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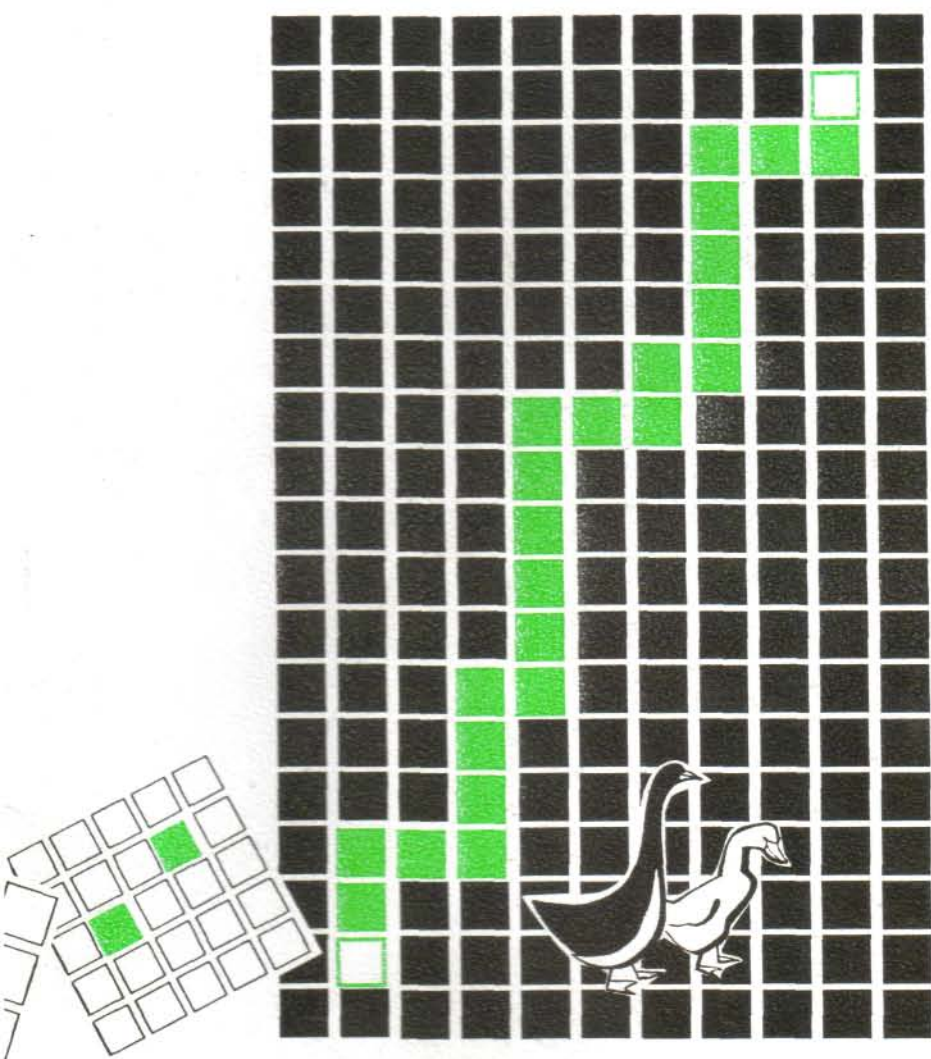
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Farm &

Businesses



Vol. 5, No. 1, December 2001

The Journal of the **Caribbean**
Agro-Economic
Society

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THE URUGUAY ROUND OF TRADE LIBERALIZATION AND ITS IMPACT ON US-CARIBBEAN TRADE

**Vincent R. McDonald John
W. Sumner¹**

ABSTRACT

The agreement, which emerged from the Uruguay Round (UR) of GATT negotiation and WTO emergence, has been, greeted with general optimism by most participating countries. While there are areas of agreement there are also areas of concern especially in the agricultural sector.

One of the post UR prevailing sentiments is that special trade preference, hitherto granted to developing by developed countries should be received with a view to its elimination over time. Changes in trading arrangements anticipated to flow from the recommendations are likely to result in the loss of trade, revenues and income, increases in unemployment throughout the region and a general lowering of the standard of living of Caribbean citizens.

In keeping with these concerns the study will analyse the efforts of UR on Caribbean - United States trade and use it as a basis for projecting the effects of the reduction and ultimately elimination of trade preferences currently enjoyed by Caribbean countries. As such, the study develops a model that approximates the trade patterns and uses a series of analytical diagrams to illustrate the direction and comparative magnitudes of responses to expected changes. Recommendations flow from the development of the model and the resulting analysis.

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1. INTRODUCTION

The conclusion of the Uruguay Round (UR) of negotiations on reforms to the General Agreement on Tariffs and Trade (GATT) in 1994, culminated in the signing of the Uruguay Agreement (UA). The UA has stimulated much discussion and analysis regarding its expected impact on the world economy and individual countries. GATT member countries subscribe to trade liberalization principles and practices such as those reflected in the institution's objective "to contribute to rising standards of living and full employment by entering into reciprocal and mutually advantageous arrangements directed to the substantial reduction of tariffs and other barriers to trade and to the elimination of discriminatory treatment in international commerce."

The underlying theory is that of free trade. The theory essentially promises welfare gains on the assumption that countries are able to exercise free choice in the decision to trade and that market forces are allowed to allocate resources freely to the most efficient producers. It is for this reason that the removal of barriers to trade (trade liberalization) is generally a desired principle in world trade. Free trade, or the removal of trade barriers, is therefore seen as a necessary condition for the creation of optimal trade environments in which goods and

services may be exchanged between countries for the benefit of all participants. Modern trade theory (advocated by the "new trade theory school") suggests that free trade delivers benefits such as: the augmentation of human and physical resources; the sharing and transfer of technology; and the increase of learning by doing opportunities.

Despite the convincing case made for free trade and trade liberalization measures by traditional and modern trade theories, many developing countries are concerned that, in the past, theoretical and potential benefits of trade liberalization have not been translated into real gains for them. This has led to skepticism on their part about the UA. Developing countries are also concerned that recent changes in the global alignment of developed countries for the purpose of trade and investment, as witnessed by the formation of the EU and NAFTA Agreement, will bestow even more market power on industrialized countries and thus increase their influence on the determination of the general terms of trade between developing and developed trading partners. In this new trade era, it is necessary for developing countries to reexamine current and traditional trading arrangements and to attempt to reconfigure their trading practices to

achieve more welfare gains, or at the very least, minimize welfare losses.

In addition to its provisions for the reduction and the eventual elimination of trade restrictions such as tariffs and non-tariff barriers by all trading partners, the UA also provides for the dismantling of preferential trading arrangements over time. These preferential trading arrangements were granted to developing countries on the basis of the "compensation principle" in some cases and in others were done out of consideration for the need to alleviate conditions of poverty. Faced with the impending loss of trade preferences and the expected loss of export earnings as a result, developing countries must now seek to navigate a safe path through the turbulent seas of world trade in the absence of preferences under the guidance of the World Trade Organization (WTO).

2. THEORETICAL CONTEXT

The WTO was established in 1995 under an agreement reached during the Uruguay Round of multilateral trade negotiations. Now established as the most important international organization that governs world trade, the WTO has some 136 members and 37 observer governments (32 of which have applied). Membership represents 95 percent of countries involved in world

trade. (Sek, 1994). The WTO's jurisdiction covers a broad range of trade activities that apply to virtually all government practices that directly relate to trade. First, the governments of the member countries agree on a set of multilateral rules and principles for trade that provide stable and predictable bases for trade. Secondly, the WTO provides mechanisms to enforce the rules adopted under the UA. Additionally, it provides a forum for negotiations to reduce trade barriers under the most-favored nation (MFN) also called normal trade relations (NTR) principle. This principle requires each country to grant to each other member country treatment at least as favorable as it grants to its most-favored trade partner.

In the case of the Caribbean, the UA has already led to a controversial ruling of the WTO in favor of the dismantling of preferences for the sale of Caribbean bananas under the Lome convention to the EU. The WTO panel found that certain aspects of the banana regime, especially the system for allocating import licenses, discriminated against growers and marketing companies in certain countries (Honduras, Guatemala, Ecuador and Mexico). The panel did not find that the preferential tariffs accorded ACP countries were discriminating (Hanrahan, p.3)

Since several Caribbean economies depend heavily on banana exports as

their main source of export revenues, this action has caused much consternation on the part of these countries, and the region as a whole. Caribbean banana producers and their governments have responded with outcries of unfairness and victimization. Meetings have been held at various levels to try to alleviate the negative fallout of the WTO ruling and its consequent effect, not only on Caribbean-EU, but also Caribbean-US trade. While these political efforts proceed there is still a great need for researchers to fully analyze this problem and to identify feasible short and long term solutions.

In addition to the Lome agreement with the EU, Caribbean Basin countries have benefited from other preferential trading arrangements such as: the generalized System of Preferences (GSP); the Caribbean Economic Recovery Act (CBERA) with the United States; and the Canadian International Development Agency (CIDA) aid and trade arrangements. Facing the possible dismantling of each of these arrangements, Caribbean researchers must separately and collectively study the impact of these trade reforms (liberalization measures) on the regional economy. These studies are an important prerequisite to the determination of appropriate and effective responses to this challenge. Such research should involve an assessment of the possible

welfare impact of the broader UA as well as investigations into the specific effects that are likely to result from the dismantling of specific preferential trading arrangements. These effects are expected to include: the loss of trade revenues and income by Caribbean countries; an increase in unemployment throughout the region and a general lowering of the standard of living of Caribbean citizens. This study is an attempt to develop an analytical framework for evaluating some of these effects.

3. METHODOLOGY

A model is developed based on what is assumed to approximate the situation as it relates to Caribbean-US trade, while applying some simplifying assumptions to maintain clarity of exposition. A series of basic diagrams are used to illustrate the direction and comparative magnitude of the expected responses to changes in the model's parameters. The model provides the theoretical structure for a brief discussion on the expected effects of the UA on future Caribbean-US trade.

4. A MODEL OF US-CARIBBEAN TRADE

This model of trade follows in the tradition of the new trade theory school and allows for increasing returns and the

exploitation of monopoly rents resulting from the introduction of new varieties and/or new technologies in traded goods. Based on the work of Krugman (1996), we may refer to this model as a "technology gap" model.

The underlying hypothesis is that: in the international exchange of goods and services among countries, the countries with the most advanced technologies are likely to specialize in the production of goods and services which require highly skilled labor and advanced technologies. "The advantage of developed countries does not lie in greater endowment of non-human inputs per worker or in superior overall efficiency as much as in a superior ability to exploit new-technology" (Krugman, p. 140-141). Developed countries, such as the US, are in the position where they, as a result, tend to specialize in the production and trade of highly processed, high technology manufactured goods. Comparatively, developing countries, such as those in the Caribbean, tend to specialize in the production of primary agricultural commodities and low technology manufactured goods and services.

Agricultural production and trade are recognized as necessary and desirable for achieving economic development (see for example, Johnson and Mellor (1961), and Ranis and Fei (1961). Okidegbe of the World Bank

points out that although agriculture will remain the main source of income in the rural areas of most developing countries, it should be noted that no country has succeeded in effectively reducing rural poverty on the back of agriculture alone (Okidegbe, July 2000, p.4). It is therefore generally felt that developing countries need to expand their production and trade in manufactured goods produced by higher levels of skilled labor and technology.

Meanwhile, the status quo for these two trading partners (the Caribbean and the US) is that the nature of goods and services traded between them reflects a technology gap that influences their terms of trade in a way that is negative to Caribbean countries. It follows then, that as long as the technology gap exists, and is significant, the terms of trade between Caribbean countries and the US will be adverse to the Caribbean. Given these preexisting conditions the removal of preferential trading arrangements for Caribbean countries can only therefore further exacerbate the adverse nature of the US-Caribbean terms of trade.

5. THE TECHNOLOGY GAP MODEL OF TRADE

The Ricardian concept of comparative advantage has long stood as the acceptable basis for trade promotion and expansion. Loosely interpreted, the

theory of comparative advantage justifies trade between nations with differences in their production set, on the basis of the argument that such trade allows them to take advantage of their differences for mutual benefit. The theory suggests that should country A be the best absolute producer of item A and also the best absolute producer of item B, that country A should specialize in the production and export of item A if its efficiency at producing item A is greater than its efficiency of producing item B. The theory further suggests that another country (perhaps the second most efficient country at producing item B) should then be allowed to specialize in the production and export of item B. The theory of comparative advantage is therefore one of the main explanations of international specialization in trade.

Since the theory of Comparative Advantage suggests that the country that is most efficient (lowest costs of production) at producing a given product be allowed to specialize in the production and export of that product, then the underlying assumption is that with regard to that product the country that specializes should be operating on the lowest part of the long run average cost curve. This assumption is necessary for expanded world trade to lead to increased global welfare. In order for global welfare to increase as a result of expanded trade, marginal cost pricing

(which assures allocative efficiency) is also an important condition. The higher market prices are above marginal costs the greater is the potential for trade disadvantages and the emergence of winners and losers in expanded world trade.

Other traditional trade theorists such as Ohlin and new trade theorists of today such as Krugman have argued that countries may also trade because there are inherent advantages in specialization, arising primarily from the existence of economies of scale. According to Krugman "at a logical level a theory of trade based on increasing returns is as fundamental as one based on comparative advantage; at a practical level it is reasonable to argue that economies of scale, if perhaps not as important as national differences as a motive for trade, are at least of the same order of magnitude." (Krugman, 98).

The economies of scale justification for international trade may be important for more than one reason. The efficient production of certain goods and services, for which there are increasing returns to scale, can only be achieved at certain minimum levels of production. The ability of such producers to produce and market goods and services at these minimum output levels is most often determined by their ability to offer prices low enough to call forth the required supply. In turn their ability to offer these

lower prices is usually based on their ability to achieve the lowest costs of production. Low costs of production are determined mainly by the state of the productive technology and the cost of production inputs. Therefore the producers with the most efficient technology and the lowest costs of production inputs are normally the most efficient.

Even though the motive for trade may differ, most trade theories tend to agree that mutual gain should be the desired principle supporting trade liberalization initiatives. This notwithstanding, many developing countries have argued that the recent trade liberalization measures established as part of the Uruguay Agreement, violates the accepted principles of free and fair trade, by passing provisions that will ultimately harm developing countries and result in economic and social welfare losses on their part.

Among the developing countries disappointed with various provisions of the Uruguay Agreement are countries in the African Caribbean and Pacific (ACP) group that previously enjoyed preferential trade status for some of their major exports under the Lome convention with the European Union. The new Uruguay Agreement calls for a phasing out of this preferential trading arrangement between the ACP group and the EU claiming that this arrangement

discriminates against other countries outside of the ACP group. Some of the developing countries have argued that such preferential trading arrangements merely compensate for the inequalities and disadvantages of trade that occurs between nations which enjoy market power and those that do not. These countries argue that the more powerful developed countries gain more from trade than the less powerful developing countries because of their ability to influence trade prices.

The following theoretical model attempts to establish some of the disadvantages of trade liberalization that occur between the more developed countries using the case of the United States (country U) and the export of manufactured items and the less developed countries using the case of Caribbean (country C) banana exporters.

6. ASSUMPTIONS

We assume:

1. A simplified model of trade between a developed country U and a developing country C. where country U, which produces and exports manufactured goods, has market power while country C, which produces and exports bananas, is a price taker.
2. We further assume that the producers in country U operate in a

monopolistically competitive market while country C producers are faced with market conditions that most closely approximates perfect competition.

3. We also assume that the producers of country U as well as those of country C produce goods and services for the domestic market and also for the export market.

6.1 Country U Analysis

Producers in country U compete for both local and export market share mainly by:

- varying the quality of their products;
- introducing new varieties of products with the use of newer techniques or newly invented materials;
- improving on product functionality and features;
- advertising and marketing.

These initiatives require R&D investments which are then recovered through monopoly rent prices charged by producers for improved products. For many products in this market the short run prices reflect monopoly rents (represented by P_m in figure 1A) where output (represented by Q_m) is below the efficient market output level shown as Q_e in the same chart. Producers obtain economic profit in the short run as shown by the shaded area P_m, a, b, c .

These economic profits attract other producers into the industry or into the

production of competitive products, both of which tend to eliminate the economic profit in the long term. Figure 1C illustrates the long term position where $P_m Q_m$ is the long run price and output combination resulting in zero economic profits. The long term price and output combination of the producers of country U are however inefficient compared to the $P_e Q_e$ price and output combination which represents the efficient market position, by coinciding with the lowest point on the Average Total Cost (ATC) curve.

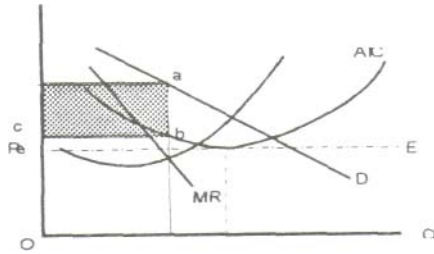
This means that producers in country U are unable to achieve either efficient market productive efficiency or allocative efficiency where their marginal costs are equal to their prices. Given their inability to produce at the lowest point of the ATC, producers in country U are forced to exceed marginal cost prices for their exports to country C. These exports include the inputs that go into producing goods and services in country C.

6.2 Country C Analysis

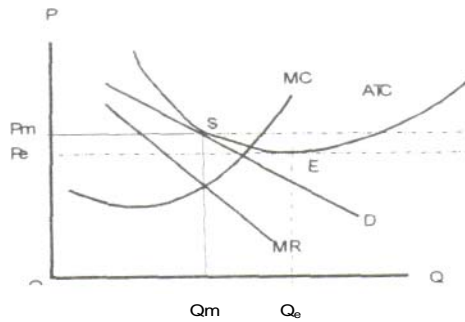
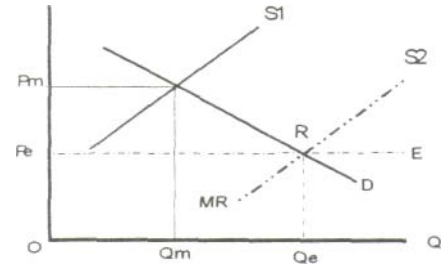
Banana producers in country C import goods and services, including production inputs (machinery, equipment and fertilizers, etc.) from country U. We have established above that the prices for these imports are already above their marginal costs. This places upward

Figure 1. Monopolistically Competitive Market for US Producers of Manufactures
 Q_m Q

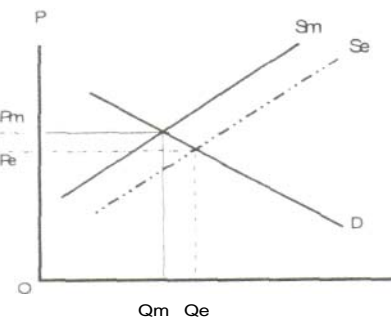
(1A): Monopolistically competitive market structure for US manufactures where producers earn economic profit in the short term equivalent to the shaded area (P_m, a, b, c).



(1B): Monopolistically competitive producers supply Q_m at the monopoly price P_m compared to the efficient market output level of Q_e at the market efficient price of P_e .

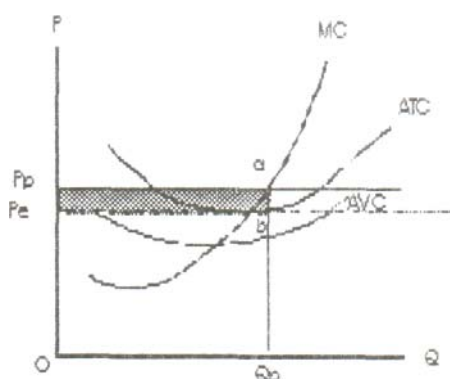


(1C): Monopolistically competitive producers are at long run equilibrium with zero economic profits at P_m where they supply Q_m . The long run position still at a higher price than the economically efficient price of P_e where the efficient market supply is Q_e .

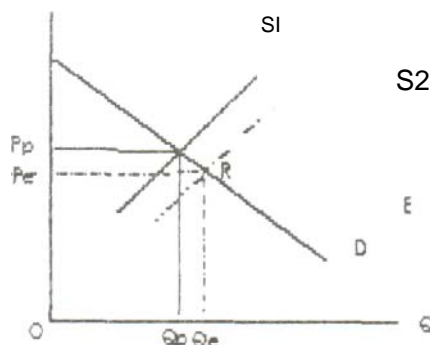


(1D): US monopolistically competitive producers with long term equilibrium supply of Q_m at price P_m , which is less than the market efficient output level of Q_e at the lower market efficient price P_e .

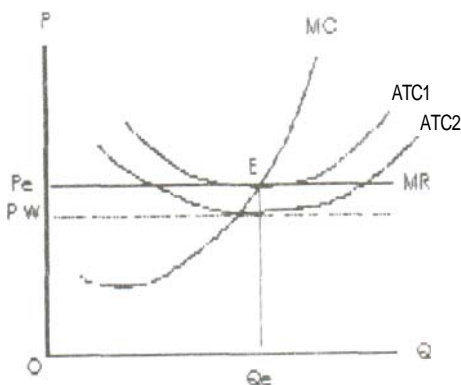
Figure 2. Caribbean Banana Production in a Segmented Market: The Market Representing Preferential Trading Arrangements and Prices and the Open World Market with World Market Prices



(2A): Caribbean banana producers earning some economic profits shown by area Pp a,b, Pe at a preferential price Pp supplying Qp. Figure 2a also shows the efficient price Pe which coincides with the efficient output level Qe which in this case is the same as Qp.



(2B): Caribbean banana producers supply Qp at the preferential price Pp compared to the efficient market output level of Qe at the market efficient price of Pe.



(2C): Caribbean banana producers supply Qe in the long run of the market efficient price Pe. Figure 2C also shows the world market price Pw which is below the cost of production and the adjustment (shifting the ATV curves down to ATC2) that these producers must make if they are to compete in the world market.



(2D): This figure shows attentive demand and supply positions for Caribbean banana producers at the market efficient price and alternatively at the world market price.

pressure on the costs of producing bananas.

Figure 2A illustrates the concept of country C banana producers selling their produce in preferential markets such as they do under the European Union's Lome convention and the Generalized System of Preferences (GSP) arrangement with the United States. At this preferential price P_p Caribbean producers are able to make some economic profit as represented by the shaded area $P_p.a,b,P_e$. The price of P_p is a little above the efficient market price of P_e and the output level Q_p is very close to the efficient output level of Q_e which is obtained at the lowest point of the ATC curve. The long run equilibrium position of the Caribbean banana producers is shown in figure 2C where the market efficient price of P_e is equivalent to marginal costs and the output level Q_e occurs at the lowest point of the ATC 1 curve.

The Uruguay Agreement provides for the eventual dismantling of preferential prices for bananas. When these provisions take effect Caribbean producers must sell their bananas at the world market price (represented by P_w in figure 2C) which for many banana producers is below their costs of production. These producers will be forced to produce for export at a loss or to get out of banana production. These effects are shown in figure 2D where the

supply curve SI represents the efficient market price P_e and quantity Q_e . At the world market price, some producers leave the industry causing the supply curve to shift to S_2 with the output level at Q_w . Total export revenue at the world market price is represented by the bounded area $P_w,T,Q_w,0$, and appears to be far less than the total export revenue that was realized at the previous efficient price and output levels of P_eQ_e . The conclusions to be drawn from these illustrations are:

1. That country U producers can influence prices and tend to operate at prices above marginal costs which reflect both productive and allocative inefficiency.
2. That these prices are passed on through exports to Caribbean producers whose costs of production are driven upwards.
3. Faced with high prices for production imports and low world market prices for their produce (bananas) Caribbean producers are forced to diversify their production and in some cases go out of business, leading to a loss of economic and social welfare.
- 4 Caribbean producers will be hard pressed to compete on the open world market at prices such as P_w given the high prices they must pay for their input imports. Also given the reduction in output caused by the

5. lowering of export prices from P_p to P_e and ultimately to P_w , Caribbean producers will be unable to increase their output levels to take advantage of economies of scale. Likewise if US producers are able to charge monopoly rent prices for new technologies and technology goods, then Caribbean producers will be unable to afford the kinds of technology investments necessary to reduce their costs of production.

7. DISCUSSION

7.1 The Role of Technology and the Technology - Gap

In the monopolistic competition model of trade, technology plays a very important role. It is the application of new techniques and processes that these producers use to create differentiated products. Key elements for achieving a growing technological edge within a free enterprise economy are the quantities of inputs. These elements include extensive use and development of complex capital goods; tools, machinery, communication and marketing.

7.2 The Technology-Gap Trade

How does the presence of a technology gap in the domestic market and across countries affect trade? In answer to this

question, it is assumed that a domestic technology gap as well as a cross-country technology gap between country C and country U, in our model, will tend to worsen the terms of trade for country C. We define a technology gap to mean the time it will take another firm or producer to replicate or produce a competitive substitute for a new good, if that substitute does not currently exist. We also define the terms of trade as the ratio of export prices relative to import prices over a trading period of say a year (the average price of exports in 1999 / the average price of imports in 1999). This measure is known as the "net barter terms of trade" or commodity terms of trade" and produces a ratio which may be interpreted as follows: A terms of trade ratio of "1" is the fairest ratio for both countries. Whereas, a terms of trade ratio that is less than 1, from country C's perspective, is more advantageous to country C.

Technology gaps in the monopolistic competition model are used primarily by firms to earn monopoly rents, as a result of creating new varieties of manufactures and selling them at higher prices before other firms can catch up by producing substitutes. Given that we have previously established a direct relationship between local prices in country U and the prices of its exports to country C, it is safe to argue that the presence of technology gaps in the

domestic market of country U means that importers in country C will pay higher prices for manufactures. This will lead to a worsening of the terms of trade in country C, unless there is a proportional increase in the average price of exports from country C to country U. In the case of a technology gap between the developed country U, and the developing country C, there are a number of adverse effects for the developing country, however, there are also some positive effects.

8. POSITIVE EFFECTS OF A TECHNOLOGY GAP

It is often argued that there are also positive aspects of a cross-country technology gap. One such argument is that technology followers are able to eventually transfer the technology from the technology leaders at a much lower cost than if they had to pay to develop the technology in the first place. This point is, however, diminished by the fact that, in the interim, countries such as the Caribbean loses export revenues and market share. Another point of view claims that the use of older technology tends to keep the cost of production lower than if expensive new technology is introduced. This argument is countered by the point that new technology, though relatively more expensive, may be factor

saving and thereby tend to reduce the cost of production.

9. TARIFF EFFECTS

Under the Uruguay Agreement, the US is expected to reduce tariffs for agricultural commodities by about 38 percent from an average of 14.23 to around 8.83. Tariffs for non-agricultural goods will be reduced in the United States by about 34 percent and is expected to lower the average tariff rate 3.0 percent from the pre-UA rate of 4.6 percent. Comparatively, developing countries such as in the Caribbean are expected to reduce their tariffs by 20 percent from an average of 15.3 percent to an average of 12.3. The lowering of US tariffs and the elimination of duties on some imports, are expected to lead to reduced costs for input imports such as mechanical and other implements needed in the non-agricultural sector. This will tend to lower production costs and drive the price of finished products downwards. It follows then that the US-Caribbean trade model that lowers US costs of production is likely to result in lower prices for US exports and a greater volume of trade between the US and the Caribbean. Additionally, the lowering of import tariffs means that US consumers will pay less for their consumption of imports and will, therefore, have greater relative purchasing power. In our model this will

result in the increased demand for goods produced in the Caribbean, enabling Caribbean exporters to increase the volume and value of Caribbean exports.

Further, in our model, changes in Caribbean prices of agricultural products do not affect trade with the US since Caribbean exporters are seen as price takers and, therefore, will supply whatever they can, up to any relevant quota, at the given world market or preferential price. The lowering of tariffs in Caribbean countries will however, make input imports from the US cheaper and hence lower the costs of producing goods for the domestic and export markets. This will place Caribbean exporters in a better position to compete with other countries for US market share.

10. NON-TARIFF EFFECTS

The UA requires the United States to transform non-tariff barriers into equally restrictive, but more transparent tariffs, which are then subject to an average cut of 36 percent. In addition, tariff rate quotas are established to provide minimum access for imports that have up to now been excluded from certain markets. New guidelines have also been established regarding the trade effects of sanitary and phytosanitary measures (SPS) that will prevent these regulations from serving protectionist objectives.

SPS includes the principles of equivalence, transparency as well as special and differential treatment.

Tariff reduction and elimination of quantitative and qualitative non-tariff restrictions will open up the US market more to Caribbean exporters. The model suggests that the transmission effects of these measures will be similar to those related to tariff reductions. The major concern of Caribbean countries should be that as they reduce their own non-tariff barriers whether the stability of their balance of payments and balance of trade will be threatened. The answer to these questions will of course depend on the magnitude of the net effect of non-tariff reductions on the part of the trading partners

11. ANTICIPATED EFFECTS OF THE NEW AGREEMENTS

The Uruguay Round broadened the coverage of world trade rules to other important areas never before 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 there are significant resources involved and countries are pledged to continue efforts to expand markets. The overall growth of the service sector in the world has translated to some \$1 trillion in world trade services. It is anticipated that Caribbean countries will expand the range of services they offer to US residents beyond the hospitality industry and into other commercial areas such as transportation, advertising, telecommunications, audiovisual, financial, information and agriculture.

The agreement on trade-related aspects of intellectual property rights (TRIPS) establishes new trade disciplines with regard to patents, trademarks, copyrights, and trade secrets that supplement existing intellectual property conventions. An accord was also established in Trade Related Investment Measures (TRIMS). As a result, 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 can only benefit from the additional opportunities created if member countries are prepared to commit resources to developing the human capital and technology-learning infrastructure necessary to make use of these resources.

12. IMPLICATION FOR CARIBBEAN AGRICULTURAL SECTOR

Many studies have sought to assess the impact of the Uruguay Round (UR) on the conduct of trade. There are those who have concluded that the UR provisions have been beneficial to developing countries (Sek, Pregeli and Wilson, 2000). The conclusion reached is that its introduction was a success, this same conclusion is not as obvious with respect to the interests of developing countries as addressed by Balassa (1998), Jar (1993) and Kumar (1993). Ingo (1995) considers questions of inputs in agriculture while Davenport (1995) analyses the impact of the UR on Caribbean and Latin American countries.

The ACP countries brought a variety of concerns into the agricultural trade negotiations. They were concerned for example with market access for their products. As such, it means negotiations to reduce tariffs and other access barriers. The efforts to maintain preferential access to traditional markets continue net food importing countries are concerned with the impact of further agricultural trade liberalization on the cost and availability of food imports.

With respect to these new provisions developing countries have an interest in technical assistance to help them adopt the new rules and discipline already

established in the UR on agriculture, the SPS agreement, the understanding on dispute settlement.

At the least, the concern takes us back to the issues underlying the need for the UR in respect agricultural trade. These include: (1) the presence of trade distorting government support to agriculture (price and income support or export subsidies), (2) agricultural import barriers and (3) health and sanitary restrictions. How are these countries impacted by the new realities?

In fact, supporters of trade liberalization often argue that government support policies lead to excess production, trade distortion, large budget outlays for export and other subsidies which results in high costs to consumers while distorting farmers' production decisions. On the other hand import barriers in the form of quotas, import levies and voluntary restraints of exports as well as health and sanitary restrictions are all devices used to control the level of agricultural trade.

In this new setting can Caribbean countries react and seek to survive? According to Ambassador Redhead, not very well, as reflected in his statement: "WTO is the most important international organization as it will set the agenda for the 21st century. However it does not augur well for the future of developing countries. It is weighted heavily against small states and

is oppressive to us. Because we say we are independent they expect us to subsidize their development." He continues, "Further, the system does not recognize the existence of developing states. Can you imagine putting a Caribbean state like Grenada in the same category as Brazil?" (King, 1999, p.35). In its 1999 Annual Report, the Caribbean Development Bank reported mixed results on the performance of the agricultural sector. Caribbean countries reported increases in regional sugar production although there were continued uncertainties in the banana producing Caribbean countries. This uncertainty in the banana sector, while continuing to create short-run turmoil in those countries, might well be the long-run catalyst for change that these countries have to face as they seek to compete in a liberalized trade environment which calls for reforms of the existing system. It is not surprising that Trinidad and Tobago Prime Minister Basdeo Panday complained that: "The recent WTO ruling on bananas is just one example of the consequences which the poorest can suffer when arrangements designed to redress inequality, like the banana protocol, are compromised by indiscriminate and insensitive ideology masquerading as the new order." (King, 1999, p.35). Reforms in the agricultural sector must of necessity cover a broad range of issues from macroeconomic

issues including *cost* of production to those of the environment.

The extent to which these issues will impact on the individual countries will vary from country to country- depending on the economic, political, social and international entanglements. It is obvious that great care must be taken by the countries in designing and implementing the best package of policy reforms to meet this changing situation. These reforms cannot be a one size-fit-all. Because of the scale of operation which characterizes the countries, it means that there will have to be a coordinated package of policy initiatives which closely evaluate not only the agricultural sectors' outcomes but also considers the impact these changes have on the well-being of the total population of the economy. For a liberalized world situation, Caribbean countries cannot continue to be dependent on the traditional agricultural exports. They are at a disadvantage in respect to scale and productivity and as such must identify and institute alternative exportable production alternatives.

In the meanwhile some form of compensation package should be established to ensure the survival of this sector. Harahan (1999) highlights this dilemma as he points out that in the case of bananas, the Caribbean and other ACP countries are unanimous in wanting to maintain the present system of

preferences. ACP countries fear that they will be driven out of business if quotas for Latin American bananas were eliminated since it would force them to compete with more efficient suppliers. Ecuador, for example, produces bananas at a cost of about \$162.99 per metric ton, while ACP costs can be as high as \$515.00 per ton.

In the face of such differences in production costs, governments must provide incentives for small producers by implementing pricing policies that do reflect domestic market conditions. This includes the absence of government involvement in mandating marketing boards or other agricultural para-statal, which seeks to monopolize marketing arrangements. Some advocate the use of tariff revenues on bananas to assist vulnerable Caribbean economies or for the US to increase its financial and technical assistance to banana producing Caribbean countries, maybe in the form of reduced tariffs for exports from Caribbean countries (Hanrahan, 8/99, p.6).

13. CONCLUSION

In this paper, we make the argument that benefits of free trade are neither automatic nor equal for all countries involved. While there is considerable evidence that trade liberalization results in increased world welfare, developing

countries have experienced worsening terms of trade when compared to the developed countries for many decades. In the past, preferential trading arrangements have been granted to ACP countries as a means of compensation for the many disadvantages they continue to encounter in international trade and exchanges with developed countries. The Uruguay Agreement has introduced provisions for the phased elimination of these arrangements in lieu of creating a level playing field for world trade

We have introduced a monopolistically competitive technology-gap model to illustrate some of the effects likely to result from the implementation of the UA. Most of the effects anticipated are likely to result in increased trade between the US and Caribbean region. This trade expansion will benefit both Caribbean and US residents. Given the size and influence of the US economy on world trade, it is reasonable to argue that US firms with local market power, can influence world prices in general. Further, it is not unusual for developed countries such as the US, to have monopoly market power in respect to specific commodities. If these propositions are true then the welfare of Caribbean citizens are likely to be tied to the fortunes of US consumers for as long as the Caribbean continues to conduct a substantial proportion of its trade with the US. The

inclusion of the Caribbean region in the NAFTA trading area will create additional opportunities for Caribbean countries to benefit from trade and international commerce. An important prerequisite is for Caribbean countries to enhance their ability to openly compete. In this regard, the move to dismantle preferential trading and to liberalize markets arrangements, though perhaps unfair, may well create the sense of urgency needed by Caribbean governments and businesses to take the first steps in finding those commodities among which it has a competitive advantage.

The monopolistically competitive model suggests that the way forward is for Caribbean countries to develop their technological capabilities and an adequate human capital stock as they prepare to meet the challenges of the 21st century.

REFERENCES

- Caribbean Development Bank, Annual Report various issues, 1989-1999
Bridgetown Barbados. Caribbean Economic Overview 1996.
World Bank, Caribbean Division.
Connolly Michael and Melo, Ja'ane De. 1994. "The Effects of Protectionism. On a Small Country - The Case of Uruguay." The World Bank, Washington, DC

- De Alonzo, frina Trado, (1992) Trade Issues in the Caribbean ed. Caribbean Studies Vol.7. Gordon and Breach, Philadelphia.
- Deardorf, Alan V. and Robert M. Stern (1990) "Computational Analysis of Global Trading Arrangements", Ann Arbor, MI.
- Grimmett, Jeanne J. (1996) "Free Trade Areas, Developing Country Preferences and the WTO" Congressional Research Service, Library of Congress, IB93107.
- _____ (1994). "World Trade Organization: Institutional Issues and Dispute Settlement, CRS, 94-627A.
- Hanrahan, Charles E., (1999). The US European Union Banana Dispute, CRS Report #RS20130, Dec. 9.
- Irwin, Douglas A. (1996). "Against the Tide - An Intellectual History of Free Trade." Princeton University Press, Princeton, New Jersey.
- Johnson, B. F. and Mellor, J.W. (1961). "The Role of Agriculture in Economic Development" American Economic Review 51:566-93.
- King, Luzette, (1998) "The World Trade Organization Ruling on the Banana Dispute: An Analysis of the Implications" Unpublished Thesis submitted to University of East London. England.
- Krugman, Paul R, (1996). Rethinking International Trade, The MIT Press, Cambridge, Mass.
- Okidegbe, Nwanze, (2000). Monitoring Rural Well-being a Rural Card. The World Bank, Washington, DC.
- Ranis, G, and Fel, J. C.H (1961) "A Theory of Economic Development" American Economic Review 51:533-65.
- Sek, Lenore, (1994) "The Uruguay Round: A Review of Major Issues" CRS Report for Congress. 24.
- Sek, Lenore; Pregeli, Valadimin, and Wilson, Arlene (2000). The World Trade Organization: The Debate in the United States, CRS, Long Term Report, RL 30521.
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