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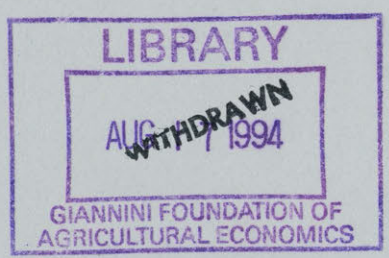
Staff Paper Series

WESTERN HEMISPHERIC AGRICULTURAL TRADE: INITIATIVES AND AGREEMENTS

by

Chris O. Andrew, William A. Messina, Jr. and Veronica Gottret*

Staff Paper 398 November 1990



FOOD AND RESOURCE ECONOMICS DEPARTMENT

Institute of Food and Agricultural Sciences

UFLERE **University of Florida**

Gainesville, Florida 32611

ABSTRACT

WESTERN HEMISPHERIC AGRICULTURAL TRADE:
INITIATIVES AND AGREEMENTS

Chris O. Andrew, William A. Messina, Jr. and Veronica Gottret

World agricultural trade has become increasingly important issue as evidenced by its inclusion in the ongoing Uruguay Round of the General Agreement on Tariffs and Trade (GATT). Special regional trade agreements either in place or under discussion (i.e. the U.S. Caribbean Basin Initiative, U.S./Canada Free Trade Agreement, EC-1992 and the U.S./Mexican Free Trade Agreement) make the process of agricultural trade negotiation even more complex. This paper reviews a broad range of world and agricultural trade statistics in an effort to place Western Hemisphere agricultural trade into perspective. It then goes on to summarize some of the research conducted by the University of Florida, Department of Food and Resource Economics designed to help identify the impact of trade programs and agricultural policies in the Western Hemisphere. Finally, the paper discusses some of the issues and concerns that need to be addressed in the context of trade agreements currently under consideration in the Western Hemisphere.

Key Words: trade, trade policy, Western Hemisphere, Caribbean, Mexico, agriculture

WESTERN HEMISPHERIC AGRICULTURAL TRADE: INITIATIVES AND AGREEMENTS*

by

Chris O. Andrew, William A. Messina, Jr. and Veronica Gottret

This presentation addresses the Western Hemisphere agricultural trade situation in a general context and, specifically, some of the concerns related to the Caribbean Basin Initiative and the prospects for a free trade agreement with Mexico. It is the position of the authors that trade harmony within the Western Hemisphere is important: 1) to the overall growth and development of the hemisphere itself, and 2) to viability of trade for the Western Hemisphere relative to other major trading blocs and trading situations on the world scene. We recognize that there are costs and benefits associated with trade agreements and initiatives particularly between commodity groups, geographic regions, producers and consumers of agricultural goods, and even competitive situations between producers of the same commodities. Nevertheless, it would seem from our work, and that of others, that openness in trade will be conducive to improved socio-economic development and wiser use of resources for purposes of meeting world food consumption needs and in support of viable world trade in agricultural products.

Western Hemispheric Agricultural Trade

During the 1970s and 1980s, the Western Hemisphere accounted for 21%-22% of world export shares on average (Figure 1). Other regions, particularly Asia, Africa and the Middle East, did show some change from the 1970s to the 1980s but Europe and the Western Hemisphere held relatively

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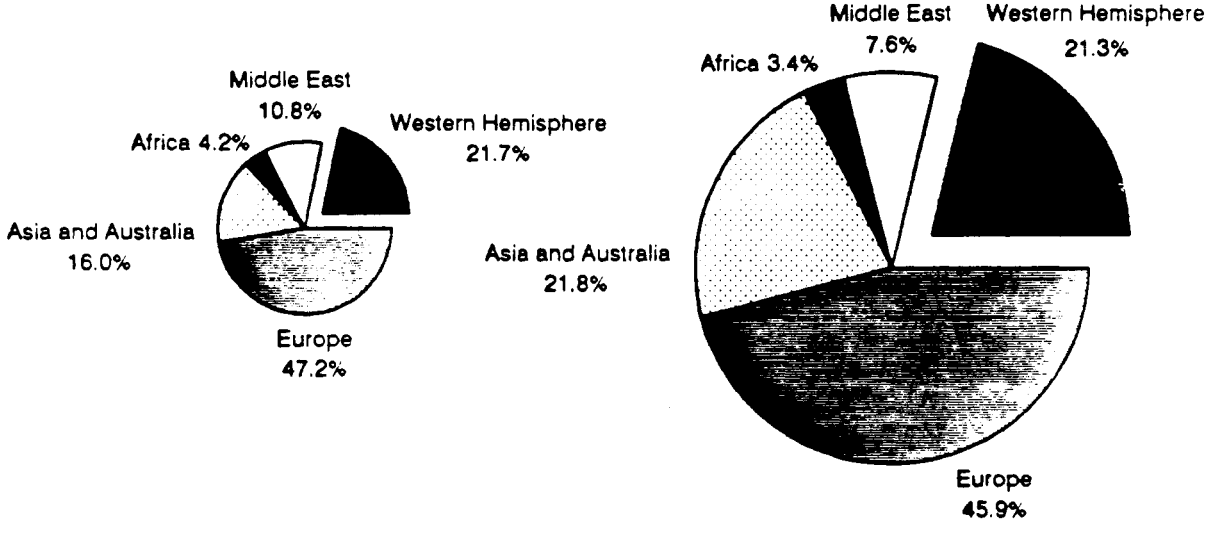
*Paper presented at the 1990 Farm Credit Systems National Directors Conference, Orlando, Florida, September 25, 1990.

Figure 1.

WORLD EXPORT SHARES



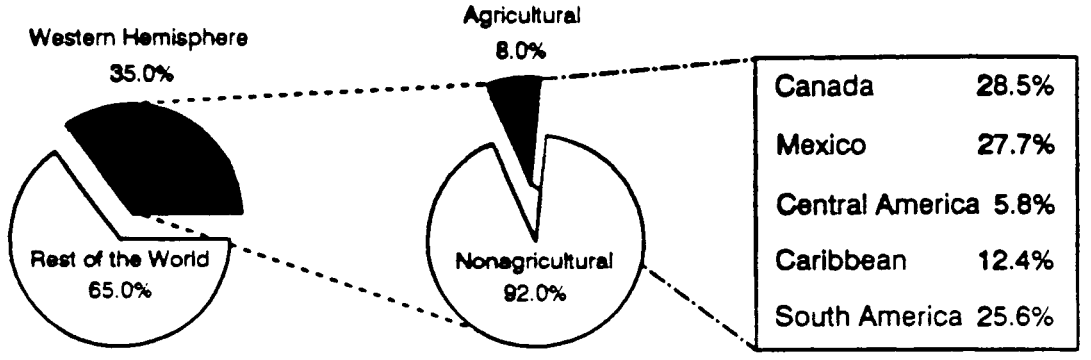
1970s Average
800.5 billion $

1980s Average
1,957.7 billion $

constant. Turning to U.S. export shares during the 1980s, 35% of total U.S. exports were shipped to other countries in the Western Hemisphere representing a total of nearly $840 billion for the decade (approximately $84 billion per year on average) (Figure 2). Agricultural exports averaged 8% of U.S. exports to the Western Hemisphere. Canada and Mexico were the most important receivers of U.S. agricultural exports in the 1980s representing over half of U.S. agricultural exports in the hemisphere. During the 1980s the U.S. imported approximately $3.55 trillion in goods from other countries in the world ($355 billion on an average annual basis) (Figure 3). Western Hemisphere imports by the United States represented 32% of the total and agricultural commodities made up about 8% of the Western Hemisphere import total. Of the $9 billion imported on the average in agricultural goods per year, Canada and Mexico, again, are important trading partners however South America is by far our most important agricultural supplier in the hemisphere representing over 41% of total agricultural imports during the decade. Central America also shows a somewhat greater import market share than it did for export market shares.

This presentation is particularly concerned with trade initiatives such as the potential U.S./Mexican free trade agreement and the Caribbean Basin Initiative. Thus, import and export shares with these two areas are summarized. U.S. exports to Mexico for the 1980s totaled $135 billion ($13.5 billion yearly average) of which 13.7% were agricultural (Figure 4). These exports, on a commodity basis, are distributed primarily to grains and feeds, oilseeds and animal products. One might note that these commodities are primarily produced in the Midwestern portion of the United States suggesting that this region benefits substantially from export trade with Mexico. U.S. imports from Mexico totaled about $190 billion during the decade ($19 billion per year on average) of which 8% were agricultural (Figure 5). It should be noted here that USDA distinguishes between competitive and non-competitive agricultural commodities when compiling trade statistics. Commodities which are not produced in the U.S. (ex. bananas, coffee, cocoa,) make up the non-competitive category while commodities which are also produced in the United States fall into the

Figure 2.
U.S. EXPORT SHARES
(Average for the 1980s)

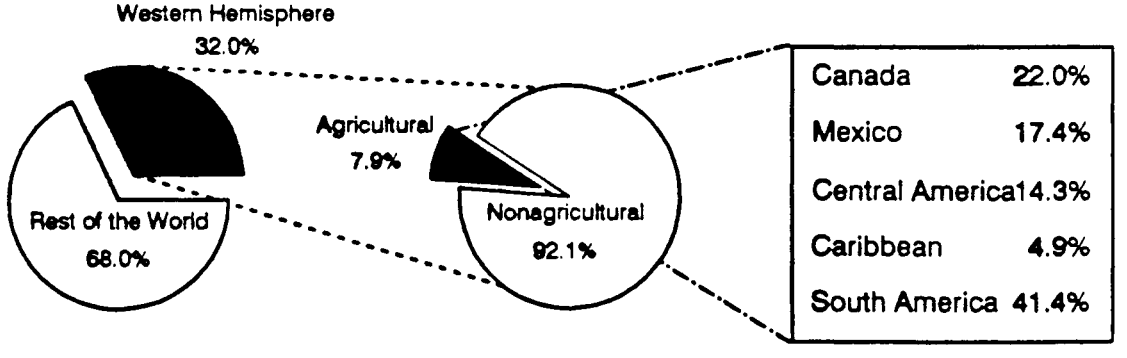


U.S. TOTAL EXPORTS
240 billion $

WESTERN HEMISPHERE
83.9 billion $

AGRICULTURAL
6.67 billion $

Figure 3.
U.S. IMPORT SHARES
(Average for the 1980s)



U.S. TOTAL IMPORTS
354.7 billion $

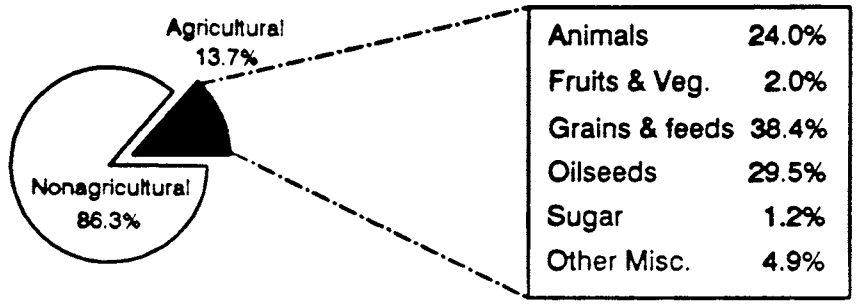
WESTERN HEMISPHERE
113.4 billion $

AGRICULTURAL
9.0 billion $

Figure 4.

U.S. EXPORTS TO MEXICO

(Average for the 1980s)



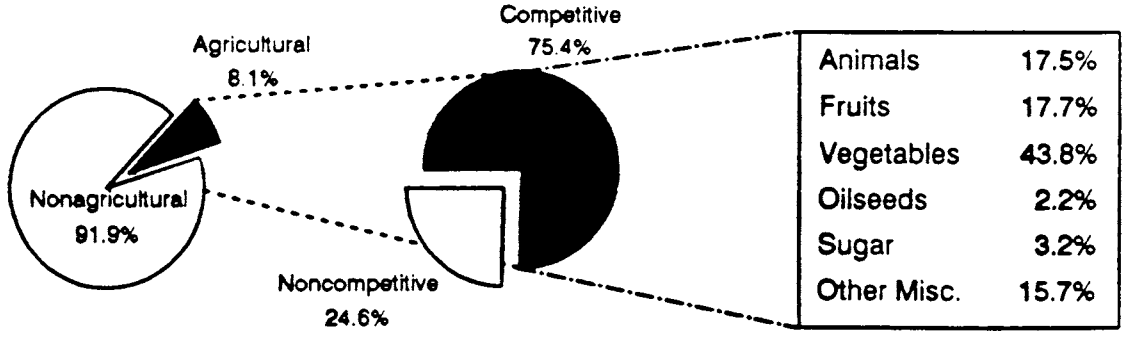
TOTAL EXPORTS
13.5 billion $

AGRICULTURAL EXPORTS
1.8 billion $

Figure 5.

U.S. IMPORTS FROM MEXICO

(Average for the 1980s)



TOTAL IMPORTS
19.2 billion $

AGRICULTURAL IMPORTS
1.6 billion $

COMPETITIVE AG. IMPORTS
1.2 billion $

competitive classification. Fully 75% of U.S. agricultural imports from Mexico are competitive with U.S. produced products. Fruit and vegetable producing states in the U.S. receive the greatest import pressure.

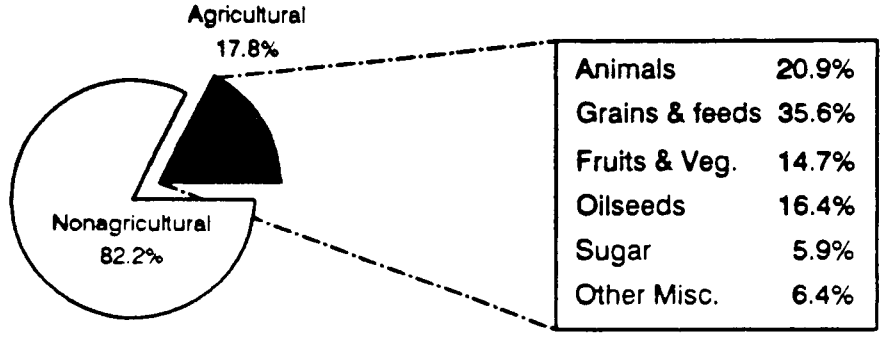
The U.S. exports to the Caribbean Basin countries for the 1980s totalled about $70 billion ($7 billion yearly average) of which nearly 18% were agricultural, again favoring primarily grains and feeds, oilseeds and animal products (Figure 6). The agricultural share of imports from the Caribbean Basin is higher than that of Mexico but a smaller proportion (38%) of those commodities are competitive with U.S. agricultural production. The distribution on a commodity basis of these products favors sugar at almost 50% of total imports, followed by animals (Figure 7). Again, this implies a slightly different competitive situation relative to producer group interests and their location in the U.S.

Thus, as we begin the analysis of concerns relative to the trade situation with Mexico and the Caribbean, we can recognize that there are geographic and commodity considerations which tend to favor some producer groups and place others at a disadvantage (in terms of potential competitive pressure) when we consider policy changes that would relax trade restrictions. As we study concerns about free trade, it is important to ask the questions of 'who' is likely to benefit and lose from free trade arrangements and 'why'. The differences in 'who' may gain and lose are explained as one considers different grower interests, interests of distributors, consumers, bankers, laborers, resource managers and others. All have something to offer to agriculture and all stand to be impacted by the change in different ways. In answering questions as to 'why' they gain or lose these groups may cite a number of reasons, some based in fact, and others more imagined. For example, one might consider the issues of food safety, food security, economic stability, capital flight, social impact, economic impact, environmental impact, market share positions and others. It seems that the discussion surrounding trade agreements may focus most directly on economic issues but there are issues of

Figure 6.

U.S. EXPORTS TO THE CARIBBEAN BASIN

(Average for the 1980s)



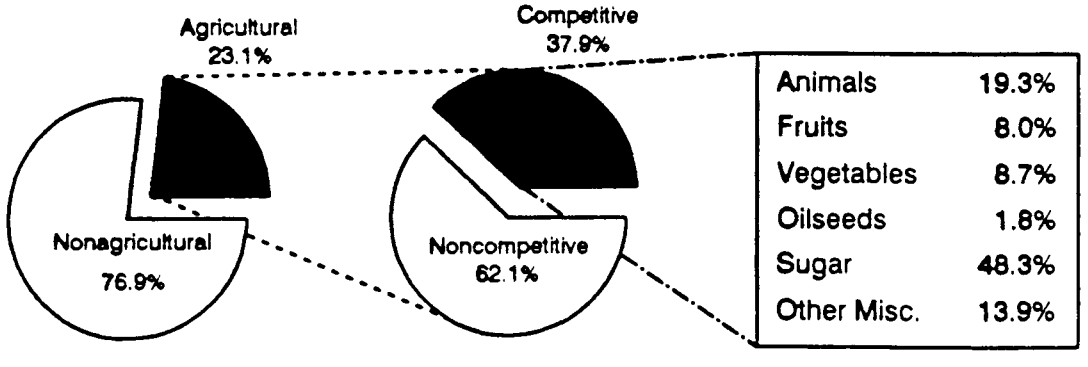
TOTAL EXPORTS
6.9 billion $

AGRICULTURAL EXPORTS
1.2 billion $

Figure 7.

U.S. IMPORTS FROM THE CARIBBEAN BASIN

(Average for the 1980s)



TOTAL IMPORTS
7.4 billion $

AGRICULTURAL IMPORTS
1.7 billion $

COMPETITIVE AG. IMPORTS
0.7 billion $

social and environmental ethics and political concerns involved as well. It is essential that all of these concerns be addressed if policy is to be both beneficial and effective in a general context for U.S. agriculture as well as for our trading partners in this hemisphere.

Caribbean Basin Agricultural Trade and Policy

In 1983 the Caribbean Basin Economic Recovery Act, which is the primary policy mechanism of the Caribbean Basin Initiative, provided for improved trade relations with 28 Caribbean, Central American and South American countries (Figure 8). The countries included under the Caribbean Basin Initiative are as follows:

Antigua and Barbuda	Guatemala
Aruba	Haiti
Bahamas	Honduras
Barbados	Jamaica
Belize	Montserrat
British Virgin Islands	Netherlands Antilles
Costa Rica	Panama
Dominica	St. Christopher/Nevis
Dominican Republic	St. Lucia
El Salvador	St. Vincent
Grenada	Trinidad & Tobago

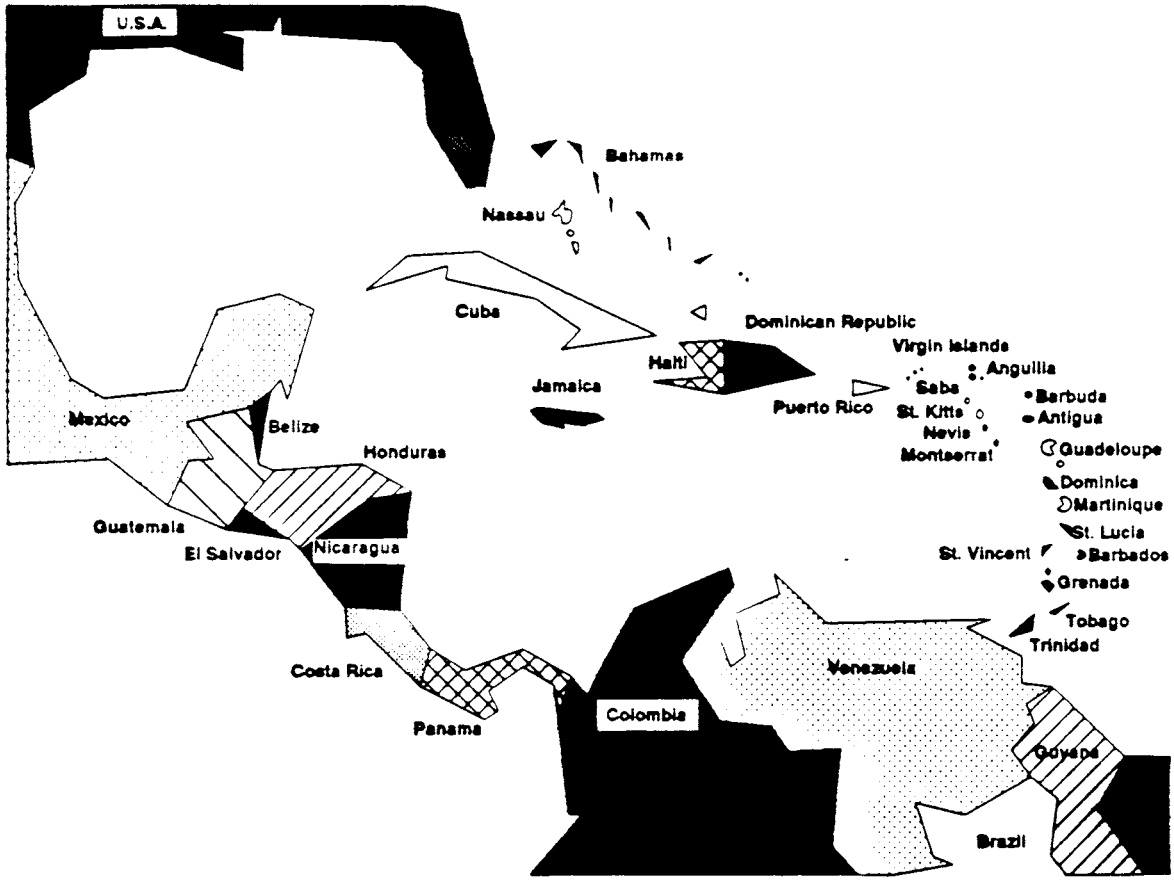
Nicaragua's status as a CBI beneficiary is under consideration.

The purpose of this agreement was to augment economic development in the Basin by enhancing the region's ability to interact in a viable economic capacity within the international trade arena. The U.S. stands to gain from improved economic development within the region vis-a-vis enhanced demand for U.S. exports as well as from improved socio-political stability.

Florida is concerned with the Caribbean Basin trade and policy situation for several reasons. The State of Florida exhibits very similar agriculture, climatic, economic, cultural and demographic

Figure 8.

Caribbean Basin



conditions relative to the Caribbean Basin. Florida is the major port of entry for products imported from the region as well as an important trans-shipment state for U.S. exports to the region and to the rest of the world. Thus, Florida is concerned about the economic well-being of the region and also the State's ability to remain competitive with those agricultural products which might be available to U.S. consumers from the Caribbean Basin countries. Emphasis is given not only to trade in agricultural products in the Basin but also economic development because viable market opportunities can emerge as economies in the region grow and develop.

Generally, observations from research directed toward agricultural relations between the United States and the Caribbean Basin suggest the following:

1. The U.S. is by far the Caribbean Basin's major supplier of agricultural products. The percent of agricultural imports from the U.S. ranges from 28% for Haiti to 80% for Guatemala.

2. U.S. agricultural exports to the Caribbean Basin countries decreased as the region experienced economic stagnation in the late 1970s and the 1980s.

3. Agricultural exports from the Caribbean Basin Initiative countries to the U.S. also declined beginning in the early 1980s.

4. Agricultural trade liberalization through the CBI has had limited economic impact on agricultural trade with the U.S. and economic growth in the region.

One would ask why has the CBI been ineffective in terms of its impact on agricultural trade. There are two reasons for this trend. First, the U.S. has specific commodity policies in place which take precedence over the CBI legislation (to be discussed later) and second, the onset of the "debt

crisis" around 1980 had a dramatic impact on financial and economic conditions in the Caribbean Basin as well as in Latin America. We begin by looking at the trade statistics (Figure 9). Note that the average annual rate of growth for exports from 1970 to 1980 was quite substantial ranging from 18% for total exports to nearly 30% for total agricultural exports to Latin America and the Caribbean countries. However, the rate of annual growth in exports in fact was negative for the 1981-83 period and did not improve for agricultural exports in the 1984-86 period. Again, why might this be the case? A review of major economic indicators for Latin America and the Caribbean reveals that the average annual rate of growth in these indicators was significant and positive in the 1970s (Figure 10). Again, a precipitous decline in the average annual rate of change is indicated for gross national product and particularly the finance variables (including international reserves and domestic investment) in the 1981-83 period. Some of these indicators recovered in the 1984-86 period but domestic investment remained extremely sluggish and negative. Together the data in these figures would suggest that demand for agricultural exports from the U.S. was hampered by economic stagnation brought on by rising worldwide interest rates. A large percentage of the loans to developing countries were at floating interest rates, resulting in higher loan payments, and the onset of the debt crisis.

Research was conducted at the University of Florida's Food and Resource Economics Department in an effort to determine the extent to which this deterioration in trade might have been caused by financial stress placed on the economies of the region as a result of the debt crisis. The aspects of financial stress that are important to this situation include increased total external debt, reductions in economic growth rates, increases in real interest rates, a reduction in export revenues and a lack of new disbursements. Based upon this concern for financial stress as a potential cause of decreased international trade activity, a stress index was developed by University of Florida researchers for analytical purposes. This stress index included solvency, liquidity and profitability as indicators of economic well-being and stress throughout the 1970s and 1980s. Financial stress values are graphed

Figure 9.

U.S. TOTAL AND AGRICULTURAL EXPORTS

ITEM	AVERAGE ANNUAL RATE OF GROWTH		
	1970-80	1981-83	1984-86
		Percent	
Total U.S. Exports	18.44	-2.05	3.42
Total U.S. Exports to Latin America and the Caribbean	20.83	-11.63	6.69
U.S. Agricultural Exports	20.92	-3.94	-9.39
U.S. Agricultural Exports to Latin American and the Caribbean	29.08	-3.24	-10.53

Figure 10.

LATIN AMERICA AND THE CARIBBEAN
MAJOR ECONOMIC AGGREGATES

ITEM	AVERAGE ANNUAL RATE OF GROWTH		
	1970-80	1981-83	1984-86
		Percent	
Gross National Product	16.64	-3.68	3.27
Real GNP	5.93	-1.30	3.23
Exports	21.94	-2.00	-2.33
Imports	22.01	-3.22	-3.37
International Reserves	28.59	-11.10	9.25
Domestic Investment	10.02	-12.01	-10.80
Government Expenditure	4.91	0.43	-0.55
Private Consumption	3.13	0.36	-2.47

LATIN AMERICA AND THE CARIBBEAN
EXTERNAL PUBLIC AND PRIVATE DEBT

ITEM	AVERAGE ANNUAL RATE OF GROWTH		
	1970-80	1981-83	1984-86
		Percent	
Total External Debt	18.65	13.53	2.98
Debt from official sources	13.44	15.82	14.46
Debt from private sources	23.91	16.67	5.53
Debt Service	24.85	2.71	1.07
Interest Payments	31.33	14.81	1.80
Disbursements	25.29	-5.79	-13.01
Net Transfers	35.49	-149.41	34.45

in Figure 11 for several selected countries. The financial stress situation was not important prior to 1980 as stress levels were generally negative but it becomes extremely important for these countries in the decade of the 1980s as the "debt crisis" begins to emerge. Each of the countries represented moves well beyond the significant point of 2 on the financial stress index between 1981 and 1982 suggesting that these parameters are important to the economic analysis. While further research is necessary to determine causal relations more specifically, we are prepared to make some policy statements. They are as follows:

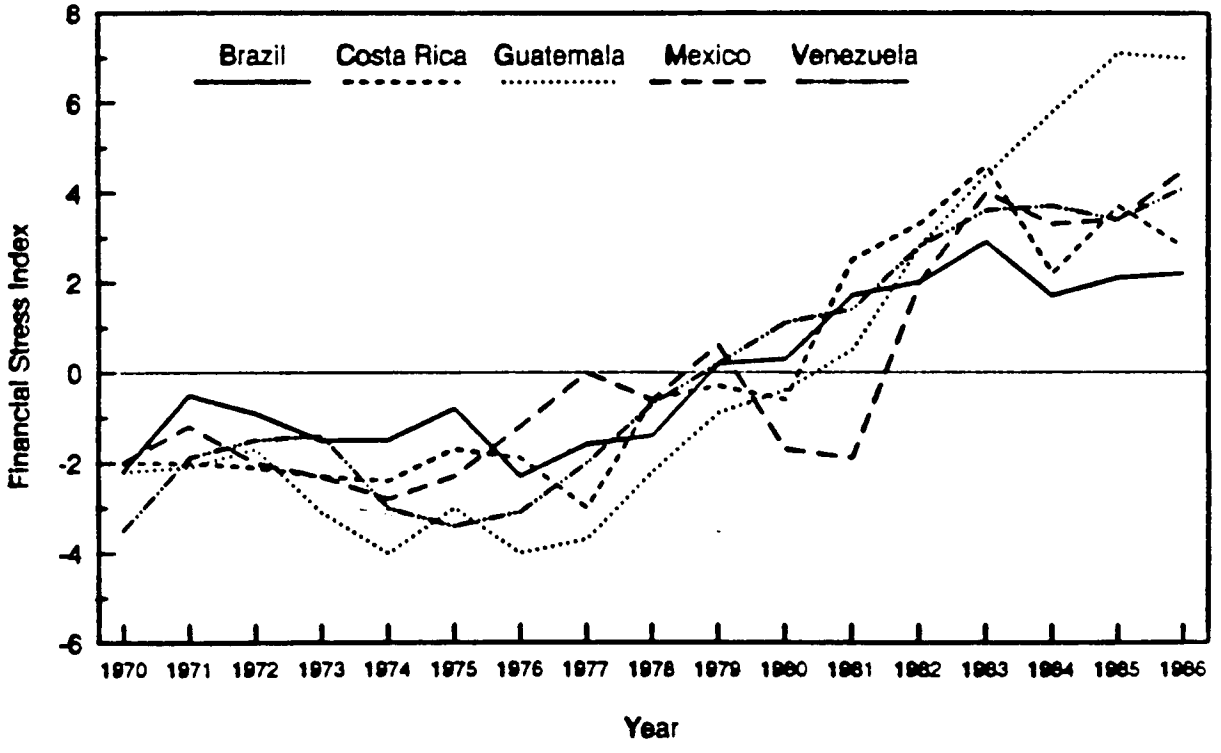
1. There must be policies and strategies to deal with debt crisis situations in Latin America and the Caribbean Basin. Specifically, it will be necessary to consider ways to expand the openness of the international trading system. Also, for viable investment growth and general economic activity, reasonable real interest rates are essential. And the economic policies in the indebted countries must be refocused to help resolve the major stress situations and should do so in consonance with international policies.

2. Thus, policies and programs must be designated to promote sustained economic growth and development within the region. These policies must be both domestic and international in nature, given the level of international dependence displayed by countries of the region.

3. The importance of comparative advantage, particularly in terms of price competitiveness, must be emphasized so that those producing regions with best capability for production and export of specific commodities can do so and then use the revenues for growth purposes. This in itself will lead to expanded trade both due to the specialization and to the income effects associated with production at least cost points.

Figure 11.

Observed Values of Financial Stress



Commodity Cases as Examples of Trade Policy Concerns

We begin with the sugar case. The world sugar market for many years has been perhaps the most manipulated major commodity market on earth. When in the early 1980s it became clear that the U.S. would not be able to support the U.S. growers with price programs and purchase programs because of the high level of sugar in storage at that time and the large spread between the world and U.S. sugar prices, an import quota was established to protect U.S. growers from world sugar imports. The price spreads between the U.S. and world sugar market prices are indicated in Figure 12. As a consequence of the high domestic sugar support price, there was a major shift in U.S. caloric sweetener consumption and production beginning in the early 1980s as indicated by Figure 13. Note how U.S. imports from the rest of the world decreased continuously throughout the 1980s as a result of steadily decreasing U.S. sugar import quotas. This policy had a devastating impact on agriculture in the Caribbean Basin as sugar represented the second most important agricultural export commodity for the region (behind only bananas, a "non-competitive" commodity as discussed earlier). At the same time high fructose corn syrup (HFCS) sweeteners increased in production and market share throughout the period as caloric sweetener users shifted to less expensive HFCS. Thus, the sugar policy was not only successful in protecting the beet and cane interests but also brought other high cost sweeteners into the protected market and squeezed out the import source.

Major findings from research conducted at the University of Florida indicate that relaxing U.S. sugar quotas to CBI countries to pre-1984 levels (pre-CBI) would provide more potential for enhanced regional economic growth than the entire CBI program. Also, U.S. sugar policies have stimulated the search for alternative agricultural enterprises including fruits and vegetables in Caribbean Basin countries, many of which compete with Florida, Texas and California crops. And, finally, U.S. sugar policies in general stimulated technological advancements in the use of high fructose corn syrup as a substitute for sugar.

Figure 12.
U.S. Domestic And World Raw Sugar Prices (Nominal)
1950-1988

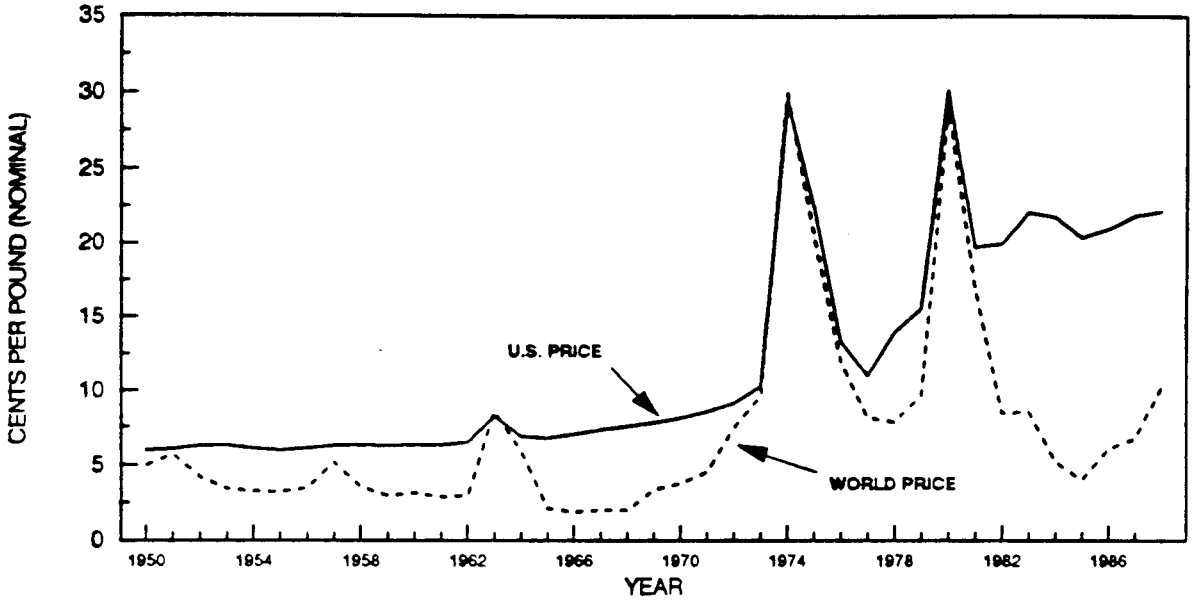
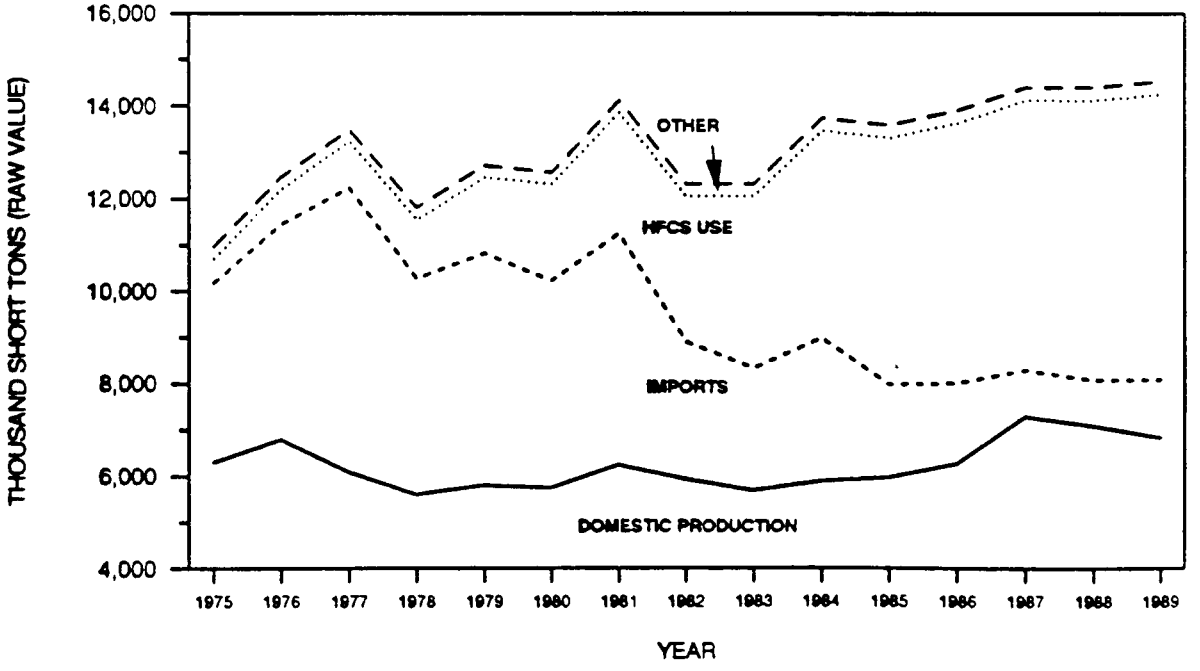


Figure 13.
U.S. CALORIC SWEETENER CONSUMPTION



SOURCE USDA Sugar and Sweeteners, Situation and Outlook Yearbook, June 1990

The question remains, is this policy good for international trade purposes? Even though it does benefit U.S. sugar producers the answer relative to trade might suggest that it is not because the potential for continuous growth in world export demand was thwarted by the policy. While domestic sweetener producers gained, those producers who might have exported grains and similar products to the Caribbean countries did not gain. Further indication of the relative advantage of sugar production over other commodities resulting from the policy is provided by a comparison of net cash returns (Figure 14). Net cash returns for U.S. produced crops favored the sugar beet and sugar cane producers significantly relative to corn, cotton, soybean, rice and wheat producers on a dollar per planted acre basis.

Now, relative to the potential for a free trade agreement with Mexico, let us turn to market shares by suppliers to the U.S. fresh winter vegetable market. We do so because of domestic concern in terms of relative competitive position in the fruit and vegetable industry. We recognize from the earlier market share and export information that Mexico is an important market for U.S. feed grains, oil seeds and livestock products. In a competitive sense, the winter vegetable market is important to both Florida and Mexico.

Specific market shares compared for the 1975-76, 1980-81 and 1986-87 period show that Florida has lost market share to Mexico in cucumbers, squash, green peppers, green beans and, to a lesser extent, eggplant (Figures 15-19). However, for tomatoes (Figure 20) market share for Florida has increased over this time frame while Mexico's has decreased. To put these trends into perspective, it is important to recognize that in the 1988-89 season, tomatoes represented 43% of the Florida vegetable crop output (Figure 21) while the other five vegetables (green peppers, cucumbers, green beans, squash and eggplant) only represent about 18% of Florida's vegetable production. The remaining 40% of production includes vegetables which are in competition with Mexico to a lesser degree. For the five directly competitive crops other than tomatoes, it should also be noted that the

Figure 14.

NET CASH RETURNS FOR U.S. CROPS

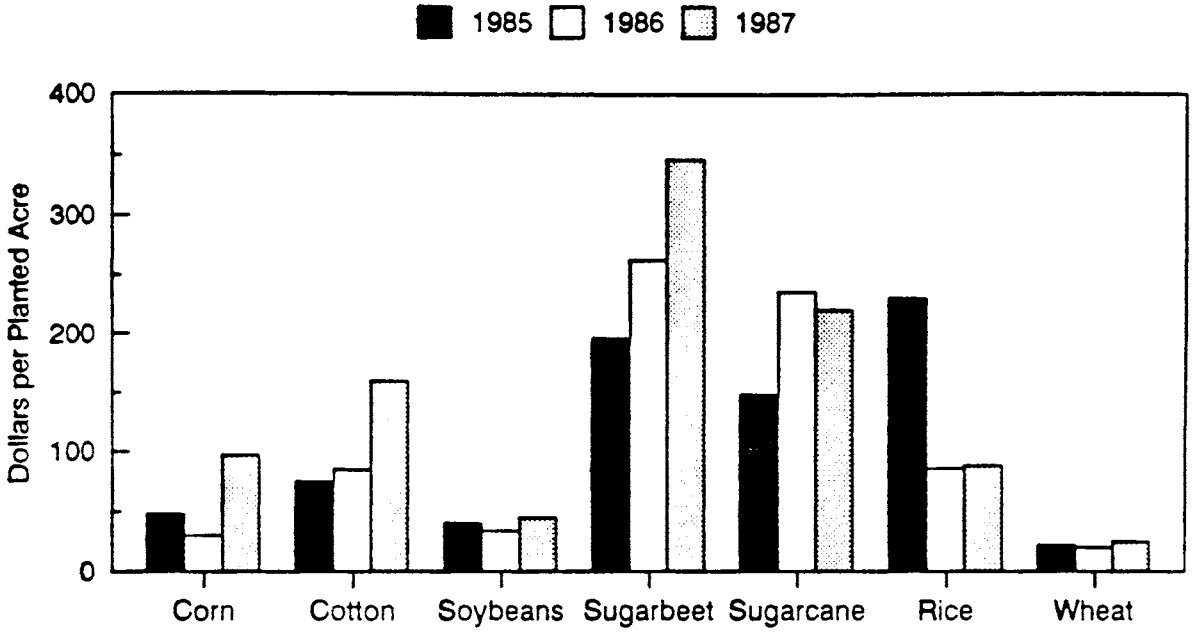


Figure 15.

U.S. MARKET SHARES FOR CUCUMBERS
Florida, Mexico and Others

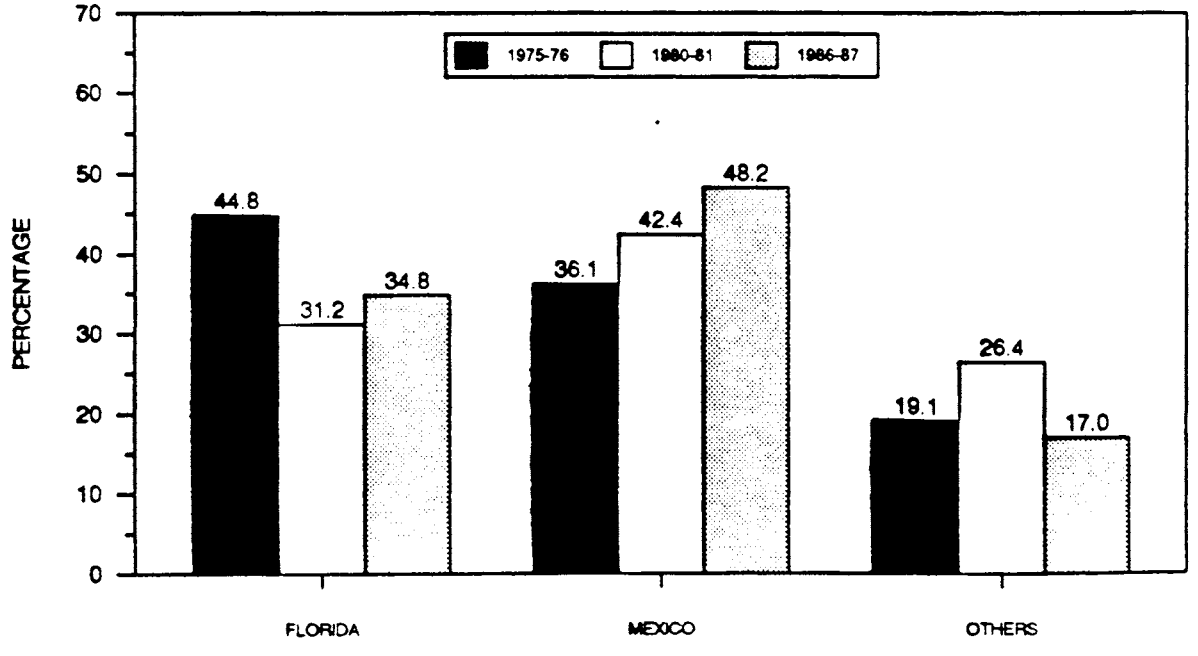


Figure 16.
U.S. MARKET SHARES FOR SQUASH
Florida, Mexico and Others

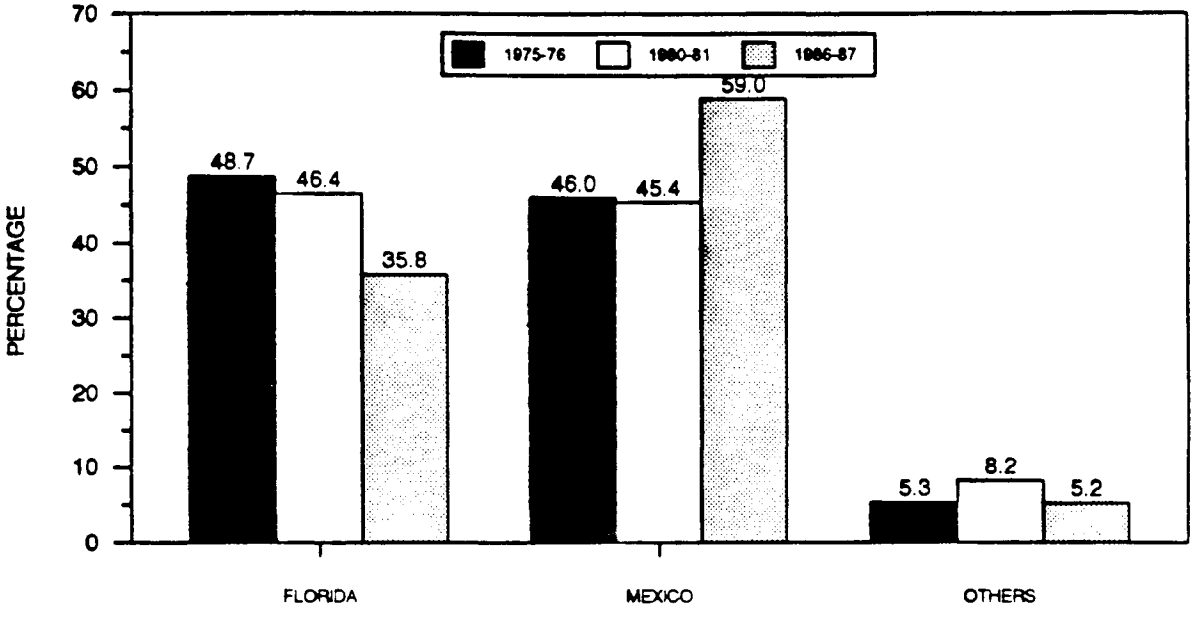


Figure 17.
U.S. MARKET SHARES FOR PEPPERS
Florida, Mexico and Others

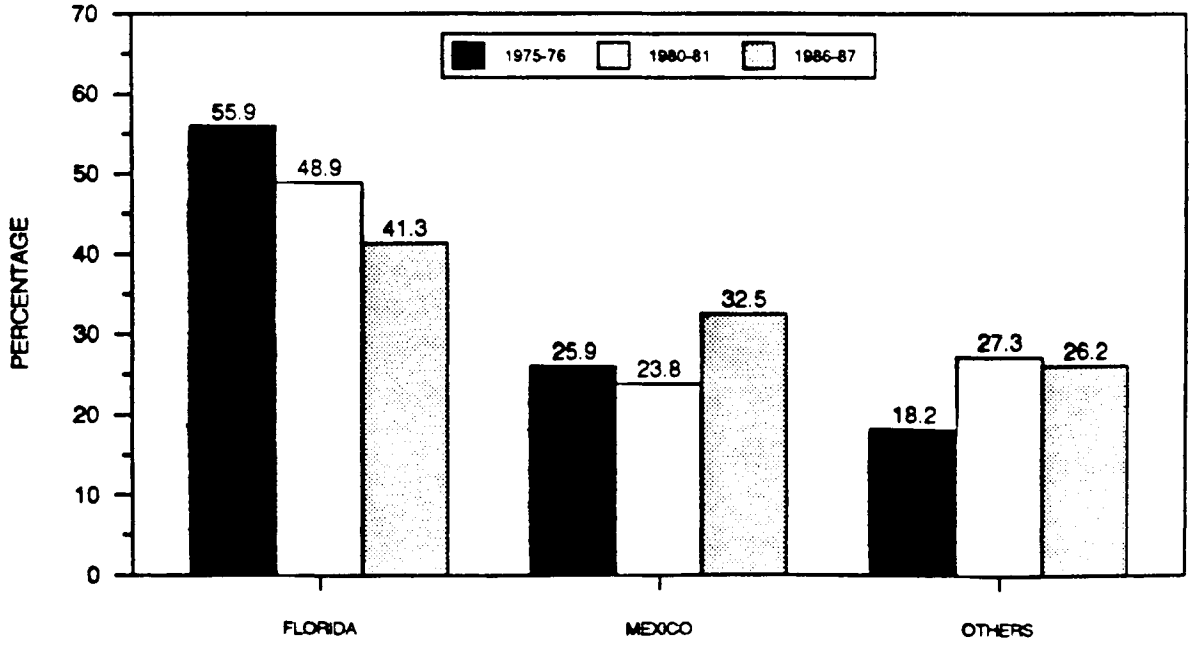


Figure 18.
U.S. MARKET SHARE FOR GREEN BEANS
Florida, Mexico and Others

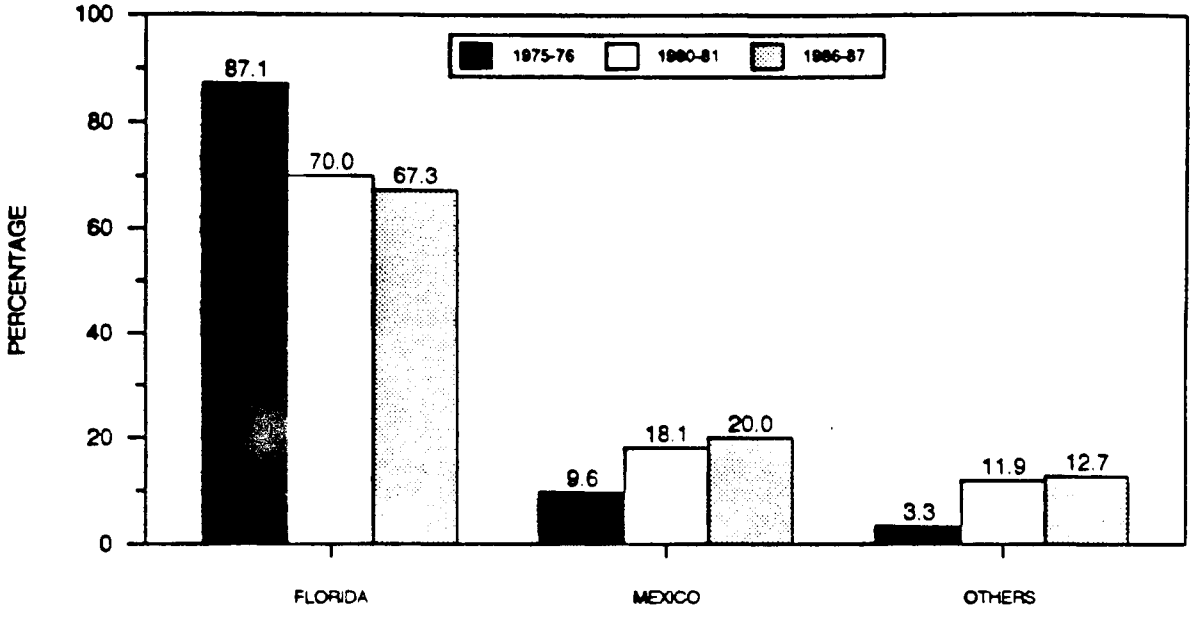


Figure 19.
U.S. MARKET SHARE FOR EGGPLANT
Florida, Mexico and Others

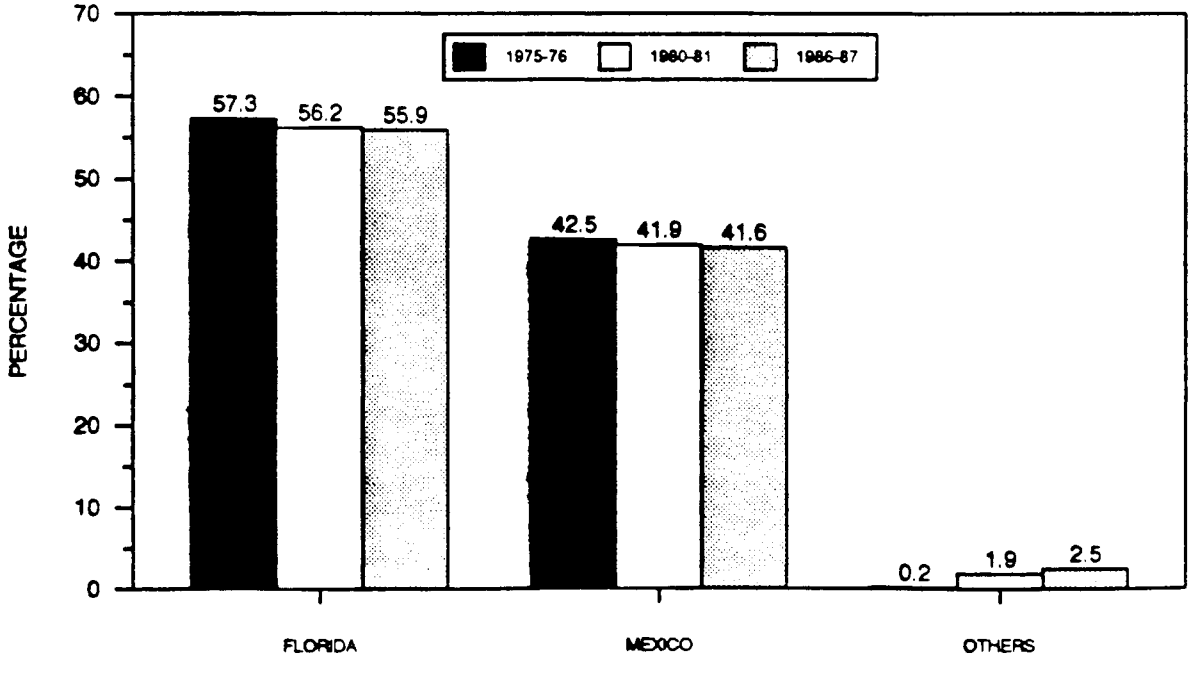


Figure 20.
U.S. MARKET SHARES FOR TOMATOES
Florida, Mexico and Others

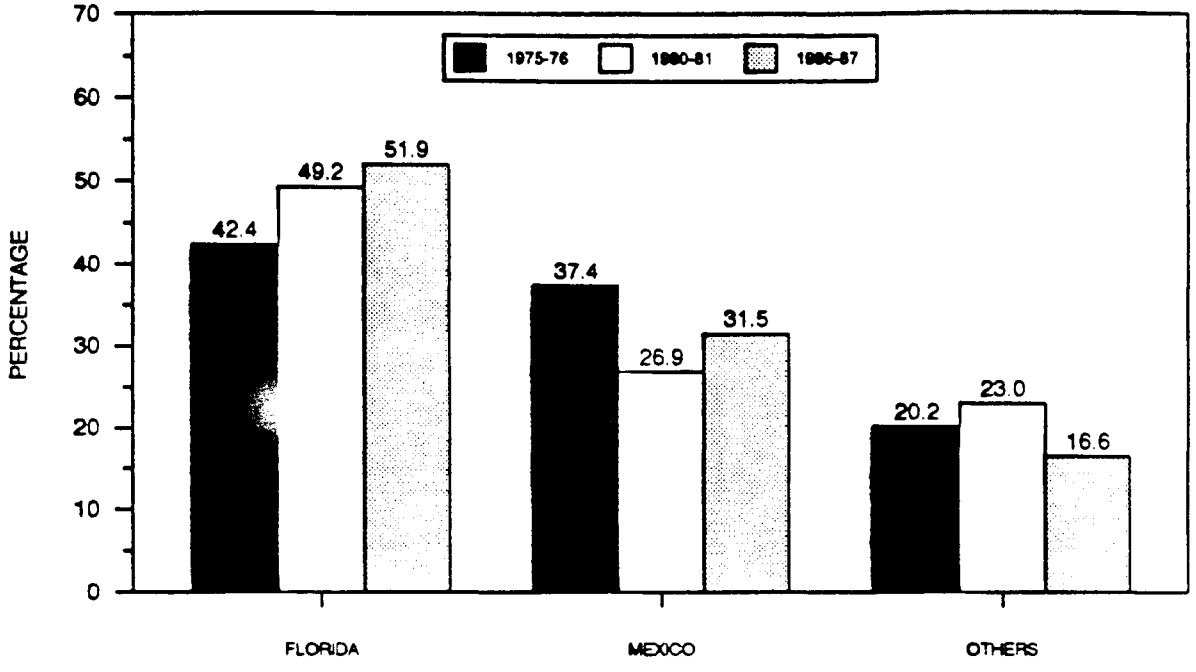
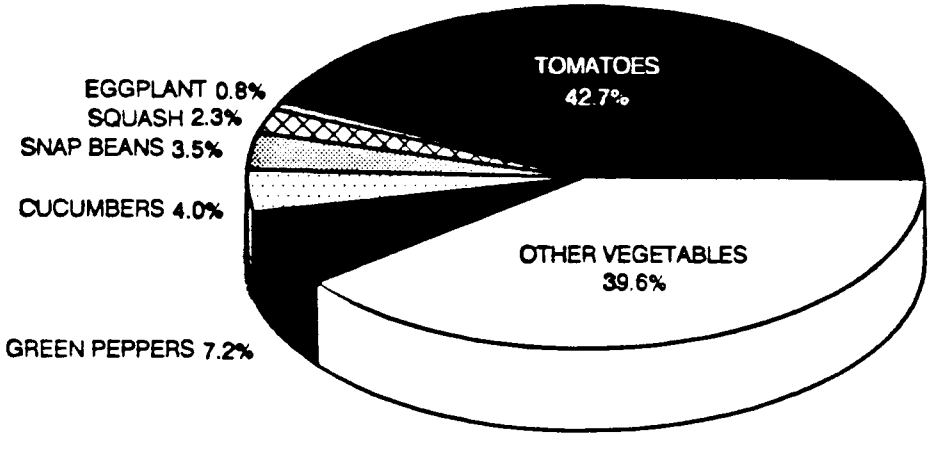


Figure 21.
FLORIDA VEGETABLE CROP PRODUCTION
1988-89 SEASON



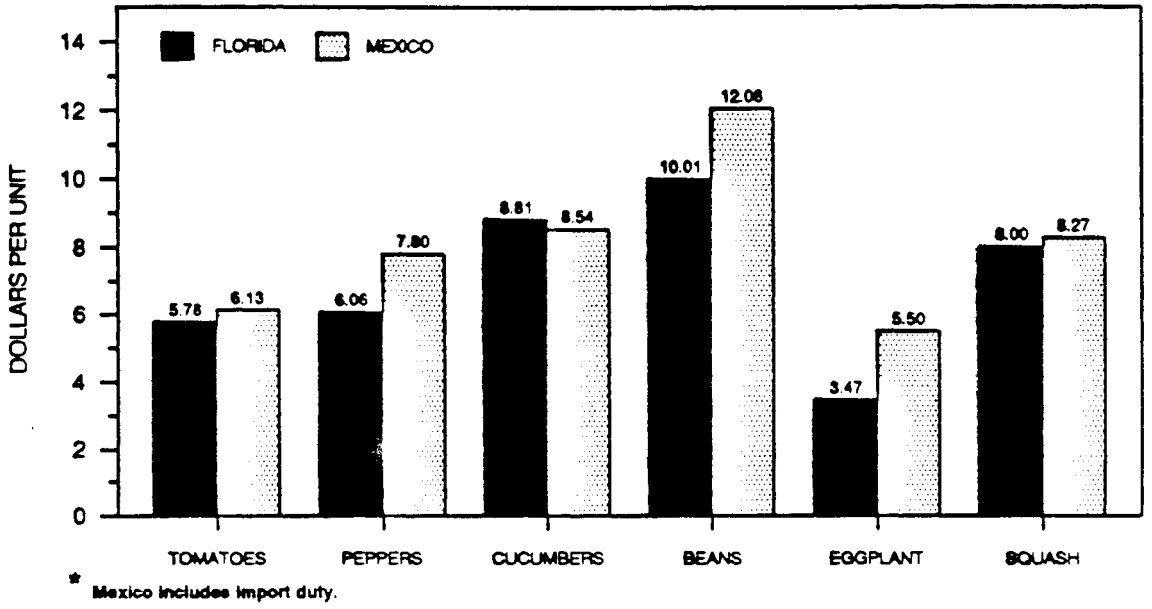
*Includes carrots, radishes, cabbage, lettuce, celery, sweet corn, watermelons, strawberries and Irish potatoes.

winter demand for these commodities has grown so much in the last fifteen years that, despite the loss in market share, overall production for all of these crops in Florida has increased during the period. Thus we would conclude, based on historical market share information, that Florida has done relatively well in maintaining its market position. This has prevailed even with a decline in the power of the tariff to regulate imports. The tariff level has been fixed at an absolute amount for many years and has eroded with inflation to the point that it only represents about 5% of the export value of tomatoes. Thus, it is possible that removal of the tariff will not have as great an impact as one might expect on the Florida vegetable industry. Of importance, however, is the notion that long-term oversight by Florida, Texas and California growers relative to imports from Mexico may have created a rational marketing approach that did exclude major dumping on the U.S. market for fear of retaliation through various trade inhibiting mechanisms. With a free trade agreement and the lapse of this informal surveillance, it is not certain what kind of supply response Mexico would have relative to the winter vegetable market.

It is important to note in terms of the winter vegetable market that Mexico does have higher production costs (Figure 22) which reflects higher transportation and marketing costs relative to U.S. producers. Mexico also receives higher prices than Florida on average (Figure 23); this is primarily because Mexico enters the highest price market of December, January and February. Of course Mexico can extend on both ends of the December-February market and absorb Florida shares.

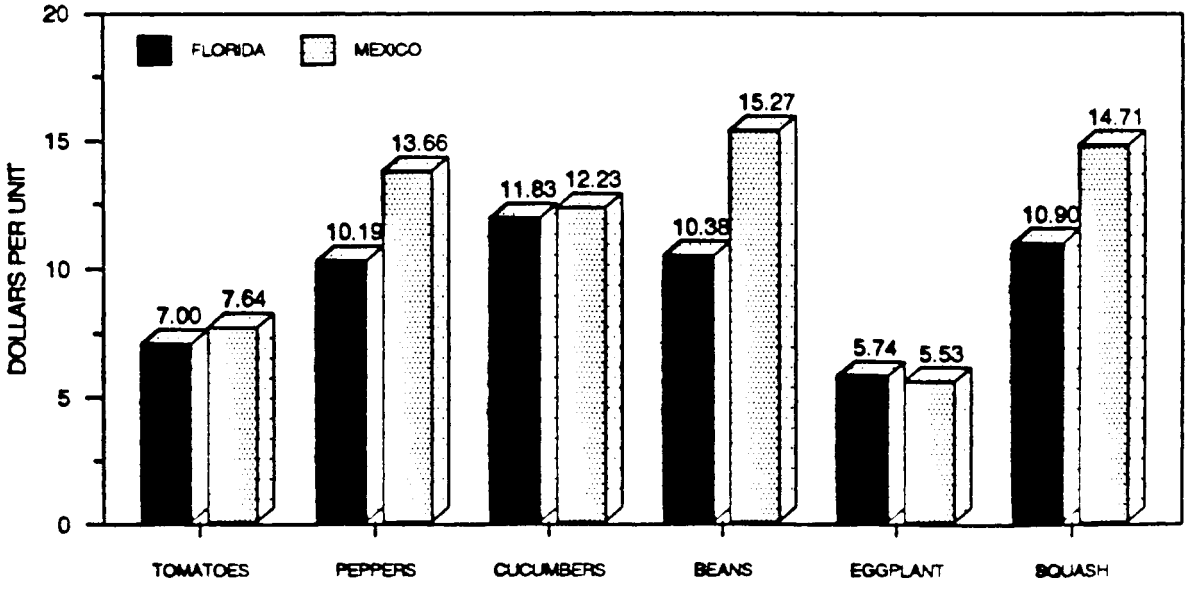
Any discussion of competitiveness in the fruit and vegetable markets would be incomplete without some mention of pesticide and food safety issues. Mexican growers are able to use pesticides on their crops whose use is prohibited in the U.S. Given that the pesticides in question were banned because of worker, environmental or consumer safety, is it sensible (and safe) to restrict their domestic use while allowing foreign growers to use them and then ship the produce into the U.S.? This represents one of the most difficult issues to resolve in the process of trade negotiations.

Figure 22.
TOTAL PRODUCTION AND MARKETING COSTS
Florida and Mexico *



* Mexico includes import duty.

Figure 23.
WEIGHTED AVERAGE F.O.B. PRICES
VARIOUS CROPS
1978-79 to 1983-84



Conclusion

We conclude by revisiting the problem which has prompted concern for new initiatives and trade agreements within the Western Hemisphere by specifically focusing on Latin America and the Caribbean. In summary, we believe that it is important to ask the questions of 'who' is impacted and 'why' they are concerned. It is also important to deal with the vested interest versus holistic response situation because it is recognized that certain groups will gain and others will lose from various agreements. We must look at them as a whole and do the best we can to benefit the most people, which generally will come with a more open market situation. Also we must expand our overall knowledge of this situation for more careful and effective policy making. Lastly, decisions must be made relative to both the immediacy of policy oriented results and targeting for longer term results. It is a now/future question of balance. Biting the bullet at present may, in fact, help us become more competitive in the future if we can withstand present and short-term adjustments.

It would seem that our approach to dealing with policy formulation in the trade area must then focus on: 1) the major constituents including not only those in the United States but those who would be our markets, and 2) the constraints which confront both groups in terms of their participation as viable economic units in this process. Of course we will have to deal with many conflicts. We must achieve consensus in that process or we are not going to be able to negotiate at the table with the industrial interests. Often industrial trade goals differ from those of agriculture and overshadow agricultural interests. In the end, we must join together across economic sectors and frontiers within the Western Hemisphere in dealing with the international trade and policy situation.

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