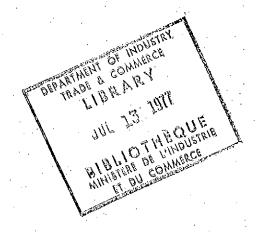
A STUDY

ON DIRECT SHIPMENT AND TRANSSHIPMENT

OF CANADIAN EXPORTS TO THE COMMONWEALTH CARIBBEAN

November, 1970

Industry, Trade and Traffic Services Branch, Department of Industry, Trade and Commerce, Ottawa, Ontario.



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I INTRODUCTION

A. Background

This study was undertaken in order to update the previous study that was released in 1968 entitled "Canada - Commonwealth Caribbean, Transportation Study, 1968" which examined in detail transportation problems in Canada - Commonwealth Caribbean trade, the historical background of Canada - Commonwealth Caribbean transportation services and current problems associated with these services.

The purpose of this current study is to examine recent trends of Canadian exports to the Commonwealth Caribbean in terms of volume and cost, with a view to establishing a basis upon which Departmental actions and policies may be developed in advising Canadian shippers on the routing of various commodities.

B. <u>Nature of Study</u>

The volume analysis covers the time period from 1963 to 1968 inclusive. It considers the direct shipment and transshipment by road and by rail of all the major commodity groups exported from Canada to each of the Commonwealth Caribbean countries. This first part of the study examines the quantity of major Canadian exports shipped to the Commonwealth Caribbean. The cost analysis deals with the period 1968 - 1969 and is concerned with the cost of shipping these commodities by alternative modes of transport and alternative routings.

Total Canadian exports to the seven Commonwealth Caribbean countries increased by 48.1 per cent from \$62,441,000 in 1963 to \$92,481,840 in 1968. During the same period, total exports transshipped by road and by rail from Canada to the seven countries rose by 317 per cent from \$2,715,000 to \$11,311,000. Routings by road accounted for 78.2 per cent of total trans-

shipments in 1963 and 90.3 per cent in 1968.

Between 1963 and 1968, the value of all selected major commodity groups exported from Canada to the seven Commonwealth Caribbean countries increased by 18.5 per cent from \$39,184,000 to \$46,448,000 even though, in terms of quantity, however, the total tonnage exported of this group decreased from 203,655 tons in 1963 to 170,970 tons in 1968; representing a decline of 16.0 per cent over the period.

The quantity of all selected major commodity groups exported from Canada to the seven Commonwealth Caribbean countries and transshipped by road and by rail amounted to 2,162 tons in 1963 and this volume increased to 6,114 tons in 1968. The quantity transshipped by road increased from 958 tons in 1963 to 4,861 tons in 1968.

Table (a) of the Appendix shows the value of all domestic exports from Canada to each of the seven Commonwealth Caribbean countries, by mode of transport, during the period 1963 - 1968. Chart (a) shows exports of selected major commodity groups from Canada to the Commonwealth Caribbean by all modes of transport, for the period 1963 - 1968. Table (b) of the Appendix shows total Canadian exports of selected commodity groups to each of the Commonwealth Caribbean countries as well as transshipments via the United States and transshipments as a percentage of total exports of the selected commodity groups. Table (c) of the Appendix shows the percentage of commodities trucked partly through Miami and partly through New York. The dash (-) represents either no road transshipments or all road transshipments moved through one port.

II METHODOLOGY

The Dominion Bureau of Statistics' publication, Exports by Mode of Transport, was used to show, in terms of quantity, the proportion of Canadian exports shipped directly to the Commonwealth Caribbean and the proportion transshipped via the United States, as well as the proportion of transshipments moving by road. Private data provided by industry sources made it possible to divide total road transshipments into the proportion moving through New York and the proportion moving through Miami to the Commonwealth Caribbean. Information on the cost of transporting Canadian exports to the Commonwealth Caribbean by alternative modes and routings have been obtained from a number of steamship lines and trucking firms.

A. Assumptions:

It was assumed:

- that all cargo traffic from Canada to the Commonwealth Caribbean which
 is transshipped by road via the United States is routed either through the
 Port of New York or the Port of Miami,
- 2. that the percentage distribution of Canadian exports to the Commonwealth Carribean by mode of transport for the whole year 1963 is the same as the percentage distribution for the last nine months of that year.

B. Limitations

- 1. Data on the quantity of Canadian exports to the Commonwealth Caribbean for the first three months of 1963 and for certain commodity groups throughout the period under analysis were not available from the DBS publication Exports by Mode of Transport and had to be estimated.
- 2. Information on cargo trucked from Montreal to Miami and destined for the Commonwealth Caribbean is not available for four months of the year 1966 and has had to be estimated.

- 3. The tonnage figures provided by private industry sources, in many cases, combined Central American and South American countries with the Commonwealth Caribbean countries used in this study. It was, therefore, necessary to evaluate the percentage distribution exported to every country involved and then apply this distribution to the appropriate countries; thereby estimating the tonnages transshipped via Miami and New York.
- 4. Large percentage increases shown in the analysis in some cases are deceptive because of the small volume of cargo in the base year. For example Table 1 (c) shows a 6,060 per cent increase in the volume of total transshipments in 1966 over the 1965 figure, however, this actually represents a growth from 5 tons in 1965 to 308 tons in 1966.

C. Terminology

Commonwealth Caribbean Countries

Jamaica Trinidad-Tobago Guyana Leeward and Windward Islands Barbados British Honduras

DIRECT SHIPMENT: Exports by water and air to destination.

DOLLARS:

Canadian dollars

SELECTED (MAJOR) COMMODITY GROUPS:

Bahamas

Those chosen as significant for this study using a total export value as the criterion.

TON (SHORT TON): Weight unit of 2,000 pounds.

TRANSSHIPMENT: Export by road and/or rail via the United States.

D. \$ U.S. CONVERSIONS

Where ocean rates had to be converted from \$U.S. to \$Cdn. the exchange rate used was \$1.00 U.S. = \$0.92 Cdn., while a conversion factor of 4 per cent was used to convert U.S. trucking rates to Canadian dollars.

In order to facilitate the analysis, a criterion based on value has been established as a means of selecting the major commodity groups exported from Canada to each of the Commonwealth-Caribbean countries. Accordingly, the following commodity groups have been selected as the major Canadian exports to the Commonwealth Caribbean.

1. Jamaica:

Meat, fresh, chilled or frozen Meat, cured Fish, salted and/or dried Fish, pickled Fish, canned Dairy produce Cereals, milled Other foods Paper for printing Aluminum, including alloys General purpose industrial machinery Drilling and mining, oil and gas machinery Railroad and street railroad rolling stock Road motor vehicles Rubber tires and tubes Electric lighting and control equipment Apparel and apparel accessories Medicinal and pharmaceutical products

2. Trinidad - Tobago:

Cattle Meat, cured Fish, salted and/or dried Fish, canned Dairy produce Cereals, milled Vegetables, fresh or chilled Complete feeds and feed concentrates Tobacco, unmanufactured Lumber Paper for printing Aluminum, including alloys General purpose industrial machinery Road motor vehicles Heating, air conditioning and refrigeration equipment Electric lighting and control equipment Apparel and apparel accessories Medicinal and pharmaceutical products

3. Guyana:

Meat, cured Fish, salted and/or dried Fish, cannod Cereals, milled Vegetables, fresh or chilled Vegetables, dried, preserved, not canned Othor foods Paper for printing Other fabrics Structural shapes and railroad track material Pipes and tubes, iron and steel General purpose industrial machinery Drilling and mining, oil and gas, machinery Railroad and street railroad rolling stock Road motor vehicles Heating, air conditioning and refrigeration equipment Electric lighting and control equipment Furniture and fixtures Medicinal and pharmaceutical products Containers and closures

4. Bahamas:

Meat, fresh, chilled or frozen Ready cooked meat and preparations, not canned Dairy produce Cereals, milled Vegetables, fresh or chilled Sugar, molasses and syrups Other foods Pipes and tubes, iron and steel Road motor vehicles Rubber tires and tubes Communications and related equipment Electric lighting and control equipment Furniture and fixtures Apparel and apparel accessories Jewelry and silverware Medicinal and pharmaceutical products

5. Leeward and Windward Islands: Meat, cured

Meat, cured
Fish, salted and/or dried
Fish, canned
Dairy produce
Coreals, milled
Sugar, molasses and syrups
Other foods
Complete feeds and feed concentrates
Lumber
Broad woven fabrics

Leeward and Windward Islands: (Cont'd)

Other special industrial machinery Road motor vehicles Measuring and laboratory equipment Furniture and fixtures Footwear House furnishings

6. Barbados:

Meat, cured Fish, salted and/or dried Fish, canned Cereals, milled Vegetables, fresh or chilled Other foods Complete feeds and feed concentrates Lumber Paper for printing Broad woven fabrics Heating, air conditioning and refrigeration equipment Electric lighting and control equipment Furniture and fixtures Apparel and apparel accessories Footwear House furnishings Medicinal and pharmaceutical products Containers and closures

7. British Honduras:

Fish, canned
Cereals, milled
Other foods
Paper for printing
Fine paper
Broad woven fabrics
Aluminum, including alloys
Drilling and mining, oil and gas, machinery
Road motor vehicles
Electric lighting and control equipment
Hand tools and miscellaneous cutlery
Medicinal and pharmaceutical products
Containers and closures

III SUMMARY AND FINDINGS

A. JAMAICA

Total Canadian exports to Jamaica increased from \$22.3 million to \$34.4 million between 1963 and 1968. Pirect shipments from 1963 - 1968 by water and air of the selected commodity groups amounted to 375,008 tons; while transshipments by road and rail via the United States amounted to 5,678 tons or 1.5 per cent of total shipments of the selected commodity groups.

Transshipments by road from Canada to Jamaica of the selected commodity groups from 1963 - 1968 amounted to 4,474 tons or 78.8 per cent of the total transshipments.

From 1966 to 1968, 2,521 tons were routed through Miami, and 616 tons were routed through New York.

In 1968 and 1969, the total transshipment rate for every major commodity group was higher than the direct ocean rate from Canada to Jamaica. An analysis of the various freight rates can be found in the section entitled "Costs of Alternative Modes and Routings".

B. TRINIDAD - TOBAGO

Total Canadian exports to Trinidad-Tobago remained stable in 1963 and 1968 in terms of value at \$16.2 million. Direct shipments by water and air of the major commodity groups from 1963 - 1968 amounted to 330,540 tons. Transshipments by road and rail via the United States amounted to 1,927 tons of the selected commodity groups. Of this, 1,757 tons were transshipped by road.

During the period 1966 - 1968, 154 tons were routed through Miami and 1,396 tons through New York.

In 1968 and 1969 the total transshipment rates, as shown in the section entitled "Costs of Alternative Modes and Routings" were substantially higher than the direct ocean rates.

C. GUYANA

Between 1963 and 1968 exports to Guyana in terms of value rose from \$5.1 million to \$9.3 million. Direct shipments of the major commodity groups during this period amounted to 75,143 tons while transshipments amounted to only 836 tons. Road transshipments amounted to 439 tons of the total transshipments during this period.

From 1966 - 1968, 50 tons of the road transshipments were routed through the Port of Miami and 371 tons through the Port of New York.

The direct rates, as shown in the specific section on rates, were less than the transshipment rate.

D. BAHAMAS

Total Canadian exports to the Bahamas increased by 109.8 per cent over the five year period 1963 - 1968, from \$6.1 million to \$12.8 million. Direct shipments to the Bahamas from 1963 - 1968 of the selected commodity groups amounted to 98,900 tons. Total transshipments amounted to 9,587 tons during this period with road transshipments accounting for 9,169 tons. The Miami routing accounted for 4,608 tons of road transshipments to the Bahamas between 1966 and 1968 while New York accounted for 1,640 tons.

For 1968 and 1969, the total transshipment rate was greater than the direct ocean freight rate from Montreal to the Bahamas.

E. LEEWARD AND WINDWARD ISLANDS

The total value of Canadian exports to the Leeward and Windward Islands increased from \$6.6 million in 1963 to \$8.4 million in 1968. Direct shipments between 1963 and 1968 of the major commodity groups amounted to 200,490 tons while during this same period, total transshipments by rail and road amounted to 1,107 tons. Of the total transshipments, 585 tons were routed by road from Canada. Road transshipments via Miami between 1966 and 1968 amounted to 138 tons while New York accounted for 284 tons.

The transshipment rate was higher than the direct rate for all commodities for the years 1968 and 1969.

F. BARBADOS

The value of Canadian exports to the Barbados increased by 83.9 per cent over the period 1963 to 1968, from \$5.5 million to \$10.1 million.

For the selected major commodity groups, 164,047 tons were shipped directly from Canada to the Barbados during the period 1963 - 1968. Only 160 tons were transshipped by road and rail via the United States. Of the total transshipments of the selected commodities during this period, 85 tons were shipped by road via the United States; the remainder went by rail to U.S. ports. Between 1966 and 1968, 46 tons were routed through Miami and 29 tons through New York.

In 1968 and 1969, the combined overland/water rates exceeded the direct ocean rates from Canada by a substantial amount as the section on rates shows. Higher U.S. ocean rates and overland costs accounted for the difference in rates.

G. BRITISH HONDURAS

The total value of Canadian exports to the British Honduras increased in value from \$0.7 million in 1963 to \$1.3 million in 1968. Between 1963 and 1968, total exports of the selected major commodity groups shipped directly to the Barbados amounted to 4,958 tons. Total transshipments by rail and road of the major commodity groups during this period was 4,834 tons. Of the total transshipments, 684 tons were routed by road and 4,150 tons were routed by rail.

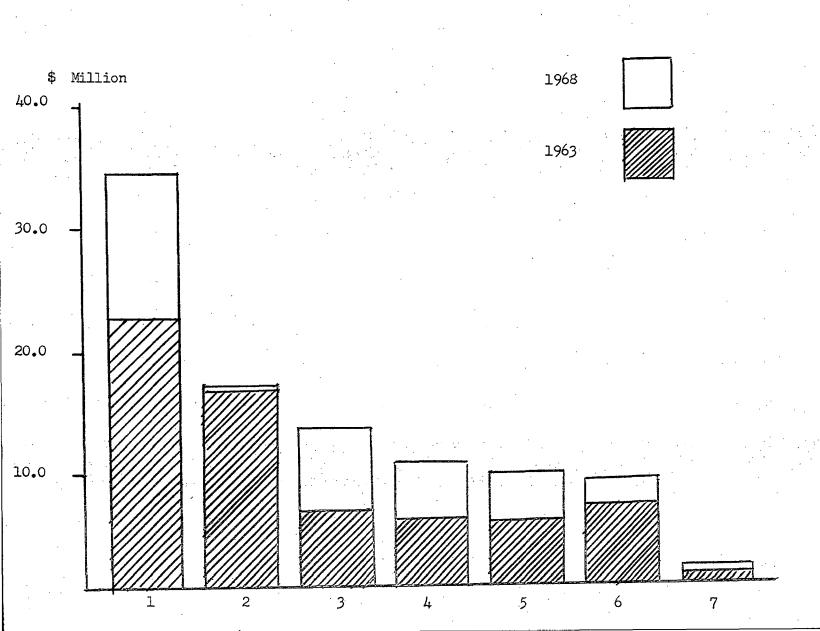
Between 1966 and 1968, 132 tons of road transshipments of the selected commodity groups were routed through Miami and 465 tons were routed through New York.

Chart 1 shows the total value of exports to Commonwealth Caribbean countries for the year 1963 and 1968.

The various rates for selected commodities as shown in detail in the section dealing with "Cost of Alternative Modes and Routings".

CHART 1

TOTAL VALUE OF EXPORTS TO COMMONWEALTH CARIBBEAN COUNTRIES



- 1. Jamaica
- 2. Trinidad and Tobago
- 3. Bahamas
- 4. Barbados
- Guyana
- 6. Leeward and Windward Islands
- 7. British Honduras

IV RECENT TRENDS IN THE VOLUME OF MAJOR EXPORTS TO COMMONWEALTH CARIBBEAN COUNTRIES

A. JAMAICA

Table 1(a) shows selected data on the value of total exports by all modes of transport and the volume of major exports transshipped by road and rail, by road, and by road via Miami from Canada to Jamaica during the period 1963 - 1968. Chart 1(a) shows the value and volume of exports of selected major commodity groups to Jamaica from Canada by all modes of transport during the period 1963 - 1968.

1. Total Shipments

Total Canadian exports to Jamaica increased from \$22.3 million in 1963 to \$34.4 million in 1968, representing a growth of 54.3 per cent over the five-year period. A value of \$500,000 was used as the criterion to select the 18 major commodity groups being exported to Jamaica from Canada. These commodity groups constitute, in terms of value, 60.9 per cent of total Canadian exports to this country on the average for the years 1963 - 1968.

In 1963, 54,711 tons, or \$14,088,000, of the basket of the 18 commodity groups were exported to Jamaica. The quantity decreased to 54,647 tons in 1968, representing a decline, in terms of quantity, of 0.1 per cent over the whole period. However, the value of these major exports to Jamaica increased to \$17,819,000 in 1968, representing an increase of 26.5 per cent over the period.

During the period 1963 - 1968 as a whole, 375,000 tons of the selected commodity groups, or 98.5 per cent of total shipments, were shipped directly by water and air from Canada to Jamaica. Direct shipments of the selected commodity groups ranged from a low of 54,647 tons in 1968 to a high of 68,032 tons in 1966. On the average, 62,501 tons per year of the selected commodity groups were shipped

directly to Jamaica from Canada. During this five-year period, 5,678 tons, or 1.5 per cent, were transshipped by road and rail via the United States. From 1963 to 1966, there was little appreciable fluctuation in these percentages. In 1967, however, the volume being transshipped through the United States showed an increase from 784 tons in 1966 to 1,434 tons.

2. Total Transshipments

During the period 1963 - 1968, a total of 4,475 tons of the selected major commodity groups were transshipped by road via the United States from Canada to Jamaica, representing 78.8 per cent of total transshipments (5,678 tons). As a yearly average, over the five-year period, 73.6 per cent of all road and rail shipments of these commodity groups were exported by truck. To illustrate the increasing usage of road transport, it is interesting to note that, on the average, total transshipments of the selected commodity groups increased by 25.6 per cent yearly during this period, while the average annual increase in road transshipments amounted to 77.4 per cent.

Between 1963 and 1966, transshipments of each of the major commodity groups, excluding fresh, chilled and frozen meat and cured meat, accounted for less than 10 per cent of the total shipments of each group. Transshipments of fresh, chilled and frozen meat increased sharply from 12 tons in 1963 to 237 tons in 1964, then decreased to 119 tons in 1965. From 1966 to 1968, transshipments of fresh, chilled or frozen meat increased steadily until they reached a high of 920 tons in 1968. Export shipments of cured meat by road and rail increased from 123 tons in 1963 to 310 tons in 1964, but then declined steadily to 27 tons in 1968.

In 1967, more than 10 per cent of the total volume of road motor vehicles, and rubber tires and tubes, as well as fresh, chilled or frozen meat, was transshipped from Canada via the United States to Jamaica. Transshipments of road motor vehicles amounted to 60 tons out of the total 366 tons exported

TABLE 1 (a)

SELECTED DATA ON THE VALUE OF TOTAL EXPORTS BY ALL MODES OF TRANSPORT AND THE VOLUME OF MAJOR EXPORTS TRANSSHIPPED BY ROAD AND RAIL, BY ROAD, AND BY ROAD VIA MIAMI FROM CANADA TO JAMAICA, 1963 - 1968(*)

| | | * | | | | |
|--|----------------|----------------|------------|------------|--------------|--------------|
| | 1963 | 1964 | 1965 | 1966 | <u> 1967</u> | <u> 1968</u> |
| Value of total exports (in \$,000) percentage change over | 22,271 | 28,942 | 30,280 | 33,500 | 39,080 | 34,378 |
| previous year | - | +30.0 | + 4.6 | +10.6 | +16.7 | -12.0 |
| Volume of total transshipments of selected commodity groups | | | | | | |
| (in short tons) percentage change over | 540 | 937 | 742 | 784 | 1,433 | 1,243 |
| previous year | <u>.</u> | +73.5 | -20.8 | +5.7 | +82,8 | -13.3 |
| Volume of road transshipments of selected commodity groups | | • | • | | | |
| (in short tons) percentage change over | 174 | 692 | 472 | 706 | 1,292 | 1,138 |
| previous year road transshipments as a percentage | - | +297.7 | -31.8 | +49.6 | +83.0 | -11.9 |
| of total transshipments | 32.2 | 73.9 | 63.6 | 90.1 | 90.2 | 91.6 |
| Volume of road transshipments of selected commodity groups via Miami | | | | | | |
| (in short tons) percentage change over | . | * . ; <u>-</u> | - | 395 | 1,071 | 1,055 |
| previous year road transshipments via Miami as a | • | - | <i>;</i> – | · <u>-</u> | +171.1 | -1.5 |
| percentage of road transshipments | : - | . | · - | 55.9 | 82.9 | 92.7 |
| | | | , | | | |

Industrial Traffic Services Division, Industry, Trade and Traffic Services Branch, Department of Industry, Trade and Commerce.

^{*} Data on the volume of major exports transshipped by road via Miami is not available for 1963 - 1965.

OF SELECTED MAJOR COMMODITY GROUPS FROM CANADA TO JAMAICA (1963 - 1968)Value Volume (\$000,000) (000 tons) Legend :23 Value of total selected commodity groups - -Volume of total selected commodity groups Volume of transshipments of selected --commodity groups 68 22 66 21 64 **.** 20 62 .19 60 18 58 17 56 16 54 .15 52 1 1963 1964 1965 1966 1967 Dominion Bureau of Statistics, Trade of Canada, Exports by Mode of Transport, SOURCE: 1963 - 1968.

to Jamaica. 167 tons of the total 663 tons of rubber tires and tubes were transshipped via the United States. In 1968, more than 10 per cent of the following commodity groups were transshipped to Jamaica: fresh, chilled or frozen meat (920 tons); other foods (59 tons); general purpose industrial machinery (22 tons); drilling, mining, oil and gas machinery (70 tons); rubber tires and tubes (45 tons); and electric lighting and control equipment (23 tons).

From 1966 to 1968, a total of 3,136 tons of the selected major commodity groups were exported from Canada to Jamaica by road via the United States. Of this total, 2,521 tons, or 80.4 per cent, were trucked through Miami and 616 tons, or 19.6 per cent, were routed through New York. In 1966, 55.9 per cent of all road transshipments to Jamaica was routed via Miami; in 1967, this proportion increased to 82.9 per cent; and, in 1968, it rose to 92.7 per cent.

From 1966 to 1968, all of the following commodity groups transshipped by road were routed through Miami: fresh, chilled or frozen meat, cured meat, other foods, and electric lighting and control equipment. In 1966 and 1967, all road transshipments of paper for printing and apparel and apparel accessories were routed via New York.

B. TRINIDAD - TOBAGO

Table 1(b) shows selected data on the value of total exports by all modes of transport and the volume of major exports transshipped by road and rail, by road, and by road via Miami from Canada to Trinidad-Tobago during the period 1963 - 1968. Chart 1(b) shows the value and volume of exports of selected major commodity groups to Trinidad-Tobago from Canada by all modes of transport during the period 1963 - 1968.

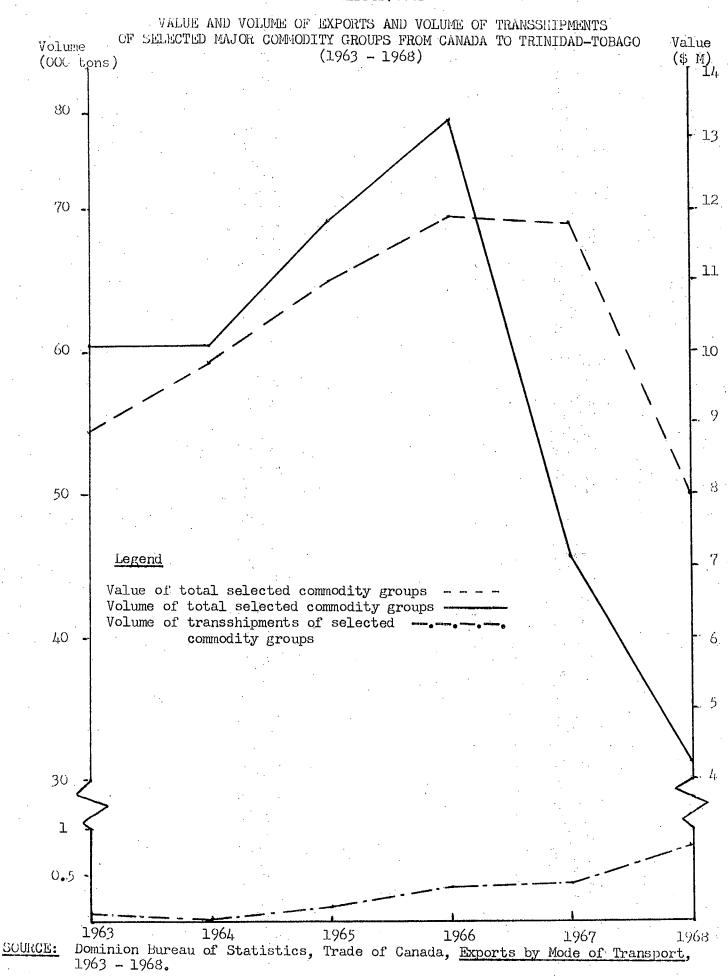
TABLE 1 (b)

SELECTED DATA ON THE VALUE OF TOTAL EXPORTS BY ALL MODES OF TRANSPORT AND THE VOLUME OF MAJOR EXPORTS TRANSSHIPPED BY ROAD AND RAIL, BY ROAD, AND BY ROAD VIA MIAMI FROM CANADA TO TRINIDAD-TOBAGO, 1963 - 1968(*)

| | • | | | | | | | | | , | | |
|---|---|---------------------------------------|----------|--------|---------------|----------|--------|------------|--------|--------|--------|--------|
| | | · · · · · · · · · · · · · · · · · · · | 1963 | | 1964 | 1965 | | 1966 | | 1967 | | 1968 |
| Value of total exports (in \$,000) | | 16,213 | . 1 | .7,791 | 21,532 | | 23,337 | , , , | 20,115 | • | 16,228 | |
| percentage change over previous year | | | _ | | +9.7 | +21.0 | | +8.4 | | -13.8 | | -19.3 |
| | tal transshipments | | | | | - | : | | | | | |
| (in short | | | 105 | . jeg | 19 | 195 | | 388 | | 406 | | 814 |
| percentage change over previous year | | - | | -81.9 | +926.3 | | +99.0 | | +4.6 | | +100.5 | |
| | ad transshipments of | | | | | | • | | | | | , |
| (in short | | | 6 | | 3 | 185 | ٠ | 335 | | 405 | - | 810 |
| percentage previous y | ear | J. | - · | | -50.0 | +6,066.6 | | +81.1 | | +20.9 | | +100.0 |
| road transshipments as a percentage of total transshipments | | 5.7 | e. | 15.8 | 94.9 | ,* | 86.3 | | 99.8 | | 99.5 | |
| | ad transshipments of | • | | | | | | • | | | | |
| (in short t | | | | | - | - | | 32 | | 71 | | 51 |
| percentage c previous ye | ar | | ••• | | | · * | , | - . | | +121.9 | | -28.2 |
| | ipments via Miami as a of road transshipments | • | - | | - | - | | 9.6 | | 17.5 | | 6.3 |
| | | | | | | • | | 1.7 | • | * | ٠. | |

Industrial Traffic Services Division, Industry, Trade and Traffic Services Branch, Department of Industry, Trade and Commerce.

^{*} Data on the Volume of major exports transshipped by road via Miami is not available for 1963 - 1965.



1. Total Shipments

Total Canadian exports to Trinidad-Tobago climbed from \$16.2 million in 1963 to \$23.3 million in 1966 and dropped in the next two years to the original figure. A value of \$300,000 was used as the criterion to select the 18 major commodity groups being exported to Trinidad-Tobago from Canada. These commodity groups constitute, in terms of value, 54.9 per cent of total Canadian exports to this country on the average for the years 1963 - 1968.

In 1963, 60,497 tons, or \$8,966,000, of the "basket" of the 18 commodity groups were exported to Trinidad-Tobago. These amounts decreased to 30,946 tons, or \$8,015,000, in 1968, representing a decline of 48.8 per cent in terms of quantity and a decline of 10.6 per cent in terms of value over the whole period.

During the period 1963 - 1968 as a whole, 330,539 tons of the selected commodity groups, or 99.4 per cent of total shipments, were shipped directly by water and air from Canada to Trinidad-Tobago. Direct shipments of the selected commodity groups ranged from a low of 30,139 tons in 1968 to a high of 69,023 tons in 1966. On the average, 55,090 tons per year of the selected commodity groups were shipped directly to Trinidad-Tobago from Canada. During the same five-year period, 1,916 tons, or 0.6 per cent, were transshipped by road and rail via the United States. Throughout this period, there was a large increase in the volume transshipped through the United States, from 105 tons in 1963 to 804 tons in 1968.

2. Total Transshipments

During the period 1963 - 1968, a total of 1,753 tons of the selected major commodity groups were transshipped by road via the United States from Canada to Trinidad-Tobago, representing 91.0 per cent of total transshipments (1,926 tons).

In 1963, no cured meat was transshipped by road to Trinidad-Tobago from Canada, but by 1968, 48 tons of this commodity groups were routed by road, this represents 100 per cent of total transshipments of cured meat. From 1963 to 1966 there were no transshipments of fresh or chilled vegetables, but in 1967 and 1968, 13 tons and 455 tons, respectively, of this commodity group were transshipped by road to Trinidad-Tobago. Both the 1967 and 1968 road transshipment figures represent 100 per cent of total transshipments of fresh or chilled vegetables. In 1963 and 1964, no cattle were transshipped to Trinidad-Tobago, however, for the years 1965 - 1968 road transshipments increased steadily from 92 tons in 1965 to 293 tons in 1968.

From 1966 to 1968, a total of 1,550 tons of the selected major commodity groups were transshipped by road from Canada to Trinidad-Tobago. Of this total, 153 tons, or 9.9 per cent, were routed through Miami and 1,397 tons (90.1 per cent) were routed through New York. In 1966, 31.6 tons of the selected commodity groups were trucked through Miami; in 1967, 70.6 tons were exported by the same route; and, in 1968, 5.1 tons were transported through the Port of Miami.

From 1966 to 1968, all road transshipments of cured meat to Trinidad-Tobago were routed via Miami. All road transshipments of cattle, paper for printing, and aluminum, including alloys, were routed via New York between 1966 and 1968.

C. GUYANA

Table 1(c) shows selected data on the value of total exports by all modes of transport and the volume of major exports transshipped by road and rail, by road, and by road via Miami from Canada to Guyana during the period 1963 - 1968. Chart 1(c) shows the value and volume of exports of selected major commodity groups to Guyana from Canada by all modes of transport during the period 1963 - 1968.

TABLE 1 (c)
SELECTED DATA ON THE VALUE OF TOTAL EXPORTS BY ALL MODES OF TRANSPORT AND THE VOLUME OF MAJOR EXPORTS TRANSSHIPPED BY ROAD AND RAIL, BY ROAD AND BY ROAD VIA MIAMI FROM CANADA TO GUYANA, 1963 - 1968(*)

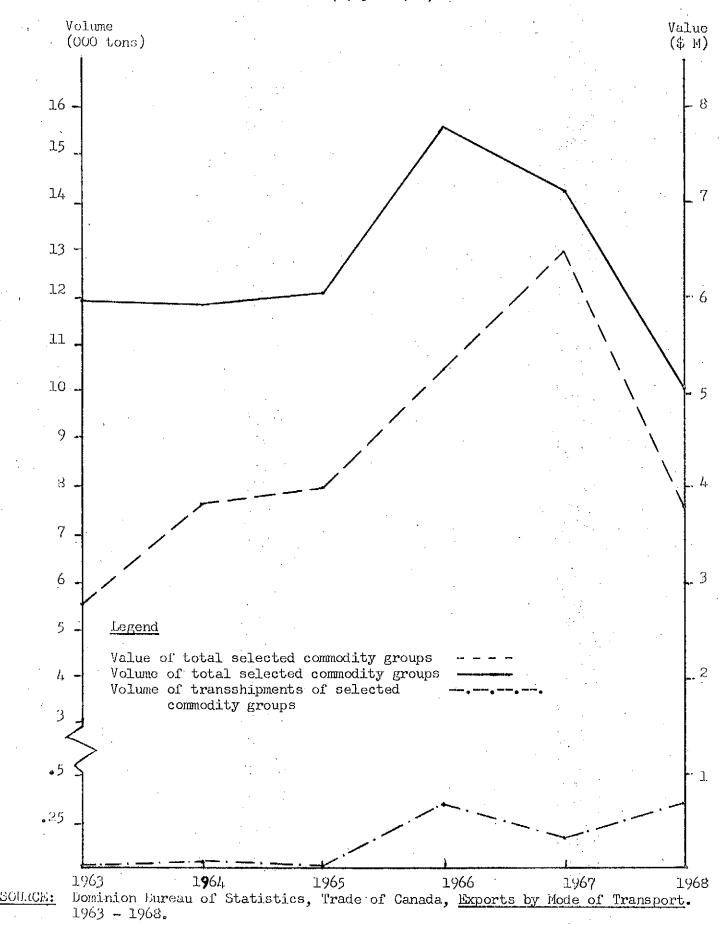
| | 1963 | 1964 | 1965 | 1966 | <u> 1967</u> | 1968 |
|---|-----------------|----------------------|-----------------------------|----------------------|--|-----------------------|
| Value of total exports (in \$,000) percentage change over previous year | 5,061 - | 7,116 +40.6 | 7,750 +8.9 | 9,878 +27.5 | 12 ,132 +22 . 8 | 9,291 -23.4 |
| Volume of total transshipments of selected commodity groups (in short tons) percentage change over previous year | 3 | 34 +1,033.3 | 5 - 85 . 3 | 308 +6,060.0 | 141 - 54•2 | 345 +144•7 |
| Volume of road transshipments of selected commodity groups (in short tons) percentage change over previous year road transshipments as a percentage of total transshipments | 3 - 100.0 | 10 +233•3 29•4 | 5 -50.0 100.0 | 46 +820•0 14•9 | 49 +6.5 34.8 | 326 +565•3 94•5 |
| Volume of road transshipments of selected commodity groups via Miami (in short tons) percentage change over previous year road transshipments via Miami as a percentage of road transshipments. | - - | | <u>-</u> - | 7 - 15.2 | 37 +428 . 6 75 . 5 | 6 -83.8 1.8 |

Industrial Traffic Services Division, Industry, Trade and Traffic Services Branch, Department of Industry, Trade and Commerce.

^{*} Data on the volume of major exports transshipped by road via Miami is not available for 1963 - 1965.

CHART 1(c)

VOLUME AND VALUE OF EXPORTS AND VOLUME OF TRANSSHIPMENTS OF SELECTED HAJOR COMMODITY GROUPS FROM CANADA TO GUYANA (1963 - 1968)



1. Total Shipments

Total Canadian exports to Guyana increased from \$5.1 million in 1963 to \$9.3 million in 1968, representing a growth of 82.4 per cent over the five-year period. A value of \$150,000 was used as the criterion to select the 20 major commodity groups being exported to Guyana from Canada. These commodity groups constitute, in terms of value, 51.9 per cent of total Canadian exports to this country on the average for the years 1963 - 1968.

In 1963, 11,972 tons, or \$2,871,000, of the "basket" of the 20 commodity groups were exported to Guyana. This quantity decreased to 10,137 tons in 1968, representing a decline of 15.3 per cent over the whole period. However, the value of these major exports to Jamaica increased to \$3,890,000 in 1968, representing an increase of 35.5 per cent over the five-year period.

During the period 1963 - 1968 as a whole, 75,143 tons of the selected commodity groups, or 98.9 per cent of total shipments, were shipped directly by water and air from Canada to Guyana. Direct shipments of the selected commodity groups ranged from a low of 9,791 tons in 1968 to a high of 15,315 tons in 1966. On the average, 12,524 tons per year of the selected commodity groups were shipped directly to Jamaica from Canada. During the same period, 836 tons, or 1.1 per cent, were transshipped by road and rail via the United States. From 1963 to 1968, there was very little variation in these proportions from year to year.

2. Total Transshipments

During the period 1963 - 1968, 438 tons of the selected major commodity groups were transshipped by road via the United States from Canada to Guyana; this quantity represents 52.4 per cent of all transshipments (836 tons). Only two commodity groups were transshipped by road in substantial quantities during the period under review: fresh or chilled vegetables

and oil and gas drilling and mining machinery. There were no road transshipments of fresh or chilled vegetables until 1966 when 20 tons of this
commodity group were exported by road to Guyana. The quantity transshipped by road decreased to 10 tons in 1967, but increased sharply to
292 tons in 1968. Road transshipments of oil and gas drilling and mining
machinery commenced in 1966 when 13 tons of this commodity group were
exported by road via the United States. This quantity decreased to 7 tons
in 1967 but increased again to 12 tons in 1968.

From 1966 to 1968, a total of 424 tons of the selected major commodity groups were transshipped by road from Canada to Guyana. Fifty tons (11.8 per cent) of this total were routed via Miami and 374 tons (88.2 per cent) were transshipped through New York. In 1966, 15.5 per cent of total road transshipments to Guyana were routed via Miami, in 1967, the proportion of all road transshipments moving via Miami increased to 70.8 per cent; and, in 1968, only 1.8 per cent of all road transshipments were trucked through Miami to Guyana.

In 1966 and 1967, all of the following commodity groups transshipped by road were routed through Miami: road motor vehicles, electric lighting and control equipment and other foods. In 1966 and in 1968, all road transshipments of fresh or chilled vegetables and oil and gas drilling and mining machinery were routed via New York to Guyana.

D. BAHAMAS

Table 1(d) shows selected data on the value of total exports by all modes of transport and the volume of major exports transshipped by road and rail, by road, and by road via Miami from Canada to the Bahamas during the period 1963 - 1968. Chart 1(d) shows the value and volume of exports of selected major commodity groups to the Bahamas from Canada by all modes of transport during the period 1963 - 1968.

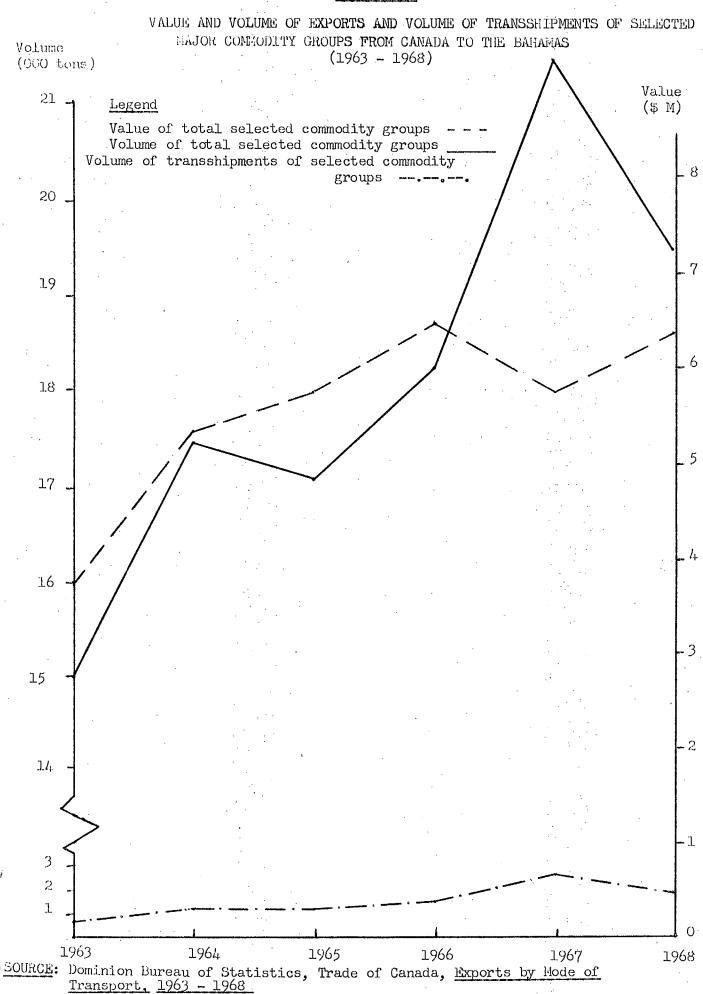
TABLE 1 (d)

SELECTED DATA ON THE VALUE OF TOTAL EXPORTS BY ALL MODES OF TRANSPORT AND THE VOLUME OF MAJOR EXPORTS TRANSSHIPPED BY ROAD AND RAIL, BY ROAD, AND BY ROAD VIA MIAMI FROM CANADA TO THE BAHAMAS, 1963-1968(*)

| | 1963 | 1964 | 1965 | <u> 1966</u> | <u> 1967</u> | 1968 |
|---|---------------|----------------|---------------|------------------|------------------------|-----------------|
| Value of total exports (in \$,000) percentage change over previous year | 6,133 | 8,876 +44.7 | 9,257 +4.3 | 10,847 +17.2 | 10,245 - 5.6 | 12,772 +24.7 |
| Volume of total transshipments of selected commodity groups (in short tons) percentage change over previous year | 771 - | 1,198 +55.4 | 1,184 -1.2 | 1,695 +43.2 | 2,751 +62.3 | 1,988 -27.7 |
| Volume of road transshipments of selected commodity groups (in short tons) percentage change over previous year road transshipments as a percentage | 715 - | 1,109 +55.1 | 1,097 -1.1 | 1,628 +48.4 | 2,677 +64.4 | 1,943 -27.4 |
| of total transshipments | 92.7 | 92.6 | 92.7 | 96.0 | 97.3 | 97•7 |
| Volume of road transshipments of selected commodity groups via Miami (in short tons) percentage change over previous year road transshipments via Miami as a percentage of road transshipments. | <u>-</u> - | | - - - | 780 - 17.9 | 1,919 +146.0 | 1,909 5 |
| percentage of road transshipments. | - | . - | - | 47.9 | 71.7 | 98.3 |

^{*} Data on the volume of major exports transshipped by road via Miami is not available for 1963 - 1965.

Industrial Traffic Services Division, Industry, Trade and Traffic Services Branch, Department of Industry, Trade and Commerce.



1. Total Shipments

Total Canadian exports to the Bahamas increased from \$6.1 million in 1963 to \$12.8 million in 1968, representing a growth of 109.8 per cent over the five-year period as a whole. A value of \$150,000 was used as the criterion to select the 16 major commodity groups being exported to the Bahamas from Canada. These commodity groups constitute, in terms of value, 58.8 per cent of total Canadian exports to this country on the average for the years 1963 - 1968.

In 1963, 11,972 tons, or \$3,840,000, of the "basket" of the 16 commodity groups were exported to the Bahamas. This quantity increased to 19,540 tons in 1968, representing an increase of 63.2 per cent over the whole period. The value of the major exports increased to \$6,336,000 in 1968. This represents, in terms of value, an increase of 65.0 per cent.

During the period 1963 - 1968 as a whole, 98,901 tons of the selected commodity groups, or 90.7 per cent of total shipments, were shipped directly by water and air from Canada to the Bahamas. Direct shipments of the selected commodity groups ranged from a low of 14,278 tons in 1963 to a high of 18,846 tons in 1967. On the average, 16,483 tons per year of the selected commodity groups were shipped directly to the Bahamas from Canada. During this five-year period, 10,084 tons, or 9.3 per cent, were transshipped by road and rail via the United States. Throughout this period, an increasing trend in the proportion of major exports transshipped was noted. Transshipments rose from 770 tons in 1963 to 2,486 tons in 1968.

2. Total Transshipments

During the period 1963 - 1968, a total of 9,170 tons of the selected major commodity groups were transshipped by road via the United States from Canada to the Bahamas, representing 95.7 per cent of total transshipments of 9.586 tons.

In 1963, 375 tons of ready-cooked meat and preparations were transshipped by road via the United States; in 1968, 498 tons were transshipped
by rail to the Bahamas of this commodity group. Road transshipments of dairy
produce increased from 150 tons in 1963 to 550 tons in 1967, but then declined
to 348 tons in 1968. In 1963, 109 tons of rubber tires and tubes were transshipped by road from Canada to the Bahamas, however, by 1966, this volume had
decreased to 64 tons. In 1968 the volume of road transshipments of rubber
tires and tubes increased again to 94 tons. Road transshipments of road
motor vehicles increased from 16 tons in 1963 to 235 tons in 1965, then
decreased to 63 tons by 1968. There were no transshipments of milled cereals
until 1965 when only 2 tons were transshipped, but by 1968, the quantity transshipped had increased to 488 tons. Not until 1966 was there appreciable amounts
of sugar, molasses and syrups transshipped from Canada to the Bahamas. Transshipments grew and by 1968, 606 tons of this commodity group were exported via
road and rail.

From 1966 to 1968, a total of 6,238 tons of the selected major commodity groups were exported from Canada to the Bahamas by road via the United States. Of this total, 4,607 tons, or 73.9 per cent, were trucked through Miami and 1,631 tons, or 26.1 per cent, were routed through New York. In 1966, 48.2 per cent of all road transshipments to the Bahamas was routed via Miami; in 1967, this proportion increased to 71.7 per cent; and, in 1968, it rose to 98.3 per cent.

From 1966 to 1968, all of the following commodity groups transshipped by road were routed through Miami: fresh, chilled or frozen meat, other foods, electric lighting and control equipment, communications and related equipment, and furniture and fixtures.

E. LEEWARD AND WINDWARD ISLANDS

Table 1(e) shows selected data on the value of total exports by all modes of transport and the volume of major exports transshipped by road and rail, by road, and by road via Miami from Canada to the Leeward and Windward Islands during the period 1963 - 1968. Chart 1(e) shows the value and volume of exports of selected major commodity groups to the Leeward and Windward Islands from Canada by all modes of transport during the period 1963 - 1968.

1. Total Shipments

Total Canadian exports to the Leeward and Windward Islands increased from \$6.6 million in 1963 to \$8.4 million in 1968, representing a growth of 27.3 per cent over the five-year period as a whole. A value of \$100,000 was used as the criterion to select the 16 major commodity groups being exported to the Leeward and Windward Islands from Canada. These commodity groups constitute, in terms of value, 69.1 per cent of total Canadian exports to this country on the average for the years 1963 - 1968.

In 1963, 32,922 tons, or \$5,025,000, of the "basket" of the 16 commodity groups were exported to the Leeward and Windward Islands. The quantity decreased to 29,457 tons in 1968, representing a decline, in terms of quantity, of 10.5 per cent over the whole period. The value of these major exports to the Leeward and Windward Islands decreased to \$4,971,000 in 1968, representing a decline of 1.1 per cent over the period as a whole.

During the period 1963 - 1968 as a whole, 200,489 tons of the selected commodity groups, or 99.4 per cent of total shipments, were shipped directly by water and air from Canada to the Leeward and Windward Islands. Direct shipments of the selected commodity groups ranged from a low of 29,205 tons in 1968 to a high of 36,259 tons in 1966. On the average, 33,415 tons per year of the selected commodity groups were shipped directly to the Leeward and Windward Islands

TABLE 1 (e)

SELECTED DATA ON THE VALUE OF TOTAL EXPORTS BY ALL MODES OF TRANSPORT AND THE VOLUME OF MAJOR EXPORTS TRANSSHIPPED BY ROAD AND RAIL, BY ROAD, AND BY ROAD VIA MIAMI FROM CANADA TO THE LEEWARD AND WINDWARD ISLANDS, 1963-1968(*)

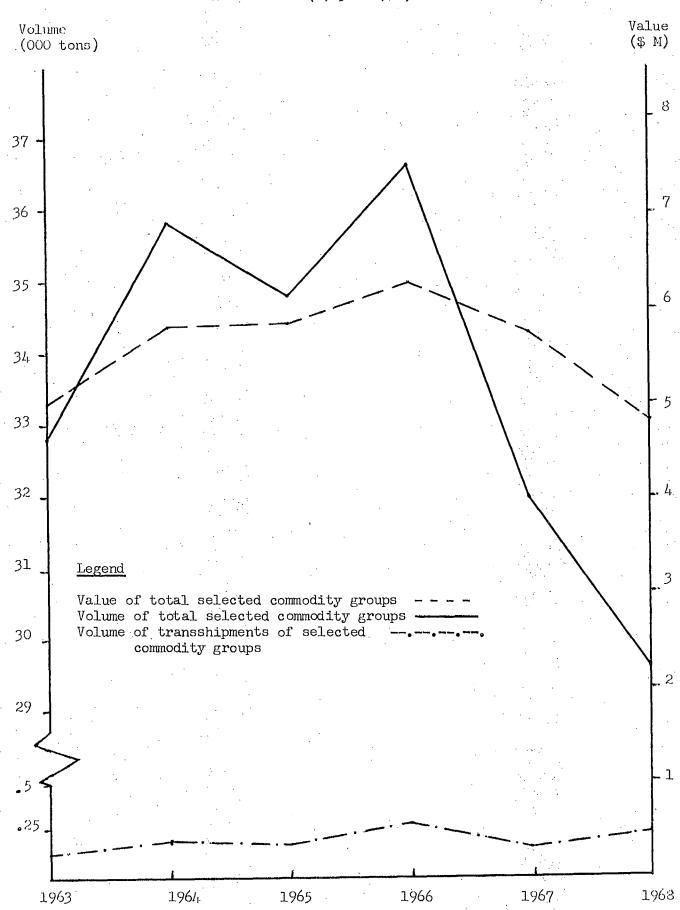
| Value of total exports (in \$,000) percentage change over previous year | 1963 | <u>1964</u> | <u>1965</u> | 1966 | <u>1967</u> | <u>1968</u> |
|---|-------|-----------------|-------------|---------------|--------------|---------------|
| | 6,596 | 7,986 | 8,037 | 8,753 | 9,719 | 8,414 |
| | - | +21.1 | +.6 | +8.9 | +11.0 | - 13.4 |
| Volume of total transshipments of selected commodity groups (in short tons) percentage change over previous year | 121 | 183 | 151 | 264 | 142 | 246 |
| | - | +51.2 | -17•5 | +74•8 | -46•2 | +73•2 |
| Volume of road transshipments of selected commodity groups (in short tons) percentage change over previous year road transshipments as a percentage | 10 | 132 +1,220.0 | 21 -84.1 | 152 +623.8 | 105 -30.9 | 165 +57•1 |
| of total transshipments Volume of road transshipments of selected commodity groups via Miami (in short tons) percentage change over previous year | 8•3 | 72 . 3 | 13.9 | 57•6 | 73.9 | 67.1 |
| | - | - | - | 23 | 41 | 74 |
| | - | - | - | - | •78.3 | +80.5 |
| road transshipments via Miami as a percentage of road transshipments. | - · · | - | - | 15.1 | 39.0 | 44.8 |

Industrial Traffic Services Division, Industry, Trade and Traffic Services Branch, Department of Industry, Trade and Commerce.

^{*} Data on the volume of major exports transshipped by road via Miami is not available for 1963 - 1965.

CHART 1(e)

VOLUME AND VALUE OF EXPORTS AND VOLUME OF TRANSSHIPMENTS
OF SELECTED MAJOR COMMODITY GROUPS FROM CANADA TO THE LEEWARD AND WINDWARD ISLANDS
(1963 - 1968)



SOURCE: Dominion Bureau of Statistics, Trade of Canada, Exports by Mode of Transport, 1963 - 1968.

from Canada. During the same period, 1,107 tons, or 0.5 per cent, were transshipped by road and rail via the United States. Throughout the period under review, there was little fluctuation in these proportions.

2. Total Transshipments

During the period 1963 - 1968, a total of 584 tons of the selected major commodity groups were transshipped by road via the United States from Canada to the Leeward and Windward Islands, representing 52.8 per cent of total transshipments (1,107 tons). In 1963, only 6 tons of dairy produce were transshipped by road via the United States; however, by 1967, this volume had increased to 53 tons, then declined to 28 tons in 1968. Total transshipments of road motor vehicles increased from 5 tons in 1963 to 83 tons in 1966, but then declined to 1 ton in 1968. In 1963, only 1 ton of cured meat was transshipped by road from Canada to the Leeward and Windward Islands, however, by 1968, this volume had increased to 30 tons. In 1968, road transshipments of other special industrial machinery amounted to 61 tons. From 1963 to 1968, transshipments of milled cereals increased from 108 tons in 1963 to a high of 129 tons in 1965, then decreased to 5 tons in 1968. In 1968, 75 tons of lumber were transshipped via the United States to the Leeward and Windward Islands.

From 1966 to 1968, a total of 421 tons of the selected major commodity groups were exported from Canada to the Leeward and Windward Islands by road via the United States. Of this total, 138 tons, or 32.8 per cent, were trucked through Miami and 283 tons, or 67.2 per cent, were routed through New York. In 1966, 15.4 per cent of all road transshipments to the Leeward and Windward Islands was routed via Miami; in 1967, this proportion increased to 38.6 per cent; and, in 1968, it rose to 44.8 per cent.

From 1966 to 1968, all of the following commodity groups transshipped by road were routed through Miami: cured meat, other foods, and furniture and fixtures. In 1967 and 1968, all road transshipments of house furnishings were routed via New York.

F. BARBADOS

Table 1(f) shows selected data on the value of total exports by all modes of transport and the volume of major exports transshipped by road and rail, by road, and by road via Miami from Canada to Barbados during the period 1963 - 1968. Chart 1(f) shows the value and volume of exports of selected major commodity groups to Barbados from Canada by all modes of transport during the period 1963 - 1968.

1. Total Shipments

Total Canadian exports to Barbados increased from \$5.5 million in 1963 to \$10.1 million in 1968, representing a growth of 83.6 per cent over the five-year period. A value of \$100,000 was used as the criterion to select the 18 major commodity groups being exported to Barbados from Canada. These commodity groups constitute, in terms of value, 61.7 per cent of total Canadian exports to this country on the average for the years 1963 - 1968.

In 1963, 27,177 tons, or \$3,973,000, of the "basket" of the 18 commodity groups were exported to Barbados. The quantity decreased to 24,738 tons in 1968, representing a decline, in terms of quantity, of 9.0 per cent over the period. However, the value of these major exports to Barbados increased to \$4,640,000 in 1968, representing an increase of 16.8 per cent over the period.

During the period 1963 - 1968 as a whole, 164,047 tons of the selected commodity groups, or 99.9 per cent of total shipments, were shipped directly by water and air from Canada to Barbados. Direct shipments of the

TABLE 1 (f)

SELECTED DATA ON THE VALUE OF TOTAL EXPORTS BY ALL MODES OF TRANSPORT AND THE VOLUME OF MAJOR EXPORTS TRANSSHIPPED BY ROAD AND RAIL, BY ROAD, AND BY ROAD VIA MIAMI FROM CANADA TO BARBADOS, 1963 - 1968 (*)

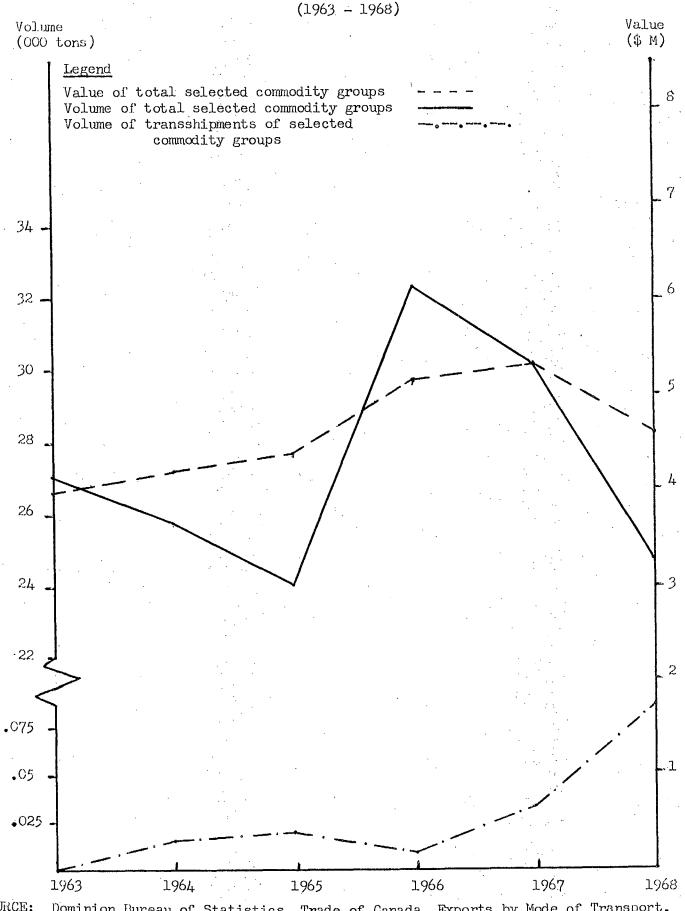
| | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 |
|--|--------------|-------------------|---------------|----------------|---------------|-----------------------|
| Value of total exports (in \$,000) percentage change over previous year | 5,469 | 6,922 +26.6 | 6,826 -1.4 | 8,112 +18.8 | 8,417 +3.8 | 10,056 |
| Volume of total transshipments of selected commodity groups (in short tons) percentage change over previous year | | 14 | 19 +35•7 | 7 -63•2 | 33 +371•4 | 87 +163 . 6 |
| Volume of road transshipments of selected commodity groups (in short tons) percentage change over previous year | · . | 6 - | -33•3 | 7 +75•0 | 16 +128•6 | 52 +225•0 |
| road transshipments as a percentage of total transshipments | - | 42.9 | 21.1 | 100.0 | 48.5 | 59.8 |
| Volume of road transshipments of selected commodity groups via Miami (in short tons) percentage change over previous year road transshipments via Miami as a | - - | <u>-</u> | . | 4 | 10 +150•0 | 25 +150 . 0 |
| percentage of road transshipments. | - | - | - | 57.1 | 62.5 | 48.1 |

Industrial Traffic Services Division, Industry, Trade and Traffic Services Branch, Department of Industry, Trade and Commerce.

^{*} Data on the volume of major exports transshipped by road via Miami is not available for 1963 - 1965.

CHART 1(f)

VALUE AND VOLUME OF EXPORTS AND VOLUME OF TRANSSHIPMENTS OF SELECTED MAJOR COMMODITY GROUPS FROM CANADA TO BARBADOS (1963 - 1968)



SOURCE: Dominion Bureau of Statistics, Trade of Canada, Exports by Mode of Transport, 1963 - 1968.

selected commodity groups ranged from a low of 23,975 tons in 1965 to a high of 32,361 tons in 1966. On the average, 27,341 tons per year of the selected commodity groups were shipped directly to Barbados from Canada. During the five-year period, 160 tons, or 0.1 per cent, were transshipped by road and rail via the United States. From 1963 to 1968, there was little appreciable fluctuation in these percentages.

2. Total Transshipments

During the period 1963 - 1968, a total of 81 tons of the selected major commodity groups were transshipped by road via the United States from Canada to Barbados, representing 50.6 per cent of total transshipments (160 tons). Not until 1968 were there any appreciable quantities of commodity groups transshipped by road to Barbados. Ten tons of fresh or chilled vegetables, 15 tons of furniture and fixtures, and 9 tons of containers and closures were transshipped by road from Canada in 1968.

In 1964, 12 tons of other foods were transshipped via the United States to Barbados. In 1965, 15 tons of milled cereals were exported by road and rail from Canada to Barbados. And, in 1967 and 1968, 18 tons and 45 tons, respectively, of fresh or chilled vegetables were transshipped from Canada.

From 1966 to 1968, a total of 75 tons of the selected major commodity groups were exported from Canada to Barbados by road via the United States.

Of this total, 39 tons, or 52.0 per cent, were trucked through Miami and 36 tons, or 48.0 per cent, were routed through New York. In 1966, 52.2 per cent (3.5 tons) of all road transshipments to Barbados was routed via Miami; in 1967, this proportion increased to 65.6 per cent; and in 1968, it declined to 48.1 per cent.

From 1966 to 1968, all of the following commodity groups transshipped by road were routed through Miami: cured meat, and furniture and fixtures. In 1966 and 1967, all road transshipments of apparel and apparel accessories were routed via New York.

G. BRITISH HONDURAS

Table 1(g) shows selected data on the value of total exports by all modes of transport and the volume of major exports transshipped by road and rail, by road, and by road via Miami from Canada to British Honduras during the period 1963 - 1968. Chart 1(g) shows the value and volume of exports of selected major commodity groups to British Honduras from Canada by all modes of transport during the period 1963 - 1968.

1. Total Shipments

Total Canadian exports to British Honduras increased from \$0.7 million in 1963 to \$1.3 million in 1968, representing a growth of 85.7 per cent over the five-year period. A value of \$25,000 was used as the criterion to select the 13 major commodity groups being exported to British Honduras from Canada. These commodity groups constitute, in terms of value, 52.2 per cent of total Canadian exports to this country on the average for the years 1963 - 1968.

In 1963, 1,328 tons, or \$421,000, of the "basket" of the 13 commodity groups were exported to British Honduras. The quantity increased to 2,011 tons in 1968, representing an increase, in terms of quantity, of 51.4 per cent. The value of these major exports to British Honduras increased to \$661,000 in 1968, representing an increase of 57.0 per cent over the period.

During the period 1963 - 1968 as a whole, 4,958 tons of the selected commodity groups, or 50.6 per cent of total shipments, were shipped directly by water and air from Canada to British Honduras. Direct shipments of the selected commodity groups ranged from a low of 618 tons in 1968 to a high of 1,053 tons in 1966. On the average, 826 tons per year of the selected commodity groups were shipped directly to British Honduras from Canada.

During the five-year period, 4,833 tons, or 49.3 per cent, were transshipped by road and rail via the United States. Throughout the period under review,

TABLE 1 (g)

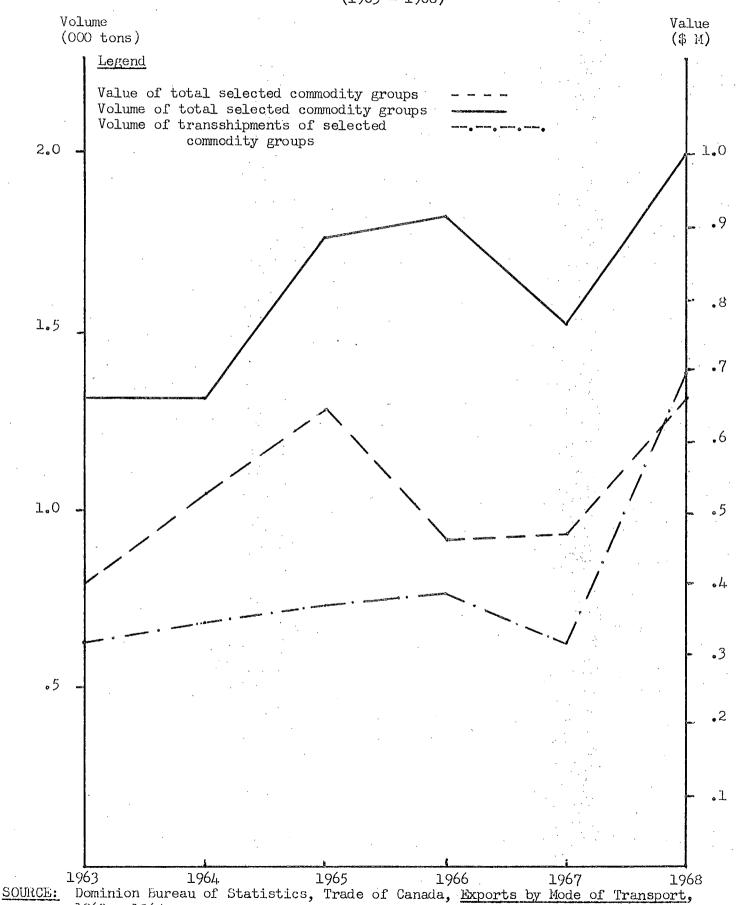
SELECTED DATA ON THE VALUE OF TOTAL EXPORTS BY ALL MODES OF TRANSPORT AND THE VOLUME OF MAJOR EXPORTS TRANSSHIPPED BY ROAD AND RAIL, BY ROAD, AND BY ROAD VIA MIAMI FROM CANADA TO BRITISH HONDURAS, 1963 - 1968 (*)

| | <u> 1963</u> | 1964 | <u>1965</u> | 1966 | 1967 | 1968 |
|---|--------------|------------------------|---------------|-----------------|----------------------|----------------------|
| Value of total exports (in \$,000) percentage change over previous year | 698 | 973 | 1,065 | 921 | 1,179 | 1,343 |
| | - | +39•4 | +9.5 | - 13.5 | +28.0 | +13.9 |
| Volume of total transshipments of selected commodity groups (in short tons) percentage change over previous year | 623 | 690 | 732 | 769 | 629 | 1,391 |
| | - | +10.8 | +6 . 1 | +5•1 | -18.2 | +121.1 |
| Volume of road transshipments of selected commodity groups (in short tons) percentage change over previous year road transshipments as a percentage of total transshipments | 50 | 25 | 12 | 71 | 99 | 427 |
| | - | - 50 . 0 | -52.0 | +491.7 | +39•4 | +331•3 |
| | 8.0 | 3 . 6 | 1.6 | 9.2 | 15•7 | 30•7 |
| Volume of road transshipments of selected commodity groups via Miami (in short tons) percentage change over previous year road transshipments via Miami as a percentage of road transshipments. | - - | - - - | - - - | 10 - 14.1 | 38 +280.0 38.4 | 84 +121.1 19.7 |

Industrial Traffic Services Division, Industry, Trade and Traffic Services Branch, Department of Industry, Trade and Commerce.

^{*} Data on the volume of major exports transshipped by road via Miami is not available for 1963 - 1965.

VALUE AND VOLUME OF EXPORTS AND VOLUME OF TRANSHIPMENTS OF SELECTED MAJOR COMMODITY GROUPS FROM CANADA TO BRITISH HONDURAS (1963 - 1968)



1963. - 1968.

the percentage of total shipments transshipped via the United States fluctuated from a low of 732 tons in 1965 to a high of 1,391 tons in 1968.

2. Total Transshipments

During the period 1963 - 1968, a total of 684 tons of the selected major commodity groups were transshipped by road via the United States from Canada to British Honduras, representing 14.2 per cent of total transshipments (4,833 tons).

Transshipments of milled cereals increased from 599 tons in 1963 to 923 tons in 1968. In 1963 and 1964, transshipments of road motor vehicles were approximately 20 tons. This volume then declined until 1967 when 43 tons of this commodity groups were transshipped to British Honduras. In 1968, transshipments of other foods, paper for printing, fine paper, and hand tools and miscellaneous cutlery amounted to 97 tons, 91 tons, 79 tons, and 106 tons, respectively. In 1966 and 1967, road transshipments of aluminum including alloys were about 32 tons.

From 1966 to 1968, a total of 586 tons of the selected major commodity groups were exported from Canada to British Honduras by road via the United States. Of this total, 132 tons, or 22.5 per cent, were trucked through Miami and 454 tons, or 77.5 per cent, were routed through New York. In 1966, 14.3 per cent of all road transshipments to British Honduras were routed via Miami; in 1967, this proportion increased to 43.5 per cent; and, in 1968, it declined to 19.7 per cent.

In 1967 and 1968, all road transshipments of electric lighting and control equipment were routed through Miami. From 1966 to 1968, all road transshipments of oil and gas drilling and mining machinery were routed via New York.

V COST OF ALTERNATIVE MODES AND ROUTINGS

The purpose of this part of the analysis is to compare the costs of shipping exports by alternative modes and routings from Canada to the various Commonwealth Caribbean countries. Although direct ocean freight rates from Montreal to the Commonwealth Caribbean countries are shown in the study, overland trucking rates from Toronto to Montreal are not presented. The rates must be taken into account, however, in the case where shipments of commodities originate in Toronto and are trucked to Montreal for direct transport by water to the Commonwealth Caribbean.

In examining transshipment rates, both Toronto and Montreal were selected as the points of origin, and New York and Miami were employed as the transshipment points for commodities exported to the Caribbean. Overland trucking rates from Toronto and Montreal to New York and Miami are listed in Table 2. U.S. ocean freight rates from New York and Miami to the Commonwealth Caribbean countries are also used in the cost comparison and are listed in the appropriate column in Tables 3(a) to 3(g).

Direct ocean freight rates from Canada are compared with total transshipment rates for selected commodities moving to the seven Commonwealth Caribbean countries. A comparison is then made of the costs of alternative transshipment routings:

- (a) Toronto via New York vs. Toronto via Miami;
- (b) Montreal via New York vs. Montreal via Miami;

- (c) Toronto via New York vs. Montreal via New York; and
- (d) Toronto via Miami vs. Montreal via Miami.

 Cost data obtained from private industry sources were available only for the years 1968 and 1969.

Legend for Chart 3(a) to 3(g):



Trucking Rate



Ocean freight rate

- (1) Direct ocean rate from Montreal
- (2) Transshipment rate from Toronto via New York
- 3) Transshipment rate from Montreal via New York
- (4) Transshipment rate from Toronto via Miami
- (5) Transshipment rate from Montreal via Miami.

TABLE 2

ROAD TRANSPORT RATES

(Cdn. \$/short ton)

1968

| Meat, Fresh or Frozen 44.72 31.40 52.00 Powdered Skim Milk 33.90 31.20 30.37 Fish, Dried or Salted 39.40 39.73 30.37 Wheat Flour 33.90 31.20 40.45 Sugar, N.E.S. 33.90 17.06 30.37 Soups 33.90 17.06 30.37 Newsprint 33.90 19.76 41.60 Cast Iron Pipes 33.90 31.20 41.60 Tires and Tubes 33.90 31.20 41.60 Electric Lighting and Control Equipment 44.72 43.68 69.26 Heat, Fresh or Frozen 43.68 33.70 52.00 Powdered Skim Milk 32.03 32.03 33.90 Fish, Dried or Salted 39.94 40.56 33.90 Potatoes, Fresh 32.03 32.03 33.90 Potatoes, Fresh 32.03 32.03 33.90 Newsprint 32.03 32.03 33.90 Newsprint 32.03 32.03 30.90 Ontrol Equipment 43.68 44.93 <th></th> <th>COMMODITY</th> <th></th> <th>TORONTO/NEW YORK</th> <th>MONTREAL/NEW YORK</th> <th>TORONTO/MONTREAL MIAMI</th> | | COMMODITY | | TORONTO/NEW YORK | MONTREAL/NEW YORK | TORONTO/MONTREAL MIAMI |
|--|---|--|---------------------------------------|------------------|-------------------|---------------------------|
| Fish, Dried or Salted 39.40 39.73 30.37 Wheat Flour 33.90 31.20 30.37 Potatoes, Fresh 33.90 31.20 40.45 Sugar, N.E.S. 33.90 17.06 30.37 Soups 33.90 31.20 30.37 Newsprint 33.90 19.76 41.60 Cast Iron Pipes 33.90 31.20 41.60 Tires and Tubes 33.90 31.20 41.60 Electric Lighting and Control Equipment 44.72 43.68 69.26 Meat, Fresh or Frozen 43.68 33.70 52.00 Powdered Skim Milk 32.03 32.03 33.90 Fish, Dried or Salted 39.94 40.56 33.90 Wheat Flour 32.03 32.03 33.90 Potatoes, Fresh 32.03 32.03 33.90 Potatoes, Fresh 32.03 32.03 33.90 Potatoes, Fresh 32.03 32.03 33.90 Newsprint 32.03 32.03 33.90 Newsprint 32.03 32.03 33.90 Newsprint 32.03 32.03 33.90 Newsprint 32.03 32.03 33.90 Cast Iron Pipes 32.03 32.03 32.03 50.96 Cast Iron Pipes 32.03 32.03 50.96 Electric Lighting and | | Meat, Fresh or Frozen | | 44.72 | 31.40 | 52.00 |
| Wheat Flour 33.90 31.20 30.37 Potatoes, Fresh 33.90 31.20 40.45 Sugar, N.E.S. 33.90 17.06 30.37 Soups 33.90 31.20 30.37 Newsprint 33.90 19.76 41.60 Cast Iron Pipes 33.90 31.20 41.60 Tires and Tubes 33.90 31.20 41.60 Electric Lighting and Control Equipment 44.72 43.68 69.26 1969 Meat, Fresh or Frozen 43.68 33.70 52.00 Powdered Skim Milk 32.03 32.03 33.90 Fish, Dried or Salted 39.94 40.56 33.90 Wheat Flour 32.03 32.03 32.03 33.90 Potatoes, Fresh 32.03 32.03 32.03 33.90 Potatoes, Fresh 32.03 32.03 32.03 33.90 Newsprint 32.03 32.03 32.03 33.90 Newsprint 32.03 32.03 32.03 50.96 Cast Iron Pipes 32.03 <t< td=""><td></td><td>Powdered Skim Milk</td><td></td><td>33.90</td><td>31.20</td><td>30.37</td></t<> | | Powdered Skim Milk | | 33.90 | 31.20 | 30.37 |
| Potatoes, Fresh 33.90 31.20 40.45 Sugar, N.E.S. 33.90 17.06 30.37 Soups 33.90 31.20 30.37 Newsprint 33.90 19.76 41.60 Cast Iron Pipes 33.90 31.20 41.60 Tires and Tubes 33.90 31.20 41.60 Electric Lighting and Control Equipment 44.72 43.68 69.26 Meat, Fresh or Frozen 43.68 33.70 52.00 Powdered Skim Milk 32.03 32.03 33.90 Fish, Dried or Salted 39.94 40.56 33.90 Wheat Flour 32.03 32.03 33.90 Potatoes, Fresh 32.03 32.03 33.90 Potatoes, Fresh 32.03 32.03 33.90 Sugar, N.E.S. 32.03 17.47 33.90 Soups 32.03 32.03 33.90 Newsprint 32.03 32.03 33.90 Newsprint 32.03 32.03 33.90 Newsprint 32.03 32.03 33.90 Cast Iron Pipes 32.03 32.03 50.96 Tires and Tubes 32.03 32.03 50.96 Electric Lighting and | | Fish, Dried or Salted | ٠. | 39.40 | 39.73 | 30.37 |
| Potatoes, Fresh 33.90 31.20 40.45 Sugar, N.E.S. 33.90 17.06 30.37 Soups 33.90 31.20 30.37 Newsprint 33.90 19.76 41.60 Cast Iron Pipes 33.90 31.20 41.60 Tires and Tubes 33.90 31.20 41.60 Electric Lighting and Control Equipment 44.72 43.68 69.26 Meat, Fresh or Frozen 43.68 33.70 52.00 Powdered Skim Milk 32.03 32.03 33.90 Fish, Dried or Salted 39.94 40.56 33.90 Wheat Flour 32.03 32.03 33.90 Potatoes, Fresh 32.03 32.03 33.90 Potatoes, Fresh 32.03 32.03 33.90 Sugar, N.E.S. 32.03 17.47 33.90 Soups 32.03 32.03 33.90 Newsprint 32.03 32.03 33.90 Newsprint 32.03 32.03 33.90 Newsprint 32.03 32.03 33.90 Cast Iron Pipes 32.03 32.03 50.96 Tires and Tubes 32.03 32.03 50.96 Electric Lighting and | • | Wheat Flour | • | 33.90 | 31.20 | 30.37 |
| Soups 33.90 31.20 30.37 Newsprint 33.90 19.76 41.60 Cast Iron Pipes 33.90 31.20 41.60 Tires and Tubes 33.90 31.20 41.60 Electric Lighting and Control Equipment 44.72 43.68 69.26 1969 Meat, Fresh or Frozen 43.68 33.70 52.00 Powdered Skim Milk 32.03 32.03 33.90 Fish, Dried or Salted 39.94 40.56 33.90 Wheat Flour 32.03 32.03 33.90 Potatoes, Fresh 32.03 32.03 40.35 Sugar, N.E.S. 32.03 17.47 33.90 Soups 32.03 32.03 33.90 Newsprint 32.03 32.03 33.90 Newsprint 32.03 32.03 50.96 Cast Iron Pipes 32.03 32.03 50.96 Electric Lighting and 50.96 | | Potatoes, Fresh | | 33.90 | 31.20 | 40.45 |
| Newsprint 33.90 19.76 41.60 Cast Iron Pipes 33.90 31.20 41.60 Tires and Tubes 33.90 31.20 41.60 Electric Lighting and Control Equipment 44.72 43.68 69.26 1969 Meat, Fresh or Frozen 43.68 33.70 52.00 Powdered Skim Milk 32.03 32.03 33.90 Fish, Dried or Salted 39.94 40.56 33.90 Wheat Flour 32.03 32.03 33.90 Potatoes, Fresh 32.03 32.03 40.35 Sugar, N.E.S. 32.03 17.47 33.90 Soups 32.03 32.03 33.90 Newsprint 32.03 20.38 50.96 Cast Iron Pipes 32.03 32.03 50.96 Tires and Tubes 32.03 32.03 50.96 Electric Lighting and | | Sugar, N.E.S. | ; | 33.90 | 17.06 | 30.37 |
| Newsprint 33.90 19.76 41.60 Cast Iron Pipes 33.90 31.20 41.60 Tires and Tubes 33.90 31.20 41.60 Electric Lighting and Control Equipment 44.72 43.68 69.26 1969 Meat, Fresh or Frozen 43.68 33.70 52.00 Powdered Skim Milk 32.03 32.03 33.90 Fish, Dried or Salted 39.94 40.56 33.90 Wheat Flour 32.03 32.03 33.90 Potatoes, Fresh 32.03 32.03 40.35 Sugar, N.E.S. 32.03 17.47 33.90 Soups 32.03 32.03 33.90 Newsprint 32.03 20.38 50.96 Cast Iron Pipes 32.03 32.03 50.96 Tires and Tubes 32.03 32.03 50.96 Electric Lighting and | | Soups | | 33.90 | 31.20 | 30.37 |
| Tires and Tubes 33.90 31.20 41.60 Electric Lighting and Control Equipment 44.72 43.68 69.26 1969 | | Newsprint | | 33.90 | 19.76 | • |
| Tires and Tubes 33.90 31.20 41.60 Electric Lighting and Control Equipment 44.72 43.68 69.26 1969 | | Cast Iron Pipes | | 33.90 | 31.20 | 41.60 |
| Test | | Tires and Tubes | | 33.90 | 31.20 | 41.60 |
| Meat, Fresh or Frozen 43.68 33.70 52.00 Powdered Skim Milk 32.03 32.03 33.90 Fish, Dried or Salted 39.94 40.56 33.90 Wheat Flour 32.03 32.03 33.90 Potatoes, Fresh 32.03 32.03 40.35 Sugar, N.E.S. 32.03 17.47 33.90 Soups 32.03 32.03 32.03 33.90 Newsprint 32.03 20.38 50.96 Cast Iron Pipes 32.03 32.03 50.96 Tires and Tubes 32.03 32.03 50.96 Electric Lighting and 50.96 | | | | 44.72 | 43.68 | 6 9.2 6 |
| Meat, Fresh or Frozen 43.68 33.70 52.00 Powdered Skim Milk 32.03 32.03 33.90 Fish, Dried or Salted 39.94 40.56 33.90 Wheat Flour 32.03 32.03 33.90 Potatoes, Fresh 32.03 32.03 40.35 Sugar, N.E.S. 32.03 17.47 33.90 Soups 32.03 32.03 32.03 33.90 Newsprint 32.03 20.38 50.96 Cast Iron Pipes 32.03 32.03 50.96 Tires and Tubes 32.03 32.03 50.96 Electric Lighting and 50.96 | · | | | | | |
| Powdered Skim Milk 32.03 32.03 33.90 Fish, Dried or Salted 39.94 40.56 33.90 Wheat Flour 32.03 32.03 33.90 Potatoes, Fresh 32.03 32.03 40.35 Sugar, N.E.S. 32.03 17.47 33.90 Soups 32.03 32.03 33.90 Newsprint 32.03 20.38 50.96 Cast Iron Pipes 32.03 32.03 50.96 Tires and Tubes 32.03 32.03 50.96 Electric Lighting and | | | , , | 1969 | | |
| Fish, Dried or Salted 39.94 40.56 33.90 Wheat Flour 32.03 32.03 33.90 Potatoes, Fresh 32.03 32.03 40.35 Sugar, N.E.S. 32.03 17.47 33.90 Soups 32.03 32.03 32.03 33.90 Newsprint 32.03 20.38 50.96 Cast Iron Pipes 32.03 32.03 50.96 Tires and Tubes 32.03 32.03 50.96 Electric Lighting and | | Meat, Fresh or Frozen | | 43.68 | 33.70 | 52.00 |
| Wheat Flour 32.03 32.03 33.90 Potatoes, Fresh 32.03 32.03 40.35 Sugar, N.E.S. 32.03 17.47 33.90 Soups 32.03 32.03 33.90 Newsprint 32.03 20.38 50.96 Cast Iron Pipes 32.03 32.03 50.96 Tires and Tubes 32.03 32.03 50.96 Electric Lighting and 50.96 | | Powdered Skim Milk | · · . | 32.03 | 32.03 | 33.90 |
| Potatoes, Fresh 32.03 32.03 40.35 Sugar, N.E.S. 32.03 17.47 33.90 Soups 32.03 32.03 33.90 Newsprint 32.03 20.38 50.96 Cast Iron Pipes 32.03 32.03 50.96 Tires and Tubes 32.03 32.03 50.96 Electric Lighting and 50.96 | | Fish, Dried or Salted | • | 39.94 | 40.56 | 33.90 |
| Sugar, N.E.S. 32.03 17.47 33.90 Soups 32.03 32.03 33.90 Newsprint 32.03 20.38 50.96 Cast Iron Pipes 32.03 32.03 50.96 Tires and Tubes 32.03 32.03 50.96 Electric Lighting and 50.96 | | Wheat Flour | | 32.03 | 32.03 | 33 .9 0 |
| Soups 32.03 32.03 33.90 Newsprint 32.03 20.38 50.96 Cast Iron Pipes 32.03 32.03 50.96 Tires and Tubes 32.03 32.03 50.96 Electric Lighting and 50.96 | • | Potatoes, Fresh | | 32.03 | 32.03 | 40.35 |
| Newsprint 32.03 20.38 50.96 Cast Iron Pipes 32.03 32.03 50.96 Tires and Tubes 32.03 32.03 50.96 Electric Lighting and 50.96 50.96 | | Sugar, N.E.S. | | 32.03 | 17.47 | 33.90 |
| Cast Iron Pipes 32.03 32.03 50.96 Tires and Tubes 32.03 32.03 50.96 Electric Lighting and 50.96 | | Soups | | 32.03 | 32.03 | 33.90 |
| Tires and Tubes 32.03 32.03 50.96 Electric Lighting and | | Newsprint | | 32.03 | 20.38 | 50.96 |
| Electric Lighting and | | Cast Iron Pipes | , | 32.03 | 32.03 | 50.96 |
| | | Tires and Tubes | | 32.03 | 32.03 | 50.96 |
| 2 · · · · · · · · · · · · · · · · · · · | | Electric Lighting and Control Equipment | · · · · · · · · · · · · · · · · · · · | 43.68 | 44.93 | 69.26 |

SOURCE: Maislin Brothers Transport Limited and Florida Refrigerated Services.

A. JAMAICA

Table 3(a) shows the combined overland/water freight rates from

Toronto and Montreal via New York and Miami and the ocean freight rates from

Montreal to Jamaica for selected Canadian export commodities in 1968 and 1969.

Chart 2(a) illustrates the comparative cost for one of these commodities, fresh

or frozen meat, directly and indirectly from Canada to Jamaica in 1968 and 1969.

A comparison of the combined overland/water freight rate with the direct freight rate from Montreal reveals that the direct ratewas substantially cheaper than the transshipment rate in 1968 and 1969. The difference between direct and transshipment rates in 1968 range from \$34.75 per ton for newsprint to \$129.64 per ton for electrical equipment while in 1969 the difference ranges from \$31.37 per ton for newsprint to \$121.39 per ton for electrical equipment. Except for fresh or frozen meat routed through Miami in 1968 and 1969 the U.S. ocean rates to Jamaica exceeded the direct ocean rates for the selected commodities. The other factor accounting for the variation between direct and transshipment rates is the addition of the overland costs in transshipping commodities via the United States.

In analyzing the two transshipment routes from Toronto to Jamaica through New York and Miami, it was found that in 1963, fresh or frozen meat, powdered skim milk, wheat flour and canned soups could be transshipped from Toronto through Miami at a lower rate than through New York. However, it was cheaper to ship newsprint, electrical equipment and tires and tubes from Toronto via New York than via Miami. In 1969, only fresh or frozen meats and canned soups could be shipped cheaper from Toronto via Miami than via New York. The remaining commodities: powdered skim milk, wheat flour, newsprint, electrical equipment and tires and tubes could be shipped cheaper from Toronto via New York than via Miami. Table 3(a) shows the cost changes over the two years. The variation in rates between the Toronto/ New York/Jamaica route and the Toronto/Miami/Jamaica route are due to differences in both the overland rates from Toronto to Miami and New York and the U.S. ocean freight rates from New York and Miami to Jamaica.

TABLE 3 (a)

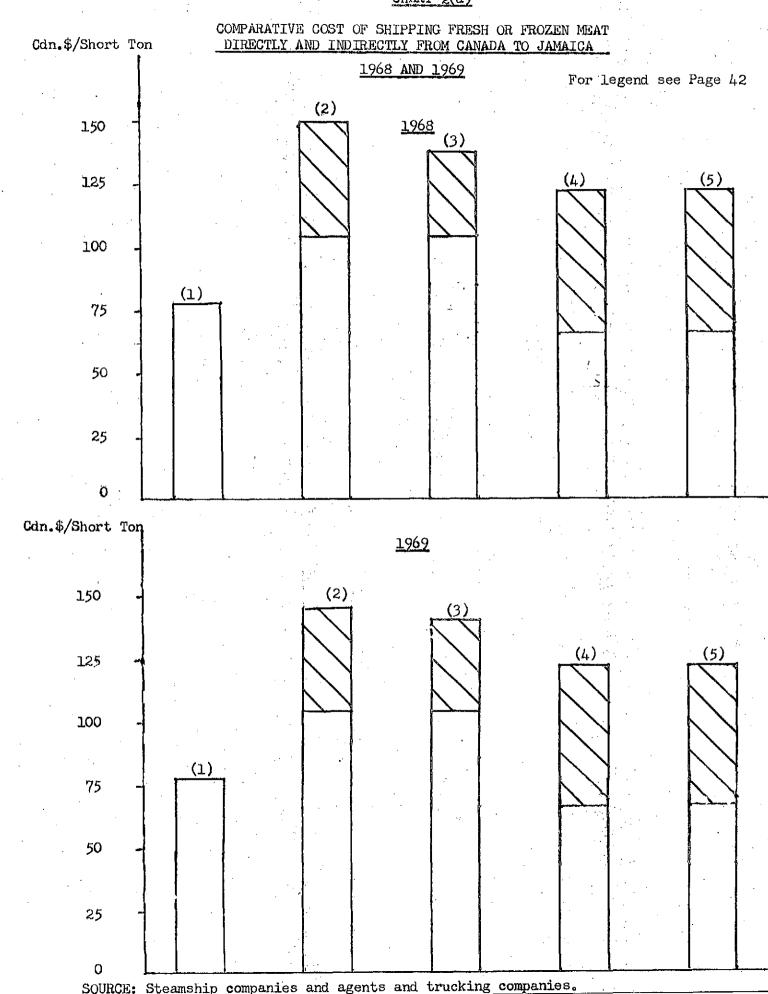
Jamaica

(All rates are in Cdn. \$/short ton)

1968

| • | • | | - | | | |
|----------------------|--|-------------------------|---|--|--|-------------------------|
| COMMODITY | U.S. OCE/ NAM YORK TO JAMAICA | N RATE MIAMI TO JAMAICA | COMBINED (TORONTO <u>NEW YORK</u> JAMAICA | OVERLAND/WATER R. MONTREAL NEW YORK JAMATCA | ATES MONTREAL/TORONTO MIAMI JAMAICA | MONTREAL DIRECT RATE |
| Meat, Fresh or Froze | en 104.98 | 69.98 | 149.70 | 136.38 | 121.98 | 77.00 |
| Powdered Skim Milk | 60.48 | 60.48 | 94.38 | 91.68 | 90.85 | 31.25 |
| Wheat Flour | 28.58 | 28.58 | 62.48 | 59.78 | 58.95 | 20.75 |
| Soups | 82.36 | 53.07 | 116.26 | 113.56 | 83.44 | 35.50 |
| Newsprint | 41.99 | 41.99 | 75.89 | 61.75 | 83.59 | 27.00 |
| Elect. Equipment | 181.96 | 181.96 | 226.68 | 225.64 | 251.22 | 96.00 |
| Tires and Tubes | 166.80 | 166.80 | 200.70 | 198.00 | 208.40 | 1 19. 50 |
| | | | | | | |
| | | | <u>1969</u> | | | |
| Meat, Fresh or Froze | en 104.98 | 69.98 | 148.66 | 138.68 | 121.98 | 77.00 |
| Powdered Skim Milk | 79.32 | 79.32 | 111.35 | 111.35 | 113.22 | 38.00 |
| Wheat Flour | 28.58 | 28,58 | 60.61 | 60.61 | 62.48 | 24.00 |
| Soups | 82.36 | 53.07 | 114.39 | 114.39 | 86.97 | 40.00 |
| Newsprint | 41.99 | 41.99 | 74.02 | 62.37 | 92.95 | 31.00 |
| Elect. Equipment | 181.96 | 181.96 | 225.64 | 226.89 | 251.22 | 105.50 |
| Tires and Tubes | 166.80 | 166.80 | 198.83 | 198.83 | 217.76 | 131.00 |

CHART 2(a)



A comparison of the Montreal/New York transshipment route with the Montreal/Miami route shows that in 1968 it was cheaper to transfer fresh or frozen meat, powdered skim milk, wheat flour and soups from Montreal via Miami than via New York. However, it was cheaper to transship newsprint, electrical equipment and tires and tubes from Montreal via New York than via Miami. In 1969 only fresh or frozen meats and soups were cheaper to ship via Miami from Montreal to Jamaica. The remaining commodities: powdered skim milk, wheat flour, Newsprint, electrical equipment and tires and tubes were all cheaper to ship from Montreal via New York than via Miami. Table 3(a) shows the various rates from Montreal via New York and Miami.

B. TRINIDAD-TOBAGO

Table 3(b) shows the combined overland/water freight rates from Toronto and Montreal via New York and Miami, the U.S. ocean freight rates from New York and Miami, and the ocean freight rates from Montreal to Trinidad-Tobago for selected Canadian export commodities in 1968 and 1969. Chart 2(b) illustrates the comparative cost of shipping fresh or frozen meat directly and indirectly from Canada to Trinidad-Tobago in 1968 and 1969.

An analysis of the combined overland/water rates with the direct ocean rates for all the selected commodities exported from Canada to Trinidad-Tobago in 1968 and 1969, the direct rates from Montreal were appreciably lower than the transshipment rates via New York and Miami. The difference in direct rates over transshipment rates for 1968 ranged from \$33.44 per ton for powdered skim milk to \$112.81 per ton for electrical lighting and control equipment while for 1969 the differences ranged from \$31.60 per ton for powdered skim milk to \$115.72 per ton for electrical equipment.

A comparison of the transshipment routes from Toronto via New York and Miami shows that in 1968 it was cheaper to ship fresh or frozen meat, newsprint and electrical lighting and control equipment from Toronto via New York than via

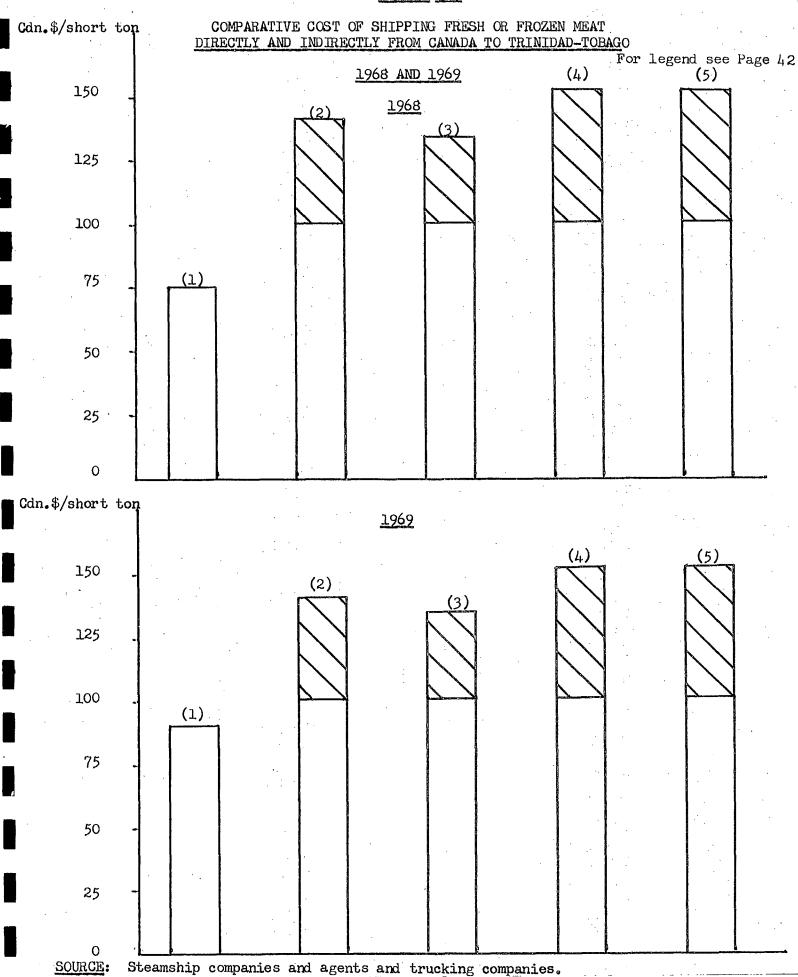
TABLE 3 (b)
Trinidad-Tobago

1968

(All rates are in Cdn.\$/short ton)

| COMMODITY | U.S. OCEAN RATE NEW YORK/MIAMI TRINIDAD-TOBAGO | COME TORONTO/NEW YORK TRINIDAD-TOBAGO | INED OVERLAND/WATER I MONTREAL/NEW YORK TRINIDAD-TOBAGO | RATE TORONTO/MONTREAL MIANI TRINIDAD-TOBAGO | MONTREAL DIRECT RATE |
|--|--|---|---|--|-------------------------|
| Meat, Fresh or Frozen | 100.89 | 145.61 | 132.29 | 152.89 | 75.00 |
| Fish, Dried or Salted | 56.00 | 95.40 | 95.73 | 86.37 | 17.86 |
| Powdered Skim Milk | 42.57 | 76.47 | 73.77 | 72.94 | 39.50 |
| Wheat Flour | 32.08 | 65.98 | 63.28 | 62.45 | 21 . 50 |
| Newsprint | 50 .16 | 84.06 | 69.92 | 91.76 | 31.75 |
| Electric Lighting and Control Equipment | 176.13 | 220.35 | 219.81 | 245•39 | 107.00 |
| | | | | | |
| | | <u> 1969</u> | 4 - | | |
| Meat, Fresh or Frozen | 100.89 | 144.57 | 134.59 | 152.89 | 90.50 |
| Fish, Dried or Salted | 63.51 | 103.45 | 104.07 | 97.41 | 20.32 |
| Powdered Skim Milk | 46.07 | 78.10 | 78,10 | 79.97 | 46.50 |
| Wheat Flour | 32.08 | 64.11 | 64.11 | 65.98 | 25.50 |
| Newsprint | 54.29 | 86,32 | 74.67 | 105.25 | 35.25 |
| Electric Lighting and Control Equipment | 187.79 | 231.47 | 232.72 | 257.05 | 117.00 |

CHART 2(b)



Miami. However, it was cheaper to ship dried or salted fish, powdered skim milk and wheat flour from Toronto via Miami than via New York.

In 1969 only dried or salted fish had a cheaper rate from Toronto out of Miami. The other commodities: fresh or frozen meat, powdered skim milk, wheat flour, newsprint and electrical lighting and control equipment were cheaper to ship from Toronto via New York. The comparison of the rates are shown in Table 3(b).

A comparison of the Montreal/New York transshipment route with the Montreal/Miami route shows that in 1968 it was cheaper to ship fresh or frozen meat, newsprint and electric lighting and control equipment from Montreal through New York than through Miami. However, it was possible to ship dried or salted fish, powdered skim milk and wheat flour cheaper from Montreal via Miami than via New York.

In 1969 it was possible to ship fresh or frozen meat, powdered skim milk wheat flour, newsprint and electric lighting and control equipment from Montreal to Trinidad-Tobago via New York cheaper than via Miami. Only dried or salted fish was less expensive out of Miami as compared with out of New York. The U.S. ocean freight rates from New York and Miami were identical in 1968 and 1969; therefore the overland rates from Montreal to New York and Miami were responsible for the difference in transshipment rates for the two alternate routes. The transshipment rates out of Montreal for the various selected commodities can be found in Table 3(b).

C. GUYANA

Table 3 (c) shows the combined overland/water freight rates from Toronto and Montreal via New York and Miami, the U.S. ocean freight rates from Miami and the ocean freight rates from Montreal to Guyana for selected Canadian export commodities in 1968 and 1969. Chart 2 (c) illustrates the comparative cost of

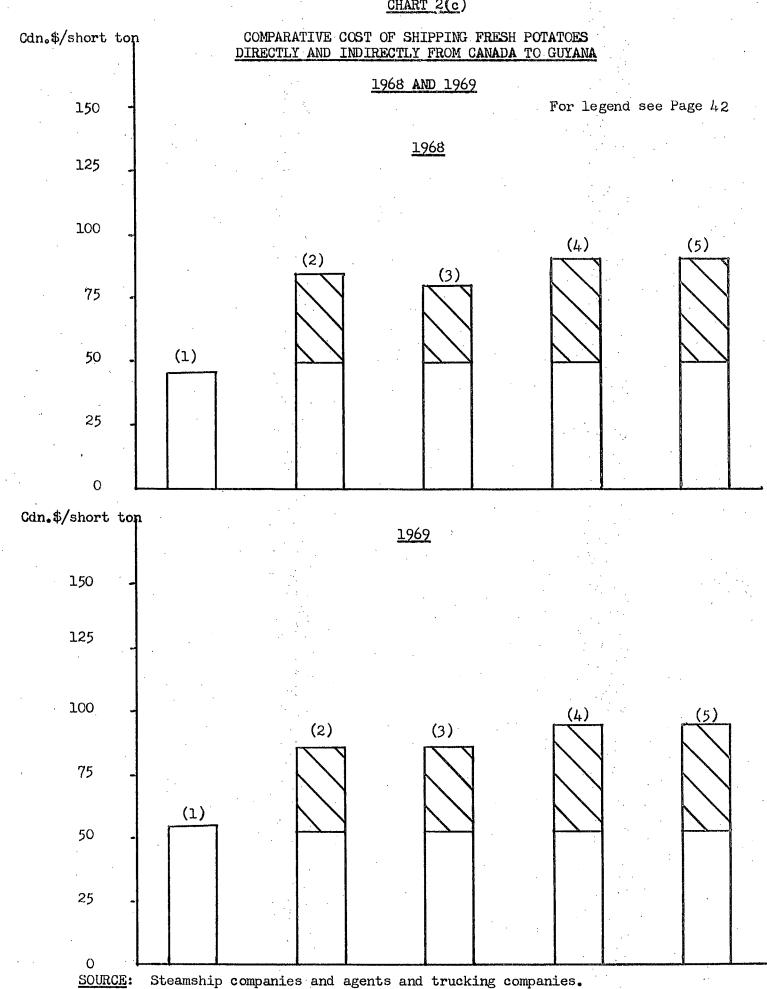
TABLE 3 (c)

Guyana 1968

(All rates are in Cdn.\$/short ton)

| COMMODITY | u.s. ocean rate new york/miami guyana | TORONTO/NEW YORK GUYANA | ED OVERLAND/WATER R MONTREAL/NEW YORK GUYANA | | MONTREAL DIRECT RATE |
|--|---|-------------------------|--|--------|-------------------------|
| Meat, Fresh or Frozen | 113.38 | 158.10 | 144.78 | 165.38 | 75.00 |
| Fish, Salted or Dried | 53.65 | 93.05 | 93.38 | 84.02 | 20.09 |
| Wheat Flour | 35.90 | 69.80 | 67.10 | 66.27 | 22,25 |
| Potatoes, Fresh | 49.13 | 83.03 | 80.33 | 89.58 | 45.00 |
| Soups, Canned | 89.87 | 123.71 | 121.01 | 120.18 | 34.00 |
| Newsprint | 54.80 | 88.70 | 74.56 | 96.40 | 34.00 |
| Pipes and Tubes, Iron and Steel | 78•59 | 112.49 | 109.79 | 120.19 | 35 . 75 |
| Electric Lighting and Control Equipment | 177.29 | 222.01 | 220.97 | 246.55 | 103.00 |
| | | 1969 | | | |
| Meat, Fresh or Frozen | 113.38 | 157.06 | 147.08 | 165.38 | 90.50 |
| Fish, Salted or Dried | 58.32 | 98.26 | 98.88 | 92.22 | 22.55 |
| Wheat Flour | 35.90 | 67.93 | 67.93 | 69.80 | 26.25 |
| Potatoes, Fresh | 52.91 | 84.94 | 84.94 | 93.26 | 54.50 |
| Soups, Canned | 77.69 | 109.72 | 109.72 | 11.59 | 40.50 |
| Newsprint | 59.21 | 91.24 | 79.59 | 110.17 | 38.75 |
| Pipes and Tubes, Iron and Steel | 84.67 | 116.70 | 116.70 | 135.63 | 35•75 |
| Electric Lighting and Control Equipment | 188.96 | 232.44 | 233.89 | 258.22 | 103.00 |

CHART 2(c)



shipping one of these commodities, fresh potatoes, directly and indirectly from Canada to Guyana in 1968 and 1969.

An analysis of the transshipment rates with direct rates from Canada to Guyana for 1968 and 1969 shows that the direct rates were substantially lower than the transshipment rates. In 1968 the difference between direct and transshipment rates ranged between \$35.33 per ton for fresh potatoes to \$117.97 per ton for electrical lighting and control equipment. In 1969 the difference between the two rages ranged from \$30.44 per ton for fresh potatoes to \$130.89 per ton for electrical lighting and control equipment. One reason for the higher transshipment rates is that the U.S. ocean freight rates, except for fresh potatoes, were higher than the direct ocean rates from Montreal to Guyana. In addition, overland rates on commodities transshipped via the United States contribute to the difference between direct and transshipment rates.

In analyzing the transshipment rates from Toronto to Guyana via Miami and New York, it was found that in 1968 it was cheaper to transship the following articles from Toronto to Guyana via New York rather than via Miami: fresh or frozen meat, fresh potatoes, newsprint, iron and steel pipes and tubes and electrical lighting and control equipment. However, it was less expensive to transship salted or dried fish, wheat flour and canned soups from Toronto to Guyana via Miami rather than via New York.

In 1969 it was cheaper to transship fresh or frozen meat, wheat flour, fresh potatoes, canned soups, newsprint, iron and steel pipes and tubes, and electric lighting and control equipment from Toronto to Guyana via New York.

Only the rate on salted or dried fish was lower from Toronto to Guyana via Miami. The rates for both years are shown in Table 3(c).

A comparison of the Montreal/New York transshipment route with the Montreal/Miami route for 1968 shows that fresh or frozen meats, fresh potatoes, newsprint, iron and steel pipes and tubes and electric lighting and control equipment could be transshipped cheaper from Montreal to Guyana via New York rather than via Miami.

However, in 1968 salted or dried fish, wheat flour and canned soups could be shipped cheaper via Miami from Montreal rather than via New York.

In 1969 it was cheaper to transship fresh or frozen meat, wheat flour, fresh potatoes, canned soups, newsprint, iron and steel pipes and tubes and electric lighting and control equipment from Montreal to Guyana via New York rather than via Miami. Only salted or dried fish was cheaper via Miami in 1969. The comparison for the two alternate routes is shown in Table 3(c). Since the U.S. ocean freight rates were identical from New York and Miami in 1968 and 1969, the overland rates caused the difference in transshipment rates.

D. BAHAMAS

Table 3(d) shows the combined overland/water freight rates from Toronto and Montreal via New York and Miami, the U.S. ocean freight rates from New York and Miami and the ocean freight rates from Montreal to the Bahamas for selected Canadian export commodities in 1968 and 1969. Chart 2(d) illustrates the comparative cost of shipping one of these commodities, wheat flour, directly and indirectly from Canada to the Bahama Islands in 1968 and 1969.

An analysis of the combined overland/water rates with the direct rates from Canada to the Bahamas shows that, in both 1968 and 1969, the direct rates were lower than the transshipment rates for the selected exports. In 1968 the difference between the direct rates and the transshipment rates differed from \$21.74 per ton for fresh or frozen meat to \$55.28 per ton for tires and tubes. In 1969 this difference ranged from \$24.04 per ton for fresh or frozen meat to \$64.11 for tires and tubes.

In analyzing the two transshipment routes from Toronto to the Bahamas through New York and Miami for 1968 it was found that fresh or frozen meat, fresh potatoes, cast iron pipes and tires and tubes could be transshipped cheaper from Toronto via New York than via Miami. However, it was cheaper to transship powdered skim milk, wheat flour, sugar N.E.S. and soups from Toronto via Miami rather than via New York.

TABLE 3 (d)
Bahama Islands
1968

(All rates are in Cdn.\$/short ton)

| eader-ader (Challahalla-ulus-ader Chill (Chill (Chill) Chilling Chill (Chilling Chill) Chilling Chilling (Chill | U.S. OCEAN RATE | COMB: | INED OVERLAND/WATER RA | TE | MONTREAL |
|---|----------------------------------|---------------------------------|----------------------------------|---|-------------|
| COMMODITY | NEW YORK/MIAMI BAHAMA ISLANDS | TORONTO/NEW YORK BAHAMA ISLANDS | MONTREAL/NEW YORK BAHAMA ISLANDS | TORONTO/MONTREAL MIAMI BAHAMA ISLANDS | DIRECT RATE |
| | | | | | |
| Meat, Fresh or Frozen | 65.34 | 110.06 | 96.74 | 117.34 | 75.00 |
| Powdered Skim Milk | 42.66 | 76.56 | 73.86 | 73.03 | 43,00 |
| Wheat Flour | 35.64 | 69.54 | 66.84 | 66.01 | 27.50 |
| Potatoes, Fresh | 37.80 | 71.70 | 69.00 | 78.25 | 31.00 |
| Sugar, N.E.S. | 35.64 | 69.54 | 52.70 | 66.01 | 24.25 |
| Soups | 66.13 | 100.03 | 97.33 | 96.50 | 51.15 |
| Cast Iron Pipes | 33.48 | 67.38 | 64.68 | 75.88 | 32.50 |
| Tires and Tubes | 136.08 | 169.98 | 167.28 | 177.68 | 112.00 |
| | • | • | | • | |
| | | 1969 | | | • |
| Meat, Fresh or Frozen | 65.34 | 109.02 | 99.04 | 117.34 | 75.00 |
| Powdered Skim Milk | 42.66 | 74.69 | 74.69 | 76.56 | 43.00 |
| Wheat Flour | 35.64 | 67.67 | 67.67 | 69.54 | 24.25 |
| Potatoes, Fresh | 37.80 | 69.83 | 69.83 | 78.15 | 28,00 |
| Sugar, N.E.S. | 35.64 | 67.67 | 53.11 | 69.54 | 22.25 |
| Soups | 66.13 | 98.16 | 98.16 | 100.03 | 48.04 |
| Cast Iron Pipes | 33.48 | 65.51 | 65.51 | 84.44 | 27.50 |
| Tires and Tubes | 136.08 | 168.11 | 168.11 | 187.04 | 104.00 |

CHART 2(d) COMPARATIVE COST OF SHIPPING WHEAT FLOUR DIRECTLY AND INDIRECTLY FROM CANADA TO THE BAHAMA ISLANDS Cdn.\$/short ton 1968 AND 1969 For legend see Page 42 1968 150 125 100 (2) 75 (3) (4) (5) 50 (1) 25 0 Cdn.\$/short ton 1969 150 125 100 (5) 75 (3) (2) 50 (1) 25

SOURCE: Steamship companies and agents and trucking companies.

0

In 1969 fresh or frozen meat, powdered skim milk, wheat flour, fresh potatoes, sugar N.E.S., soups, cast iron pipes and tires and tubes were all shipped cheaper via New York from Toronto rather than Miami. Miami did not hold a cost advantage for any of the select commodities in 1969 from Toronto. Table 3(d) shows the cost comparisons for both the years for both routes. The U.S. ocean freight rates from New York and Miami were identical in 1968 and 1969, therefore, the difference in overland rates from Toronto to Miami and New York explains the difference in rates charged on the two alternative transshipment routes.

A comparison of the Montreal/New York transshipment route with the Montreal/Miami route shows that in 1968 it was less expensive to ship fresh or frozen meat, fresh potatoes, sugar N.E.S., cast iron pipes and tires and tubes from Montreal to the Bahamas via New York rather than via Miami. However, powdered skim milk, wheat flour and soups could be shipped cheaper via Miami than via New York. In 1969 every commodity mentioned previously; fresh or frozen meat, powdered skim milk, wheat flour, fresh potatoes, sugar N.E.S., soups, cast iron pipes and tires and tubes could be shipped cheaper via New York rather than Miami. Table 3(d) sets out the rates for the two alternate transshipment routes.

E. LEEWARD AND WINDWARD ISLANDS

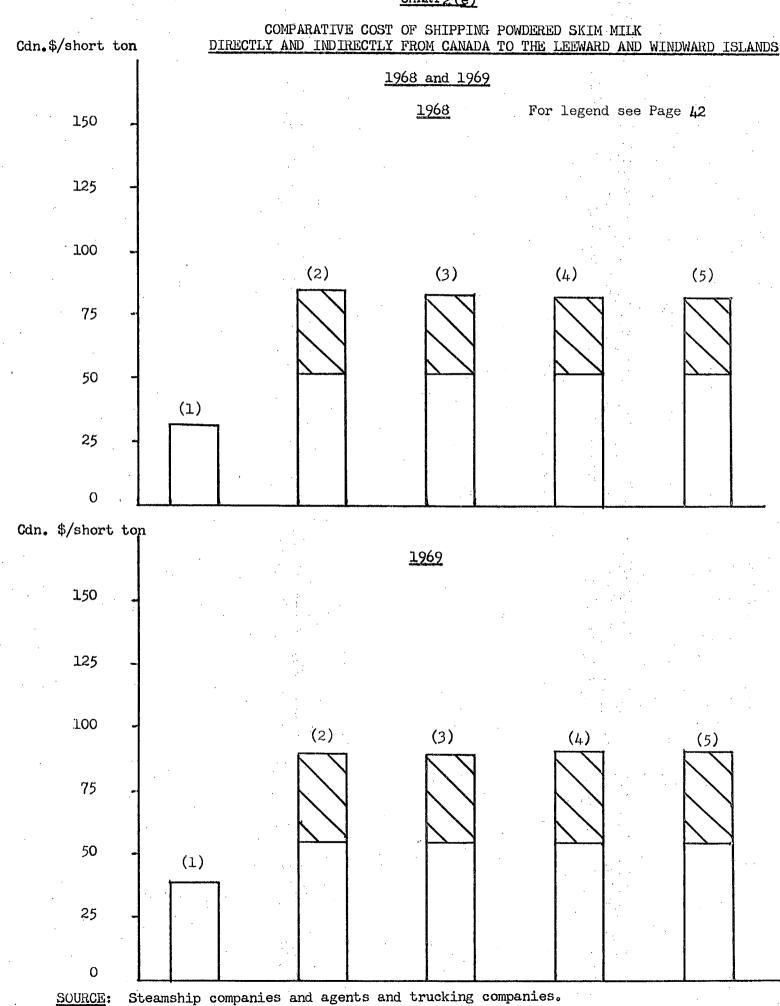
Table 3(e) shows the combined overland/water freight rates from Toronto and Montreal via New York and Miami, the U.S. ocean freight rates from New York and Miami, and the ocean freight rates from Montreal to the Leeward and Windward Islands for selected Canadian export commodities in 1968 and 1969. Chart 2(e) illustrates the comparative cost of shipping one of these export commodities, powdered skim milk, directly and indirectly from Canada to the Leeward and Windward Islands in 1968 and 1969.

A comparison of the combined overland/water freight rates with the direct freight rates from Montreal reveals that the direct rates were appreciably

TABLE 3 (e)
Leeward and Windward Islands

| | | <u>1968</u> | | es are in Cdn. \$/shor | rt ton) |
|-------------------------|--------------------------------|-------------------------|---|------------------------------------|-------------------------|
| COMMODITY | U.S. OCEAN RATE NEW YORK/MIAMI | TORONTO NEW YORK L.W.I. | INED OVERLAND/WATER MONTREAL NEW YORK L.W.I. | RATE TORONTO/MONTREAL MIAMI L.W.I. | MONTREAL DIRECT RATE |
| - Fish, Dried or Salted | 69.38 | 108.78 | 109.11 | 99•75 | 26.34 |
| Powdered Skim Milk | 51.32 | 85.22 | 82.52 | 81.69 | 31.25 |
| Wheat Flour | 43.16 | 77.06 | 74.36 | 73.53 | 22.00 |
| Sugar | 47.24 | 81.14 | 64.30 | 77.61 | 22.50 |
| Soups | 105.82 | 139.72 | 137.02 | 136.19 | 48.50 |
| Elect. Fixtures | 195.96 | 240.68 | 239.64 | 265.22 | 174.00 |
| | | <u>1969</u> | | | |
| Fish, Dried or Salted | 74.61 | 114.55 | 114.55 | 114.55 | 28.13 |
| Powdered Skim Milk | 55.99 | 88,02 | 88.02 | 89.89 | 38.00 |
| Wheat Flour | 43.16 | 75.19 | 75.19 | 77.00 | 26.75 |
| Sugar | 47.82 | 79.85 | 65.29 | 81.72 | 25 .50 |
| Soups | 113.66 | 145.69 | 145.69 | 147.56 | 56.25 |
| Elect. Fixtures | 207.62 | 251.30 | 252.55 | 276.88 | 114.00 |

CHART2(e)



lower than the transshipment rates via Miami and New York. In 1968 the difference between the direct freight rate from Montreal to the Leeward and Windward Islands and the transshipment rates out of Miami and New York varied from a low of \$41.80 per ton for sugar to \$125.64 per ton for electric fixtures for the selected commodities. In 1969 the rate difference for the selected commodities varied from \$39.79 per ton for sugar to \$137.30 per ton for electric fixtures.

In analyzing the two transshipment routes from Toronto to the Leeward and Windward Islands through New York and Miami for 1968, it was found that dried or salted fish, powdered skim milk, wheat flour, sugar and soups could be shipped cheaper via the Toronto-Miami route than the Toronto-New York route. Only electric fixtures could be shipped cheaper via the Toronto-New York route.

In 1969 there was a shift that favoured New York. That year, every commodity except dried or salted fish could be shipped cheaper via New York. The rate for dried or salted fish was the same via both ports. Since the ocean freight rates via both ports were the same for the selected commodities, it is the overland rates from Toronto to Miami and New York that caused the variation in total transshipment rates. The various transshipment rates are shown in Table 3(e).

A comparison of the Montreal/New York transshipment route with the Montreal/Miami route for 1968 shows that dried or salted fish, powdered skim milk and wheat flour could be shipped cheaper via Miami. However, soups, sugar and electric fixtures could be shipped cheaper via New York.

In 1969 powdered skim milk, wheat flour, sugar, soups and electric fixtures could be shipped cheaper via the Montreal/New York route. Miami did not hold a cost advantage in any article as Table 3 (e) shows. Once again the difference in overland rates accounts for the difference as the ocean freight rates are identical for each port.

F. BARBADOS

Table 3(f) shows the combined overland/water freight rates from

Toronto and Montreal via New York and Miami, the U.S. ocean freight rates from

New York and Miami and the ocean freight rates from Montreal to Barbados for

selected Canadian export commodities in 1968 and 1969. Chart 2(f) illustrates

the comparative cost of shipping one of these commodities, wheat flour,

directly and indirectly from Canada to Barbados in 1968 and 1969.

An analysis of the combined overland/water rates with direct ocean rates in 1968 shows that the direct rates were lower than the transshipment rates for every commodity that year. The difference between the two rates varied from \$32.62 per ton for fresh or frozen meat to \$126.31 per ton for electric lighting equipment. In 1969 the difference varied \$34.92 per ton for fresh or frozen meat to \$137.97 per ton for electric lighting equipment. One of the factors contributing to the difference between the direct rates and the combined overland/water rates were the U.S. ocean freight rates which were consistently higher than the direct ocean freight rates. In addition to higher U.S. ocean rates, overland trucking rates on all commodities transshipped via the United States were partly responsible for the higher transshipment rates.

In analyzing the Toronto/New York/Barbados transshipment route with the Toronto/Miami/Barbados route, it was observed that in 1968 fresh or frozen meat, newsprint and electric lighting equipment could be shipped cheaper via New York. However, dried or salted fish, powdered skim milk, wheat flour and soup could be shipped cheaper via Miami.

In 1969 fresh or frozen meat, wheat flour, soups, newsprint and electric lighting equipment could be shipped cheaper via New York. Only powdered skim milk and dried or salted fish could be shipped cheaper out of Miami. The various rates are shown in Table 3(f).

A comparison of the Montreal/New York transshipment route and the Montreal/Miami route for 1968 shows that dried or salted fish, powdered skim milk, wheat flour

TABLE 3(f)

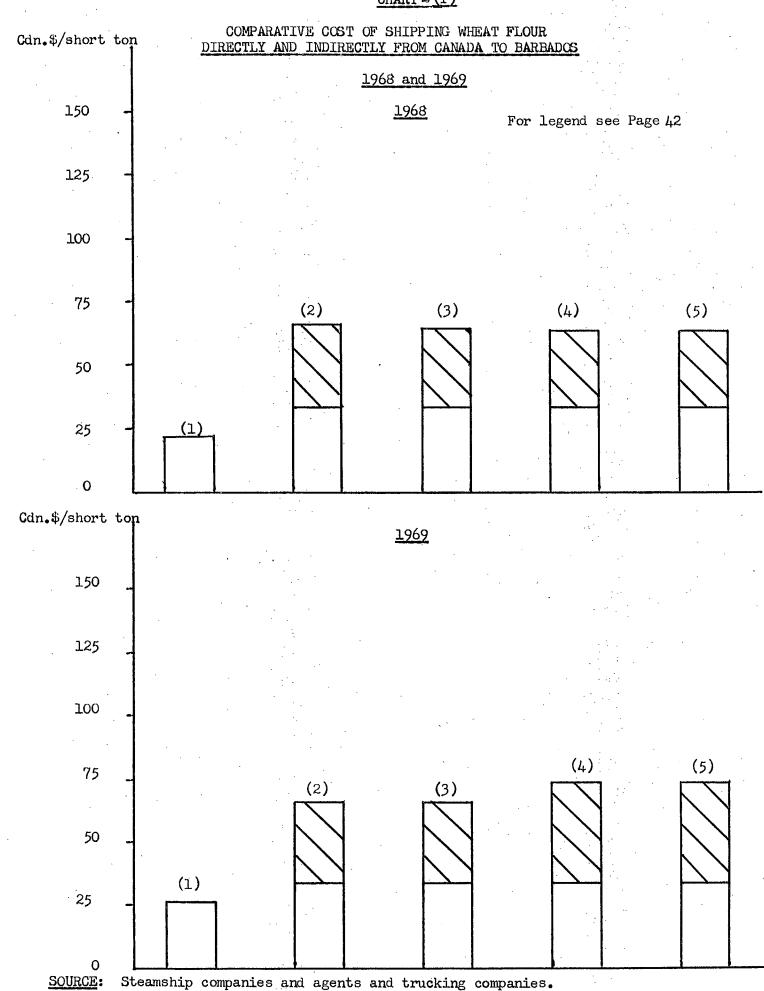
(All rates are in Cdn. \$/short ton)

BARBADOS

1968

| • | U.S. OCEAN RATE | <u>.</u> | COMBINED OVERLAND/WATER RATE | | | | |
|--------------------------|----------------------------|-----------------------------|------------------------------|------------------------------------|----------------|--|--|
| COMMODITY | NEW YORK/MIAMI BARBADOS | TORONTO/NEW YOR BARBADOS | MONTREAL/NEW YORK BARBADOS | TORONTO/MONTREAL MIAMI/BARBADOS | DIRECT RATE | | |
| Meat, Fresh or Frozen | 76,22 | 120.94 | 107.62 | 128•22 | 75,00 | | |
| Fish, Dried or Salted | 56.45 | 95.85 | 96 .18 | 86.82 | 20.09 | | |
| Powdered Skim Milk | 49.76 | 83.66 | 80.96 | 80.13 | 43.00 | | |
| Wheat Flour | 32.76 | 66.66 | 63.96 | 63.13 | 21.50 | | |
| Soups | 85.97 | 119.87 | 117.17 | 116.34 | 34.00 | | |
| Newsprint | 52.28 | 86.18 | 72.04 | 93.88 | 31.75 | | |
| Electric Lighting Equip. | 172.63 | 217.35 | 216.31 | 241.89 | 90.00 | | |
| | | | | | | | |
| • | | | • | • | | | |
| • | | <u>19</u> | 69 | | | | |
| | | | • | | | | |
| Meat, Fresh or Frozen | 76.22 | 119.90 | 109.92 | 128,22 | 75.00 | | |
| Fish, Dried or Salted | 61.58 | 101.52 | 102.14 | 95.48 | 22.33 | | |
| Powdered Skim Milk | 49.76 | 89.70 | 90.32 | 83.66 | 43.00 | | |
| Wheat Flour | 32.76 | 64.79 | 64.79 | 73.11 | 25 .5 0 | | |
| Soups | 93.78 | 125.81 | 125.81 | 127.68 | 40.50 | | |
| Newsprint | 56.69 | 88.72 | 77.07 | 107.65 | 35.25 | | |
| Electric Lighting Equip. | 184.29 | 227.97 | 229.22 | 253.55 | 90.00 | | |
| • | | | | • | • | | |

CHART 2 (f)



and canned soups were cheaper to transship through Miami to Barbados than through New York. However, fresh or frozen meat, newsprint and electric lighting equipment were cheaper to ship through New York.

In 1969 fresh or frozen meat, wheat flour, soups, newsprint and electric lighting equipment were cheaper to ship to Barbados through New York than through Miami. Only dried or salted fish and powdered skim milk were cheaper to ship through Miami to the Barbados from Montreal. The various rates are shown for 1968 and 1969 in Table 3(f).

G. BRITISH HONDURAS

Table 3(g) shows the combined overland/water freight rates from

Toronto and Montreal via New York and Miami, the U.S. ocean freight rates from

New York and Miami, and the ocean freight rates from Montreal to British Honduras

for selected Canadian export commodities in 1968 and 1969. Chart 2(g) illustrates

the comparative cost of shipping one of these commodities, newsprint, directly and

indirectly from Canada to the British Honduras in 1968 and 1969.

In comparing the combined overland/water rate with the direct ocean freight rate in 1968, it was found that the direct rate from Montreal was lower than the overland rate in all cases. The difference between the two varied from \$33.40 per ton for wheat flour to \$86.24 per ton for canned soups. In 1969 the difference was from \$31.94 per ton for wheat flour to \$89.23 per ton for canned soups. The reason for the higher transshipment rate is that, for all commodities with the exception of electric lighting and control equipment shipped via Miami in 1968 and 1969 and wheat flour shipped via New York in 1969, the U.S. ocean rate is higher than the direct ocean rate from Miami. In addition to the higher U.S. ocean rate, Canadian exports transshipped via the United States are subject to overland rates.

In comparing transshipment rates between Toronto/New York/British
Honduras and the Toronto/Miami/British Honduras route for 1968, it was found that

TABLE 3 (g)

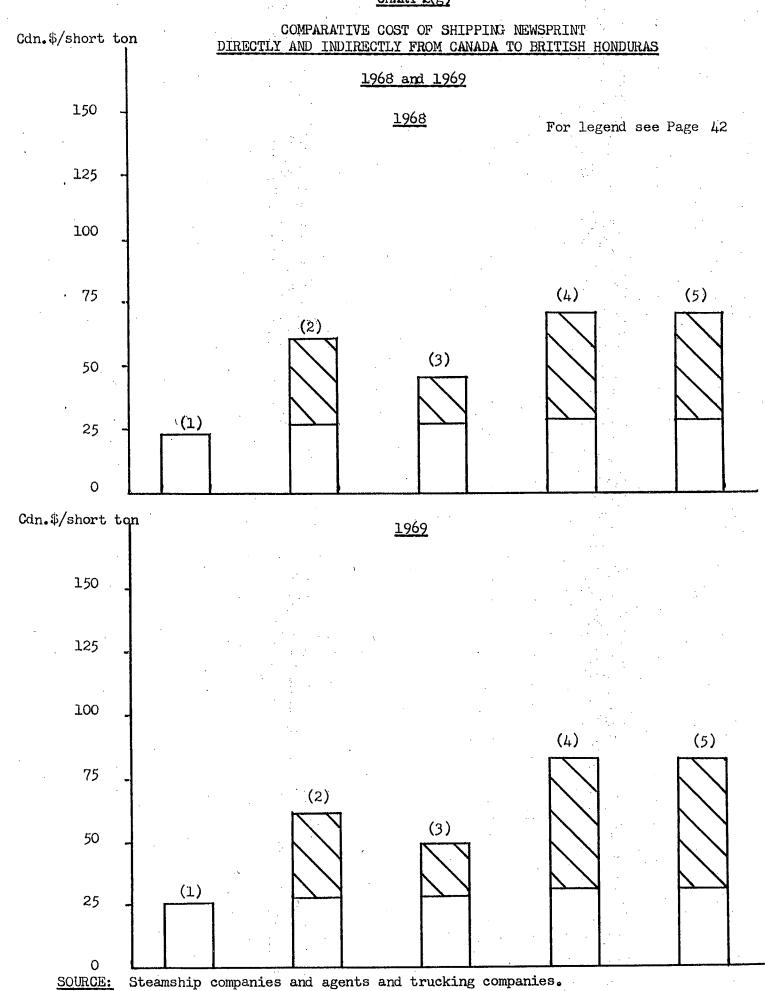
British Honduras

1968

(All rates are in Cdn.\$/short ton)

| The second secon | U.S. (| OCEAN RA | TE | COMBINE | D OVERLAND/WATE | R RATE | |
|--|--------------------------|----------|-------------------|-----------------------------------|--------------------------------------|---------------------------------------|-------------------------|
| COMMODITY | NEW YORK BR. HONDURAS | BR. | MTAMI HONDURAS | TORONTO/NEW YORK/ ER. HONDURAS | MONTREAL NEW YORK BR. HONDURAS | MONTREAL/TORONTO MIAMI ER. HONDURAS | MONTREAL DIRECT RATE |
| Wheat Flour | 19.01 | | 20.53 | 52.91 | 51.73 | 50.90 | 17.50 |
| Soups | 89.87 | | 89.87 | 123.77 | 121.07 | 120.24 | 34.00 |
| Newsprint | 26.14 | | 28.23 | 60 .0 4 | 45.90 | 69.83 | 23.00 |
| Electric lighting and control equip. | 118.80 | | 81.65 | 163.52 | 162.48 | 150.91 | 114.00 |
| | · | | | | | | |
| | | | | · · | · · | | • |
| | | | | <u>1969</u> | | | |
| Wheat Flour | 20.91 | | 22.58 | 52 . 94 | 52.94 | 56.48 | 21.00 |
| Soups | 97.69 | 7 | 97.69 | 129.72 | 129.72 | 131.59 | 40.50 |
| Newsprint | 28.75 | | 31.05 | 60.78 | 49.13 | 82.01 | 25.30 |
| Electric lighting and control equip. | 130.68 | | 89.81 | 174.36 | 175.61 | 159•07 | 127.40 |

CHART 2(g)



wheat flour, soups and electric lighting and control equipment could be shipped cheaper via Miami than via New York. Only newsprint could be shipped cheaper via New York.

In 1969, wheat flour, soups and newsprint could be shipped cheaper via New York than via Miami. Miami only held an advantage over New York in electric lighting and control equipment. Table 3(g) shows the various rates from Toronto via New York and Miami.

In analyzing the comparative transshipment rates for the four **selected** commodities when shipped from Montreal via New York and Miami in 1968, it was observed that wheat flour, soups and electric lighting and control equipment could be transshipped cheaper via Miami than via New York. Only newsprint could be transshipped cheaper via New York.

In 1969, New York held an advantage in wheat flour, soups and newsprint while Miami held the advantage in electric lighting and control equipment.

Table 3(g) shows the various rates for the selected commodities from Montreal in 1968 and 1969.

APPENDIX
TO
"STUDY ON DIRECT SHIPMENT AND TRANSSHIPMENT OF
CANADIAN EXPORTS TO THE COMMONWEALTH CARIBBEAN"

VALUE AND VOLUME OF EXPORTS AND VOLUME OF TRANSSHIPMENTS OF SELECTED MAJOR COMMODITY GROUPS FROM CANADA TO COMMONWEALTH CARIBBEAN COUNTRIES, (1963 - 1968)Volume Value 2500 tons) (\$M) 240 60 230 220 55. 210 200 50 190 180 45 170 40 Value of total selected commodity groups 6 Volume of total selected commodity groups 5 Volume of transshipments of selected commodity groups 4 3 2 1 1963 1964 1965 1966 1967 1968 Dominion Bureau of Statistics, Trade of Canada, Exports by Mode of Transport, SOURCE:

1963 - 1968.

Table(a)

Value of Total Domestic Exports From Canada To Commonwealth Caribbean Countries, by Mode of Transport, 1963-1968

(Thousands of Dollars)

| Country | Year | Water | Road | Rail | Air | Other | Total |
|-----------------|--------------------------------------|--|--|---------------------------------------|--|--|--|
| Jamaica | 1963 1964 1965 1966 1967 | 20,520 26,126 27,309 29,999 34,196 28,290 | 570 1,210 1,096 1,632 2,299 3,205 | 67 303 221 145 173 406 | 869 1,005 1,406 1,481 2,208 2,274 | 245 299 247 243 204 203 | 22,271 28,942 30,280 33,500 39,080 34,378 |
| Trinidad-Tobago | 1963 1964 1965 1966 1967 | 15,508 16,871 20,177 21,372 17,565 14,111 | 50 97 207 523 760 675 | 52 124 144 93 55 31 | 343 441 771 1,111 1,565 1,293 | 260 258 234 238 170 117 | 16,213 17,791 21,532 23,337 20,115 16,228 |
| Guyana | 1963 1964 1965 1966 1967 | 4,707 6,589 7,301 8,956 10,190 7,351 | 35 44 56 150 419 267 | 116 220 21 58 164 48 | 71 102 163 546 1,203 1,513 | 132 161 209 168 156 113 | 5,061 7,116 7,750 9,878 12,132 9,291 |
| Bahamas | 1963 1964 1965 1966 1967 | 4,232 5,592 5,188 5,479 4,975 6,052 | 1,270 2,222 2,876 3,999 3,942 4,354 | 251 424 384 320 161 96 | 282 524 689 934 1,062 2,157 | 98 114 121 115 105 113 | 6,133 8,876 9,257 10,847 10,245 12,772 |

Table (a)(Contd.)

Value of Total Domestic Exports From Canada To Commonwealth Caribbean Countries, by Mode of Transport, 1963-1968

(Thousands of Dollars)

| Country | Year | Water | Road | Rail | Air | Other | Tot al |
|----------------------------|------|----------------|------|------|------------|--------------|-----------------|
| Leeward & Windward Islands | 1963 | 6,114 | 46 | 40 | 79 | 317 | 6,596 |
| | 1964 | 7,329 | 148 | 47 | 99 | 363 | 7,986 |
| | 1965 | 7,305 | 185 | 18 | 163 | 366 | 8,037 |
| | 1966 | 7,663 | 573 | 29 | 165 | 323 | 8,753 |
| | 1967 | 7,561 | 448 | 103 | 1,363 | 245 | 9,719 |
| | 1968 | 6,644 | 644 | 371 | 541 | 214 | 8,414 |
| Barbados | 1963 | 5,064 | 23 | 4 | 225 | 1 5 3 | 5,469 |
| | 1964 | 6,295 | 52 | 46 | 363 | 165 | 6,922 |
| | 1965 | 6,156 | 229 | 3 | 301 | 138 | 6,826 |
| | 1966 | 7,497 | 101 | 7 | 376 | 132 | 8,112 |
| | 1967 | 7,525 | 201 | 1 | 561 | 130 | 8,417 |
| British Honduras | 1968 | 9 , 131 | 245 | 4 | 581 | 94 | 10 , 056 |
| | 1963 | 476 | 131 | 60 | 11 | 20 | 698 |
| | 1964 | 676 | 162 | 99 | 14 | 22 | 973 |
| | 1965 | 755 | 176 | 97 | 16 | 22 | 1,065 |
| | 1966 | 537 | 214 | 128 | 17 | 24 | 921 |
| | 1967 | 685 | 339 | 100 | 27 | 28 | 1,179 |
| | 1968 | 306 | 824 | 141 | 50 | 21 | 1,343 |

Source: Dominion Bureau of Statistics, Trade of Canada, Exports by Mode of Transport, 1963-1968.

TABLE (b)

TRANSSHIPMENTS VIA THE UNITED STATES OF MAJOR CANADIAN EXPORTS TO COMMONWEALTH CARIBBEAN COUNTRIES 1963 - 1968 (IN SHORT TONS)

| <u>1963</u> | | | | | <u> 1964</u> | | | <u> 1965</u> | | | 1966 | | | 1967 | | <u>1968</u> | | | | |
|----------------------------|-----------------|----------|--------------|-----------------|--------------|---|-----------------|--------------|------------|-------------------|---------|-------------|-----------------|-------|----------|--------------------|----------|----------------|--|--|
| : | TOTAL * EXPORTS | VIA U.S. | · <u>~</u> | TOTAL * EXPORTS | | · <u>~</u> | TOTAL * EXPORTS | VIA U.S | <u>.</u> % | TOTAL* EXPORTS | VIA U.S | • <u>%</u> | TOTAL * EXPORTS | | <u>8</u> | TOTAL ≉ EXPORTS | VIA U.S. | - 1 | | |
| JAMAICA | 54,711 | 540 | 1.0 | 66,009 | 937 | 1.4 | 68,461 | 742 | 1.1 | 68,819 | 784 | 1.1 | 68,063 | 1,433 | 2.1 | 54,647 | 1,243 | 2.3 | | |
| TRINIDAD' - TOBAGO | 60,497 | 105 | .2 | 60,466 | 19 | - · · · · · · · · · · · · · · · · · · · | 65,318 | 195 | •3 | 69,416 | 388 | . 6. | 45,850 | 406 | •9 | 30,946 | 804 | 2.6 | | |
| GUYANA | 11,972 | 3 | - | 11,850 | 34 | •3 | 12,181 | 5 | - | 15,625 | 308 | 2.0 | 14,233 | 141 | 1.0 | 10,137 | 345 | 3•4 | | |
| BAHAMAS - | 15,049 | 771 | 5.1 | 17,465 | 1,198 | 6.9 | 17,128 | 1,184 | 6.9 | 18,216 | 1,695 | 9.3. | 21,590 | 2,750 | 12.7 | 19,540 | 2,486 | 12.7 | | |
| LEEWARD & WINDWARD ISLANDS | 32,922 | 12 - | - | 35,859 | 183 | •5 | 34,882 | 151 | •4 | 36 , 523 | 264 | •7 | 32,015 | 142 | •4 | 29,457 | 246 | .8 | | |
| BARBADOS | 27,177 | - | - | 25,806 | 14 | .1 | 23,999 | 19 | .1 | 32,372 | 7 | | 30,143. | 33 | .1 | 24,738 | 87 | •4 | | |
| BRITISH HONDURAS | 1,328 | 623 | 46.9 | 1,336 | 690 | 51.6 | 1,776 | 732 | 41.2 | 1,823 | 769 | 42.2 | 1,524 | 629 | 41.3 | 2,011 | 1,391 | 69•2 | | |

Of Selected Commodity Groups.

SOURCE: D.B.S. EXPORTS BY MODE OF TRANSPORT 1963 - 1968.

Source: Private data from industry sources.

TABLE (c)

Note: Figures shown are percentages trucked via Miami. The remainder was trucked via New York.

PERCENTAGE OF COMMODITIES TRANSSHIPPED BY ROAD
PARTLY VIA MIAMI AND VIA NEW YORK FOR THE PERIOD 1966 - 1968

| | | | | | | | | | | | | | The LEEWARD | | | | | | | | | | |
|--|----------------|------------|-----------------|------|--------|---------------------------------------|------|------------|---------|--------------------|--------------|------------|-------------|--------------|-----------------------|-------|------------|---------------------------|------|--------|----------------|---|--|
| • | JAMAICA | | TRINIDAD-TOBAGO | | | GUYANA | | | BAHAMAS | | | & WINI | DWARD I | SLANDS | | BARBA | ADOS . | BRITISH HONDURAS_ | | | | | |
| | 1966 | 1967 | 1968 | 1966 | 1967 | 1968 | 1966 | 1967 | 1968 | 1966 | 1967 | 1968 | , 1966 | 1967 | 1968 | 1966 | 1967 | 1968 | 1966 | 1967 . | 1968 | | |
| Ready Cooked Meat and Prep. | , | | | _ | · - | <u>-</u> | _ | - | | : 86 . 1 | | _ | _ | *** | - | - | | and a | - | | | _ | |
| Dairy Produce | .5 | 75.0 | - | 37.5 | 63.6 | - | - | | | 4.1 | 24.9 | - | 4.6 | 25.3 | : - | · - | - | - | - | - | = | | |
| Cereals Milled | - | · · - | <u> </u> | - | - | - ' | - | - | | 71.9 | - | | - | · - | - | - | _ | | 91.0 | - | - | , | |
| Fresh or Frozen Vegetables | - | - | | - | 67.2 | - | _ | 67.0 | - | - | 67.3 | - . | - | - | - | - | | = | - | - | -, | | |
| Sugar, Molasses & Syrups | _ | - | · | - | - - | - | - | , - | | | 73.8 | 95.7 | - | | - | | | | | | - | | |
| Complete Feeds & Conc. | - | · - | - | - | 51.9 | - | - | - | - | | - | _ | - | 50.0 | | | | ه سه مور | | - | · , | | |
| Broad Woven Fabrics | - | · <u>-</u> | - | - | | | - | | - | <u>.</u> | - | . *** | - | 60.0 | - | ÷ | • | | | ·_ | - | | |
| Aluminum In cl. Alloys | 1.4 | 5.6 | - - | - | - | - | _ | | - | - | _ | | · - | . <u>-</u> . | - | - | - | - | 1.9 | 5.5 | . - | | |
| Iron & Steel Pipes & Tubes | 41.8 | | | _ | - | - | _ | ÷ · | - | | - | - | - | | · , = · | _ | - | • | - | - | _ | | |
| General Purpose Industrial Machinery | | _ | 13.6 | | 1 4 | | , | | | | • | | | | , | | *, | | | • | | | |
| Road Motor | . - | | 15.0 | | | - | | ** | | . = | - | . = | - | - | - | - | | | - | _ | . - | | |
| Vehicles | 17.4 | 9.4 | 57.9 | 16.1 | 9.6 | | - | | - | 2.2 | 9.5 | - , | 2.5 | 9.6 | - | | · _ | - | _ | 10.5 | | | |
| Rubber Tires & Tubes | 31.4 | 10.5 | ,· | _ | - | - | - | - | - | 15.2 | 10.5 | 91.5 | ·_ | - | - | | <u>-</u> : | ==> | _ | - | ٠ | | |
| Electric Light & Control Equipment | | - | - | _ | _ | · · · · · · · · · · · · · · · · · · · | - | | _ | <u>-</u> | - | - | - | | · - , | 45.5 | - | | 35.7 | · , | | | |
| Med. & Pharm. Products | - | 17.8 | _ | 23.5 | i7.6 | | _ | 14.3 | - | 11.7 | 18.3 | - | - | - | - | - | | | - | - | **** | | |
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