 15 per cent and chemicals 14 per cent (see Table 12). Miscellaneous manufactures comprised the most rapidly growing category with machinery and transport equipment second.

Table 12

Imports of Manufactured Goods to Industrial Countries  
by Main Commodity Categories, 1954 and 1963

(Billions of \$ U.S. and per cent)

	Machinery and Transport Equipment		Chemicals		Classed by Materials		Miscellaneous Manufactures		Total	
	\$	%	\$	%	\$	%	\$	%	\$	%
1954	5.2	(43)	2.0	(17)	3.4	(28)	1.5	(12)	12.1	(100)
1963	16.7	(47)	4.9	(14)	8.6	(24)	5.6	(15)	35.8	(100)
Average Annual Increase		13.8%		10.5%		10.9%		15.8%		12.8%

Source: UN Commodity Trade Statistics.

Table 13 presents a breakdown of imports by the industrial markets of Canadian manufactured goods by these four categories in 1954 and 1963. A comparison of Tables 12 and 13 shows that in 1963 the composition of Canadian imports was similar to that of imports from the world. Conversely the growth of imports from Canada of machinery and transport equipment, chemicals and manufactures classified by materials was substantially below the world rate. It should be mentioned at this juncture that from 1960 to 1963 imports of Canadian manufactures grew much more rapidly than from 1954 to 1960. This development is elaborated in a subsequent section.

Table 13

Imports of Manufactured Goods to Industrial Markets  
from Canada by Main Commodity Categories, 1954 and 1963

(Millions of \$ U.S. and per cent)

	Machinery and Transport Equipment		Chemicals		Classed by Materials		Miscellaneous Manufactures		Total	
	\$	%	\$	%	\$	%	\$	%	\$	%
1954	157.5	(38)	145.4	(35)	101.6	(24)	13.8	(3)	418.3	(100)
1963	452.3	(50)	218.0	(24)	176.8	(20)	51.5	(6)	898.6	(100)
Average Annual Increase		12.4%		4.6%		6.3%		15.8%		8.9%

Source: UN Commodity Trade Statistics.

<sup>1/</sup> See Appendix A for an outline of the contents of each category.

A recent study has pointed out that the composition of world trade in manufactures is continuously changing:

"The pattern of world trade in manufactures is changing constantly as industrial development goes on. Indeed, the rise of new industries and the relative decline of old ones may have a more dramatic effect on the composition of world trade than on that of home output. Typically, when a new industry is established, it begins in one or two countries. For some years, these countries will be the only suppliers of the world, and exports will rise faster than production. But as the industry becomes established more and more countries will introduce it; exports of the product will begin to rise more slowly than total world exports, and some new product or group of products will take its place as the fastest-growing element in world trade.

"This is the process which we have seen in the last hundred years, as the pattern of world trade, once dominated by textiles, was reshaped first by the rise of the iron and steel, railway and shipbuilding industries, and then by the inventions and product developments at the end of the last century which led to the great twentieth century industries of automobiles and electrical engineering. The reshaping has continued since the Second World War -- with, for instance, electronics, petro-chemicals and plastics. All these changes have brought about a consistent increase since the beginning of this century in the share of three major categories in world trade -- machinery, transport equipment and chemicals." <sup>1/</sup>

One further trend of trade in manufactured goods might be noted. There appears to be a growing trade between the industrial countries themselves in manufactured goods. This exchange of manufactures for manufactures seems to arise from specialization, economies of scale, patents and other technological factors. This trade reflects the growing interdependence of the industrial countries in manufactures. Three of many examples of this intra-trade in manufactures are outlined below:

- (a) The portion of manufactured goods in the imports of highly industrialized countries has virtually doubled in the last decade. Manufactures accounted for nearly 16 per cent of United States imports in 1954 and slightly more than 32 per cent in 1963. Similarly, during the same period the portion of manufactures in the imports of Britain increased from 12 to 24 per cent, Germany from 15 to 31 per cent, France 18 to 36 per cent and Japan 12 to 21 per cent.
- (b) From 1954 to 1963, EEC exports of machinery and transport equipment to the United States increased from \$104 million to \$813 million or by an average of 26 per cent a year. Exports of the same commodities in the

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<sup>1/</sup> National Institute of Economic and Social Research, Fast and Slow-Growing Products in World Trade, Economic Review, London, August 1963, p. 22.

opposite direction grew from \$318 million to more than \$1.1 billion or by an average of nearly 14 per cent a year. In 1963 this two-way trade totalled more than \$1.9 billion.

- (c) Intra EEC trade in nonelectrical machinery increased from \$445 million in 1954 to more than \$2 billion in 1963. All members of the EEC participated in this growing trade. Exports of these products from Italy and France increased at an annual rate of 25 per cent each, the Netherlands nearly 21 per cent, Belgium and Luxembourg 19 per cent and Germany 16 per cent.

### III - UNDERLYING DEVELOPMENTS

The flow of world trade during the post-war years has, of course, been affected by many complex developments. A number of these developments are closely interwoven and difficult to disentangle. In addition some factors influenced trade throughout most of the post-war period while others made an impact for part of the period only. Among longer run developments were the rapid growth of world demand; a number of technological advances which brought about savings in the use of materials, the substitution of synthetics for natural materials and the decline of transportation and communication costs relative to the costs of production; and the substantial reduction of trade barriers on industrial commodities. Some shorter run influences have been the reconstruction of the war-damaged economies of Western Europe and Japan, the relatively slow growth of the United States, British and Canadian economies during recent years, and changes in the value of national currencies in terms of the U.S. dollar. An attempt will be made to outline some of the more important developments which have had a general and continuing influence on trade under three headings: World Production and Trade, Science and Technology, and Barriers to Trade.

Limiting the following comments to long-run developments does not imply that short-run factors were unimportant. This point might be given emphasis by reference to the way a juxtaposition of short-run developments in the early 1950's affected the Canadian economy. It will be recalled that an important feature of this period was the expenditure of exceptionally large amounts of money on the discovery, development and marketing of natural resources such as oil, gas, iron ore and water power. It seems generally agreed that these efforts were stimulated by international political events which helped make Canada a preferred country in which to invest substantial amounts of capital for resource development purposes. These investments, in turn, made an important contribution to the continued resource orientation of Canadian exports.

#### 1. World Production and Trade

An important reason for the rapid growth of world trade has been the rapid growth of world production. At the same time the expansion of world trade has contributed to the growth of the world economy. Professor Gottfried Haberler summarized the situation by observing that, "the rapid rise in world trade is the consequence of, but has also powerfully contributed to, the rapid growth of world production."<sup>1/</sup>

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<sup>1/</sup> Gottfried Haberler, op. cit.

From 1949 to 1963 real industrial production in the United States, West European countries and Japan grew at an annual rate of 5.6 per cent whereas between 1926 and 1938 it increased by 2.3 per cent a year. During the same periods the volume of world exports increased at annual rates of 6.3 per cent and 0.5 per cent respectively. In addition, industrial production in these countries increased almost as rapidly between 1958 and 1963 (6.2 per cent a year) as between 1949 and 1954 (6.5 per cent a year) when a substantial part of output was channeled towards rebuilding war-torn economies. During the same periods the volume of world exports grew by 7.1 per cent and 5.7 per cent annually. Over the ten years 1953 to 1963 the volume of world exports increased at a yearly rate of 6.6 per cent and industrial production by 4.6 per cent.<sup>1/</sup>

An important exception to the vigorous expansion of demand and trade has been the sluggish growth in the consumption and export of foodstuffs. A recent study observed that, "the demand for foodstuffs has followed the well-known historical pattern of consumption: while the demand for food has increased with the rising levels of per capita incomes, the increase in demand has tended to be less than proportionate to the rise in incomes".<sup>2/</sup> The study also noted that, "In economically advanced countries ... demand for staple goods has frequently stagnated or even declined." The growth of exports of exports of foodstuffs has been further retarded by the fact that a number of industrial countries maintain high barriers against imports.<sup>3/</sup>

## 2. Science and Technology

Scientists have cautioned that we are now in a period of technological change which will fundamentally alter our methods of production and patterns of trade.<sup>4/</sup> These technological changes include the industrial use of electronics, atomic energy and automation. These changes are influencing trade patterns in at least two ways: first, the technically most-advanced products of industry containing substantial amounts of value added by science, technology and skilled workmen are among the fastest growing in world

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<sup>1/</sup> See J. R. Downs, Export Projections to 1970, Staff Study No. 8, Statistical Appendix A-2, Economic Council of Canada: Queen's Printer, Ottawa, 1964.

<sup>2/</sup> UN, A Review of Trends in World Trade, E/Cong. 46/12, 26 February 1964, p. 28  
See also John Dawson, Changes in Agriculture to 1970, Staff Study No. 11, Economic Council of Canada: Queen's Printer, Ottawa, 1964.

<sup>3/</sup> See GATT, Trends in International Trade, A Report by a Panel of Experts, October 1958.

<sup>4/</sup> Dr. C. J. Mackenzie, "The Significance of the Recent Scientific Explosion", Address to the Chemical Institute of Canada, 15 February 1961.



trade; and second, the industrialized countries are trading with each other to an increasing extent on the basis of specialization in manufactured products.

A more detailed example of the impact of technology on trade relates to savings in the use of natural materials. The consumption of natural materials has been rising less rapidly than industrial production in most industrial countries. This development has, in turn, retarded the growth of exports of natural materials. Evidence of this development is set out in Table 14 and Appendix B, Table B-6.<sup>1/</sup>

Table 14  
Growth in Real Consumption of Important Natural Materials  
1952-54 to 1960-61 <sup>2/</sup>  
\_\_\_\_\_  
(Per cent)

	U.S.	Canada	U.K.	EEC	OWE*	Japan
Natural Materials	7	12	18	60	68	190
Manufacturing Production	24	24	29	78	60	218

\* Other Western Europe.

Source: National Institute of Economic and Social Research.

One reason for this development is that the quantity of natural materials used per unit of output has been declining. This trend, in turn, arises out of: (a) technological advances leading to economies in consumption of materials; (b) an increase in the degree of fabrication of industrial materials, particularly in the technologically advanced sectors such as electronics, space equipment and guided missiles;<sup>3/</sup> (c) the expanding use of lighter products; and (d) the growing use of waste materials.

A second reason for the relative decline in the use of natural materials is the changing pattern of industrial production:

"Economic growth involves not merely an expansion in the total output of manufacturing, but also a structural shift in the pattern of output. Particularly important is the relative growth of the capital and consumer durable goods and chemicals industries and the relative

<sup>1/</sup> Additional evidence of the decline in the use of materials per unit of output is provided in J. R. Downs, op. cit., pp. 6-8.

<sup>2/</sup> The natural materials are vegetable oils and oilseeds, marine oils, animal fat (lard and tallow), raw cotton, raw wool, raw jute and jute manufactures, aluminum, copper, lead, tin, zinc, iron and steel, hides and skins, natural rubber, sawn timber and woodpulp.

<sup>3/</sup> A recent study of United States production of military equipment has shown that the volume of materials consumed per million dollars of defence expenditure in that country fell by about one third from 1955 to 1960. National Institute of Economic and Social Research, Trade and Development Problems of the Under-Developed Countries: The Background to the United Nations Conference, Economic Review, London, May 1964, p. 38.

decline of the textiles, clothing and other non-durable goods industries. The basic metals industries are generally in an intermediate position; they tend to expand in roughly the same proportion as manufacturing production as a whole. Since value added in manufacturing per unit of materials is generally significantly higher in the durable goods and chemicals industries than in textiles and other non-durable industries, the shift in industry pattern will, by itself, tend to reduce the ratio of materials consumption to an over-all index of manufacturing production."<sup>1/</sup>

The phenomenon might be illustrated by noting that in the United States an expansion of industrial production by 24 per cent between 1952-54 and 1960-61 resulted in a 5 per cent increase in the consumption of iron and steel and an 8 per cent increase in non-ferrous metals. This appears to suggest a shift in the pattern of production towards less metal-intensive products and the substitution of other materials for metals. Within the metals group there was also considerable substitution of aluminum for other metals.<sup>2/</sup>

The growth of exports of natural materials has been further eroded by the development and increased use of synthetic substitutes. The most important of these substitutes developed to date are man-made fibres, synthetic rubber, plastic materials and synthetic detergents. In 1952-54 synthetics represented 9 per cent of the value of consumption of major industrial materials by the industrial countries, whereas, by 1960-61 the proportion had risen to 15 per cent. During this period the rate of growth in the consumption of synthetics was around four times as fast as the rate of growth for consumption of natural materials. It has been estimated that if the proportion of synthetics had not risen during these years, the consumption of natural materials would have increased by approximately \$4 billion.<sup>3/</sup>

The incursion of synthetics on other industrial materials might be further illustrated by reference to the relative rates of growth of the production of plastics and various metals (see Table 15). A recent study observed that while "the plastic industry is really not much more than fifty years old" it "already produces one of the world's main groups of industrial materials". In support of this statement the study noted that "world plastic consumption, by weight, is now larger than that of either copper or aluminum and in volume terms greater than that of all nonferrous metals combined, although still less than a quarter of the world steel consumption". The study went on to forecast

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<sup>1/</sup> National Institute of Economic and Social Research, op. cit. p. 38-39

<sup>2/</sup> Ibid. p. 38

<sup>3/</sup> Ibid. p. 33

that, "plastics, judging from past growth rates will continue to gain rapidly on conventional materials."<sup>1/</sup>

Table 15

World Production and Growth Rates of Plastics and Various Metals

	Production			Growth Rate		
	(Thousands of metric tons)			(Per cent per year)		
	1938	1950	1960	1938-50	1950-60	1938-60
Plastics	300	1,500	5,700	14.3	14.3	14.3
Copper	1,840	2,280	3,660	1.8	4.8	3.2
Aluminum	530	1,280	3,610	7.6	10.9	9.1
Zinc	1,400	1,810	2,420	2.1	3.0	2.5
Steel	88,000	153,000	241,000	4.7	4.7	4.7

Source: National Institute of Economic and Social Research

Technological advances in transportation and communication during the past century have facilitated the movement of goods both internally and across national boundaries.<sup>2/</sup> A recent review of transport and communication economics observed that while there is an element of fixed costs in developing new means of transportation and communications "by and large ... the long-run cost curve of conducting trade is a falling one as the world shrinks in space and time. Trade must overcome distance and barriers to communications, now as before, but the task becomes continuously easier."<sup>3/</sup>

In the field of transportation, technological advances have brought about a steady decline in costs relative to the costs of production thereby increasing the number and amount of exports, imports and domestic trade of primary products, industrial materials and manufactured goods. In broad terms this decline in costs has brought into domestic and international trade heavy or bulky products which had previously been traded only over short distances and facilitated the trading of manufactured goods on a world basis. Regarding manufactured goods it has been observed that "in general, manufactures, including even bulky and heavy manufactures such as machine tools, are readily traded on

<sup>1/</sup> C. Freeman, The Plastics Industry: A Comparative Study of Research and Innovation, National Institute of Economic and Social Research, London 1963, sponsored by the Directorate of Scientific Affairs of the OECD.

<sup>2/</sup> Examples of technological advances in transportation during the last 100 years are joining the screw propeller to the steam engine, the Suez and Panama canals and St. Lawrence seaway, railways, refrigerated ships and railroad cars, tankers, pipelines and aeroplanes. The jet aircraft could bring about another major advance in transport technology and reduce costs still further. Examples of advances in communications are airmail, the telegraph, radio, telephone and teletype.

<sup>3/</sup> Charles P. Kindleberger, Foreign Trade and the National Economy, Yale University Press, 1961, p. 25.

a world basis" and "their transport costs amount to perhaps 2 per cent of delivered value, and can safely be ignored by economists."<sup>1/2/</sup>

Advances in the related field of communications have assisted trade in a number of ways. Improved communications have, for example, increased the producer's knowledge of export opportunities in foreign markets and expanded his means of exploiting them, particularly by providing effective service to customers. Similarly the growth of communications has increased the consumer's knowledge of the foreign products which are available and led to a growing standardization of tastes in the higher income countries.

### 3. Barriers to Trade

An American authority recently observed that, "an indispensable condition for the rapid recovery and growth of the industrial countries and the expansion of world trade was the removal of the jungle of internal and external direct controls that had grown up in many countries during the depression and the war."<sup>3/</sup> During the war the western allies -- under the leadership of the United States and with the full co-operation of Canada -- agreed to co-operate to raise standards of living, maintain high levels of employment and expand the production and exchange of goods. To these ends the allies established the multilateral trading system consisting of the General Agreement on Tariffs and Trade (GATT), the International Monetary Fund and the International Bank for Reconstruction and Development. These agencies provided for the use of the tariff as the only acceptable instrument for protecting domestic production and the renunciation of all other forms of protection including quantitative restrictions; the prohibition of discrimination except in a few carefully defined circumstances; the maintenance of adequate levels of international liquidity; the convertibility of currencies and stable exchange rates; and the movement of long-term capital from capital-rich countries to capital-poor countries for the purpose of assisting reconstruction and development. Very substantial progress has been made through these agencies in reducing barriers against imports of industrial products, securing the convertibility of currencies and increasing the flow of funds from the economically advanced countries to the developing countries.

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<sup>1/</sup> Charles P. Kindleberger, op. cit., p. 14.

<sup>2/</sup> Gottfried Haberler, op. cit., p. 18, states, "Charles Kindleberger has pointed out to me that a veritable revolution has taken place in ocean transportation. Thus, while the world wholesale price index in dollars has about doubled since before the war, oil tanker rates are just about where they were, and dry cargo rates have gone up on a very rough average by 50 per cent. This great cheapening of transport cost constitutes a powerful integrating force in the world economy...."

<sup>3/</sup> Ibid., p. 13.

By the mid-1950's, however, the impetus towards reducing trade barriers on a multilateral basis appeared largely exhausted. For the next several years the most important developments were the formation of regional trading areas with the EEC and EFTA being the most important. It seems generally agreed that regional trading arrangements are neither good nor bad in themselves. A judgment on their value depends upon whether they may create more trade than they divert. A regional arrangement can increase competition, encourage the consolidation of an industry into more efficient units, reduce costs and prices, increase output and prosperity and raise imports and exports with the rest of the world. Conversely a regional arrangement can be an instrument for increased protection and trade diversion from outside countries.<sup>1/</sup> It is probably too early to reach conclusions regarding the trade creating and diverting effects of the EEC and EFTA. There is evidence -- some of it is contained in this paper -- indicating that the formation of these two trading areas made an important contribution to the expansion of international trade. It should be recalled, however, that at the end of 1963 internal tariffs in both groups were still 40 per cent of their original level and their elimination without similar reductions in external tariffs would substantially raise discrimination against outside countries thereby increasing the risk of trade diversion. Viewed in this light the negotiation of a substantial reduction of trade barriers in the Kennedy Round would probably renew the impetus towards reducing barriers on a multilateral basis and improve the prospects of the EEC and EFTA continuing to make a vigorous contribution to the expansion of world trade.<sup>2/</sup>

By and large, there is a relationship between the industrial tariffs maintained by the industrialized countries and the degree of processing or manufacturing of the products they cover. Generally industrial raw materials enter free of duty or at low rates. Beyond this stage, however, duties tend to rise roughly in proportion to the degree of processing and manufacturing. These rates frequently limit imports and sometimes prohibit them. In view of the structural bias it might be expected that a

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<sup>1/</sup> See (a) Jacob Viner, The Customs Union Issue, Carnegie Endowment for International Peace, 1950; and (b) the General Agreement on Tariffs and Trade, Article XXIV, Geneva, 1958.

<sup>2/</sup> Gottfried Haberler, op. cit., p. 14, made the following comment on these multilateral and regional developments: "This freeing of trade constitutes a movement towards world-wide integration that has preceded and overlapped the regional reduction of trade barriers and regional integration in the European Common Market and other similar schemes of which we hear so much. There can be hardly a doubt that, up to now, the quantitative effects on trade of the world-wide integration and liberalization has been much greater than those of the much more discussed and advertised regional schemes."

substantial reduction of industrial tariffs would especially stimulate the exports of the more highly processed and manufactured goods. A British study has made the following comment on this point:

"In recent years the volume of world exports of manufactures has been growing unusually rapidly in relation to world manufacturing production. This has probably been due, in the main, to the freeing of trade from quota and tariff restrictions. In the previous peace-time periods shown in the table below the volume of world exports of manufactures grew only slightly faster than world manufacturing production, apart from two periods (1881-85 to 1896-1900 and 1926-29 to 1936-38) when it grew much more slowly, both periods being ones in which tariffs or other restrictions on trade were intensified." <sup>1/</sup>

Table 16

Rate of Growth of Exports of Manufactures  
and World Manufacturing Production

	Volume - Per Cent Per Year	
	Manufacturing Production	Exports of Manufactures
1876-80 to 1881-85	4.4	4.5
1881-85 to 1896-1900	3.9	1.2
1896-1900 to 1911-13	4.1	5.0
1921-25 to 1926-29	6.8	7.1
1926-29 to 1936-38	3.0	-1.4
1953-55 to 1959-61	4.7	7.6
1953-54	0	10
1954-55	12	12
1955-56	4	9
1956-57	3	9
1957-58	-3	-2
1958-59	11	9
1959-60	6	14
1960-61	3	4
1961-62	7	6

Note: The scope of this group of manufactures is broader than that of the group used in other parts of this paper and outlined in Appendix A.

Source: National Economic Development Council.

<sup>1/</sup> National Economic Development Council, Export Trends, London 1963, p. 1.

IV - KENNEDY ROUND OF TRADE NEGOTIATIONS1. Dimensions of Negotiations

In May, 1963, members of GATT agreed to conduct comprehensive trade negotiations -- "The Kennedy Round" -- covering both tariff and nontariff barriers and all classes of products. They further agreed that the tariff negotiations should be based on the principle of equal across-the-board cuts, subject to a minimum of exceptions, and certain modifications to take account of significant disparities in tariff levels and of countries largely dependent on exports of agricultural and other primary products where equal linear reductions may not provide a balance of advantage. It was subsequently decided that 50 per cent would be the working "hypothesis" for the general rate of linear tariff reductions. The United States, EEC, Britain, Japan, Sweden, Switzerland, Denmark, Norway and Austria have agreed to participate on the basis of equal linear cuts. Canada, Australia, New Zealand, South Africa and certain other countries will participate on the basis of reducing their tariffs by varying amounts commensurate with benefits received.<sup>1/</sup>

Publicly announced developments to date suggest that the "linear countries" might, if favourable circumstances continue, conclude a negotiation leading to (a) reductions of industrial tariffs averaging from 30 to 40 per cent, (b) reduction of some industrial nontariff barriers, and (c) limited reductions of some agricultural barriers and freezing the remainder at existing levels. An average reduction of 30 to 40 per cent in industrial tariffs could result from three factors: exclusion from the negotiations of products accounting for approximately 15 per cent of industrial imports; the reduction of EEC duties which are significantly below those of the United States or Britain by around 25 per cent on average;<sup>2/</sup> and the reduction of duties on all other items by 50 per cent. A negotiation along these lines would result in a very substantial number of

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<sup>1/</sup> GATT Press Release 794, 29 May, 1963. pp. 12-14.  
Statement by the Minister of Trade and Commerce, 24 May, 1963; Department of Trade and Commerce Press Release 37/63.  
GATT Press Release 864, 6 May, 1964.  
Statement by the Minister of Trade and Commerce, 11 May, 1964; Department of Trade and Commerce Press Release 39/64.

<sup>2/</sup> In a series of three articles entitled "Does the Kennedy Round Serve the Interests of Europe?" published April 30 and May 1 and 2, 1964, the Paris newspaper Le Monde commented that under the formula proposed by the EEC the Community would be entitled to reduce tariffs by an average of 25 per cent affecting around 9 per cent of industrial imports.

industrial tariffs being cut by 50 per cent. Small reductions in tariffs would ordinarily lead to small changes in trade whereas large reductions would normally produce large changes. Measured by almost any yardstick the 50 per cent cut in many industrial tariffs envisaged in the Kennedy Round would be a large reduction. In past GATT negotiations there has been a tendency for countries to combine reductions in tariffs with the least possible sacrifice of protection for domestic industries. This practice was facilitated by two facts: reduction of tariffs in the GATT started from the very high levels established during the 1930's and the item-by-item method of negotiating which has been used in past negotiations. Five rounds of GATT negotiations have, however, gradually limited the scope for avoiding reductions in protection afforded domestic industries. Use of the linear rather than item-by-item method of cutting tariffs would limit still further the possibility of countries avoiding meaningful reductions in protection.

## 2. Opportunities for Canada

It would be difficult or impossible to estimate in quantitative terms the increase in Canadian exports which would result from a 50 per cent reduction of many foreign industrial tariffs. It might be possible to make a rough estimate of short-run increases in sales that would accrue following the reduction of 'key' duties on traditional exports by undertaking an elaborate item-by-item analysis. It would be very difficult, however, to measure the long-run gains for traditional exports because of the need to take account of a number of changing factors -- e.g., economic growth, relative changes in costs and prices and technological advances -- whose course is not easy to forecast. It would be still more difficult to measure the long-run gains which would result from new exports or a substantial increase in sales of products which Canada is now exporting in small amounts. By and large the industrialized countries maintain tariffs to assist import-competing industries. These tariffs are now protecting or partially protecting markets worth billions of dollars a year. A substantial reduction of these tariffs on a broad range of products could bring important new forces into play in the Canadian economy which would fundamentally alter the current competitive situation, provide many existing industries with an opportunity to accelerate or redirect their operations into more profitable channels, and lead to the establishment of new lines of production in Canada. In particular the reduction of tariffs could provide Canadian industry with opportunities to reduce uneconomical diversification resulting from the need to offer a wide variety of products to a relatively small number of consumers and to create larger and more specialized production units serving both the domestic and



and export markets. Accompanying reductions in Canadian tariffs could also tend to promote shifts towards more specialized and competitive indigenous production.

Although it is not possible to measure the long-run effects of tariff reductions, the direction of them is both clear and important. An authoritative Canadian study described the impact of the United States tariff on the Canadian economy in the following terms:

"... the basic fact remains that United States commercial policy has long exerted a severely distortive influence on Canadian economic development. Again despite the lack of precise factual data in this field, it can hardly be doubted that, given access to the American market, Canada would have a substantial advantage in the fabrication of a wide variety of products, especially those resting on indigenous power resources and raw materials. A few examples come readily to mind: paper and wood products; petro-chemicals and other chemical products; refined metals and minerals and certain of their manufactured products. A detailed examination would no doubt reveal others. Indeed, it is not unlikely that given access to the United States market Canadian industry would prove competitive in some sectors of advanced manufacturing which do not depend so directly on natural resource availabilities. This judgment would seem to be supported by the finding that inadequate size of markets is at the heart of Canada's relative disadvantage over a broad range of secondary manufacturing industries. In the broadest terms, Canada's inability to develop more effectively along these lines can be attributed in substantial measure to the restraints imposed by United States commercial policy. There can be few other general propositions about the Canadian economy which have stronger roots in economic analysis and logic." <sup>1/</sup>

Viewed in this light it seems possible, however, to acquire some notion of the order of magnitude of the opportunities that reductions in foreign tariffs could provide Canadian industry to increase exports. To this end, Tables 17, 19, 20, C-1, C-2 and C-3 compare current rates of duty applied to imports of industrial products by the United States, Britain, EEC and Japan with the levels that would exist if they were reduced by 50 per cent. In order to present a general picture of the comparison of the very large number of duties involved, the rates for each market have been grouped in categories. The tables contain a number of limitations,-- some overstating the opportunities presented by a 50 per cent reduction, some understating them, while others could cut either way. The more important limitations tending to overstate the opportunities arise from the fact that the tables do not allow for (a) duties that will be on exception and disparity lists and either excluded from the negotiations or cut less than 50 per cent and (b) the reduction of duties in Britain's most-favoured-nation tariff which would cut

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<sup>1/</sup> Irving Brecher and S. S. Reisman, Canada-United States Economic Relations, Royal Commission on Canada's Economic Prospects, Ottawa, 1957, p. 181.

certain margins of preference that assist Canadian exports to that market. Limitations which tend to understate the opportunities that would accrue include (a) the fact that Tables 17 and C-1 deal with actual 1963 exports of \$100,000 (Cdn.) or more per statistical unit and do not show the effect of a 50 per cent cut on high duties which now prohibit imports from Canada or reduce them to small amounts and (b) not infrequently the tariff schedules of the United States, EEC and Japan provide a range of duties for certain products and, without exception, the highest rate in the range was incorporated in the tables. A limitation which might cut both ways is that grouping of duties tends to mask the 'key' duties on the 'key' products and could either overstate or understate the effect of a 50 per cent cut -- e.g. a tariff reduced from 20 per cent to 10 per cent could still be a real obstacle to exporting a particular product to a particular market and conversely a 20 per cent rate could be prohibitive while a 10 per cent rate would permit substantial imports. While the tables are not, therefore, altogether satisfactory they are perhaps useful in providing a general idea of the opportunities a 50 per cent reduction in foreign tariffs could present to Canadian industry.

A review of the magnitude of opportunities the Kennedy Round could present to Canadian industry might begin with 1963 exports of industrial products. Canada's exports of industrial products totalled \$5.3 billion (Cdn.) in 1963.<sup>1/</sup> Around \$4.5 billion or 86 per cent of these exports went to the United States, Britain, EEC and Japan in amounts of \$100,000 or more per statistical item. Table 17 shows that more than 60 per cent of these exports were duty free and that nearly 30 per cent were dutiable at rates of 10 per cent or less. A 50 per cent reduction would place 38 per cent of these exports in the 10 per cent or less category and leave one per cent dutiable at rates above 10 per cent.<sup>2/</sup>

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<sup>1/</sup> This group of exports is derived from the Dominion Bureau of Statistics rather than the Standard International Trade Classification which is the source of the commodity groups used in most other parts of this paper. This group includes Dominion Bureau of Statistics categories "crude materials, inedible", "fabricated materials, inedible" and "end products, inedible".

<sup>2/</sup> Appendix C, Table C-1 provides a breakdown of Table 17 by Dominion Bureau of Statistics categories.

Table 17

## Rates of Duty on Canada's Industrial Exports, 1963

(Millions \$ Can. and per cent of total)

	U.S.		Britain		EEC		Japan		Total	
	\$	%	\$	%	\$	%	\$	%	\$	%
<u>Current Rates of Duty</u>										
Free	1,843.7	(55)	687.9	(99)	107.6	(37)	147.1	(77)	2,786.3	(61)
00.1 to 10%	1,220.1	(36)	2.4	(--)	87.5	(30)	18.8	(10)	1,328.8	(29)
10.1 to 20%	286.4	(8)	5.6	(1)	90.7	(31)	23.5	(12)	406.2	(9)
20.1 to 30%	16.6	(1)	1.1	(--)	6.7	(2)	.8	(1)	25.2	(1)
Above 30%	9.6	(--)	.1	(--)	.5	(--)	--	(--)	10.2	(--)
	3,376.4	(100)	697.1	(100)	293.0	(100)	190.2	(100)	4,556.7	(100)
<u>Assuming 50% Reduction</u>										
Free	1,843.7	(55)	687.9	(99)	107.6	(37)	147.1	(77)	2,786.3	(61)
00.1 to 10%	1,506.5	(44)	8.0	(1)	178.2	(61)	41.3	(22)	1,735.0	(38)
10.1 to 15%	16.6	(1)	1.1	(--)	6.7	(2)	.8	(1)	25.2	(1)
Above 15%	9.6	(--)	.1	(--)	.5	(--)	--	(--)	10.2	(--)
	3,376.4	(100)	697.1	(100)	293.0	(100)	190.2	(100)	4,556.7	(100)

Source: Economic Council of Canada.

It will be recalled that two of the dominant trends in world trade are that exports of manufactured goods are increasing more rapidly than industrial materials and primary products and that a large and growing share of exports of manufactures are going to the industrial countries. Imports of manufactured goods from Canada by the industrial markets increased from nearly \$420 million in 1954 to \$600 million in 1960 and \$900 million in 1963. These imports grew at an average annual rate of 6.2 per cent from 1954 to 1960 and 14.3 per cent from 1960 to 1963. Although special factors have made a significant contribution to the rapid growth of manufactured exports since 1960, it seems clear that the competitive advantage provided by devaluation of the Canadian dollar has been an important influence.<sup>1/</sup> Since nearly half of the tariff items maintained by the United States, Britain, EEC and Japan on manufactures carry duties between 11 and 30 per cent (see Table 18), a 50 per cent reduction could further improve the competitive position of Canadian manufactures vis-à-vis domestic producers in these foreign markets by magnitudes not dissimilar to those resulting from the recent devaluation.

<sup>1/</sup> Further comments on the growth of exports of Canadian manufactures since devaluation are contained in J. R. Downs, op. cit. p. 19.

Within this context it is important to note that Canada's 1963 exports of industrial "end products" totalled nearly \$780 million (Cdn.), in amounts of \$100,000 or more per statistical item.<sup>1/</sup> Around \$540 million, or 69 per cent of these exports went to the United States, Britain, EEC and Japan. Appendix C, Table C-1, shows that approximately 27 per cent of these exports entered free of duty with the remainder dutiable at varying rates. A 50 per cent reduction of the dutiable products would increase the portion entering at 10 per cent or less from 31 to 69 per cent and leave only 4 per cent with rates above these levels.

A substantial increase in Canadian exports of manufactured products will probably involve exporting many new products. This probability arises from two facts: Canadian exports of manufactured goods in 1963 accounted for a relatively small proportion of total exports and the rapid rate of technological change is resulting in the continuous appearance of new manufactured products. The Brussels nomenclature contains slightly more than 1,700 tariff items covering manufactured goods. This means that the United States, Britain, EEC and Japan combined have nearly 6,900 tariff items covering current and potential Canadian exports of manufactures. Table 18 shows that 1,843 (27 per cent) of these items now provide free entry and the remainder carry duties of varying rates. A 50 per cent reduction of the items carrying duties would increase the number dutiable between 0.1 and 10 per cent from 606 (9 per cent) to 3,850 (56 per cent) and leave 497 (7 per cent) with rates above 15 per cent.<sup>2/</sup>

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<sup>1/</sup> This is the Dominion Bureau of Statistics category "end products, inedible" which is not as broad as the category "manufactured goods" used in other parts of this paper.

<sup>2/</sup> Appendix C, Table C-2, provides a breakdown of this data by four commodity groups -- chemicals, machinery and transport equipment, manufactures classified chiefly by material and miscellaneous manufactured articles.

Table 18

Rates of Duty on Manufactured Goods  
(Number of tariff items and per cent of total)

	U.S.		Britain		EEC		Japan		Total	
	Items	%	Items	%	Items	%	Items	%	Items	%
<u>Current Rates of Duty</u>										
Free	73	( 4.3)	1,620	(93.2)	53	( 3.0)	97	( 5.6)	1,843	(26.7)
00.1 to 10%	104	( 6.1)	--	( -- )	339	(19.5)	163	( 9.4)	606	( 8.7)
10.1 to 20%	781	(46.0)	81	( 4.7)	1,208	(69.4)	1,174	(67.8)	3,244	(47.0)
20.1 to 30%	328	(19.3)	26	( 1.5)	137	( 7.9)	226	(13.1)	717	(10.4)
Above 30%	412	(24.3)	11	( .6)	3	( .2)	71	( 4.1)	497	( 7.2)
	1,698	( 100)	1,738	( 100)	1,740	( 100)	1,731	( 100)	6,907	( 100)
<u>Assuming 50% Reduction</u>										
Free	73	( 4.3)	1,620	(93.2)	53	( 3.0)	97	( 5.6)	1,843	(26.7)
00.1 to 10%	885	(52.1)	81	( 4.7)	1,547	(88.9)	1,337	(77.2)	3,850	(55.7)
10.1 to 15%	328	(19.3)	26	( 1.5)	137	( 7.9)	226	(13.1)	717	(10.4)
Above 15%	412	(24.3)	11	( .6)	3	( .2)	71	( 4.1)	497	( 7.2)
	1,698	( 100)	1,738	( 100)	1,740	( 100)	1,731	( 100)	6,907	( 100)

Source: Economic Council of Canada.

As mentioned earlier, machinery and transport equipment account for nearly half of the imports of manufactured goods by the industrial markets and more than half of their imports of manufactures from Canada. Under the Brussels nomenclature the United States, Britain, EEC and Japan combined have nearly 1,300 tariff items covering current and future imports of machinery and transport equipment from Canada. Appendix C, Table C-2, shows that 283 (22 per cent) of these tariffs are now free of duty and the remainder carry duties with various rates. A 50 per cent reduction of the dutiable items would increase the number with rates of 10 per cent or less from 54 (4 per cent) to 917 (71 per cent) and leave 17 (1 per cent) with rates above 15 per cent.

Canadian exports of industrial materials approximated \$2.5 billion in 1963 or 38 per cent of total exports. These exports included pulp and newsprint, \$1.1 billion, and base metals, nearly \$900 million. Almost 90 per cent of these exports went to the United States, Britain, EEC and Japan. The bulk of these exports were in the less processed rather than more highly processed forms.<sup>1/</sup> While the reasons why these exports

<sup>1/</sup> For example, in 1963 the price of pulp approximated \$50 to \$170 a ton, newsprint \$125 a ton, wrapping paper \$200 a ton, paper board \$170 to \$250 a ton, and fine papers from around \$300 to \$500 a ton with some grades going up to \$900 a ton, but the average value of Canadian exports of pulp, newsprint and other papers was \$127 a ton. Similarly aluminum ingot sold for approximately \$450 a ton, building sheet \$700 a ton, and industrial pipe \$1,000 a ton, but in 1963 Canadian exports of aluminum ingot and fabricated products combined had an average value of \$467 a ton.

tend to be in the less rather than more highly processed forms probably vary from product to product, relatively high foreign tariffs have generally been regarded as an important if not determining factor. The Brussels nomenclature contains nearly 200 tariff items covering the more highly processed forms of paper and base metals. The United States, Britain, EEC and Japan combined have nearly 800 items covering current and future Canadian exports of these products. Table 19 shows that 204 (26 per cent) of these items are free of duty and the remainder dutiable at various rates. A 50 per cent reduction of the dutiable items would increase the number with rates between (a) 0.1 and 5 per cent from 14 to 172 items, (b) 5.1 and 10 per cent from 172 to 342 items and (c) leave 73 items (9 per cent of the total) with rates above 10 per cent.<sup>1/</sup>

Table 19  
Rates of Duty on More Highly Processed Forms of Paper and Base Metals  
(Number of tariff items and per cent of total)

	U.S.		Britain		EEC		Japan		Total	
	Items	%	Items	%	Items	%	Items	%	Items	%
<b>Current Rates of Duty</b>										
Free	1	(.5)	198	(100)	1	(.5)	4	(2.0)	204	(25.8)
00.1 to 5%	9	(4.5)	--	(--)	4	(2.0)	1	(.5)	14	(1.8)
05.1 to 10%	18	(9.1)	--	(--)	132	(66.7)	8	(4.1)	158	(20.0)
10.1 to 15%	72	(36.4)	--	(--)	34	(17.2)	126	(64.0)	232	(29.3)
15.1 to 20%	63	(31.8)	--	(--)	23	(11.6)	24	(12.2)	110	(13.9)
Above 20%	35	(17.7)	--	(--)	4	(2.0)	34	(17.2)	73	(9.2)
	198	(100)	198	(100)	198	(100)	197	(100)	791	(100)
<b>Assuming 50% Reduction</b>										
Free	1	(.5)	198	(100)	1	(.5)	4	(2.0)	204	(25.8)
00.1 to 5%	27	(13.6)	--	(--)	136	(68.7)	9	(4.6)	172	(21.8)
05.1 to 10%	135	(68.2)	--	(--)	57	(28.8)	150	(76.1)	342	(43.2)
Above 10%	35	(17.7)	--	(--)	4	(2.0)	34	(17.3)	73	(9.2)
	198	(100)	198	(100)	198	(100)	197	(100)	791	(100)

Source: Economic Council of Canada

A significant number of existing tariffs are supplemented by nontariff barriers.<sup>2/</sup> Moreover, nearly all industrial countries use nontariff barriers as the principal means of protecting certain domestic industries against imports. There are

<sup>1/</sup> Appendix C, Table C-3, provides a breakdown of Table 19 by commodities.

<sup>2/</sup> Nontariff barriers take many forms. Some of the more restrictive barriers include quantitative restrictions; arbitrary valuation and/or classification for duty purposes; government procurement policies; state trading; discriminatory administrative and technical regulations relating to food, drugs and sanitation; excessive requirements regarding documentation, consular formalities and marking regulations; and misuse of anti-dumping and countervailing duties.

at least two reasons for this situation: first, with a few exceptions, past GATT negotiations were limited to reducing tariffs, and second, tariff reductions and intensified competition have sometimes resulted in protectionist interests pressing governments to raise nontariff barriers. A meeting of Ministers in May 1963 agreed, however, that the Kennedy Round "shall deal not only with tariffs but also with nontariff barriers".<sup>1/</sup> Another meeting of Ministers in May 1964 recalled that "the trade negotiations must relate not only to tariffs but also to nontariff barriers" and noted that "many participants have already indicated the measures on which they wish to negotiate and that others will shortly do so".<sup>2/</sup> This means that a country can negotiate the reduction or elimination of foreign nontariff barriers which are retarding its exports and secure a contractual commitment that they will not be raised again in the future. In addition, the definition of nontariff barriers does not appear to have been limited and therefore the potential scope of the negotiations in this field is very broad.

The effect of the reduction of barriers by the EEC and EFTA on trade might throw additional light on the opportunities which a successful Kennedy Round could present Canadian industry to increase exports. There are, of course, important differences between these regional groups and the Kennedy Round and their experience would not be a completely accurate guide to the effect of the Kennedy Round on Canada. Some of the more important differences are: (a) the reduction of duties in both regional groups have been discriminatory whereas the cuts agreed in the Kennedy Round will be nondiscriminatory (b) both groups are committed to the elimination of internal tariffs within a fixed period whereas the Kennedy Round is aiming at 50 per cent cuts, and (c) some members of the EEC - particularly Germany and the Benelux countries - have been obliged to raise a number of duties against outside countries in moving to the common external tariffs. At the same time there is a strong similarity in that by 1963 both groups had reduced tariffs by roughly the same amounts as envisaged in the Kennedy Round. The effect of these tariff cuts on trade would seem to provide some indication of the general magnitude and direction of the advantages that could accrue from the Kennedy Round. The impact of these tariff cuts on the trade of EFTA members may be the more accurate guide because they do not form a geographical unit, the degree of discrimination against outside countries is somewhat less, and some of them are substantial exporters of primary products and industrial materials.

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<sup>1/</sup> GATT Press Release 794, 29 May, 1963, p. 12.

<sup>2/</sup> GATT Press Release 864, 6 May, 1964, p. 2.

The EEC and EFTA had reduced internal tariffs by 60 per cent between 1959 and 1960, respectively, and the end of 1963. During the same period members of the EEC had made a 60 per cent adjustment in their external tariffs towards the common EEC level. In 1959 members of both the EEC and EFTA dismantled nearly all quantitative restrictions on industrial imports from the industrial countries. Table 20 shows that trade within the two areas had grown faster during the four years after they began reducing barriers than in the preceding six years. Table 21 shows that exports of manufactured goods within the areas had also grown more rapidly after they began reducing barriers than before. These increases in trade cannot, of course, be attributed entirely to the reduction of barriers for other economic forces were also important. It is unlikely however that these exports would have grown at these rates if barriers had not been reduced.

Table 20

Growth of Trade of EEC and EFTA  
(Per cent per year of current values)

	EEC		EFTA	
	1953-59	1959-63	1953-59	1959-63
Intra-Trade	10.6	17.3	5.4	11.0
Exports to the Other Area	10.4	9.5	7.3	12.3
Exports to Third Countries	9.2	6.2	5.0	6.5

Source: EFTA Trade, 1964.

Table 21

Growth of Exports of Manufactured Goods in EEC and EFTA  
(Per cent per year of current values)

	1954-59	1959-63
<u>Intra-EEC</u>		
Belgium-Luxembourg	10.7	23.0
France	15.4	27.0
Germany (F.G.R.)	16.3	22.0
Italy	27.0	30.0
Netherlands	16.6	18.5
Total	14.2	21.0
<u>Intra-EFTA</u>		
Austria	7.2	19.7
Britain	2.8	10.4
Denmark	14.0	19.3
Norway	9.3	13.9
Portugal	2.3	27.0
Sweden	10.1	15.1
Total	6.2	13.8

Note: Statistics for Switzerland not available.

Source: UN Commodity Trade Statistics  
OECD Foreign Trade, Series B.



### 3. Institutional Barriers

Finally, some reference should be made to the institutional barriers to Canadian exports of industrial products. It is very difficult to identify these barriers and assess their effect on exports. There are at least three reasons for these difficulties: first, the barriers appear to consist largely of noneconomic factors such as the habits and customs existing in certain industries; second, the barriers are erected and maintained by corporate decisions or lack of decisions which generally occur in a complex organizational framework; and third, the barriers raise some sensitive issues and there is a minimum of information about them. Despite these difficulties useful work has been done in this field, although there appears to be a need for additional studies.<sup>1/</sup>

Although there is a lack of precise data relating to institutional barriers it seems clear that they arise in part from the uncertainty created in the minds of Canadian businessmen regarding the permanence of access to foreign markets because of the application of escape clause procedures, misuse of customs rules and practices, pressure to "voluntarily" limit exports and harrassment through legislative bodies. The barriers can take many forms including company policies and procedures tending to inhibit exports from Canada to some or all markets, a possible management preference for expanding production in a parent corporation's country and a reluctance, because of the fear of provoking restrictions, to add more value to industrial materials in Canada before they are exported. These inhibitions and barriers could interfere with the efficient development of production and divert investment, plants, exports and employment to other countries. On the other hand it must be recognized that the parent-subsidiary relationship may also operate in favour of Canadian interests for the parent and other associated foreign companies may provide important benefits to the Canadian subsidiary in the form of guaranteed markets, efficient sales forces, economical supplies and easy access to the results of costly research.

It is not suggested that institutional barriers are more restrictive than tariffs except possibly in a limited number of situations. Indeed, institutional

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<sup>1/</sup> Studies which comment on institutional barriers include the Report of Commissioner, Combines Investigation Act, Canada and International Cartels, 1945, particularly part II; Irving Brecher and S. S. Reisman, Canada-United States Economic Relations, particularly chapters 8 and 10; John Lindeman and Donald Armstrong, Policies and Practices of United States Subsidiaries in Canada, Canadian-American Committee, 1961; and A. E. Safarian, The Exports of American-Owned Enterprises in Canada, presented at the annual meeting of the American Economic Association, Boston, 28 December, 1963.

barriers appear to be inextricably interwoven with tariffs and it is difficult to separate them. It is doubtful if much progress could be made towards reducing these institutional barriers unless tariffs are reduced at the same time. On the other hand, the institutional barriers, if not effectively dealt with, could nullify or limit some important export opportunities that would accrue to Canada from a substantial reduction in tariff barriers.

The recently adopted Automotive Program represents an attempt to secure the advantages of large scale production and specialization in that industry by a combination of tariff reductions and other measures designed to eliminate institutional barriers. In announcing the program, the Minister of Industry for Canada explained that the elimination of the United States tariff and other formal barriers would not be sufficient to remove the institutional impediments to trade and therefore it was necessary to adopt other measures of which the most important was a commitment by Canadian manufactures to substantially expand Canadian production over the next three-and-a-half years. The Minister went on to state that in the review of the program scheduled for 1968 Canada will want assurances that institutional barriers now limiting Canadian production and exports have been reduced to the point where market forces alone will provide the Canadian industry with the opportunity to participate fully in the expanding North American market.<sup>1/</sup>

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<sup>1/</sup> Automotive Program Outline, News Release, Department of Industry, Ottawa, 15 January, 1965.

Appendix A

CONTENT OF IMPORT AND EXPORT  
STATISTICAL GROUPS

Appendix AContents of Import and Export Groups

(SITC Revised)

Commodity Group	SITC* Number
<b>1. <u>Primary Products</u></b>	
Foodstuffs:	
Live animals	001
Meat, fresh chilled or frozen	011
Meat, dried, salted or smoked, whether or not in airtight containers	012
Meat, in airtight containers, n.e.s., and meat preparations whether or not in airtight containers	013
Milk and cream	022
Butter	023
Cheese and curd	024
Eggs	025
Fish, fresh and simply preserved	031
Fish, in airtight containers, n.e.s., and fish preparations, whether or not in airtight containers (including crustacea and molluscs)	032
Wheat (including spelt) and meslin unmilled	041
Rice	042
Barley, unmilled	043
Maize (corn), unmilled	044
Cereals, unmilled, other than wheat, rice, barley and maize	045
Meal and flour of wheat or of meslin	046
Meal and flour of cereals except meal and flour of wheat or of meslin	047
Cereal preparations and preparations of flour and starch of fruit and vegetables	048
Fruit, fresh, and nuts (not including oil nuts), fresh or dried	051
Dried fruit, (including artificially dehydrated)	052
Fruit, preserved, and fruit preparations	053
Vegetables, fresh, frozen, or simply preserved (including dried leguminous vegetables); roots, tubers and other edible vegetable products, n.e.s., fresh or dried	054
Vegetables, roots and tubers, preserved or prepared, n.e.s., whether or not in airtight containers	055
Sugar and honey	061
Sugar confectionery and other sugar preparations (except chocolate confectionery)	062
Coffee	071
Cocoa	072
Chocolate and other food preparations containing cocoa or chocolate, n.e.s.	073
Tea and maté	074
Spices	075
Feeding-stuff for animals (not including unmilled cereals)	081
Margarine and shortening	091
Food preparations, n.e.s.	099
Animal oils and fats	411
Animal and vegetable oils and fats, processed, and waxes of animal or vegetable origin	431
Beverages and Tobacco:	
Non-alcoholic beverages, n.e.s.	111
Alcoholic beverages	112
Tobacco, unmanufactured	121
Tobacco manufactures	122

\* United Nations, Standard International Trade Classification, Revised, New York, 1961, Statistical Papers, Series M. No. 34.

Appendix A - continued

Commodity Group	SITC Number
<b>1. <u>Primary Products</u> - continued</b>	
Raw Materials:	
Hides and skins (except fur skins) undressed	211
Fur skins, undressed	212
Oil-seeds, oil nuts and oil kernels	221
Fuel wood and charcoal	241
Wood in the rough or roughly squared	242
Cork, raw and waste	244
Silk	261
Wool and other animal hair	262
Cotton	263
Jute	264
Vegetable fibres, except cotton and jute	265
Waste materials from textile fabrics (including rags)	267
Fertilizers, crude	271
Stone, sand and gravel	273
Sulphur and unroasted iron pyrites	274
Natural abrasives (including industrial diamonds)	275
Other crude minerals	276
Iron ore and concentrates	281
Iron and scrap steel	282
Ores and concentrates of non-ferrous base metals	283
Non-ferrous metal scrap	284
Silver and platinum ores	285
Ores and concentrates of uranium and thorium	286
Crude animal materials, n.e.s.	291
Crude vegetable materials, n.e.s.	292
Fuels:	
Coal, coke and briquettes	321
Petroleum, crude and partly refined for further refining (excluding natural gasoline)	331
Petroleum products	332
Gas, natural and manufactured	341
Electric energy	351
<b>2. <u>Industrial Materials</u></b>	
Lumber:	
Wood, shaped or simply worked	243
Pulp and Paper:	
Pulp and waste paper	251
Paper and paperboard	641
Articles made of paper pulp, of paper or of paperboard	642
Base Metals:	
Pig iron, spiegeleisen, sponge iron, iron and steel powders and shot and ferro-alloys	671
Ingots and other primary forms (including blanks for tubes and pipes) of iron or steel	672
Iron and steel bars, rods, angles, shapes and sections (in- cluding sheet pilings)	673
Universals, plates and sheets of iron or steel	674

Appendix A - continued

Commodity Group	SITC Number
<b>2. <u>Industrial Materials</u> - continued</b>	
Hoop and strip of iron or steel	675
Rails and railway track construction material of iron and steel	676
Iron and steel wire (excluding wire rod)	677
Tubes, pipes and fittings of iron and steel	678
Iron and steel castings and forgings, unworked, n.e.s.	679
Silver, platinum and other metals of the platinum group, worked and unworked	681
Copper, worked and unworked	682
Nickel, worked and unworked	683
Aluminum, worked and unworked	684
Lead, worked and unworked	685
Zinc, worked and unworked	686
Tin, worked and unworked	687
Uranium and thorium and their alloys	688
Miscellaneous non-ferrous base metals employed in metallurgy, worked and unworked	689
Rubber:	
Crude rubber, (including synthetic and reclaimed)	231
Vegetable Oils and Fats:	
Fixed vegetable oils, soft	421
Other fixed vegetable oils	422
Synthetic Textile Fibres:	
Synthetic and regenerated (artificial) fibres	266
<b>3. <u>Manufactured Goods</u></b>	
Chemicals:	
Organic chemicals	512
Inorganic chemicals: elements, oxides and halogen salts	513
Other inorganic chemicals	514
Radioactive and associated materials	515
Mineral tar and crude chemicals from coal, petroleum and natural gas	521
Synthetic organic dyestuffs, natural indigo and colour lakes	531
Dyeing and tanning extracts, and synthetic tanning materials	532
Pigments, paints, varnishes and related materials	533
Medicinal and pharmaceutical products	541
Essential oils, perfume and flavour materials	551
Perfumery and cosmetics, dentifrices and other toilet preparations (except soaps)	553
Soaps, cleansing and polishing preparations	554
Fertilizers, manufactured	561
Explosives and pyrotechnic products	571
Plastic materials, regenerated cellulose and artificial resins	581
Chemical materials and products, n.e.s.	599
Machinery and Transport Equipment:	
Power generating machinery other than electric	711
Agricultural machinery and implements	712
Office machinery	714

## Appendix A - continued

Commodity Group	SITC Number
<b>3. Manufactured Goods - continued</b>	
Metalworking machinery	715
Textile and leather machinery	717
Machines for special industries	718
Machinery and appliances (other than electrical) and machine parts, n.e.s.	719
Electric power machinery and switchgear	722
Equipment for distributing electricity	723
Telecommunications apparatus	724
Domestic electrical apparatus	725
Electric apparatus for medical purposes and radiological apparatus	726
Other electrical machinery and apparatus	729
Railway vehicles	731
Road motor vehicles	732
Road vehicles other than motor vehicles	733
Aircraft	734
Ships and boats	735
<b>Manufactures Classified by Material:</b>	
Leather	611
Manufactures of leather or of artificial or reconstituted leather, n.e.s.	612
Fur skins, tanned or dressed (including dyed)	613
Materials of rubber	621
Articles of rubber, n.e.s.	629
Veneers, plywood boards, 'improved' or reconstituted wood and other wood, worked, n.e.s.	631
Wood manufactures, n.e.s.	632
Cork manufactures	633
Textile yarn and thread	651
Cotton fabrics, woven, (not including narrow or special fabrics)	652
Textile fabrics, woven, (not including narrow or special fabrics) other than cotton fabrics	653
Tulle, lace, embroidery, ribbons, trimmings and other small wares	654
Special textile fabrics and related products	655
Made-up articles, wholly or chiefly of textile materials, n.e.s.	656
Floor coverings, tapestries, etc.	657
Lime, cement and fabricated building materials, except glass and clay materials	661
Clay construction materials and refractory construction materials	662
Mineral manufactures, n.e.s.	663
Glass	664
Glassware	665
Pottery	666
Pearls and precious and semi-precious stones, worked and unworked	667
Finished structural parts and structures, n.e.s.	691
Metal containers for storage and transport	692
Wire products (excluding electric) and fencing grills	693
Nails, screws, nuts, bolts, rivets and similar articles of iron, steel, or of copper	694
Tools for use in the hand or in machines	695

Appendix A - continued

Commodity Group	SITC Number
<b>3. <u>Manufactured Goods</u> - continued</b>	
Cutlery	896
Household equipment of base metals	697
Manufactures of metal, n.e.s.	698
Miscellaneous Manufactures:	
Sanitary, plumbing, heating and lighting fixtures and fittings	812
Furniture	821
Travel goods, handbags and similar articles	831
Clothing, except fur clothing	841
Fur clothing (not including headgear) and other articles made of furskins; artificial fur and articles thereof	842
Footwear	851
Scientific, medical, optical, measuring and controlling instruments and apparatus	861
Photographic and cinematographic supplies	862
Developed cinematographic film	863
Watches and clocks	864
Musical instruments, sound recorders and reproducers and parts and accessories therefor	891
Printed matter	892
Articles of artificial plastic materials, n.e.s.	893
Perambulators, toys, games and sporting goods	894
Office and stationery supplies, n.e.s.	895
Works of art, collectors' pieces and antiques	896
Jewellery and goldsmiths' and silversmiths' wares	897
Manufactured articles, n.e.s.	899



Appendix E

STATISTICS RELATING  
TO  
IMPORTS AND EXPORTS

Table B-1

Imports and Exports of Goods and Services  
as Percentage of Gross National Product  
1961-62

Country	Imports		Exports	
	Rank	%	Rank	%
Netherlands	1	50.2	1	51.9
Norway	2	45.1	2	40.6
Belgium	3	35.9	3	36.0
Denmark	4	32.5	5	30.0
Switzerland	5	32.4	4	30.9
Sweden	6	25.9	6	25.9
Austria	7	24.4	7	24.3
Canada	8	22.6	9	20.3
Britain	9	22.0	8	22.7
Germany (F.G.R.)	10	18.2	10	19.8
Italy	11	17.4	11	17.8
France	12	14.0	12	14.9
Japan	13	12.0	13	11.1
United States	14	4.4	14	5.3

Source: OECD, Statistics of National Accounts, 1955-62, Supplement  
IMF, International Financial Statistics

Table B-2

World Commodity Exports, 1948 and 1953-63  
(Millions of U.S. Dollars and Per Cent of Total)

	1948		1953		1954		1955	
	\$	%	\$	%	\$	%	\$	%
World	57,500	(100. )	82,600	(100. )	86,100	(100. )	93,700	(100. )
Industrialized Countries:								
United States	12,545	( 21.8)	15,661	( 19.0)	14,986	( 17.4)	15,428	( 16.5)
Germany (F.G.R.)	780	( 1.3)	4,740	( 5.7)	5,600	( 6.5)	6,520	( 7.0)
Britain	6,297	( 10.9)	7,153	( 8.7)	7,419	( 8.6)	8,054	( 8.6)
France	2,110	( 3.7)	4,020	( 4.9)	4,400	( 5.1)	5,080	( 5.4)
Canada	3,109	( 5.4)	4,220	( 5.1)	4,034	( 4.7)	4,386	( 4.7)
Japan	258	( 0.4)	1,275	( 1.5)	1,629	( 1.9)	2,011	( 2.1)
Italy	1,077	( 1.9)	1,507	( 1.8)	1,638	( 1.9)	1,857	( 2.0)
Netherlands	1,024	( 1.8)	2,153	( 2.6)	2,414	( 2.8)	2,687	( 2.9)
Belgium-Luxembourg	1,690	( 2.9)	2,260	( 2.7)	2,300	( 2.7)	2,776	( 3.0)
Sweden	1,107	( 1.9)	1,480	( 1.8)	1,583	( 1.9)	1,726	( 1.8)
Switzerland	799	( 1.4)	1,204	( 1.5)	1,228	( 1.4)	1,307	( 1.4)
Denmark	569	( 1.0)	895	( 1.1)	964	( 1.1)	1,057	( 1.1)
Austria	198	( 0.3)	538	( 0.6)	610	( 0.7)	699	( 0.7)
Norway	<u>415</u>	<u>( 0.7)</u>	<u>509</u>	<u>( 0.6)</u>	<u>583</u>	<u>( 0.7)</u>	<u>633</u>	<u>( 0.7)</u>
Total Industrialized	31,978	( 55.6)	47,615	( 57.6)	49,388	( 57.4)	54,221	( 57.9)
Other	25,522	( 44.4)	34,985	( 42.4)	36,712	( 42.6)	39,479	( 42.1)

Table B-2 (Cont'd)

1956		1957		1958		1959		1960	
\$	%	\$	%	\$	%	\$	%	\$	%
103,700	(100. )	111,800	(100. )	107,900	(100. )	115,400	(100. )	127,700	(100. )
18,952	( 18.3)	20,694	( 18.5)	17,738	( 16.4)	17,459	( 15.1)	20,383	( 16.0)
7,780	( 7.5)	9,010	( 8.1)	9,220	( 8.5)	9,980	( 8.6)	11,415	( 8.9)
8,800	( 8.5)	9,226	( 8.2)	8,893	( 8.2)	9,324	( 8.1)	9,953	( 7.8)
4,760	( 4.6)	5,340	( 4.8)	5,380	( 5.0)	5,600	( 4.9)	6,862	( 5.4)
4,916	( 4.7)	5,094	( 4.6)	5,045	( 4.7)	5,365	( 4.7)	5,554	( 4.3)
2,501	( 2.4)	2,858	( 2.6)	2,877	( 2.7)	3,456	( 3.0)	4,055	( 3.2)
2,145	( 2.1)	2,552	( 2.3)	2,577	( 2.4)	2,913	( 2.5)	3,648	( 2.9)
2,862	( 2.8)	3,097	( 2.8)	3,218	( 3.0)	3,607	( 3.1)	4,028	( 3.1)
3,162	( 3.0)	3,186	( 2.8)	3,046	( 2.8)	3,295	( 2.9)	3,775	( 2.9)
1,945	( 1.9)	2,137	( 1.9)	2,088	( 1.9)	2,207	( 1.9)	2,564	( 2.0)
1,442	( 1.4)	1,560	( 1.4)	1,539	( 1.4)	1,683	( 1.5)	1,879	( 1.5)
1,111	( 1.1)	1,174	( 1.0)	1,288	( 1.2)	1,401	( 1.2)	1,493	( 1.2)
849	( 0.8)	979	( 0.9)	918	( 0.9)	968	( 0.8)	1,120	( 0.9)
<u>772</u>	<u>( 0.7)</u>	<u>821</u>	<u>( 0.7)</u>	<u>744</u>	<u>( 0.7)</u>	<u>810</u>	<u>( 0.7)</u>	<u>881</u>	<u>( 0.7)</u>
61,997	( 59.8)	67,728	( 60.6)	64,571	( 59.8)	68,128	( 59.0)	77,610	( 60.8)
41,703	( 40.2)	44,072	( 39.4)	43,329	( 40.2)	47,272	( 41.0)	50,090	( 39.2)

Table B-2 (Cont'd)

World Commodity Exports, 1948 and 1953-63  
(Millions of U.S. Dollars and Per Cent of Total)

	1961		1962		1963	
	\$	%	\$	%	\$	%
World	133,500	(100. )	140,900	(100. )	151,890	(100. )
Industrialized Countries:						
United States	20,755	( 15.5)	21,374	( 15.2)	22,967	( 15.1)
Germany (F.G.R.)	12,687	( 9.5)	13,264	( 9.4)	14,617	( 9.6)
Britain	10,308	( 7.7)	10,617	( 7.5)	11,414	( 7.5)
France	7,210	( 5.4)	7,359	( 5.2)	8,085	( 5.3)
Canada	5,811	( 4.4)	5,925	( 4.2)	6,457	( 4.2)
Japan	4,236	( 3.2)	4,916	( 3.5)	5,448	( 3.6)
Italy	4,183	( 3.1)	4,666	( 3.3)	5,047	( 3.3)
Netherlands	4,307	( 3.2)	4,585	( 3.2)	4,962	( 3.3)
Belgium-Luxembourg	3,924	( 2.9)	4,324	( 3.1)	4,839	( 3.2)
Sweden	2,743	( 2.1)	2,922	( 2.1)	3,202	( 2.1)
Switzerland	2,041	( 1.5)	2,216	( 1.6)	2,415	( 1.6)
Denmark	1,537	( 1.2)	1,669	( 1.2)	1,903	( 1.3)
Austria	1,202	( 0.9)	1,263	( 0.9)	1,326	( 0.9)
Norway	931	( 0.7)	973	( 0.7)	1,073	( 0.7)
Total Industrialized	81,875	( 61.3)	86,073	( 61.1)	93,755	( 61.7)
Other	51,625	( 38.7)	54,827	( 38.9)	58,135	( 38.3)

Source: UN Yearbook of International Trade Statistics, 1962.  
UN Monthly Bulletin of Statistics, September, 1964.

Table B-3

World Commodity Imports, 1948 and 1953-63  
(Millions of \$ U.S. and per cent of total)

	1948		1953		1954		1955	
	\$	%	\$	%	\$	%	\$	%
World	63,600 (100.)		84,300 (100.)		88,500 (100.)		98,400 (100.)	
Industrialized Countries								
United States	7,183 (11.3)		10,915 (12.9)		10,396 (11.7)		11,516 (11.7)	
Germany (F.G.R.)	1,690 ( 2.7)		4,110 ( 4.9)		4,890 ( 5.5)		6,100 ( 6.2)	
Britain	8,070 (12.7)		9,025 (10.7)		9,129 (10.3)		10,483 (10.6)	
France	3,500 ( 5.5)		4,190 ( 5.0)		4,470 ( 5.1)		5,000 ( 5.1)	
Canada	2,618 ( 4.1)		4,317 ( 5.1)		4,075 ( 4.6)		4,628 ( 4.7)	
Japan	684 ( 1.1)		2,410 ( 2.9)		2,399 ( 2.7)		2,471 ( 2.5)	
Italy	1,539 ( 2.4)		2,420 ( 2.9)		2,439 ( 2.8)		2,711 ( 2.8)	
Netherlands	1,871 ( 2.9)		2,375 ( 2.8)		2,858 ( 3.2)		3,208 ( 3.3)	
Belgium-Luxembourg	2,046 ( 3.2)		2,413 ( 2.9)		2,535 ( 2.9)		2,830 ( 2.9)	
Sweden	1,377 ( 2.2)		1,579 ( 1.9)		1,776 ( 2.0)		1,997 ( 2.0)	
Switzerland	1,163 ( 1.8)		1,179 ( 1.4)		1,304 ( 1.5)		1,489 ( 1.5)	
Denmark	713 ( 1.1)		1,001 ( 1.2)		1,170 ( 1.3)		1,178 ( 1.2)	
Austria	390 ( 0.6)		546 ( 0.7)		653 ( 0.7)		887 ( 0.9)	
Norway	750 ( 1.2)		912 ( 1.1)		1,019 ( 1.2)		1,090 ( 1.1)	
Total Industrialized	33,594 (52.8)		47,392 (56.2)		49,113 (55.5)		55,588 (56.5)	
Other	30,006 (47.2)		36,908 (43.8)		39,387 (44.5)		42,812 (43.5)	

Table B-3

World Commodity Imports, 1948 and 1953-63  
(Millions of \$ U.S. and per cent of total)

	1956		1957		1958	
	\$	%	\$	%	\$	%
World	108,700	(100.)	119,700	(100.)	113,800	(100.)
Industrialized Countries						
United States	12,803	(11.8)	13,381	(11.2)	13,340	(11.7)
Germany (F.G.R.)	6,970	( 6.4)	7,890	( 6.6)	7,730	( 6.8)
Britain	10,413	( 9.6)	10,960	( 9.1)	10,096	( 8.9)
France	5,850	( 5.4)	6,430	( 5.4)	5,920	( 5.2)
Canada	5,638	( 5.2)	5,710	( 4.8)	5,205	( 4.6)
Japan	3,230	( 3.0)	4,284	( 3.6)	3,033	( 2.7)
Italy	3,175	( 2.9)	3,674	( 3.1)	3,216	( 2.8)
Netherlands	3,725	( 3.4)	4,105	( 3.4)	3,625	( 3.2)
Belgium-Luxembourg	3,273	( 3.0)	3,432	( 2.9)	3,129	( 2.7)
Sweden	2,209	( 2.0)	2,428	( 2.0)	2,366	( 2.1)
Switzerland	1,766	( 1.6)	1,964	( 1.6)	1,706	( 1.5)
Denmark	1,311	( 1.2)	1,358	( 1.1)	1,366	( 1.2)
Austria	974	( 0.9)	1,128	( 0.9)	1,074	( 0.9)
Norway	1,212	( 1.1)	1,275	( 1.1)	1,310	( 1.2)
Total Industrialized	62,549	(57.5)	68,019	(56.8)	63,116	(55.5)
Other	46,151	(42.5)	51,681	(43.2)	50,684	(44.5)

Table B-3 - continued

1959		1960		1961		1962		1963	
\$	%	\$	%	\$	%	\$	%	\$	%
120,900	(100.)	134,800	(100.)	140,200	(100.)	149,100	(100.)	159,500	(100.)
15,476	(12.8)	15,071	(11.2)	14,702	(10.5)	16,334	(11.0)	17,104	(10.7)
8,580	(7.1)	10,104	(7.5)	10,941	(7.8)	12,280	(8.2)	13,019	(8.2)
10,787	(8.9)	12,319	(9.1)	11,864	(8.5)	12,136	(8.1)	13,120	(8.2)
5,210	(4.3)	6,276	(4.7)	6,678	(4.8)	7,519	(5.1)	8,727	(5.5)
5,746	(4.8)	5,655	(4.2)	5,694	(4.1)	5,846	(3.9)	6,067	(3.8)
3,599	(3.0)	4,491	(3.3)	5,810	(4.1)	5,636	(3.8)	6,739	(4.2)
3,369	(2.8)	4,721	(3.5)	5,222	(3.7)	6,056	(4.1)	7,539	(4.7)
3,939	(3.3)	4,531	(3.4)	5,112	(3.6)	5,347	(3.6)	5,967	(3.7)
3,442	(2.8)	3,957	(2.9)	4,219	(3.0)	4,555	(3.1)	5,090	(3.2)
2,405	(2.0)	2,899	(2.2)	2,921	(2.1)	3,114	(2.1)	3,389	(2.1)
1,923	(1.6)	2,243	(1.7)	2,707	(1.9)	3,020	(2.0)	3,255	(2.1)
1,602	(1.3)	1,805	(1.3)	1,873	(1.3)	2,130	(1.4)	2,128	(1.3)
1,145	(0.9)	1,416	(1.0)	1,485	(1.1)	1,552	(1.0)	1,675	(1.1)
1,323	(1.1)	1,462	(1.1)	1,616	(1.2)	1,654	(1.1)	1,821	(1.2)
68,546	(56.7)	76,950	(57.1)	80,844	(57.7)	87,179	(58.5)	95,640	(60.0)
52,354	(43.3)	57,850	(42.9)	59,356	(42.3)	61,921	(41.5)	63,860	(40.0)

Source: UN Yearbook of International Trade Statistics, 1962.  
UN Monthly Bulletin of Statistics, September, 1964.



Table B-4

## Shares of Industrial Import Markets, 1945 and 1963

(Millions of \$ U.S. and per cent)

Imports to:	Imports from:	Total Imports				Primary Products			
		1954		1963		1954		1963	
		\$	%	\$	%	\$	%	\$	%
Canada	U.S.	3,055.6	(72.7)	4,126.8	(67.8)	633.6	(52.4)	753.5	(45.5)
	EEC	132.4	( 3.2)	317.0	( 5.2)	21.5	( 1.8)	33.3	( 2.0)
	EFTA	443.3	(10.5)	601.9	( 9.9)	55.3	( 4.6)	78.7	( 4.8)
	Japan	19.7	( 0.5)	121.1	( 2.0)	4.2	( 0.3)	7.5	( 0.4)
	Others	552.5	(13.1)	919.4	(15.1)	494.9	(40.9)	782.7	(47.3)
	Total	4,203.5	(100.)	6,086.2	(100.)	1,209.5	(100.)	1,655.6	(100.)
U.S.	Canada	2,355.4	(23.0)	3,825.8	(22.5)	618.5	(10.6)	1,189.6	(15.7)
	EEC	904.9	( 8.9)	2,515.0	(14.8)	215.4	( 3.7)	296.3	( 3.9)
	EFTA	913.5	( 8.9)	1,884.1	(11.1)	237.6	( 4.1)	417.5	( 5.5)
	Japan	269.3	( 2.6)	1,494.4	( 8.8)	87.0	( 1.5)	124.2	( 1.6)
	Other	5,789.0	(56.6)	7,294.5	(42.8)	4,658.2	(80.1)	5,578.1	(73.3)
	Total	10,232.1	(100.)	17,013.8	(100.)	5,816.7	(100.)	7,605.7	(100.)
EEC	Canada	239.1	( 2.0)	451.4	( 1.8)	172.7	( 2.1)	249.5	( 1.8)
	U.S.	1,804.5	(15.0)	5,036.3	(20.5)	993.1	(12.2)	1,824.4	(13.5)
	EFTA	2,781.2	(23.2)	6,544.1	(26.5)	805.9	( 9.9)	1,437.6	(10.7)
	Japan	50.2	( 0.4)	335.4	( 1.4)	18.1	( 0.3)	92.5	( 0.7)
	Others	7,132.5	(59.4)	12,285.8	(49.8)	6,134.1	(75.5)	9,882.5	(73.3)
	Total	12,007.5	(100.)	24,653.0	(100.)	8,123.9	(100.)	13,486.5	(100.)
EFTA	Canada	820.3	( 6.7)	1,159.1	( 6.0)	382.0	( 4.8)	579.6	( 5.6)
	U.S.	1,195.4	( 9.8)	2,265.0	(11.7)	668.6	( 8.5)	903.6	( 8.8)
	EEC	3,157.2	(25.8)	6,341.9	(32.8)	1,056.5	(13.3)	1,458.7	(14.2)
	Japan	60.9	( 0.5)	233.6	( 1.3)	19.0	( 0.2)	72.9	( 0.7)
	Others	6,987.0	(57.2)	9,312.0	(48.2)	5,819.3	(73.2)	7,268.0	(70.7)
	Total	12,220.8	(100.)	19,311.6	(100.)	7,945.4	(100.)	10,282.8	(100.)
Japan	Canada	122.5	( 5.1)	318.8	( 4.7)	107.5	( 5.4)	254.7	( 5.3)
	U.S.	848.5	(35.4)	2,077.6	(30.8)	637.1	(31.9)	1,201.8	(24.9)
	EEC	107.2	( 4.5)	395.0	( 5.9)	58.6	( 2.9)	22.2	( 0.4)
	EFTA	66.0	( 2.7)	263.5	( 3.9)	12.6	( 0.6)	47.3	( 1.0)
	Other	1,252.9	(52.3)	3,681.9	(54.7)	1,180.6	(59.2)	3,302.0	(68.4)
	Total	2,397.1	(100.)	6,736.8	(100.)	1,996.4	(100.)	4,828.0	(100.)

Table B-4 - continued

Industrial Materials				Manufactured Goods			
1954		1963		1954		1963	
\$	%	\$	%	\$	%	\$	%
231.8	(67.8)	279.1	(61.3)	2,011.8	(82.3)	2,957.6	(77.3)
21.4	(6.3)	36.9	(8.1)	79.5	(3.2)	242.8	(6.4)
56.2	(16.4)	77.7	(17.1)	317.2	(13.0)	438.5	(11.5)
2.8	(0.8)	15.5	(3.4)	12.2	(0.5)	97.4	(2.5)
29.8	(8.7)	46.6	(10.2)	25.2	(1.0)	87.9	(2.3)
342.0	(100.)	455.8	(100.)	2,445.9	(100.)	3,824.2	(100.)
1,325.4	(51.2)	1,753.8	(52.7)	334.2	(21.0)	674.7	(12.2)
226.7	(8.8)	352.9	(10.6)	452.7	(28.4)	1,753.6	(31.7)
226.8	(8.8)	272.4	(8.2)	438.1	(27.5)	1,109.7	(20.1)
21.2	(0.8)	232.2	(7.0)	156.4	(9.8)	1,104.9	(20.0)
788.7	(30.4)	714.9	(21.5)	212.4	(13.3)	885.9	(16.0)
2,588.8	(100.)	3,326.2	(100.)	1,593.8	(100.)	5,528.8	(100.)
53.9	(2.8)	120.3	(3.2)	12.4	(0.6)	73.2	(1.1)
218.3	(11.6)	439.1	(11.5)	590.0	(30.0)	2,145.8	(33.1)
810.1	(42.8)	1,613.8	(42.2)	1,148.7	(58.3)	3,355.8	(51.8)
8.8	(0.5)	58.2	(1.5)	23.3	(1.2)	182.7	(2.8)
800.3	(42.3)	1,591.8	(41.6)	194.8	(9.9)	719.3	(11.2)
1,891.4	(100.)	3,823.2	(100.)	1,969.2	(100.)	6,476.8	(100.)
363.9	(22.0)	447.4	(19.8)	70.5	(2.8)	127.3	(1.9)
151.9	(9.2)	207.1	(9.2)	369.6	(14.3)	1,121.8	(16.8)
438.1	(26.4)	610.0	(27.0)	1,657.5	(64.3)	4,240.1	(63.6)
12.4	(0.7)	12.9	(0.5)	29.5	(1.1)	142.4	(2.1)
690.9	(41.7)	984.2	(43.5)	450.4	(17.5)	1,038.8	(15.6)
1,657.2	(100.)	2,261.6	(100.)	2,577.5	(100.)	6,670.4	(100.)
13.7	(12.0)	40.6	(8.5)	1.2	(0.4)	23.4	(1.6)
27.3	(23.9)	120.9	(25.2)	184.0	(64.4)	754.1	(52.9)
4.6	(4.0)	40.4	(8.4)	43.9	(15.4)	332.1	(23.3)
9.7	(8.5)	19.3	(4.0)	43.5	(15.2)	196.2	(13.7)
59.0	(51.6)	259.1	(53.9)	13.2	(4.6)	120.7	(8.5)
114.3	(100.)	480.3	(100.)	285.8	(100.)	1,426.5	(100.)

Notes: (a) Imports by EEC and EFTA exclude intra-trade.  
 (b) EFTA includes Finland but excludes Switzerland.

Source: UN Commodity Trade Statistics.

Table B-5

Shares of Industrial Import Markets for Manufactured Goods, 1954 and 1963  
(Millions of \$ U.S. and per cent)

Imports to:	Imports from:	Total Imports of Manufactured Goods				Machinery and Transport Equipment			
		1954		1963		1954		1963	
		\$	%	\$	%	\$	%	\$	%
Canada	U.S.	2,011.8	(82.3)	2,957.6	(77.3)	1,176.2	(88.9)	1,845.4	(85.0)
	EEC	79.5	(3.2)	242.8	(6.4)	17.6	(1.3)	97.8	(4.5)
	EFTA	317.2	(13.0)	438.5	(11.5)	128.8	(9.7)	208.7	(9.6)
	Japan	12.2	(0.5)	97.4	(2.5)	.4	(--)	15.3	(0.7)
	Others	25.2	(1.0)	87.9	(2.3)	.7	(0.1)	4.3	(0.2)
	Total	2,445.9	(100.)	3,824.2	(100.)	1,323.7	(100.)	2,171.5	(100.)
U.S.	Canada	334.2	(21.0)	674.7	(12.2)	118.9	(33.1)	359.0	(20.1)
	EEC	452.7	(28.4)	1,753.6	(31.7)	93.4	(26.0)	700.1	(39.1)
	EFTA	438.1	(27.5)	1,109.7	(20.1)	134.6	(37.4)	444.3	(24.8)
	Japan	156.4	(9.8)	1,104.9	(20.0)	9.9	(2.8)	260.2	(14.6)
	Others	212.4	(13.3)	885.9	(16.0)	2.6	(0.7)	24.7	(1.4)
	Total	1,593.8	(100.)	5,528.8	(100.)	359.4	(100.)	1,788.3	(100.)
EEC	Canada	12.4	(0.6)	73.2	(1.1)	3.0	(0.4)	41.9	(1.3)
	U.S.	590.0	(30.0)	2,145.8	(33.1)	364.5	(39.6)	1,295.5	(41.2)
	EFTA	1,148.7	(58.3)	3,355.8	(51.8)	530.1	(57.6)	1,669.9	(53.0)
	Japan	23.3	(1.2)	182.7	(2.8)	.9	(0.1)	41.7	(1.3)
	Others	194.8	(9.9)	719.3	(11.2)	21.3	(2.3)	102.0	(3.2)
	Total	1,969.2	(100.)	6,476.8	(100.)	919.8	(100.)	3,151.0	(100.)
EFTA	Canada	70.5	(2.8)	127.3	(1.9)	35.4	(3.4)	41.0	(1.4)
	U.S.	369.6	(14.3)	1,121.8	(16.8)	215.5	(20.8)	609.5	(20.3)
	EEC	1,657.5	(64.3)	4,240.1	(63.6)	706.0	(68.4)	2,137.8	(71.1)
	Japan	29.5	(1.1)	142.4	(2.1)	3.6	(0.3)	31.3	(1.0)
	Others	450.4	(17.5)	1,038.8	(15.6)	73.9	(7.1)	186.4	(6.2)
	Total	2,577.5	(100.)	6,670.4	(100.)	1,034.4	(100.)	3,006.0	(100.)
Japan	Canada	1.2	(0.4)	23.4	(1.6)	.3	(0.2)	10.4	(1.2)
	U.S.	184.0	(64.4)	754.1	(52.9)	123.2	(69.6)	468.6	(58.1)
	EEC	43.9	(15.4)	332.1	(23.3)	24.0	(13.5)	184.5	(22.8)
	EFTA	43.5	(15.2)	196.2	(13.7)	26.6	(15.0)	100.8	(12.5)
	Others	13.2	(4.6)	120.7	(8.5)	3.0	(0.2)	44.0	(5.4)
	Total	285.8	(100.)	1,426.5	(100.)	177.1	(100.)	808.3	(100.)

Table B-5 - continued

Chemicals		Manufactured Goods Classified by Materials				Miscellaneous Manufactures					
1954		1963		1954		1963		1954		1963	
\$	%	\$	%	\$	%	\$	%	\$	%	\$	%
204.6 (86.0)		301.6 (80.8)		381.9 (67.6)		477.7 (62.4)		249.1 (78.0)		332.9 (64.8)	
7.2 (3.0)		22.8 (6.1)		36.6 (6.5)		66.9 (8.7)		18.1 (5.7)		55.3 (10.8)	
23.0 (9.7)		41.3 (11.0)		121.7 (21.5)		125.6 (16.4)		43.7 (13.7)		62.9 (12.2)	
.5 (0.2)		2.0 (0.6)		5.9 (1.0)		43.1 (5.6)		5.4 (1.7)		37.0 (7.3)	
2.7 (1.1)		5.6 (1.5)		19.0 (3.4)		52.6 (6.9)		2.8 (0.9)		25.4 (4.9)	
238.0 (100.)		373.3 (100.)		565.1 (100.)		765.9 (100.)		319.1 (100.)		513.5 (100.)	
115.5 (36.9)		163.7 (28.9)		88.3 (14.8)		122.1 (6.8)		11.5 (3.5)		29.9 (2.2)	
85.6 (27.3)		153.4 (27.0)		177.0 (29.8)		438.9 (24.4)		96.7 (29.7)		461.2 (33.5)	
43.0 (13.8)		82.2 (14.5)		127.9 (21.5)		308.6 (17.2)		132.6 (40.7)		274.6 (20.0)	
3.1 (1.0)		33.2 (5.9)		93.0 (15.6)		443.5 (24.7)		50.4 (15.5)		368.0 (26.7)	
65.9 (21.0)		134.0 (23.7)		109.2 (18.3)		485.0 (26.9)		34.7 (10.6)		242.2 (17.6)	
313.1 (100.)		566.5 (100.)		595.4 (100.)		1,798.1 (100.)		325.9 (100.)		1,375.9 (100.)	
6.1 (1.6)		11.8 (1.1)		3.1 (0.7)		13.0 (0.9)		.2 (0.1)		6.5 (0.8)	
137.7 (35.9)		436.1 (40.7)		49.4 (10.6)		233.3 (16.4)		38.4 (19.3)		180.9 (21.7)	
164.7 (42.9)		449.4 (42.1)		318.5 (68.3)		796.0 (56.0)		135.4 (67.8)		440.5 (52.7)	
4.7 (1.2)		18.3 (1.7)		15.3 (3.3)		57.5 (4.1)		2.4 (1.2)		65.2 (7.8)	
70.6 (18.4)		154.1 (14.4)		79.8 (17.1)		321.5 (22.6)		23.1 (11.6)		141.7 (17.0)	
383.8 (100.)		1,069.7 (100.)		466.1 (100.)		1,421.3 (100.)		199.5 (100.)		834.8 (100.)	
22.9 (4.6)		31.2 (2.9)		10.3 (1.3)		40.7 (2.7)		1.9 (0.8)		14.4 (1.3)	
96.1 (19.4)		231.3 (21.3)		30.2 (3.9)		126.1 (8.4)		27.8 (10.5)		154.9 (14.3)	
279.2 (56.2)		649.0 (59.9)		498.3 (63.7)		876.7 (58.6)		174.0 (65.8)		576.6 (53.2)	
1.9 (0.4)		10.1 (0.9)		20.7 (2.6)		52.9 (3.6)		3.3 (1.2)		48.1 (4.4)	
96.3 (19.4)		163.0 (15.0)		222.8 (28.5)		399.4 (26.7)		57.4 (21.7)		290.0 (26.8)	
496.4 (100.)		1,084.6 (100.)		782.3 (100.)		1,495.8 (100.)		264.4 (100.)		1,084.0 (100.)	
.9 (1.4)		11.2 (3.0)		- ( -- )		1.0 (0.8)		- ( -- )		.8 (0.6)	
36.5 (57.1)		174.7 (47.3)		9.7 (44.7)		36.0 (30.4)		14.6 (63.1)		74.8 (57.3)	
14.1 (22.1)		100.4 (27.2)		2.6 (12.0)		26.0 (21.9)		3.2 (13.9)		21.2 (16.3)	
5.7 (8.9)		42.3 (11.5)		6.4 (29.5)		29.3 (24.8)		4.8 (20.8)		23.8 (18.2)	
6.7 (10.5)		40.6 (11.0)		3.0 (13.8)		26.2 (22.1)		.5 (2.2)		9.9 (7.6)	
63.9 (100.)		369.2 (100.)		21.7 (100.)		118.5 (100.)		23.1 (100.)		130.5 (100.)	

Notes: (a) Imports by EEC and EFTA exclude intra-trade.  
 (b) EFTA includes Finland but excludes Switzerland.

Source: UN Commodity Trade Statistics.

Table B-6

Growth in Real Consumption of Selected Materials in the Industrial Areas  
1952-54 to 1960-61

(Per cent change)

Materials	U.S.	Canada	U.K.	EEC	OWE *	Japan
<b>Natural</b>						
<b>Oils and Fats:</b>						
Vegetable oils and oilseeds	+ 9	+ 34	- 21	+ 52	+ 35	+ 92
Marine oils	+ 28	+133	- 10	- 5	- 13	+ 19
Animal fat (lard and tallow)	+ 23	+ 6	+ 32	+114	- 39	+ 138
Total, oils and fats	+ 13	+ 29	- 15	+ 57	+ 13	+ 91
<b>Textile Fibres:</b>						
Raw cotton	+ 18	+ 5	- 30	+ 19	+ 37	+ 44
Raw wool	- 5	- 15	+ 9	+ 14	+ 1	+ 185
Raw jute (and jute manu- factures)	+ 27	+ 4	- 17	+ 11	+ 39	+ 127
Total, textile fibres	+ 14	+ 2	- 9	+ 17	+ 25	+ 72
<b>Nonferrous Metals:</b>						
Aluminum	+ 32	+ 37	+ 49	+142	+ 108	+ 346
Copper	- 1	+ 15	+ 35	+ 98	+ 90	+ 251
Lead	- 10	- 10	+ 20	+ 46	+ 55	+ 145
Tin	- 1	+ 2	+ 1	+ 98	+ 30	+ 166
Zinc	- 4	+ 15	+ 23	+ 63	+ 84	+ 137
Total, nonferrous metals	+ 9	+ 18	+ 33	+ 97	+ 85	+ 230
Iron and Steel:	+ 5	+ 18	+ 26	+ 75	+ 135	+ 274
<b>Other:</b>						
Hides and skins	- 13	- 1	- 15	+ 21	+ 1	+ 156
Natural rubber	- 25	- 10	- 21	+ 23	+ 41	+ 108
Sawn timber	- 9	- 21	+ 18	+ 31	+ 42	+ 110
Woodpulp	+ 41	+ 24	+ 62	+ 79	+ 91	+ 157
Total, natural materials	+ 7	+ 12	+ 18	+ 60	+ 68	+ 164
<b>Synthetic</b>						
<b>Man-made fibres:</b>						
Rayon	- 10	+ 6	+ 8	+ 34	+ 44	+ 76
Synthetic	+165	+268	+ 551	+820	--	+1,835
Synthetic rubber:	+ 47	+ 83	+1,728	+741	+1,158	+4,480
Plastic materials:	+124	--	+ 178	+224	+ 636	+ 718
Synthetic detergents:	+ 73	+120	+ 53	+235	+ 337	+1,054
Total, synthetic materials	+ 83	+ 98	+ 141	+203	+ 299	+ 376
<b>Total, All Materials</b>	<b>+ 15</b>	<b>+ 15</b>	<b>+ 28</b>	<b>+ 73</b>	<b>+ 79</b>	<b>+ 190</b>
<b>Manufacturing Production</b>	<b>+ 24</b>	<b>+ 24</b>	<b>+ 29</b>	<b>+ 78</b>	<b>+ 60</b>	<b>+ 218</b>

Note: Stock changes have been taken into account for cotton, wool, rubber, timber and the nonferrous metals.

\* Other Western Europe.

Source: National Institute of Economic and Social Research, Trade and Development Problems of the Under-Developed Countries: The Background to the United Nations' Conference, Economic Review, London, May 1964, p. 38.

Appendix C

STATISTICS RELATING TO TARIFFS  
IN  
THE UNITED STATES, BRITAIN, EEC AND JAPAN

Table C-1

Rates of Duty on Canada's Industrial Exports, 1963  
(\$ millions and % of total)

	U.S.		Britain		EEC		Japan		Total	
	\$	%	\$	%	\$	%	\$	%	\$	%
<u>Crude Materials Inedible</u>										
<u>Current Rates of Duty:</u>										
Free	589.1	(67)	215.7	(100)	83.0	(98)	96.2	(82)	984.0	(76)
0.1 to 10%	266.8	(30)	-	-	1.4	(2)	8.4	(7)	276.6	(21)
10.1 to 20%	22.0	(3)	-	-	.4	-	13.1	(11)	35.5	(3)
20.1 to 30%	.2	-	-	-	-	-	-	-	.2	-
Above 30%	1.5	-	-	-	-	-	-	-	1.5	-
	<u>879.6</u>		<u>215.7</u>		<u>84.8</u>		<u>117.7</u>		<u>1,297.8</u>	
<u>Assuming 50% Reduction:</u>										
Free	589.1	(67)	215.7	(100)	83.0	(98)	96.2	(82)	984.0	(76)
0.1 to 10%	288.8	(33)	-	-	1.8	(2)	21.5	(18)	312.1	(24)
10.1 to 15%	.2	-	-	-	-	-	-	-	.2	-
Above 15%	1.5	-	-	-	-	-	-	-	1.5	-
	<u>879.6</u>		<u>215.7</u>		<u>84.8</u>		<u>117.7</u>		<u>1,297.8</u>	
<u>Fabricated Materials Inedible</u>										
<u>Current Rates of Duty:</u>										
Free	1,135.5	(55)	447.1	(99)	23.3	(18)	50.3	(76)	1,656.2	(61)
0.1 to 10%	804.2	(39)	2.4	(5)	71.2	(56)	6.6	(10)	884.4	(32)
10.1 to 20%	123.2	(6)	2.9	(5)	29.7	(23)	8.6	(13)	164.4	(6)
20.1 to 30%	8.0	-	-	-	3.7	(3)	.4	(1)	12.1	(5)
Above 30%	3.9	-	-	-	-	-	-	-	3.9	-
	<u>2,074.8</u>		<u>452.4</u>		<u>127.9</u>		<u>65.9</u>		<u>2,721.0</u>	
<u>Assuming 50% Reduction:</u>										
Free	1,135.5	(55)	447.1	(99)	23.3	(18)	50.3	(76)	1,656.2	(61)
0.1 to 10%	927.4	(45)	5.3	(1)	100.9	(79)	15.2	(23)	1,048.8	(38)
10.1 to 15%	8.0	-	-	-	3.7	(3)	.4	(1)	12.1	(5)
Above 15%	3.9	-	-	-	-	-	-	-	3.9	-
	<u>2,074.8</u>		<u>452.4</u>		<u>127.9</u>		<u>65.9</u>		<u>2,721.0</u>	
<u>End Products Inedible</u>										
<u>Current Rates of Duty:</u>										
Free	119.0	(28)	25.0	(86)	1.3	(2)	.6	(9)	145.9	(27)
0.1 to 10%	149.1	(35)	-	-	14.9	(18)	3.7	(56)	167.7	(31)
10.1 to 20%	141.2	(34)	2.7	(9)	60.6	(75)	1.8	(28)	206.3	(38)
20.1 to 30%	8.4	(2)	1.1	(4)	3.0	(4)	.5	(7)	13.0	(3)
Above 30%	4.2	(1)	.1	(1)	.5	(1)	-	-	4.8	(1)
	<u>421.9</u>		<u>28.9</u>		<u>80.3</u>		<u>6.6</u>		<u>537.7</u>	
<u>Assuming 50% Reduction:</u>										
Free	119.0	(28)	25.0	(86)	1.3	(2)	.6	(9)	145.9	(27)
0.1 to 10%	290.3	(69)	2.7	(9)	75.5	(93)	5.5	(84)	374.0	(69)
10.1 to 15%	8.4	(2)	1.1	(4)	3.0	(4)	.5	(7)	13.0	(3)
Above 15%	4.2	(1)	.1	(1)	.5	(1)	-	-	4.8	(1)
	<u>421.9</u>		<u>28.9</u>		<u>80.3</u>		<u>6.6</u>		<u>537.7</u>	

Notes: The rates of duty are those which are believed to have been applied to Canadian exports in 1963, except for exports to the United States under the Defence Production Sharing Agreement. This Agreement provides that Canadian exports of defence equipment to the United States enter duty free. It was not possible in the time available to identify these exports and allocate them to the duty free category.

The British duties are the preferential rates applicable to Commonwealth countries.

Some tariff items provided a range of duties and there was doubt as to the actual rate that was applied. In these cases the highest duty in the range was used.

Specific duties were converted to the ad valorem equivalent.

Exports amounting to less than \$100,000 (Cdn.) per statistical category to each market were excluded.

Source: Economic Council of Canada.

Table C-2  
Rates of Duty on Manufactured Goods

	U.S.		Britain		EEC		Japan		Total	
	Items	%	Items	%	Items	%	Items	%	Items	%
<u>Chemicals</u>										
<u>Current Rates of Duty:</u>										
Free	51	( 7.5)	704	(100.0)	23	( 3.3)	69	( 9.8)	847	(30.2)
0.1 to 10%	63	( 9.3)	-	-	162	(22.8)	91	(12.9)	316	(11.3)
10.1 to 20%	291	(42.8)	-	-	482	(67.9)	442	(62.7)	1,215	(43.4)
20.1 to 30%	175	(25.7)	-	-	42	( 5.9)	101	(14.3)	318	(11.4)
Above 30%	100	(14.7)	-	-	1	( .1)	2	( .3)	103	( 3.7)
<u>With 50% Reduction:</u>										
Free	51	( 7.5)	704	(100.0)	23	( 3.3)	69	( 9.8)	847	(30.2)
0.1 to 10%	354	(52.1)	-	-	644	(90.7)	533	(75.6)	1,531	(54.7)
10.1 to 15%	175	(25.7)	-	-	42	( 5.9)	101	(14.3)	318	(11.4)
Above 15%	100	(14.7)	-	-	1	( .1)	2	( .3)	103	( 3.7)
<u>Machinery and Transport Equipment</u>										
<u>Current Rates of Duty:</u>										
Free	11	( 3.4)	266	( 82.3)	5	( 1.6)	1	( .3)	283	(21.9)
0.1 to 10%	5	( 1.6)	-	-	40	(12.4)	9	( 2.8)	54	( 4.2)
10.1 to 20%	272	(84.2)	50	(15.5)	260	(80.5)	281	(87.0)	863	(66.8)
20.1 to 30%	23	( 7.1)	6	( 1.9)	18	( 5.5)	28	( 8.7)	75	( 5.8)
Above 30%	12	( 3.7)	1	( .3)	-	( - )	4	( 1.2)	17	( 1.3)
<u>With 50% Reduction:</u>										
Free	11	( 3.4)	266	( 82.3)	5	( 1.6)	1	( .3)	283	(21.9)
0.1 to 10%	277	(85.8)	50	(15.5)	300	(92.9)	290	(89.8)	917	(71.0)
10.1 to 15%	23	( 7.1)	6	( 1.9)	18	( 5.5)	28	( 8.7)	75	( 5.8)
Above 15%	12	( 3.7)	1	( .3)	-	( - )	4	( 1.2)	17	( 1.3)
<u>Manufactures Classified Chiefly by Material</u>										
<u>Current Rates of Duty:</u>										
Free	5	( 1.2)	392	( 94.2)	5	( 1.2)	8	( 1.9)	410	(24.8)
0.1 to 10%	30	( 7.3)	-	-	108	(26.0)	56	(13.5)	194	(11.7)
10.1 to 20%	134	(32.7)	18	( 4.3)	263	(63.4)	278	(67.0)	693	(41.9)
20.1 to 30%	84	(20.5)	5	( 1.2)	37	( 8.9)	55	(13.3)	181	(10.9)
Above 30%	157	(38.3)	1	( .3)	2	( .5)	18	( 4.3)	178	(10.7)
<u>With 50% Reduction:</u>										
Free	5	( 1.2)	392	( 94.2)	5	( 1.2)	8	( 1.9)	410	(24.8)
0.1 to 10%	164	(40.0)	18	( 4.3)	371	(89.4)	334	(80.5)	887	(53.6)
10.1 to 15%	84	(20.5)	5	( 1.2)	37	( 8.9)	55	(13.3)	181	(10.9)
Above 15%	157	(38.3)	1	( .3)	2	( .5)	18	( 4.3)	178	(10.7)



Table C-2 - continued  
Rates of Duty on Manufactured Goods

	U.S.		Britain		EEC		Japan		Total	
	Items	%	Items	%	Items	%	Items	%	Items	%
<u>Miscellaneous Manufactured Articles</u>										
<u>Current Rates of Duty:</u>										
Free	6	( 2.1)	258	( 87.5)	20	( 6.9)	19	( 6.6)	303	(26.1)
0.1 to 10%	6	( 2.1)	-	( - )	29	( 9.9)	7	( 2.4)	42	( 3.6)
10.1 to 20%	84	(29.5)	13	( 4.4)	203	(69.5)	173	(60.1)	473	(40.8)
20.1 to 30%	46	(16.1)	15	( 5.1)	40	(13.7)	42	(14.6)	143	(12.3)
Above 30%	143	(50.2)	9	( 3.0)	-	( - )	47	(16.3)	199	(17.2)
<u>With 50% Reduction:</u>										
Free	6	( 2.1)	258	( 87.5)	20	( 6.9)	19	( 6.6)	303	(26.1)
0.1 to 10%	90	(31.6)	13	( 4.4)	232	(79.4)	180	(62.5)	515	(44.4)
10.1 to 15%	46	(16.1)	15	( 5.1)	40	(13.7)	42	(14.6)	143	(12.3)
Above 15%	143	(50.2)	9	( 3.0)	-	( - )	47	(16.3)	199	(17.2)

Notes: Atlantic Tariffs and Trade provides pre-Dillon Round duties and therefore a number of U.S. and EEC rates will be around 20% below the levels shown.

British duties are the preferential rates applying to commonwealth countries.

Not infrequently the tariff schedules show a range of duties for certain products. In these cases the highest duty in the range was used without exception.

In a few cases the tariff schedules show a specific duty and do not give its ad valorem equivalent. These specific duties were excluded.

Source: Atlantic Tariffs and Trade published by Political and Economic Planning, London. Customs Tariff Schedule for Japan, 1964.

Table C-3

## Rates of Duty on More Highly Processed Forms of Paper and Base Metals

	U.S.		Britain		EEC		Japan		Total	
	Items	%	Items	%	Items	%	Items	%	Items	%
<u>Paper, Paperboard and Manufactures thereof</u>										
<u>Current Rates of Duty:</u>										
Free	-	-	28	(100.0)	-	-	2	( 7.1)	30	(26.8)
0.1 to 5%	-	-	-	-	-	-	1	( 3.6)	1	( .9)
5.1 to 10%	1	( 3.6)	-	-	2	( 7.2)	3	(10.7)	6	( 5.4)
10.1 to 15%	6	(21.4)	-	-	7	(25.0)	15	(53.6)	28	(25.0)
15.1 to 20%	16	(57.1)	-	-	16	(57.1)	6	(21.4)	38	(33.9)
Above 20%	5	(17.9)	-	-	3	(10.7)	1	( 3.6)	9	( 8.0)
<u>Assuming 50% Reduction:</u>										
Free	-	-	28	(100.0)	-	-	2	( 7.1)	30	(26.8)
0.1 to 5%	1	( 3.6)	-	-	2	( 7.1)	4	(14.3)	7	( 6.2)
5.1 to 10%	22	(78.8)	-	-	23	(82.2)	21	(75.0)	66	(58.9)
Above 10%	5	(17.8)	-	-	3	(10.7)	1	( 3.6)	9	( 8.1)
<u>Iron and Steel</u>										
<u>Current Rates of Duty:</u>										
Free	1	( .8)	122	(100.0)	-	-	-	-	123	(25.2)
0.1 to 5%	9	( 7.4)	-	-	-	-	-	-	9	( 1.9)
5.1 to 10%	16	(13.1)	-	-	111	(91.0)	-	-	127	(26.0)
10.1 to 15%	56	(45.9)	-	-	9	( 7.4)	104	(85.3)	169	(34.6)
15.1 to 20%	38	(31.2)	-	-	2	( 1.6)	2	( 1.6)	42	( 8.6)
Above 20%	2	( 1.6)	-	-	-	-	16	(13.1)	18	( 3.7)
<u>Assuming 50% Reduction:</u>										
Free	1	( .8)	122	(100.0)	-	-	-	-	123	(25.2)
0.1 to 5%	25	(20.5)	-	-	111	(91.0)	-	-	136	(27.9)
5.1 to 10%	94	(77.1)	-	-	11	( 9.0)	106	(86.9)	211	(43.2)
Above 10%	2	( 1.6)	-	-	-	-	16	(13.1)	18	( 3.7)
<u>Copper</u>										
<u>Current Rates of Duty:</u>										
Free	-	-	8	(100.0)	1	(12.5)	-	-	9	(28.1)
0.1 to 5%	-	-	-	-	-	-	-	-	-	-
5.1 to 10%	-	-	-	-	3	(37.5)	-	-	3	( 9.4)
10.1 to 15%	-	-	-	-	4	(50.0)	-	-	4	(12.5)
15.1 to 20%	-	-	-	-	-	-	4	(50.0)	4	(12.5)
Above 20%	8	(100.0)	-	-	-	-	4	(50.0)	12	(37.5)
<u>Assuming 50% Reduction:</u>										
Free	-	-	8	(100.0)	1	(12.5)	-	-	9	(28.1)
0.1 to 5%	-	-	-	-	3	(37.5)	-	-	3	( 9.4)
5.1 to 10%	-	-	-	-	4	(50.0)	4	(50.0)	8	(25.0)
Above 10%	8	(100.0)	-	-	-	-	4	(50.0)	12	(37.5)
<u>Nickel</u>										
<u>Current Rates of Duty:</u>										
Free	-	-	6	(100.0)	-	-	-	-	6	(26.1)
0.1 to 5%	-	-	-	-	2	(33.3)	-	-	2	( 8.7)
5.1 to 10%	-	-	-	-	2	(33.3)	-	-	2	( 8.7)
10.1 to 15%	2	(33.3)	-	-	2	(33.3)	-	-	4	(17.4)
15.1 to 20%	-	-	-	-	-	-	-	-	-	-
Above 20%	4	(66.7)	-	-	-	-	5	(100.0)	9	(39.1)
<u>Assuming 50% Reduction:</u>										
Free	-	-	6	(100.0)	-	-	-	-	6	(26.1)
0.1 to 5%	-	-	-	-	4	(66.7)	-	-	4	(17.4)
5.1 to 10%	2	(33.3)	-	-	2	(33.3)	-	-	4	(17.4)
Above 10%	4	(66.7)	-	-	-	-	5	(100.0)	9	(39.1)

Table C-3 (Cont'd)

	U.S.		Britain		EEC		Japan		Total	
	Items	%	Items	%	Items	%	Items	%	Items	%
<u>Aluminum</u>										
<u>Current Rates of Duty:</u>										
Free	-	-	8	(100.0)	-	-	-	-	8	(25.0)
0.1 to 5%	-	-	-	-	-	-	-	-	-	-
5.1 to 10%	1	( 12.5)	-	-	1	( 12.5)	-	-	2	( 6.3)
10.1 to 15%	-	-	-	-	3	( 37.5)	2	( 25.0)	5	(15.6)
15.1 to 20%	4	( 50.0)	-	-	3	( 37.5)	1	( 12.5)	8	(25.0)
Above 20%	3	( 37.5)	-	-	1	( 12.5)	5	( 62.5)	9	(28.1)
<u>Assuming 50% Reduction:</u>										
Free	-	-	8	(100.0)	-	-	-	-	8	(25.0)
0.1 to 5%	1	( 12.5)	-	-	1	( 12.5)	-	-	2	( 6.3)
5.1 to 10%	4	( 50.0)	-	-	6	( 75.0)	3	( 37.5)	13	(40.6)
Above 10%	3	( 37.5)	-	-	1	( 12.5)	5	( 62.5)	9	(28.1)
<u>Lead</u>										
<u>Current Rates of Duty:</u>										
Free	-	-	7	(100.0)	-	-	-	-	7	(25.0)
0.1 to 5%	-	-	-	-	1	( 14.3)	-	-	1	( 3.6)
5.1 to 10%	-	-	-	-	3	( 42.9)	-	-	3	(10.7)
10.1 to 15%	5	( 71.4)	-	-	3	( 42.8)	3	( 42.8)	11	(39.3)
15.1 to 20%	1	( 14.3)	-	-	-	-	1	( 14.3)	2	( 7.1)
Above 20%	1	( 14.3)	-	-	-	-	3	( 42.8)	4	(14.3)
<u>Assuming 50% Reduction:</u>										
Free	-	-	7	(100.0)	-	-	-	-	7	(25.0)
0.1 to 5%	-	-	-	-	4	( 57.1)	-	-	4	(14.3)
5.1 to 10%	6	( 85.7)	-	-	3	( 42.9)	4	( 57.1)	13	(46.4)
Above 10%	1	( 14.3)	-	-	-	-	3	( 42.9)	4	(14.3)
<u>Zinc</u>										
<u>Current Rates of Duty:</u>										
Free	-	-	4	(100.0)	-	-	-	-	4	(25.0)
0.1 to 5%	-	-	-	-	-	-	-	-	-	-
5.1 to 10%	-	-	-	-	2	( 50.0)	-	-	2	(12.5)
10.1 to 15%	-	-	-	-	2	( 50.0)	-	-	2	(12.5)
15.1 to 20%	4	(100.0)	-	-	-	-	4	(100.0)	8	(50.0)
Above 20%	-	-	-	-	-	-	-	-	-	-
<u>Assuming 50% Reduction:</u>										
Free	-	-	4	(100.0)	-	-	-	-	4	(25.0)
0.1 to 5%	-	-	-	-	2	( 50.0)	-	-	2	(12.5)
5.1 to 10%	4	(100.0)	-	-	2	( 50.0)	4	(100.0)	10	(62.5)
Above 10%	-	-	-	-	-	-	-	-	-	-
<u>Uranium</u>										
<u>Current Rates of Duty:</u>										
Free	-	-	1	(100.0)	-	-	1	(100.0)	2	(50.0)
0.1 to 5%	-	-	-	-	-	-	-	-	-	-
5.1 to 10%	-	-	-	-	1	(100.0)	-	-	1	(25.0)
10.1 to 15%	-	-	-	-	-	-	-	-	-	-
15.1 to 20%	-	-	-	-	-	-	-	-	-	-
Above 20%	1	(100.0)	-	-	-	-	-	-	1	(25.0)
<u>Assuming 50% Reduction:</u>										
Free	-	-	1	(100.0)	-	-	1	(100.0)	2	(50.0)
0.1 to 5%	-	-	-	-	1	(100.0)	-	-	1	(25.0)
5.1 to 10%	-	-	-	-	-	-	-	-	-	-
Above 10%	1	(100.0)	-	-	-	-	-	-	1	(25.0)

Table C-3 (Cont'd)

	U.S.		Britain		EEC		Japan		Total	
	Items	%	Items	%	Items	%	Items	%	Items	%
<u>Misc. Non-Ferrous Metals</u>										
<u>Current Rates of Duty:</u>										
Free	-	-	14	(100.0)	-	-	1	(7.1)	15	(26.8)
0.1 to 5%	-	-	-	-	1	(50.0)	-	-	1	(1.9)
5.1 to 10%	-	-	-	-	7	(28.6)	5	(35.7)	12	(21.4)
10.1 to 15%	3	(21.4)	-	-	4	(28.6)	2	(14.3)	9	(16.1)
15.1 to 20%	-	-	-	-	2	(14.3)	6	(42.9)	8	(14.3)
Above 20%	11	(78.6)	-	-	-	-	-	-	11	(19.6)
<u>Assuming 50% Reduction:</u>										
Free	-	-	14	(100.0)	-	-	1	(7.1)	15	(26.8)
0.1 to 5%	-	-	-	-	8	(57.2)	5	(35.7)	13	(23.2)
5.1 to 10%	3	(21.4)	-	-	6	(42.8)	8	(57.2)	17	(30.4)
Above 10%	11	(78.6)	-	-	-	-	-	-	11	(19.6)

Notes: Atlantic Tariffs and Trade provides pre-Dillon Round duties and therefore a number of U.S. rates and EEC rates, other than those applying to iron and steel, will be around 20% below the levels shown.

The EEC rates for iron and steel are the existing rates.

British duties are the preferential rates applying to commonwealth countries.

Not infrequently the tariff schedules show a range of duties for certain products. In these cases the highest duty in the range was used without exception.

In a few cases the tariff schedules show a specific duty and do not give its ad valorem equivalent. These specific duties were excluded.

The less processed forms of paper and base metals are excluded. Among these excluded products are pulp and newsprint; pig iron, ingot and other primary forms of iron and steel; unwrought copper, nickel, aluminum lead, zinc, tin, magnesium and other non-ferrous base metals. All forms of scrap were also excluded.

Source: Atlantic Tariffs and Trade, published by Political and Economic Planning, London.

Customs Tariff Schedule for Japan, 1964.

Tariffs of the European Coal and Steel Community.

### TECHNICAL STUDIES

The following is a list of technical studies which have been prepared as background papers for the First Annual Review of the Economic Council of Canada. They are being published separately and are available from the Queen's Printer, Ottawa. Although they are being published under the auspices of the Economic Council, the views expressed in them are those of the authors themselves.

#### Staff Studies

1. Population and Labour Force Projections to 1970, by Frank T. Denton, Yoshiko Kasahara and Sylvia Ostry.
2. Potential Output, 1946 to 1970, by B. J. Drabble.
3. An Analysis of Post-War Unemployment, by Frank T. Denton and Sylvia Ostry.
4. Housing Demand to 1970, by Wolfgang M. Illing.
5. Business Investment to 1970, by Derek A. White.
6. Special Survey of Longer Range Investment Outlook and Planning in Business, by B. A. Keys.
7. Canada and World Trade, by M. G. Clark.
8. Export Projections to 1970, by J. R. Downs.
9. Federal Tax Revenues at Potential Output, 1960 and 1970, by D. J. Daly.
10. National Saving at Potential Output to 1970, by Frank Wildgen.
11. Changes in Agriculture to 1970, by John Dawson.

#### Special Studies

1. Immigration and Emigration of Professional and Skilled Manpower During the Post-War Period, by Louis Parai.
2. A Survey of Labour Market Conditions, Windsor, Ontario, 1964: A Case Study, by G. R. Horne, W. J. Gillen and R. A. Helling.

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