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THE URUGUAY ROUND: IMPLICATIONS FOR US-CARIBBEAN TRADE

Vincent R. McDonald
John Sumner
Department of Economics
Howard University
Washington, DC 20059

ABSTRACT

The conclusion of the Uruguay Round (UR) of negotiations on reforms to the General Agreement on Trade and Tariffs (GATT) has stimulated much discussion, analysis, and interest relative to the expected impact of the changes in the world trading system. While analysts differ on the impact of this agreement, international trade theory supports the thesis that countries can overcome the limitations of size of the market through trade; hence the removal of trade barriers is a desired principle in world trade. An outgrowth of the UR is the introduction of two primary institutional instruments: The World Trade Organization (WTO) and the dispute settlement procedures set forth in the Dispute Settlement Understanding (DSU). In the case of the Caribbean, the imposition of the WTO has had almost an immediate negative impact with respect to its ruling regarding bananas. The Caribbean Community (CARICOM) was established in 1973 with the objective of promoting economic integration and stimulating trade in the Caribbean region. This article, then, is an attempt to assess the arguments, pro and con, regarding the likely impact of the interpretation of the provisions of the UR on CARICOM in its dealings with a major developed country-trading partner, the United States. As such, the article empirically examines bilateral trade statistics between the U.S. and selected members of CARICOM. The basic objective is to estimate the potential welfare impact of the proposed tariff and non-tariff provisions of the Uruguay Agreement as it relates to US-Caribbean trade. The article concludes that tariff reductions proposed under the Uruguay Agreement will lead to welfare gains by both trading partners over the short and long run periods—although the major trading partner, the U.S., will be the primary beneficiary.

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1. Introduction

The conclusion of the Uruguay Round (UR) of trade negotiations on reforms to the General Agreement on Tariffs and Trade (GATT) culminated in the signing of the Uruguay Agreement (UA) in 1994. Since then, much of the trade discussions and analyses have focused on the expected impact of the changes reflected in the new protocol. In addition to the creation of the long-awaited World Trading Organization (WTO) and the new procedures adopted by the GATT countries for settlement of trading disputes, the UA basically accomplished the following: (1) it established a schedule for the reduction of tariff rates for developing and developed countries; (2) it called for the tariffication of non-tariff barriers to trade and for the removal of other quantitative and qualitative trading restrictions; (3) the establishment of new agreements for trade in services and for international investments; and (4) proposed standards for the transfer of technology and the protection of intellectual property rights.

International trade theory suggests that these trade liberalization measures will result in the overall enhancement of world welfare to the benefit of participating countries. The mandate of GATT was to furnish a framework for liberalizing trade in order to avoid the kind of destructive protectionism that exacerbated the international depression during the 1930s.¹

The underlining theory is that of free trade. According to Harry Johnson (1971), "the proposition that freedom of trade is on the whole economically more beneficial than protection is one of the most fundamental propositions economic theory has to offer for the guidance of economic policy." The free trade proposition has survived tremendous scrutiny from economists ever since Adam Smith (1776) made his celebrated case for free trade.

Free trade theory continues to receive strong support from professional economists.² The theory essentially promises welfare gains on the assumption that countries can exercise free choice in the decision to trade and that market forces can allocate resources freely to the most efficient producers. It is for this reason that the removal of barriers to trade—trade liberalization—is regarded by most trade theorists to be a desired principle in world trade.

In addition, free trade is touted to yield benefits such as additional economies of scale resulting from the expansion of trade volumes, more

differentiated products, and increases in the variety of tradable goods available to consumers. Another expected benefit of free trade is the increase of trade competition, which tends to force firms to eliminate waste, reduce prices, and improve the quality of the product offered for the trade market. The more modern versions of trade theory argue that trade liberalization delivers additional benefits, such as the augmentation of human and physical capital resources, the sharing and transfer of technology, and increases in learning by doing opportunities.

Despite the convincing case made for free trade and trade liberalization measures, most new trade theories recognize the presence and role of market power in international trade. These theories, therefore, allow for imperfect competition and the ability of countries or firms with international market power to affect prices, terms of trade, and ultimately the distribution of gains from trade. In addition, many developing countries are concerned that, in the past, theoretical and potential benefits of trade liberalization have not been translated into substantial real gains from trade. This has led to some skepticism, on their part, about the Uruguay Agreement and its ability to deliver real benefits to developing countries.

An additional concern is the fact that the recent changes in the global alignment of developed countries for purposes of trade and investment—specifically the European Union and NAFTA agreements—will bestow even more market power on the industrialized countries, and thus increase their influence in the determination of the general terms of trade between developing and developed trading partners.

In this new trade era, it is legitimate for developing countries to re-examine current and traditional trading arrangements and attempt to re-configure their trading practices to achieve more welfare gains, or at the very least avoid welfare losses. The developing countries are also concerned that the Uruguay Agreement makes provisions for the dismantling of preferential trading arrangements over time, provisions which were granted to the developing countries based on the "compensation principle" and which in some cases were done out of consideration for the lesser fortunes of poor countries. Therefore, from the standpoint of these countries, the task is to navigate a safe path through the turbulent seas of world trade in the absence of preferences.

In the case of the group of countries classified as the Caribbean, the Uruguay Agreement has already led to a controversial ruling of the World Trade Organization (WTO) in favor of the dismantling of preferences for the sale of Caribbean bananas under the Lomé convention. This ruling will likely result in significant welfare losses to Caribbean banana-producing countries,³ at least in the short-run. The importance of bananas to the CARICOM member countries is succinctly expressed in the report, "US and CHIQUITA" at the WTO, which states that:

The banana industry is central to the economic well-being of the Caribbean and while it can certainly benefit from reform to reduce costs and increase productivity, no other legal crop or industry can be developed to replace it in the foreseeable future.

This case proves that the UA contains provisions that can harm the participating countries. It is, therefore, imperative that studies be undertaken to assess the overall potential impact of the UR and its many provisions on countries and groups of countries such as the Caribbean.

Only a limited number of empirical studies have been undertaken to estimate the net impact of the UR tariff reductions on bilateral trade between the U.S. and the Caribbean, taking into consideration the impact of the dismantling of preferential trading arrangements. This article, therefore, fills an important void and represents a step in developing crucial empirical data as a basis for an appropriate trade policy. Such a trade policy is essential if the Caribbean is to optimize the actual benefits made possible by the implementation of the UR.

(2) Methodology

This article empirically examines bilateral trade statistics between the United States and eleven English-speaking Caribbean countries⁴ that are selected to represent the Caribbean region. The basic objective is to estimate the potential welfare impact of the proposed tariff and non-tariff provisions of the Uruguay Agreement as it relates to US-Caribbean trade. The study proposes to develop quantitative estimates of the tariff effects of the UR on trade between the U.S. and the Caribbean. The approach, which may be described as a cross between an expanded gravity model and a partial equilibrium model, assumes that market power and scale economies characterize US-Caribbean trade, with monopolistic competition as the dominant market structure.

Monopolistically competitive market structures are characterized mainly by the ability of producers to charge monopoly rents based on quality and product differentiation. In the context of trade these monopoly rents are reflected in the final price charged to consumers for imported goods, and it ultimately affects consumer demand for imports. Large countries such as the U.S. tend to have more market power than small countries such as those of the Caribbean. The presence of market power in bilateral and multilateral trade allows countries to influence international trade prices, which in turn provides opportunities for those countries to benefit from increased producer surpluses at the expense of the importing country—thus redistributing the benefits of trade away from countries with less market power to those countries with more market power.

In this study, the assumption is made that the effects of market power and scale economies are reflected in the terms of trade between the United States and the Caribbean. Import and export quantities and

prices are assumed to include and reflect market power effects as well as the effects of quantitative protection such as tariffs and quotas.

The Caribbean economies are disaggregated by commodity composition of trade at the 1-digit SITC level and estimates are generated for each commodity group. Specifically, merchandise import and export data at the 1-digit SITC level are examined for five of the ten available categories.⁵

(3) Data Collection and Analysis

Trade and trade-related data were collected and analyzed to produce a 24-year (1972-1996) time series working data set. Data analysis comprised of the use of 10-year forecasts (up to year 2010) which were produced by using a Box-Jenkins ARIMA model for time series forecasting. These forecasts were prepared for each of the commodity groups. Forecast profiles of exports and imports between the U.S. and the Caribbean were generated under two scenarios. The first scenario projects Caribbean exports and imports to the U.S. in the absence of UR effects. In the second scenario, projections are made to account for the impact of the UR. The Statistical Analysis System (SAS) PC based software was used to produce these forecasts and the results are presented in Tables 1 through 4.

(4) Results

Tables 1 through 4 present the results of time series forecasts of 1-digit SITC commodity groups, selected predictor variables, and other pertinent information. Forecasts were generated for five major commodity groups up to year 2010 using actual data for the period 1972 to 1996. Results are presented for the Bahamas, Barbados, Guyana, Jamaica, Trinidad and Tobago, the Leeward and Windward Islands, and for the following SITC 1-digit commodity groups:

- 0 - Food and Live Animals;
- 5 - Chemicals and Related Products;
- 6 - Manufactured Goods Classified Chiefly by Materials;
- 7 - Machinery and Transport Equipment;
- 8 - Miscellaneous Manufactured Articles.

For the purposes of this study, the country statistical results are aggregated and then interpreted for the Caribbean (See Tables). This is possible since the commodity groups selected represent over 70 percent of the total Caribbean-US trade.

The impact of the UR on US-Caribbean trade may be broken down into the short, medium, and long-term effects. For the purposes of this study the short-term is defined as the period identified for the full implementation of most of the provisions of the UR (up to year 2000). The medium-term is defined as the period necessary to capture the direct first-

round effects of the UR given current market structures and size (up to year 2005). The long-term is defined as the period necessary to capture the interaction effects of the UR and the adjustments to new market conditions and opportunities (up to year 2010). Additionally, two scenarios are reported. Scenario one presents data, as they would have occurred if there were no UR agreement resultant effects. Scenario two considers the UR changes to trade conditions and factors and presents estimates of their projected impact.

(5) Caribbean Exports to the United States

Table 1 projects the impact of UR effects on Caribbean exports to the United States up to the year 2010. The first column of the table lists the commodities selected by this study to be included in the analysis. The list of selected commodities groups comprises approximately 77.3 percent of all Caribbean Merchandise exports to the U.S. and about 66.8 percent of all Caribbean imports from the U.S., and as such are considered by this study to be representative.

Column two indicates the average percentage tariff cuts that the U.S. has agreed to implement under the UR. The average tariff cut for all commodities is 34.3 percent (Schott, 1994). Among the commodity groups selected for this study, the average percentage tariff cut is 34.7 percent, with "Machinery and Transport Equipment" representing the highest cut at 43.1 percent and "Chemicals and Related Products," the lowest cut at 29.3 percent (Table 1).

The third column indicates the overall projected percentage increase in demand by the U.S. for the selected commodity groups. The table shows that the largest increase in demand (4.1 percent) should occur for "Miscellaneous Manufactured Articles" and the smallest increase in demand (2.4 percent) should occur in "Chemicals and Related Products."

The next three columns of Table 1 show figures for projected Caribbean exports of the selected commodity groups to the U.S. in millions of U.S. dollars for three target years, 2000, 2005 and 2010, defined as the short-term (ST), medium-term (MT), and the long-term (LT), respectively. These figures are forecasted without considering the UR effects, and they represent projected increases of the selected 1995 baseline as further elaborated in Table 1. The last three columns present the same information as the previous three, except that these figures now capture the estimated tariff effects of the UR (Table 1).

Table 1: Projected Impact of the Uruguay Agreement on Caribbean Exports to the United States

Commodities	Average Caribbean UR Tariff Cuts (%)	Projected Increase in United States Demand (%)
00-Food and Live Animals	34.26	2.69
05-Chemicals and Related Products	29.31	2.44
06-Manufactured Goods by Material	33.62	3.00
07-Machinery and Transport Equipment	43.10	3.04
08-Miscellaneous Manufactured Articles	33.62	4.11

Table 1 (continued): Projected Impact of the Uruguay Agreement on Caribbean Exports to the United States

Commodities	Projected Caribbean Exports to the United States before UR			Projected Caribbean Exports to the United States after UR with Tariff Effects		
	ST 2000	MT 2005	LT 2010	ST 2000	MT 2005	LT 2010
00-Food and Live Animals	150.2	182.4	220.4	190.6	231.5	279.7
05-Chemicals and Related Products	667.4	775.7	886.1	830.2	964.9	1 102.3
06-Manufactured Goods by Material	87.3	102.5	117.3	113.5	133.3	152.5
07-Machinery and Transport Equipment	426.1	502.0	577.3	555.6	654.6	752.8
08-Miscellaneous Manufactured Articles	135.8	149.8	160.4	191.6	211.4	226.3
TOTALS	1,446.8	1,712.4	1,961.5	1,881.5	2,195.7	2,513.6

Table 2: Projected Impact of the Uruguay Agreement on Caribbean Imports to the United States

Commodities	PUR ^a (US\$M)	Year 2000		PUR (US\$M)	Year 2005 UR (US\$M)	Percentage (% change per year)	Percentage
		UR ^b (US\$M)	Percentage (% change per year)				
00-Food and Live Animals	193.3	245.3	26.9	225.7	286.4	26.8	26.8
05-Chemicals and Related Products	561.5	698.5	24.4	776.1	965.5	24.4	24.4
06-Manufactured Good by Material	192.5	249.6	29.7	272.5	354.3	30.0	30.0
7-Machinery and Transport Equipment	39.9	52.0	30.3	44.4	57.9	30.4	30.4
08-Miscellaneous Manufactured Articles	620.7	875.8	41.1	676.2	954.1	41.1	41.1
TOTALS	1607.9	2121.2	32.0	1994.2	2618.2	31.3	31.3
Projected Total Gains to Selected Caribbean Countries (US\$ million)		513.3			623.3		

Table 2 (continued): Projected Impact of the Uruguay Agreement on Caribbean Imports to the United States

Commodities	PUR (US\$M)	Year 2010 UR (US\$M)	Percentage
00-Food and Live Animals	262.2	332.7	26.9
05-Chemicals and Related Products	886.5	1102.8	24.4
06-Manufactured Good by Material	353.1	459.0	30.0
07-Machinery and Transport Equipment	48.6	63.4	30.5
08-Miscellaneous Manufactured Articles	764.7	1079.0	41.1
TOTALS	2315.1	3036.9	31.1
Projected Total Gains to Selected Caribbean Countries (US\$ million)		721.8	

a. This projection assumes no tariff effects on the prices of Caribbean imports to the U.S.

b. This projection assumes tariff effects on the prices of Caribbean imports to the U.S.

Table 2 shows the export figures, in millions of U.S. dollars, projected for the Caribbean under the Pre-UR (PUR) and UR scenarios. The table shows that Caribbean exports for all selected commodities, under the UR, are projected to reach \$2,121.2 million by year 2000, compared to \$1,607.9 million by year 2000 under the PUR scenario. Thus, the UR is projected to yield \$513.3 million in extra trade revenues for the Caribbean in the short-term, an increase of 32 percent. In the medium-term (up to year 2005) the Caribbean gains \$623.3 million in extra export revenue, an increase of 31.3 percent, and in the long-term (up to year 2010), the Caribbean is projected to gain an extra \$721.8 million in export revenues, for an increase of 31.1 percent (Table 2). Table 2 also presents figures for each of the selected commodity groups. The largest projected gains (41.1 percent) are shown for "Miscellaneous Manufactured Articles" and the smallest gains (24.4 percent) are shown for the commodity group "Chemicals and Related Products."

6) Caribbean Imports from the United States

Table 3 presents figures reflecting Caribbean imports from the U.S. projected to the year 2010. Tables 3 and 4 are of the same format as Tables 1 and 2, and they contain similar information in each column. The first column shows the average Caribbean tariff cuts, expected because of the UR, for the selected commodity groups. The average tariff cut for all commodities is about 40 percent, with the largest cut (43.0 percent) indicated for "Chemicals and Related Products" and the smallest cut (35.1 percent) targeted for "Miscellaneous Manufactured Articles."

The third column shows estimated changes in Caribbean demand for U.S. exports for the selected commodity groups. These estimates are based on projected world demand for U.S. exports after the implementation of UR tariff reductions (Schott, 1994). The greatest increase in demand (8.3 percent) is projected for "Miscellaneous Manufactured Articles" and the smallest increase (2.96 percent) is earmarked for "Food and Live Animals."

In the next six columns of Table 3, figures are shown for projected Caribbean imports of the selected commodity groups from the U.S., in millions of U.S. dollars, for the short, medium and long terms as defined by the study to coincide with the years 2000, 2005 and 2010, respectively. Columns 4, 5, and 6 project Caribbean imports without accounting for UR effects, while the next three columns capture the estimated UR effects.

According to Table 4, Caribbean imports of the selected commodity groups from the U.S. are projected to reach \$3,450.7 million by year 2000 with no UR effects. If the estimated UR effects are considered, Caribbean imports from the U.S. would increase by about 62 percent to \$5,586.3 million by year 2000. This means that the Caribbean will import an estimated \$2,135.6 million of goods from the U.S. due to the UR effects by the year 2000 (Table 4).

Table 3: Projected Impact of the Uruguay Agreement on Caribbean Imports from the United States

Commodities	Average Caribbean UR Tariff Cuts (%)	Projected Increase in Caribbean Demand (%)
00-Food and Live Animals	37.96	2.96
05-Chemicals and Related Products	43.00	7.45
06-Manufactured Goods by Material	41.70	4.37
07-Machinery and Transport Equipment	41.20	6.10
08-Miscellaneous Manufactured Articles	35.14	8.25
TOTAL	39.80	

Table 3 (continued): Projected Impact of the Uruguay Agreement on Caribbean Imports from the United States

Commodities	Projected Caribbean Imports from the United States before UR			Projected Caribbean Imports from the United States after UR with Tariff Effects		
	ST 2000	MT 2005	LT 2010	ST 2000	MT 2005	LT 2010
00-Food and Live Animals	549.0	651.9	786.6	711.5	844.9	1,019.4
05-Chemicals and Related Products	332.4	386.2	454.2	580.0	673.9	792.6
06-Manufactured Goods by Material	505.6	612.3	706.7	744.7	901.9	1,041.0
07-Machinery and Transport Equipment	1,004.8	1,137.6	1,271.7	1,617.7	1,831.5	2,047.4
08-Miscellaneous Manufactured Articles	1,058.9	1,326.4	1,604.3	1,932.4	2,420.6	2,927.8
TOTALS	3,450.7	4,114.4	4,823.5	5,586.3	6,672.8	7,828.2
Projected Total Gains to Selected Caribbean Countries (US\$M)				2,135.6	2,558.4	3,004.7

Table 4: Projected Impact of the Uruguay Agreement on Caribbean Imports from the United States

Commodities	Year 2000			Year 2005		
	PUR (US\$M)	UR (US\$M)	Percentage (% change per year)	PUR (US\$M)	UR (US\$M)	Percentage
00-Food and Live Animals	549.0	711.5	29.6	651.9	844.9	29.6
05-Chemicals and Related Products	332.4	580.0	74.5	386.2	673.9	74.5
06-Manufactured Good by Material	505.6	744.7	47.3	612.3	901.9	47.3
07-Machinery and Transport Equipment	1004.8	1617.7	61.0	1137.6	1831.5	61.0
08-Miscellaneous Manufactured Articles	1058.9	1932.4	82.5	1326.4	2420.6	82.4
TOTALS	3450.7	5586.3	62.0	4114.4	6672.8	62.2
Projected Total Gains to Selected Caribbean Countries (US\$ million)		2135.6			2558.4	

This projection assumes no tariff effects on the prices of Caribbean exports to the U.S. The increase in projected Caribbean demand is consistent with demand elasticities estimated in Log-log Regressions presented in the table 3.

Table 4 (continued): Projected Impact of the Uruguay Agreement on Caribbean Imports from the United States

Commodities	PUR (US\$M)	Year 2010 UR (US\$M)	Percentage
00-Food and Live Animals	786.6	1019.4	29.6
05-Chemicals and Related Products	454.2	792.6	74.5
06-Manufactured Good by Material	706.7	1041.0	47.3
07-Machinery and Transport Equipment	1271.7	2047.4	61.0
08-Miscellaneous Manufactured Articles	1604.3	2927.8	82.5
TOTALS	4823.5	7828.2	62.3
Projected Total Gains to Selected Caribbean Countries (US\$ million)		3004.7	

This program assumes tariff effects on the prices of Caribbean Imports from the U.S. The increase in projected Caribbean demand is consistent with demand elasticities estimated in Log-log Regressions

In the medium-term Caribbean imports from the U.S. for the selected commodity groups are projected at \$4,114.4 million without UR effects and at \$6,672.8 when UR effects are considered. The Caribbean is, therefore, expected to import an extra \$2,558.4 million worth of goods from the U.S. in the medium term because of the UR. By the year 2010, imports are shown as \$4,823.4 million without UR effects and \$7,828.2 with UR effects, indicating an extra \$3,004.7 million worth of imports for the Caribbean in the long-term due to the UR (Table 4).

7. Discussion

A complete assessment of the impact of the UR on the Caribbean will require the use of a comprehensive computable general equilibrium model (CGEM), which includes all sectors of the entire Caribbean economy affected by trade and which considers the effects not only of tariff reductions, but of all quantitative and qualitative changes proposed by the agreement. Such an assessment is a task of great magnitude, which will require the dedication of substantial resources and time to complete.

This study has a more limited objective of providing a framework for modeling the impact of the UR on Caribbean-US trade and to empirically test the efficacy of this model by using appropriate and available historical and current data. The scope of the study was, therefore, restricted to assessing the impact of tariff reductions scheduled by the UR Agreement on Caribbean-US trade. Caribbean countries involved in the study were selected since they accounted for more than 85 percent of the trade of the CARICOM group of countries with the U.S. The choice of the SITC 1-digit commodity groups for inclusion in the study was based on the selected commodity groups which represented about 77.3 percent of all Caribbean exports to the U.S.

This study is also representative of the overall impact of the UR Agreement on the Caribbean because the U.S. is the largest single-trading partner of the Caribbean (Tables 5 and 6). History, proximity, and trade economics have resulted in the Caribbean exporting 45 percent of its merchandise to the U.S., compared to the European Union (EU) (17.2 percent), other Caribbean countries (13.9 percent), Latin America (4.4 percent), and all others (19.4 percent). The Caribbean also imports most of its merchandise from the U.S. (46 percent), compared to 13 percent from the EU, 9.8 percent from other CARICOM countries, 4.3 percent from Canada, and 26 percent from all other sources.

7. 1. Direction of Trade

Table 5 provides information derived from Caribbean Development Bank (CDB) reports relative to the direction of trade on the part of the members of CARICOM. From the region, the U.S. (44.9 percent) Europe, the EU and UK, (14.16 percent) in 1994 were the major destination for

Table 5: Direction of Trade in 1994 (Imports) for Selected CARICOM Countries

Countries	CARICOM	United States	Canada
Barbados	119.5	237.5	34.9
Belize	11.2	138.1	6.0
Grenada	33.9	41.4	3.0
Guyana	54.5	169.1	18.0
Jamaica	149.1	1145.1	82.9
Montserrat	6.9	12.7	0.7
St. Lucia	63.9	112.1	11.8
St. Vincent	34.2	45.6	2.9
Trinidad & Tobago	60.3	620.2	75.1
All Countries (Total/Average)	59.28	280.2	26.14
% Total	9.8	46.36	4.32

Table 5 (continued): Direction of Trade in 1994 (Imports) for Selected CARICOM Countries

Countries	United Kingdom	European Union	Other	Total Imports
Barbados	56.4	39.6	126.4	614.3
Belize	18.9	10.9	74.9	259.9
Grenada	14.2	7.5	19.4	119.4
Guyana	36.7	23.0	202.6	504.0
Jamaica	96.2	100.9	603.0	2177.2
Montserrat	4.6	0.8	5.3	30.9
St. Lucia	40.4	16.5	56.9	301.7
St. Vincent	16.6	15.5	15.2	130.0
Trinidad & Tobago	109.0	93.0	345.2	1302.7
All Countries (Total/Average)	43.7	34.19	160.99	--
% Total	7.23	5.66	26.63	--

Source: Caribbean Development Bank Annual Report, 1995.

Table 6: Direction of Trade in 1994 (Exports) for Selected CARICOM Countries

Countries	CARICOM	United States	Canada
Barbados	61.2	32.6	7.7
Belize	5.0	63.1	10.2
Jamaica	58.0	439.7	147.7
Montserrat	0.6	1.1	0.0
St. Lucia	14.6	26.3	0.3
St. Vincent	28.0	407	0.1
Trinidad & Tobago	436	976.6	85.4
All Countries (Total/Average)	67.04	216.27	27.9
% Total	13.91	44.9	5.8

Table 6 (continued): Direction of Trade in 1994 (Exports) for Selected CARICOM Countries

Countries	United Kingdom	European Union	Other	Total Imports
Barbados	33.8	3.7	41.6	180.6
Belize	43.4	7.1	14.0	142.9
Jamaica	164.4	122.1	287.5	1219.5
Montserrat	0.1	1.0	0.1	2.9
St. Lucia	49.9	1.8	1.9	94.9
St. Vincent	15.2	0.8	2.1	51.0
Trinidad & Tobago	42.0	128.8	573.4	2242.2
All Countries (Total/Average)	38.75	29.48	102.29	--
% Total	8.04	6.12	21.23	--

Source: Caribbean Development Bank Annual Report, 1995.

exports, followed by CARICOM with 13.9 percent. On the other hand, 21.23 percent of exports were to "Other Countries."

With respect to "Imports," (Table 5) the U.S. (46.36 percent) was the primary, single-source country for CARICOM imports; Europe, the EU, and UK accounted for 12.89 percent in 1994 while some 26.63 percent were from "Other countries," with the rest of the region accounting for nearly 10 percent.

The impact of the UR on US-Caribbean trade should be evaluated in an appropriate context. An important contextual issue is that most Caribbean countries export between 25-50 percent of their goods to the U.S. duty free under the Caribbean Basin Economic Recovery Act (CBERA). This means that, *ceteris paribus*, tariff reductions will only affect a limited range of Caribbean exports. Additionally, there are plans to include the Caribbean in an expanded NAFTA agreement that proposes to incorporate most of Latin America and the Caribbean countries into the free trade area. This development would lead to additional duty-free access to U.S. markets.

On the other hand, UR provisions call for the dismantling of trading preferences to developing countries, which could lead to the loss of Caribbean market access to the U.S. under the CBERA and the General System of Preferences (GSP) agreements. However, in the case of US-Caribbean preference arrangements, it is broadly anticipated that the absorption of the Caribbean countries into NAFTA would occur first, thereby nullifying any negative impact from the dismantling of US-Caribbean trade preferences.

While not disregarding these expected developments, this study proceeds on the assumption that tariff reductions agreed to by the U.S. under the UR will affect Caribbean exports to the U.S. directly—to the extent of the actual goods subject to duty—and indirectly by increasing the competition from other exporters to the U.S. The study, therefore, assumes that this combination of limited direct effects and indirect tariff effects for the Caribbean may be approximately represented by the actual full tariff effects as agreed to by the U.S. Demand elasticities and trade projections are, therefore, based on these assumptions.

Benefits from trade are usually measured in terms of "increase in GDP due to trade" or some other appropriate indicator of increased national income, wealth, or welfare. Some studies focus on increased export revenues as a measure of direct gains from trade since other factors, outside of trade, are likely to affect GDP growth. In this study, "welfare gains" are assumed to be represented by "increased export revenues" measured in U.S. dollars. Import figures are reported since they provide further insights into questions of "relative gains."

Overall results of the study indicate that, because of the UR, the Caribbean will gain substantial increases in export revenues (\$513.3 million) as early as the year 2000, which is defined as the short-term in this study (Table 1). This means that Caribbean exports to the U.S. are likely to

grow by an extra 6.4 percent per year up to the year 2000. Over the five-year period (1995-2000), this represents a 32 percent increase. Given the fact that the study is restricted to tariff effects and that the selected countries represent approximately 85 percent of the total US-CARICOM trade, we may safely conclude that the projected extra export revenues of \$513.3 million represent the minimum projected welfare gain to the Caribbean because of the UR tariff cuts.

Comparatively, in the previous five-year period 1990-1995, Caribbean exports to the U.S. grew at an average of 3 percent per year, which is less than half of the expected growth rate for the 1995-2000 period. Also, Caribbean export revenues to the U.S. was about \$1.1 billion in 1990, and they rose by a modest 18 percent to \$1.3 billion in 1995—yet it is projected to increase by 62 percent to about \$2.1 billion in the year 2000. These are very substantial gains to Caribbean economies that are likely to result from the implementation of the Uruguay Agreement.

The medium-term (up to the year 2005) and long-term (up to year 2010) periods reflect similar substantial gains for Caribbean countries because of the UR tariff cuts. Because of the UR tariff cuts, Caribbean exports to the U.S. are projected to increase by about another 6 percent per year to reach \$2.6 billion by the year 2005. This projected increase in export revenues is expected to generate an additional \$623.3 million in the medium-term period (year 2000-2005). Similar export revenue growth is projected for the long-term period (year 2005-2010). In this period export revenues are expected to increase by another 6 percent to reach \$3.0 billion by the year 2010. This will generate an extra \$721.8 million in export revenue for the Caribbean due to the implementation of UR tariff cuts.

It is, therefore, clear that considering all commodity groups together, the Caribbean is projected to enjoy substantial gains because of the Uruguay Agreement to reduce tariffs. However, a more complete picture of the impact of UR tariff cuts on US-Caribbean trade should also consider the impact of these changes on Caribbean imports from the U.S. This also provides some insights into the relative gains projected for the Caribbean compared to those projected for the U.S.

In 1995 the Caribbean countries selected for this study imported about 2.7 billion dollars' worth of merchandise from the U.S. The trade gap in 1995, therefore, amounted to approximately \$1.4 billion. According to the forecasts generated by this study, Caribbean imports would grow by 21 percent annually to reach \$5.6 billion by 2000, if the UR tariff reductions are considered. If these forecasts are accurate, the trade gap in the year 2000 would increase to about \$3.5 billion. Caribbean imports from the U.S. are projected to increase to \$6.7 billion by 2005 and to \$7.8 billion in 2010. Trade gaps of \$4.0 billion and \$4.8 billion are projected for the years 2005 and 2010, respectively.

The widening of the US-Caribbean trade gap, due to UR tariff reductions, provides additional support for the belief that developed countries such as the U.S. tend to benefit disproportionately from trade liberali-

zation when compared to developing countries like those in the Caribbean. Even though increased Caribbean imports from the U.S. attributed to UR tariff cuts may reflect increased purchasing power, due to both price and income effects, the widening of the trade gap is likely to result in balance-of-payment problems for some Caribbean countries.

8. Conclusion

The completion and passage of the Uruguay Round, which has culminated with the establishment of the World Trade Organization (WTO), is arguably the most profound international trade liberalization agreement in history. The implementation of the provisions of the Uruguay Agreement, which has largely been scheduled over a period lasting from 1995 to the year 2000, is expected to have significant welfare effects on all participating countries. However, developing countries such as those of the Caribbean have always been concerned, if not skeptical, about the promised welfare gains of trade liberalization efforts. Most developing countries are probably convinced that even though they might in fact experience some gains from trade, that the developed countries invariably obtain the lion's share of such gains, so that, relatively, they end up in a worse situation than before the implementation of such agreements. These beliefs are largely supported by trade theories.

Traditional trade theory, mainly of the Ricardian vintage, has shown that countries with relatively greater absolute and/or comparative advantages in the production of goods and services are likely to realize greater benefits from trade than countries with less absolute and/or comparative advantages. This theory is largely supported by the findings of this study.

This study concludes that tariff reductions, due to be implemented under the Uruguay Agreement, will lead to substantial welfare gains to participating Caribbean countries, and even more, for their major trading partner, the United States. In the short-term (by year 2000), these tariff reductions are expected to result in welfare gains of over \$500 million for the Caribbean countries selected for this study, while the U.S. is expected to achieve welfare gains of about four times this amount (\$2.1 billion) by the year 2000. Figures for the medium-term (up to year 2005) show that the selected Caribbean countries are projected to earn an additional \$623.3 million in export revenues, compared to the \$2.6 billion extra projected for the U.S. In the long-term (up to year 2010), while the Caribbean countries are expected to earn an extra \$721.8 million, the U.S. will likely earn \$3.0 billion more due to the tariff reductions. While the focus of this study is on tariff effects, it also shows that additional welfare gains are expected from the implementation of other traditional and new aspects of the Uruguay Agreement.

8. 1. Anticipated Effects of the New Agreements

The Uruguay Round broadened the coverage of world trade rules to important areas never subject to effective multilateral discipline. These areas include services, trade related aspects of intellectual property rights, and trade-related investment measures. Agreements in these areas were more successful in developing trading rules than in enhancing market access opportunities. However, as with the case of the General Agreement on Trade in Services (GATS), there are significant resources involved and countries are pledged to continue their efforts aimed at expanding markets. The overall growth of the service sector in the world has been translated to some \$1 trillion in world trade in services. It is anticipated that Caribbean countries will expand the range of services they offer to U.S. residents beyond the hospitality industry and into other commercial areas such as transportation, advertising, telecommunications, audiovisual, financial, informational, and professional. In this regard, Caribbean countries will need to increase their investments in human capital and technology adaptation.

The agreement on trade-related aspects of intellectual property rights (TRIPS) establishes new trade disciplines regarding patents, trademarks, copyrights, and trade secrets that supplement existing intellectual property conventions. An accord was also established in Trade Related Investment Measures (TRIMS). Thus, various trade restrictive and distorting effects were addressed, with a view to eliminating restrictions in trade-related investments. With respect to these new provisions, the Caribbean would only benefit from the additional opportunities created if member countries are prepared to commit the necessary resources to develop the human capital and technology-learning infrastructure.

8. 2. Anticipated Effects of Eliminating Preferential Trading Arrangements

Developing countries, from the Caribbean and Latin America to Africa, while being cautiously optimistic about the potential gains from the new round of liberalization rules and new agreements in trade in services and investments, are concerned about the number of provisions that seek to dismantle age-old preferential arrangements with developed countries. The Caribbean has two tariff preference programs with the United States: the GSP which the United States offers to the Caribbean and other developing countries and the Caribbean Economic Recovery Act (CBERA). Their elimination could mean that Caribbean exporters would be forced to pay duties on these goods, which would tend to make them less competitive compared to similar products of other countries. These goods would also become more expensive to U.S. consumers, and the resulting reduction in their demand would reduce net export revenues to Caribbean

countries. These possibilities are, however, tempered by plans to include the Caribbean in an expanded NAFTA.

The inclusion of the Caribbean region in the NAFTA trading area would allow for Caribbean goods to enter the markets of NAFTA member countries—including the U.S.—duty free. If the inclusion of the Caribbean region into the expanded NAFTA occurs prior to the dismantling of trade preferences between the Caribbean region and the U.S., then there would be no likely adverse effects from the phasing out of these preferential arrangements. Whichever occurs first, Caribbean economies should take steps to enhance their capabilities to compete in open markets. In this regard, the move to dismantle preferential trading arrangements, though perhaps unfair, may well create the sense of urgency needed by Caribbean governments and businesses to take the first steps.

ENDNOTES

1. Peter Hess and Clark Ross (1997).
2. One survey reports that 95 percent of economists questioned in the United States (and 88 percent of economists surveyed in the United States, Austria, France, Germany, and Switzerland) support or support with some qualifications the proposition that tariffs and import quotas reduce general economic welfare. See Bruno Frey et al. (1984).
3. The major Caribbean banana producing countries are Belize, Grenada, Jamaica, and St. Lucia. They are all members of the Caribbean Community (CARICOM).
4. The Caribbean countries included in this analysis are: Antigua and Barbuda, Bahamas, Barbados, Dominica, Grenada, Guyana, Jamaica, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, and Trinidad and Tobago. The Eastern Caribbean States are analyzed as a group "The Leeward and Windward Islands."
5. The SITC categories selected were
 - 0 - Food and Live Animals
 - 5 - Chemicals and Related Products
 - 6 - Manufactured Goods Classified Chiefly by Materials
 - 7 - Machinery and Transport Equipment

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