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UNITED STATES GENERAL ACCOUNTING OFFICE
WASHINGTON, D.C. 20548

December 16, 1981

COMMUNITY AND ECONOMIC
DEVELOPMENT DIVISION

B-205808



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The Honorable Ron de Lugo
House of Representatives

Dear Mr. de Lugo:

Subject: High Food Prices in the Virgin Islands
(CED-82-23)

Your October 13, 1981, letter expressed concern about the high cost of living in the Virgin Islands and, in particular, high food prices on the islands compared to other locations. You asked us to determine:

1. Actual food price differences between the Virgin Islands and other locations such as Washington, D.C.; southwest Florida; and perhaps Puerto Rico, and whether any such differences are increasing or decreasing in recent years.
2. Reasons for substantially higher food prices in the Virgin Islands than elsewhere if, in fact, that is what is found.

This report responds to the first part of your request. As arranged with your office, work we do under part two of the request will follow the issuance of this report and further discussion concerning the scope and timing of such work. To determine actual food price differences, we obtained and analyzed food price data from three different sources: (1) Virgin Islands Bureau of Labor Statistics, (2) U.S. Department of Agriculture, and (3) U.S. Office of Personnel Management. Each source used a different approach in assembling and analyzing its data and these differences are reflected in the results. The results generally indicate that:

- Food prices are higher in the Virgin Islands than in Washington, D.C.; southwest Florida; and Puerto Rico. In Hawaii--representing another island economy--food prices are slightly higher than in the Virgin Islands.
- The amounts of the differences depended on the data gathered and approaches used. For example, using different sets of data, Virgin Islands food prices ranged from 26 percent to 56 percent higher than food prices in Washington, D.C.

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--Food price differences between the Virgin Islands and Washington, D.C., have generally been increasing during recent years.

As indicated later, each approach has its strengths and weaknesses and each represents but one of many possible indicators. Also, none of the approaches indicate changes in food prices in relation to changes in income or any other indicator. For example, the Department of Agriculture's approach to determining food price differences showed that Virgin Islands food prices increased from 1974 to 1981 at approximately 8 percent compounded annually. If personal income on the islands grew at a rate higher than 8 percent, then although food prices are now higher than before, a household's ability to pay for that food may be better, assuming that the relationship of other expenses to food and income remained somewhat constant.

The results of our analysis and a discussion of each of the three approaches we considered are presented in the sections and enclosures which follow.

VIRGIN ISLANDS BUREAU
OF LABOR STATISTICS

As stated in your letter, your concern regarding high Virgin Islands food prices was based, in part, on a July 1981 press release of the Bureau of Labor Statistics, Virgin Islands Department of Labor, which stated that the retail prices of food commodities in the islands averaged 56 percent higher than in Washington, D.C., and 54 percent higher than in southwest Florida. The Bureau staff had found that identical quantities of 61 comparable food items would have cost Virgin Islands consumers \$104.37 while costing Washington and southwest Florida consumers only \$66.81 and \$67.88, respectively.

The Bureau's approach involved identifying and selecting 61 food items that are common to the Virgin Islands, Washington, and southwest Florida. Units of measurement, such as pound, gallon, or ounce, were specified. For Washington, average prices were obtained from two major retail chain outlets and then averaged; for the Virgin Islands, average prices were obtained from five food outlets on St. Thomas and from four outlets on St. Croix; for southwest Florida, average prices were obtained from three retail chain outlets. The Bureau's detailed survey data is shown as enclosure I to this report.

This particular analytical approach is relatively straightforward and easy to do. The major disadvantages are that (1) the particular items and food outlets that are selected can affect the analysis results and (2) the absence of weighting items can result in relatively unimportant items (e.g., items that are consumed in small amounts) disproportionately influencing the index.

U.S. DEPARTMENT OF AGRICULTURE

The second source we used in assessing food price differences between the Virgin Islands and elsewhere involved the U.S. Department of Agriculture's "thrifty food plan." This is a plan in which 11 groups of food items were defined in 1974 as being necessary to provide a nutritional diet to a family of four. The plan is used by the Department to assist in determining eligibility and coupon allotments under the Food Stamp Act of 1964, as amended. The thrifty food plan is the least costly of four family plans used by the Department of Agriculture and the U.S. Bureau of Labor Statistics to measure food price movements. Although items in the thrifty food plan do vary by location and actually reflect local diets (e.g., U.S. mainland vs. Virgin Islands vs. Puerto Rico vs. Hawaii), the items in each location's respective plan have not changed since they were first defined.

Enclosure II to this report compares the monthly costs of the thrifty food plan in the Virgin Islands with the U.S. mainland; Honolulu, Hawaii; and Puerto Rico. The enclosure covers the period from June 1974 to June 1981. Over this 7-year period, Virgin Islands food prices have been higher than the U.S. mainland. Some years the difference increased from the preceding year and other years the difference decreased. In June 1981, the monthly cost of the thrifty food plan in the Virgin Islands was 35 percent higher than in the U.S. mainland; 6 percent less costly than in Honolulu; and 36 percent higher than in Puerto Rico.

This particular approach is probably the best of the three to use to measure differences in food prices. It is an approach in which only food prices are allowed to change and, therefore, provides a valid measure of that variable. One of its weaknesses, however, is that individual food habits change over time and new food items are introduced to the market whereas items in the thrifty food plans remain unchanged.

U.S. OFFICE OF PERSONNEL MANAGEMENT

Cost of living allowance indexes maintained by the U.S. Office of Personnel Management provided us with a third source to use in assessing food price differences. These indexes are maintained so that U.S. employees living in high cost allowance areas throughout the world can be compensated for the amount their living costs exceed Washington costs. The cost of food represents only one index used to determine the overall cost-of-living allowance index for a given location.

To arrive at the food price index, the Office of Personnel Management generally obtains six prices on 69 food items in each allowance area and then compares the averages of these prices with average prices similarly obtained in Washington, D.C. The average for each item usually involves prices of the economy brand, the

bestseller, and the second bestseller obtained from two food outlets which U.S. employees commonly use.

Once the average prices are obtained for the 69 items, they go through a series of food category consolidations and, ultimately, appear as a single food cost index by location. In accomplishing this, weights are assigned to each food item and/or food category based on average household consumption expenditure patterns obtained from U.S. Bureau of Labor Statistics surveys.

Enclosure III compares 1975 through 1980 food price indexes for the Virgin Islands (St. Thomas and St. Croix), Puerto Rico, and Oahu, Hawaii, to the index for Washington which is considered to be the base 100. In 1980, St. Thomas and St. Croix indexes were 32 percent higher than the index for Washington; the Puerto Rico index was 21 percent higher; and the Oahu index was 37 percent higher. The enclosure also reflects individual indexes for three food categories: (1) meats-eggs-fats, (2) grocery staples, and (3) fruits and vegetables. For the Virgin Islands, each of the three categories was higher than Washington--particularly in grocery staples and fruits and vegetables.

A strength of this particular approach is that it includes food items which closely resemble what many U.S. employee households are actually buying in a given location. The approach thus provides us with some contrast and additional perspective to the results obtained from the Department of Agriculture's thrifty food plan, which represents a nutritionally adequate food basket for lower income households. The approach's weaknesses are that: (1) the food items in the basket may vary by location and may change over time, (2) the timing of the food price surveys varies by location, (3) the indexes obtained in the approach are not based on living costs in a given area alone, but rather on the extent to which these costs differ from similar costs in Washington, and (4) for the above reasons, comparisons other than from each location to the base Washington are not possible.

APPLYING THE VIRGIN ISLANDS BUREAU
OF LABOR STATISTICS APPROACH TO
FOOD ITEM PRICES OBTAINED FROM
THE OFFICE OF PERSONNEL MANAGEMENT

In addition to the above discussion, we decided to simply tabulate the prices of food items obtained by the Office of Personnel Management for St. Thomas and St. Croix and compare the totals to the prices of food items in Washington. This is similar to what was done by the Virgin Islands Bureau of Labor Statistics in its approach. We were curious to see if we would arrive at approximately the same results as the Bureau did (i.e., food prices in the Virgin Islands are 56 percent higher than in Washington).

The results we obtained reflected a smaller food price difference between the Virgin Islands and Washington. Enclosure IV shows a listing of 31 food items (this is actually a consolidated listing of the 69 items the Office of Personnel Management starts with). The enclosure shows that the 31 items would cost \$33.79 in Washington, \$43.87 in St. Thomas, and \$42.45 in St. Croix, or St. Thomas food prices are about 30 percent more costly than in Washington while St. Croix food prices are about 26 percent more costly.

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Although we are not planning any further distribution of this report, we will make copies available upon request to other interested parties.

Sincerely yours,



Henry Eschwege
Director

Enclosures - 4

DIFFERENCES IN PRICES OF SELECTED FOOD ITEMSVIRGIN ISLANDS VS. WASHINGTON, D.C., AND SOUTHWEST FLORIDA (note a)JULY 1981

<u>Item</u>	<u>Unit</u>	<u>Virgin Islands</u>	<u>Washington, D.C.</u>	<u>Southwest Florida</u>
Cabbage	1 lb.	\$.52	\$.15	\$.21
Bread	24 oz.	.95	.29	.78
Saltine crackers	1 lb.	1.50	.60	.82
Mustard	9 oz.	.79	.32	.43
Vanilla ice cream	1/2 gal.	2.84	1.27	1.35
Sugar	5 lbs.	3.22	1.45	1.52
Chicken	1 lb.	1.21	.56	.84
Frozen green beans	9 oz.	.91	.44	.54
Tomatoes	1 lb.	1.25	.64	.62
Bologna	1 lb.	3.29	1.73	1.55
Fruit cocktail	17 oz.	1.02	.55	.62
Milk	1/2 gal.	1.75	.95	1.23
Dried peas	1 lb.	.77	.42	.49
Grape jelly	18 oz.	1.70	.93	.90
Flour	5 lbs.	1.59	.88	1.04
Coffee	1 lb.	4.34	2.41	1.99
Eggs	1 doz.	1.38	.77	.87
Fresh orange juice	1/2 gal.	3.08	1.72	1.54
Ketchup	14 oz.	.72	.41	.55
Tuna	6-1/2 oz.	1.31	.76	.85
Pear halves	16 oz.	.97	.57	.64
Ham	1 lb.	5.24	3.08	3.45
Potatoes	5 lbs.	2.53	1.50	1.46
Macaroni	1 lb.	1.08	.65	.74
Lettuce	1 head	1.14	.69	.79
Beef liver	1 lb.	1.29	.79	1.02
Rice	3 lbs.	2.12	1.32	1.36
Oreo cookies	15 oz.	2.04	1.28	1.66
Peanut butter	18 oz.	2.95	1.89	2.04
Corn flakes	12 oz.	1.26	.81	.63
Bananas	1 lb.	.60	.39	.27
Cheese	1 lb.	3.28	2.15	2.65
Onions	2 lbs.	1.38	.92	.74
Bacon	1 lb.	2.06	1.38	1.26
Frozen orange juice	12 oz.	1.34	.90	1.10
Black pepper	4 oz.	1.40	.96	.82
Green beans	8 oz.	.48	.33	.30
Dried beans	1 lb.	.93	.64	.69
Salt	26 oz.	.36	.25	.28
Peach halves	16 oz.	.82	.57	.58
Cocoa	8 oz.	2.63	1.85	1.97

a/According to data from the Virgin Islands' Department of Labor,
Bureau of Labor Statistics.

<u>Item</u>	<u>Unit</u>	<u>Virgin Islands</u>	<u>Washington, D.C.</u>	<u>Southwest Florida</u>
Tea bags	3-3/4 oz.	\$1.92	\$1.38	\$1.51
Apples	3 lbs.	2.44	1.77	1.12
Pork chops	1 lb.	2.24	1.64	2.39
Carrots	1 lb.	.60	.44	.38
Ground beef	1 lb.	2.03	1.49	1.59
Raisins	15 oz.	2.26	1.68	1.38
Syrup	24 oz.	2.17	1.62	1.18
Hot dogs (beef)	1 lb.	2.45	1.84	1.75
Honey	8 oz.	1.17	.89	.77
Coca Cola	1 liter	1.02	.79	.74
Butter	1 lb.	2.43	1.89	1.92
Evaporated milk	13 oz.	.59	.47	.41
Beef sirloin	1 lb.	3.59	2.94	3.05
Lemons	each	.22	.19	.16
Cooking oil	16 oz.	1.11	.98	.90
Tomato sauce	8 oz.	.27	.25	.25
Margarine	1 lb.	.97	.90	.49
Stew beef	1 lb.	2.54	2.49	2.32
Kingfish	1 lb.	2.55	N/A	.97
Salt codfish	1 lb.	2.62	N/A	2.29
Sweet potatoes	1 lb.	.62	N/A	.69
Drinking water	1 gal.	1.46	N/A	.64
Oranges	5 lbs.	3.10	N/A	1.93
Shortening	3 lbs.	<u>2.85</u>	<u>2.99</u>	<u>1.74</u>
Total		b/ <u>\$104.37</u>	<u>\$66.81</u>	b/ <u>\$67.88</u>

Total Virgin Islands = \$104.37 = 1.56
Total Washington, D.C. \$ 66.81

Total Virgin Islands = \$104.37 = 1.54
Total Southwest Florida \$ 67.88

b/The following items were not included in the Virgin Islands or Southwest Florida totals: kingfish, salt codfish, sweet potatoes, and oranges. Drinking water was included in these totals.

THE MONTHLY COST OF THE THRIFTY FOOD PLAN FOR A FAMILY OF
FOUR WITH ELEMENTARY SCHOOL CHILDREN (note a)

	<u>Virgin Islands</u>		<u>U.S. 48 conterminous States</u>		<u>Honolulu, Hawaii</u>		<u>Puerto Rico</u>	
	<u>Cost (\$)</u>	<u>U.S. (%)</u>	<u>Cost (\$)</u>	<u>U.S. (%)</u>	<u>Cost (\$)</u>	<u>U.S. (%)</u>	<u>Cost (\$)</u>	<u>U.S. (%)</u>
June 1981	330.50	135	244.10	100	343.10	141	241.00	99
June 1980	276.50	124	223.80	100	304.50	136	216.60	97
June 1979	251.70	121	207.80	100	281.80	136	195.60	94
June 1978	236.20	123	191.60	100	253.00	132	183.90	96
June 1977	244.60	130	173.20	100	229.50	133	178.70	103
June 1976	211.10	127	166.00	100	221.30	133	169.70	102
June 1975	198.50	121	163.50	100	212.70	130	161.00	98
June 1974	193.70	127	152.90	100	194.60	127	150.40	98

a/According to data from the U.S. Department of Agriculture, Consumer Nutrition Center.

COMPARATIVE COST INDEXES FOR WASHINGTON, D.C.,AND OTHER SELECTED AREAS 1975-80 (note a)

	Washington, D.C.	St. Thomas	St. Croix	Puerto Rico	Oahu, Hawaii
	Percent				
1980					
Meats-eggs-fats	100	116.6	114.5	113.0	128.7
Grocery staples	100	139.9	143.0	130.0	140.6
Fruits & vegetables	100	150.9	145.7	120.4	150.4
Overall	<u>100</u>	<u>132</u>	<u>132</u>	<u>121</u>	<u>137</u>
1979					
Meat-eggs-fats	100	101.7	100.9	102.6	120.2
Grocery staples	100	130.6	132.0	110.0	126.1
Fruits & vegetables	100	140.4	142.0	121.8	150.1
Overall	<u>100</u>	<u>120</u>	<u>121</u>	<u>109</u>	<u>129</u>
1978					
Meat-eggs-fats	100	109.7	112.1	99.9	124.1
Grocery staples	100	130.2	127.9	108.0	131.1
Fruits & vegetables	100	133.5	130.3	130.7	140.0
Overall	<u>100</u>	<u>122</u>	<u>122</u>	<u>109</u>	<u>130</u>
1977					
Meat-eggs-fats	100	118.0	107.3	108.8	120.9
Grocery staples	100	132.7	134.1	113.5	132.4
Fruits & vegetables	100	144.0	129.5	123.4	145.8
Overall	<u>100</u>	<u>129</u>	<u>121</u>	<u>114</u>	<u>130</u>
1976					
Meat-eggs-fats	100	103.0	118.5	109.7	122.7
Grocery staples	100	133.8	137.8	112.0	121.9
Fruits & vegetables	100	143.5	138.9	133.4	143.6
Overall	<u>100</u>	<u>123</u>	<u>130</u>	<u>116</u>	<u>127</u>
1975					
Meat-eggs-fats	100	93.4	109.6	105.5	122.7
Grocery staples	100	134.4	134.0	117.4	125.5
Fruits & vegetables	100	121.2	124.4	111.6	108.9
Overall	<u>100</u>	<u>114</u>	<u>121</u>	<u>111</u>	<u>121</u>

a/According to data from the U.S. Office of Personnel Management,
Cost of Living Allowance Program.

COMPARISON OF 1980 FOOD PRICES OF SELECTED ITEMS
BETWEEN THE VIRGIN ISLANDS AND WASHINGTON, D.C. (note a)

		Washington, D.C.	St. Thomas	St. Croix
Beef & veal	lb.	\$ 3.77	\$ 3.66	\$ 3.68
Pork	lb.	1.92	2.24	2.13
Lamb & others	lb.	2.75	3.38	3.19
Fish	lb.	2.34	1.76	1.77
Chicken	lb.	.71	.97	.97
Bacon	lb.	1.25	2.40	2.08
Canned ham	lb.	2.50	3.67	2.92
Eggs	dz.	.59	1.07	1.18
Margarine	lb.	.83	.98	.87
Other fats	lb.	.82	.86	.99
Milk, fresh	qt.	.57	.67	.70
Milk, evap.	13 oz.	.51	.50	.52
Milk, dried	lb.	1.60	2.35	2.33
Bread	lb.	.38	.60	.69
Cake mix	lb.	.88	1.07	1.11
Flour	lb.	.23	.34	.34
Cereal	lb.	1.18	1.48	2.08
Rice, regular	lb.	.44	.70	.56
Coffee	lb.	2.98	4.36	4.05
Soft drinks	12 oz.			
	6 pack	1.46	2.14	1.95
Chocolate	1-1/2 oz.	.28	.43	.31
Sugar	lb.	.36	.45	.44
Baby food	4-1/2 oz.	.26	.26	.28
Fresh citrus	lb.	.47	1.01	.68
Canned juice	46 oz.	1.02	1.41	1.47
Fresh fruits	lb.	.72	.80	.82
Canned fruits	30 oz.	.95	1.32	1.28
Potatoes	lb.	.22	.40	.41
Fresh vegetables	lb.	.61	.72	.78
Canned vegetables	15-16 oz.	.56	1.01	.95
Frozen vegetables	10 oz.	.63	.86	.92
Total		<u>\$33.79</u>	<u>\$43.87</u>	<u>\$42.45</u>

Total St. Thomas = \$43.87 ÷ \$33.79 = 1.298
Total Washington, D.C.

Total St. Croix = \$42.45 ÷ \$33.79 = 1.256
Total Washington, D.C.

a/This enclosure uses Office of Personnel Management data.