

FISCAL PERFORMANCE AND FISCAL CAPACITY IN THE  
ORGANIZATION OF EASTERN CARIBBEAN STATES  
(OECS) MEMBER STATES\*

By

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Introduction

This paper is geared to detailing the performance and capacity of the member states of the OECS between 1974 and 1984. Within recent years the OECS member states have been caught in the changing fiscal problems that are afflicting the world economic systems. At the very moment when the member states seem to be coming to grips with managing their economies, international institutions are putting pressure on the states with the standard operating objective that they (the states) no longer require concessional financial assistance.<sup>1</sup> In this paper we will review the performance of the countries over the last ten years in terms of aggregate variables. We will also assess the per capita performance, the real performance and the performance of each state relative to the OECS as a composite unit. After we review the performance, we will review the capacity of the countries to perform. Finally, we will make some suggestions about the possible course of action the member states ought to take as they

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<sup>1</sup>For detailed analysis of this dilemma, see Jones-Hendrickson (1985).

seek to concretize some specifics in terms of fiscal strategies for economic transformation.

Aggregate Performance

In Table one we illustrate the growth rate per annum (GPA) of some aggregate variables of the member states and the OECS for the period 1974 to 1984. For the OECS region, population (POP) grew 1.62 percent per annum. St. Vincent had a high of 3.51 percent and St. Kitts-Nevis had a low of .01 percent.  $Y_c$ , Gross Domestic Product (GDP) at factor cost in current prices grew 13.76 percent for the OECS. Montserrat had a high of 15.61 percent and St. Kitts-Nevis had a low of 9.90 percent.

Current revenue ( $R_c$ ) grew 15.48 percent per annum for the OECS. St. Vincent experienced a 17.95 percent growth and St. Kitts-Nevis experienced a 7.87 percent. On the other hand, current expenditures ( $E_c$ ) grew 18.66 percent in St. Lucia and 12.49 percent in Antigua and Barbuda. These are to be compared with a 15.35 percent for the OECS as a unit.

*Commodity* — Exports (X) grew 12.46 percent for the OECS with a high of 25.60 percent in Montserrat and a low of 1.86 percent in Antigua and Barbuda. Imports (M) on the other hand, grew 14.02 percent in the OECS with Montserrat experiencing a high of 17.49 and Antigua a low of 12.36 percent. The Balance of Trade (BOT) fell 16.14 percent for the OECS. St. Kitts-Nevis had the highest fall

of 24.74 percent and St. Vincent had the lowest fall of 8.89 percent.

TABLE 1

Growth Rate Per Annum (GPA) of Some Aggregates

1974 - 1984

STATES	POP	Y <sub>C</sub>	R <sub>C</sub>	E <sub>C</sub>	X	M	BOT
Antigua	1.58	12.72	15.85	12.40	1.86	12.36	-18.03
Dominica	1.06	12.98	13.76	14.10	15.08	14.28	-13.76
Grenada	0.90	18.30	17.48	13.42	11.17	15.88	-19.40
Montserrat	0.16	15.61	15.35	14.26	25.60	17.49	-16.14
St. Kitts- Nevis	0.01	9.90	7.87	15.45	10.92	14.29	-24.74
St. Lucia	1.72	13.50	14.39	18.66	16.14	13.76	-15.08
St. Vincent	3.51	15.08	17.95	17.30	24.74	15.75	- 8.89
OECS	1.62	13.76	15.48	15.35	12.46	14.02	-16.14

SOURCE: Annual Statistical Digests of the Member States of the OECS.

In terms of relative performance, that is, the individual countries relative to the OECS as a unit, Table two illustrates the magnitude of each country's deviation from the OECS as an entity.

There we note that St. Kitts-Nevis' population growth over 1974-1984 was 99 percent below that of the OECS as a unit, and that St. Vincent's population growth was 117 percent above the OECS' growth rate.

St. Kitts-Nevis GDP growth per annum was 28 percent below the OECS' level while Grenada was 33 percent above the OECS' level.

St. Kitts-Nevis' current revenue was 49 percent below the effort of the OECS and St. Vincent's was 16 percent above the OECS level.

Current expenditure in St. Lucia was 22 percent above the OECS'

TABLE 2

States Versus OECS: Relative Performance

STATES	POP	$Y_c$	$R_c$	$E_c$	X	M	BOT
OECS	100	100	100	100	100	100	100
Antigua	98	91	102	81	9	88	112
Dominica	65	94	89	92	121	102	85
Grenada	56	133	113	87	90	113	120
Montserrat	10	113	99	93	205	125	100
St. Kitts-Nevis	1	72	51	101	88	102	150
St. Lucia	106	98	93	122	130	98	93
St. Vincent	217	110	116	113	199	109	55

SOURCE: Derived from Table 1

growth. In Antigua and Barbuda current expenditure was 19 percent below that of the OECS.

In the foreign trade sector, Antigua and Barbuda was 91 percent below the OECS' growth in exports whereas Montserrat was 105 percent above the OECS' level. Imports in Antigua and Barbuda was 12 percent below the growth for the OECS and 25 percent above the OECS' level for Montserrat. Finally, St. Vincent's balance of trade negative performance was 45 below the OECS' level whereas St. Kitts-Nevis' was 50 percent above the OECS' level.

#### Per Capita Performance

In table three we illustrate the GDP per capita over the period 1974 - 1984. Antigua and Barbuda had the highest in 1974 but since 1975, Montserrat has taken the top honor. Montserrat's per capita GDP was EC\$6,656 in 1984 or US\$2,465. St. Vincent on the other hand had a per capital GDP of EC\$1,632 or US\$604. The highest nominal GDP growth rate per annum was 14.83 percent in Montserrat. The lowest was 9.9 percent in St. Kitts-Nevis. In real terms,  $GPA^*$ , where  $GPA^*$  equals  $GPA$  of the GDP minus  $GPA$  of the CPI at 1974 equal 100, Grenada had 7.68 percent, the highest real growth rate in GDP per capita. St. Kitts-Nevis had the lowest in minus 3.11 percent per annum. In 1974 the OECS as a unit had a per capita GDP OF EC\$899. This grew to EC\$2,805 or

TABLE 3  
GDP Per Capita (EC\$)

YEAR	ANTI-GUA	DOMI-NICA	GRE-NADA	MONT-SERRAT	ST. KITTS-NEVIS	ST. LUCIA	ST. VINCENT	OECS
1974	1600	740	616	1591	1207	879	608	899
1975	1604	796	777	1970	1584	930	588	999
1976	1691	892	907	2108	1558	1156	657	1099
1977	2120	1058	1002	2401	1806	1314	702	1254
1978	2360	1306	1216	2839	1828	1618	872	1474
1979	2734	1287	1390	3392	2066	2038	992	1696
1980	3192	1732	2232	4962	2406	2162	1103	2099
1981	3545	1999	2568	5511	2822	2367	1356	2392
1982	3771	2031	2756	5857	3064	2519	1471	2545
1983	3986	2130	2947	6403	3004	2511	1500	2631
1984	4527	2244	3002	6656	3087	2647	1632	2805
GPA	11.17	11.69	16.95	14.83	9.9	11.69	10.41	12.20
GPA*	1.47	3.50	7.68	3.32	-3.11	2.69	1.97	Ave=2.50

SOURCE: Derived by us. For original data, see Table 1

US\$1,039 in 1984 for a 12.20 percent growth per annum.

Table four shows that in 1974 Montserrat had the highest current revenue per capita of EC\$416. Except for 1978 when St. Kitts-Nevis had that honor, Montserrat has maintained that position. The lowest per capita current revenue was in Grenada's with EC\$139 in 1974. In 1984 Montserrat had the highest per capita current revenue of EC\$1,711 or US\$634. The highest growth rate was recorded in Grenada, 16.37 percent per annum. St. Kitts-Nevis had the lowest, 12.91 percent per annum. The highest growth rate per annum was 7.10 percent in Grenada. The lowest was .01 percent in St. Kitts-Nevis. When the OECS is taken as a unit, the current revenue per capita was EC\$241 in 1974 and EC\$864 in 1984 or about US\$320. The rate of growth per annum for the OECS was 13.76 percent. The highest real growth was 7.10 percent in Grenada. The lowest was -.01 percent in St. Kitts-Nevis.

From the current expenditure per capita Montserrat had the highest in 1974 with \$516 while St. Vincent was at \$208. In 1984 Montserrat retained its top level with EC\$1,927 or US\$714 while Grenada was at the bottom with EC\$674 or US\$250. The highest growth rate was experienced by St. Lucia with 16.66 percent while Dominica had the lowest with 10.77 percent. The overall OECS current expenditure per capita went from \$208 in 1974 to \$724 in

TABLE 4  
Current Revenue Per Capita (EC\$)

YEAR	ANTI-GUA	DOMI-NICA	GRE-NADA	MONT-SERRAT	ST. KITTS-NEVIS	ST. LUCIA	ST. VINCENT	OECS
1974	367	224	139	416	291	265	200	899
1975	450	254	178	432	320	257	207	266
1976	399	301	274	618	387	297	249	312
1977	388	393	319	607	523	412	191	354
1978	481	425	417	672	681	443	137	398
1979	611	734	516	939	764	586	269	551
1980	756	605	545	1265	991	669	339	614
1981	855	758	591	1551	1047	733	322	677
1982	1100	733	618	1698	885	809	417	738
1983	1218	727	625	1753	933	829	686	823
1984	1356	733	633	1711	982	856	738	864
GPA	13.96	12.59	16.37	15.19	12.91	12.44	13.95	13.46
GPA*	4.26	4.40	7.1	3.68	-0.01	3.44	5.51	Ave=4.05

SOURCE: For original data, see table 1.

TABLE 5  
Expenditures Per Capita (EC\$)

YEAR	ANTI- GUA	DOMI- NICA	GRE- NADA	MONT- SERRAT	ST. KITTS- NEVIS	ST. LUCIA	ST. VINCENT	OECS
1974	407	234	208	516	342	231	208	264
1975	427	257	228	609	512	279	232	305
1976	476	314	345	675	584	284	249	354
1977	527	440	298	673	481	357	217	367
1978	558	404	396	775	587	369	222	399
1979	595	631	525	971	667	515	303	520
1980	719	754	551	1165	863	650	322	612
1981	933	825	602	1354	1101	731	362	708
1982	1055	771	618	1539	1089	913	472	785
1983	1096	761	643	1773	1249	995	730	885
1984	1123	786	674	1929	1437	1079	724	926
GPA	10.77	12.88	12.48	14.09	15.44	16.66	13.28	13.50
GPA*	1.07	4.69	3.21	2.58	2.43	7.66	4.84	Ave=3.78

SOURCE: See Table 3.

1984 for 13.38 percent. The 1984 figure is US\$268 per capita. St. Lucia had the highest real growth in per capita current expenditure of 7.66 percent. Antigua and Barbuda had the lowest real of 1.07 percent.

Exports per capita were \$953 for Antigua and Barbuda in 1974 for the high and \$84 for Montserrat for the low. The OECS as a unit had \$346. By 1984, St. Kitts-nevis had the high of EC\$1,410 or US\$522 and Grenada had the low of EC\$479 or US\$177. For the OECS, the value was EC\$950 or US\$352. Montserrat had the highest growth rate per annum of 25.31. Antigua and Barbuda had the lowest of .12 percent per annum. The OECS as a unit was 10.66 percent per annum.

Imports per capita were \$2,061 for the high in Antigua and Barbuda in 1974 and \$359 for the low in Grenada. By 1984 Antigua and Barbuda still had the high. It was now EC\$5,649 or US\$2,092. St. Vincent had the low of EC\$1,799 or US\$666. Montserrat experienced the highest imports per capita growth rate per annum of 18.03 percent. Antigua and Barbuda had the lowest of 10.66 percent. From \$809 per capita to \$2,640 per capita between 1974-1984, the OECS as a unit experienced a 12.46 percent growth rate per annum. The OECS is now importing \$1,690 per capita more than it is exporting or to put it another way, the region is currently

TABLE 6

Exports Per Capita (EC\$)

YEAR	ANTI-GUA	DOMI-NICA	GRE-NADA	MONT-SERRAT	ST. KITTS-NEVIS	ST. LUCIA	ST. VINCENT	OECS
1974	953	275	183	84	632	298	154	346
1975	850	279	255	42	934	287	159	386
1976	864	355	327	96	1077	453	226	460
1977	879	405	356	143	766	478	233	479
1978	893	529	420	336	1104	579	376	571
1979	905	309	525	186	1052	727	330	579
1980	943	317	435	276	1487	1032	344	672
1981	1213	666	485	514	1466	919	523	790
1982	825	823	455	597	1129	906	686	760
1983	888	899	438	766	1262	1000	842	844
1984	964	995	479	803	1410	1129	998	950
GPA	12	13.76	10.15	25.31	8.39	14.29	20.50	10.66

SOURCE: See Table 3.

TABLE 7  
Imports Per Capita (EC\$)

YEAR	ANTI-GUA	DOMI-NICA	GRE-NADA	MONT-SERRAT	ST. KITTS-NEVIS	ST. LUCIA	ST. VINCENT	OECS
1974	2061	511	359	1218	830	822	549	809
1975	2058	501	501	1409	1063	898	523	867
1976	2098	610	634	1785	1175	1106	574	989
1977	2138	737	785	1629	1370	1387	712	1134
1978	2177	948	883	2399	1524	1902	835	1351
1979	2276	730	1119	2881	2067	2307	1051	1557
1980	3105	1551	1255	3837	2764	2778	1274	2046
1981	4253	1726	1384	4391	2882	2840	1266	2291
1982	4418	1598	1386	4674	2669	2570	1384	2241
1983	4499	1795	1548	5473	3099	2946	1578	2520
1984	5649	2016	1812	6414	3598	3376	1799	2640
GPA	10.66	14.55	17.49	18.03	15.88	15.35	12.72	12.46

SOURCE: See Table 3.

importing 177 percent more than it is exporting on a per capita basis.

Finally, we derived the Consumer Price Index (CPI) for the various member states with 1974 as the base year. Given that the items which make up the CPI have different weights in the member states, it is not possible to have a composite CPI for the OECS. Nevertheless, it is still useful to get a picture of the movement of prices in the individual member states. The trends are observable from table eight.

The growth rate of inflation was a high of 13.01 percent in St. Kitts-Nevis and a low of 8.19 percent in Dominica. In 1984, the value of the dollar, based on 1974, was 40 cents in Antigua and Barbuda; 45 cents in Dominica; 41 cents in Grenada; 34 cents in Montserrat; 29 cents in St. Kitts-Nevis; 42 cents in St. Lucia; 45 cents in St. Vincent. In all cases, therefore, the real purchasing power of the dollar in 1984 vis-a-vis 1974 was less than one half.

#### Growth Relatives of Per Capita Variables

In table nine we illustrate the growth relatives of per capita GDP ( $Y_p$ ); Current revenues per capita ( $R_p$ ); current expenditures per capita ( $E_p$ ); exports per capita ( $X_p$ ) and imports per capita ( $M_p$ ). These data are the data for each state relative to the OECS.

TABLE 8

Consumer Price Index (1974 = 100)

YEAR	ANTI-GUA	DOMI-NICA	GRE-NADA	MONT-SERRAT	ST. KITTS NEVIS	ST. LUCIA	ST. VINCENT
1974	100.00	100.00	100.00	100.00	100.00	100.00	100.00
1975	114.95	108.17	104.12	125.40	124.02	130.57	129.62
1976	122.20	123.43	106.42	136.20	140.31	143.18	144.23
1977	139.01	138.06	108.76	158.60	165.23	155.93	158.95
1978	147.57	142.93	111.18	171.50	175.81	172.81	172.37
1979	171.41	166.04	113.70	200.70	205.71	189.17	199.25
1980	202.07	187.24	133.05	217.10	240.87	197.89	206.71
1981	227.88	196.34	181.80	234.80	267.75	206.99	214.17
1982	238.63	205.76	194.21	254.00	283.59	216.50	221.62
1983	242.72	210.71	237.32	274.80	310.47	226.44	223.91
1984	252.21	220.00	242.59	297.20	340.20	236.85	224.65
GPA	9.70	8.19	9.27	11.51	13.01	9.00	8.44

SOURCE: Derived from data for Individual Countries and our estimates based on 1974 = 100.

TABLE 9  
Growth Relatives of Per Capita Variables  
(1974 - 1984) G.P.A.

COUNTRIES	$Y_p$	$R_p$	$R_p$	$X_p$	$M_p$
OECS	100	100	100	100	100
Antigua	92	101	80	1	86
Dominica	96	91	95	129	117
Grenada	139	119	92	95	140
Montserrat	122	110	103	237	122
St. Kitts-Nevis	81	94	114	79	127
St. Lucia	96	90	123	134	123
St. Vincent	85	102	192	101	98

as a unit. The OECS' growth rate over the period 1974-1984 is set equal to 100.

We note that Grenada's GDP per capita performed 39 percent better than the OECS and that St. Kitts-Nevis was 19 percent worse than the OECS as a unit. In current revenues per capita, Grenada was 19 percent above the OECS while St. Lucia was 10 percent below the OECS. Current expenditures per capita were 23 percent higher than the OECS growth in the use of St. Lucia and 10 percent lower than the OECS in Antigua and Barbuda.

In the exports per capita, Antigua and Barbuda was 99 percent lower than the OECS' growth while Montserrat was 137 percent above that of the OECS. Montserrat was 45 percent above the OECS' growth in imports per capita while Antigua was 14 percent below the growth of the OECS.

In terms of the performance of the real relatives we note, in table ten, that St. Lucia's real expenditure was 103 percent above the growth experienced by the OECS over the period of analysis. Antigua and Barbuda, on the other hand, was 72 percent below the base growth of the OECS. Grenada was 18 percent above the growth in the OECS as far as the real revenues were concerned. Meanwhile, St. Lucia was 11 percent below the real revenue growth in the OECS. Finally, Grenada's real per capita GDP was 207 percent above the

TABLE 10.

Performance of Real Relatives Per Capita

1974 - 1984

COUNTRIES	R* P	R* P	Y* P
OECS	100	100	100
Antigua	28	100	59
Dominica	124	90	140
Grenada	85	118	307
Montserrat	68	109	133
St. Kitts-Nevis	64	93	-124
St. Lucia	203	89	108
St. Vincent	128	100	79

SOURCE: See Table 3.

growth of the OECS and St. Kitts was minus 124 percent below the rate experienced in the OECS.

The annual growth and the trend in the per capita variables can give us some insight into the smooth/erratic nature of the growth in the variables over the period 1974-1984. In table 11, we show the OECS data and the annual growth (year-to-year) in the data for GDP per capita ( $Y_p$ ); current revenues per capita ( $R_p$ ); current expenditures per capita ( $E_p$ ); exports per capita ( $X_p$ ) imports per capita ( $X_p$ ) and population.

The highest annual growth rate in the per capita GDP was in the year 1979-1980 and the lowest was in 1982-1983. The figures were 23.76 percent and 3.38 percent respectively. For current revenues per capita, 1978-1979 had a record 38.48 percent annual growth compared with a low of 8.63 percent in 1983-1984. In a similar fashion, we note the close link to expenditure per capita where in 1978-1979 there was a 30.33 percent annual growth and in 1983-1984 there was a 4.63 percent annual growth.

The highest annual growth of exports per capita was 19.17 percent in 1975-1976 with a very low minus 3.80 percent in 1981-1982. Imports per capita had the highest annual growth rate in 1979-1980 of 31.41 percent and the corresponding low was -2.18 percent in 1981-1982. Finally, population highest annual growth

TABLE 11  
Annual Growth Rates of Per Capita Variables  
and Population for OECS as a Unit, 1974-1984

YEAR	Y <sub>p</sub>	R <sub>p</sub>	E <sub>p</sub>	X <sub>p</sub>	M <sub>p</sub>	POP
1974 - 75	11.12	10.37	15.53	11.56	7.16	2.45
1975 - 76	10.01	17.29	16.07	19.17	14.07	1.74
1976 - 77	14.10	13.46	3.67	4.13	14.66	1.07
1977 - 78	17.54	12.43	8.72	19.21	19.14	1.16
1978 - 79	15.06	38.48	30.33	1.40	15.24	1.13
1979 - 80	23.76	11.43	17.69	16.06	31.41	.84
1980 - 81	13.96	10.26	15.69	17.56	11.97	-.06
1981 - 82	6.40	9.01	10.88	-3.80	-2.18	2.24
1982 - 83	3.38	11.52	12.74	11.05	12.45	3.16
1983 - 84	6.61	8.63	4.63	12.56	4.76	2.58
1974- 1984	12.20	13.76	13.50	10.66	12.46	1.62

SOURCE: Derived by us. For original data, see Table 3.

rate was 2.58 percent in 1983-1984 with a low of -.06 in 1980-1981. Population is given to illustrate the comparative change in population relative to the per capita variables. In table 12 we illustrate the trends in the per capita variables and population. All of the variables are trending upwards. The growth rates are above 10 percent per annum. Current revenue per capita was 13.76 percent and exports per capita were 10.66 percent per annum. The derived changes in the per capita variables (that is the changes in the trend) indicate that GDP per capita, current revenues per capita and exports per capita increased at an increasing rate. On the other hand, expenditures per capita and imports per capita grew at a constant rate.

In tables 13 and 14 we show the correlations and the elasticities for the per capita variables using annual rates of growth. There was only one significant correlation. The correlation between the annual growth of per capita GDP and the annual growth of imports per capita was significantly positively correlated ( $r = .72$ ) at the 10 percent level of significance.

All of the elasticities were inelastic. The two high elasticities were annual growths in per capita GDP and imports per capita: a ten percent change in the annual growth of GDP per capita brought about a .91 percent response in the annual growth of imports per

TABLE 12  
Trends in Per Capita Variables for OECS  
as a Unit, 1974 - 1984

YEAR	Y <sub>p</sub>	R <sub>p</sub>	E <sub>p</sub>	X <sub>p</sub>	M <sub>p</sub>	POP
1974	100	100	100	100	100	100
1975	111	110	116	112	107	102
1976	122	129	134	133	122	104
1977	139	147	139	138	140	105
1978	164	165	151	165	167	107
1979	189	229	197	167	192	108
1980	223	255	232	194	253	109
1981	266	281	268	228	283	109
1982	283	306	297	220	277	111
1983	293	341	335	244	311	115
1984	315	359	351	275	326	118
GPA	12.20	13.76	13.50	10.66	12.86	1.62

SOURCE: Derived by us. For original data, see Table 3.

per capita. The value for the annual growth in current revenues per capita and exports was .66 percent for every ten percent charge. A ten percent increase in the annual growth of current revenues per capita brought a .66 percent decrease in the annual growth of exports per capita.

In tables 15 and 16 we present the correlations and the elasticities for the trends in the per capita variables. Here we note that all of the correlations are significant at the five percent level of significance. All of the elasticities are inelastic. Whereas the variables had strong bivariate correlations, the responsiveness of one engendering reaction in the other was low. We must caution however, that these are correlations and correlations in trends, for that matter. Nevertheless the magnitudes of the correlation coefficients cannot be dismissed as mere causal empiricism.

#### Revenue Effort

In tables 17 and 18 we turn our attention to the revenue effort of the member states and the comparative view of the states relative to the OECS for three benchmark years, 1974, 1979 and 1984. These years were selected because 1974 is the starting year, 1979 is the year when much of the OECS was affected by climatic instabilities and 1984 is the end of our period of analysis.

TABLE 15

Correlations (r) for Trends in Per Capita Variables\*

	Y P	R P	E P	X P	M P
Y P	1.000				
R P	.983	1.000			
E P	.992	.945	1.000		
X P	.954	.972	.962	1.000	
M P	.986	.981	.963	.975	1.000

\* All correlations are significant at 5 percent.

TABLE 16

Elasticities for Trends in Per Capita Variables

	$Y_P$	$R_P$	$E_P$	$X_P$	$M_P$
$Y_P$	1.000				
$R_P$	.010	1.000			
$E_P$	.010	.004	1.000		
$X_P$	.003	.003	.004	1.000	
$M_P$	.005	.005	.005	.008	1.000

The revenue effort is used here in an analogous fashion to tax effort  $\frac{T}{Y}$ . It is really the ratio of current revenues to Gross Domestic Product in our case. Over time, we observed that the revenue effort growth rate per annum was highest in St. Kitts-Nevis and St. Vincent with a growth rate of 3.04 percent per annum. Grenada had the lowest of -.93 percent per annum. From a cross-section point of view, with a year held constant, we note that in 1974, Antigua and Barbuda had the lowest revenue effort, with 23 percent while St. Vincent had the highest with 33 percent. By 1975 the low position was taken by St. Kitts-Nevis with 20 percent. St. Vincent maintained its number one spot, this time with 38 percent. In 1976, Antigua and Barbuda and St. Kitts-Nevis were at the bottom with 24 percent while St. Vincent moved to a high for 1976 of 38 percent.

For 1977, Dominica maintained the top position with 37 percent whereas Montserrat<sup>was</sup> at the lowest end of the spectrum with 25 percent. This movement back and forth among the islands shifted to St. Kitts-Nevis for 1978 with 37 percent, the high, and 16 percent in St. Vincent for the low.

In 1979, Dominica had a clear high of 57 percent. This seems inconsistent given impact of hurricanes on Dominica in 1979. But we will discuss more about this under data in the last section.

For 1979, Antigua and Barbuda had the lowest revenue effort of 23 percent.

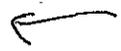
During the years 1980 through 1984 the high revenue efforts were held by St. Kitts-Nevis (41 percent), St. Kitts-Nevis (37 percent), St. Vincent (40 percent), St. Vincent (46 percent), and St. Vincent (45 percent) respectively. On the other hand the low was held by Antigua and Barbuda and Grenada, Grenada, Grenada, Grenada, and Grenada again. From 1981 to 1984 Grenada held the lowest revenue effort position. The corresponding low figures for those years were 24 percent, 23 percent, 22 percent, and 21 percent, respectively.

For the OECS as a unit, the revenue effort grew from 27 percent in 1974 to 31 percent in 1984 for a 1.39 percent growth rate per annum. In the years 1974-1975, Dominica, St. Lucia, and St. Vincent had revenue efforts above the OECS' level. In 1976, Antigua, St. Kitts-Nevis and St. Lucia were below the collective effort of the OECS. During 1977-1978 Antigua (again), Montserrat and St. Vincent were below the effort of the OECS. By 1979, however, only three states were above the OECS' effort. The states were Dominica, Grenada, and St. Kitts-Nevis. A shift was observed in 1980 when Dominica, St. Kitts-Nevis, St. Lucia and St. Vincent were the states above the effort of the OECS.

TABLE 17

Revenue Effort (R/Y) of Member States  
and OECS, 1974 - 1984

YEAR	ANTI-GUA	DOMINICA	GRE-NADA	MONT-SERRAT	ST. KITTS NEVIS	ST. LUCIA	ST. VINCENT	OECS
1974	.23	.30	.23	.26	.30	.30	.33	.27
1975	.26	.32	.23	.22	.20	.28	.35	.27
1976	.24	.34	.30	.29	.24	.26	.38	.28
1977	.18	.37	.32	.25	.29	.31	.27	.28
1978	.20	.33	.34	.24	.37	.30	.16	.27
1979	.23	.57	.37	.28	.37	.29	.27	.32
1980	.24	.35	.24	.25	.41	.31	.31	.29
1981	.24	.38	.23	.28	.37	.31	.24	.28
1982	.29	.36	.22	.29	.29	.32	.40	.29
1983	.31	.34	.21	.27	.31	.33	.46	.31
1984	.30	.33	.21	.26	.32	.32	.45	.31
GPA	2.56	.93	.93	.00	3.00	.69	3.04	1.39



SOURCE: Derived from Tables 3 and 4.

Between 1981-1984 Dominica continued to maintain its effort above the level of the OECS. Grenada dropped below. Montserrat maintained parity in 1981 and 1982 and fell four and five points below that level of the OECS in 1983 and 1984. St. Kitts-Nevis was above in 1981 and 1984 and maintained parity in 1982 and 1983. St. Lucia was above the OECS in the years 1981-1984. St. Lucia, meanwhile, was above for the years 1982-1984 and below in 1981.

#### Revenue Relatives

In table 18 we note the magnitude of the revenue effort relative to the OECS' effort for three benchmark years, 1974, 1979, 1984. There we note that Antigua was 15 percent, 29 percent and three percent below the OECS' effort for the three years. Dominica was 11 percent, 78 percent and six percent above for the three years, Grenada was 15 percent and 32 percent below in 1974 and 1984 and 15 percent above in 1979. Montserrat, meanwhile, was four percent, 12 percent and 16 percent below for the three years. In 1974 St. Kitts-nevis was 11 percent below, but in 1979 and 1984, the state was 16 percent and three percent above, respectively. St. Lucia was 11 percent and three percent above in 1974 and 1984 and nine percent below in 1979. Finally, St. Vincent was 22 percent above in 1974, 45 percent above in 1984 and 16 percent below in 1979.

TABLE 18

GPA for R/Y for OECS 100 Versus Member States

YEAR	Revenue Effort Relatives for Member States and OECS, 1974, 1979, 1984							
	OECS	ANTI- GUA	DOMI- NICA	GRE- NADA	MONT- SERRAT	ST. KITTS NEVIS	ST. LUCIA	ST. VINCENT
1974	100	85	111	85	96	89	111	122
1979	100	71	178	115	88	116	81	84
1984	100	97	106	68	84	103	103	145
GPA 1974-84	100	184	67	-67	0	219	50	219

SOURCE: Derived from Table 17.

If the OECS' growth rate per annum over the period 1974-1984 is set equal to 100, we note that Antigua's growth rate per annum improved 84 percent; Dominica's was 67 percent; Grenada was minus 67 percent. Montserrat was zero percent; St. Kitts-Nevis was 119 percent; St. Lucia was 50 percent and St. Vincent was 119 percent.

Expenditure Performance

We portray the expenditure performance (E/Y) in table 19. There we note that Antigua and Barbuda, St. Kitts-Nevis and St. Lucia were below the expenditure performance of the OECS in 1974. Antigua and Barbuda was joined by Grenada in 1975 as the two states below. By 1975, Antigua and Barbuda's new below-partner was St. Lucia. In 1978 St. Kitts-Nevis, and St. Lucia joined Antigua to repeat their 1974 below performance.

Antigua maintained its below the OECS' level in every year from 1974 through 1984. Dominica was substantially above in all years. Grenada was above in years 1974; 1976-1979 and it has been below since 1980. Montserrat, meanwhile, was above in the years 1974-1975; below in 1977 and from 1979-1984. It was equal in 1978.

In the Saints, we note that St. Kitts-Nevis above in nine out of eleven years, and below in 1974 and 1977. St. Lucia was above in five years, that is since 1980. It was below in five years 1974, and 1976-1979. It was equal to the OECS in 1975. Finally,

TABLE 13  
Expenditure to GDP Ratios 1974-1984

YEAR	ANTI-GUA	DOMI-NICA	GRE-NADA	MONT-SERRAT	ST.KITTS NEVIS	ST. LUCIA	ST. VINCENT	OECS
1974	.25	.32	.34	.32	.28	.26	.34	.29
1975	.25	.32	.29	.31	.32	.30	.39	.30
1976	.28	.35	.38	.32	.37	.25	.38	.32
1977	.25	.42	.30	.28	.27	.27	.31	.29
1978	.24	.31	.33	.27	.32	.23	.25	.27
1979	.22	.49	.38	.29	.32	.25	.31	.31
1980	.23	.44	.25	.24	.36	.30	.29	.29
1981	.26	.41	.23	.25	.39	.31	.41	.30
1982	.28	.38	.22	.26	.36	.36	.39	.31
1983	.27	.36	.22	.28	.42	.40	.49	.34
1984	.25	.35	.22	.29	.47	.41	.44	.33
GPA	.00	.69	-4.48	-1.16	5.20	5.90	2.57	1.39

SOURCE: Derived from Tables 3 and 5.

St. Vincent was above in nine years, below 1978 and equal to the OECS in 1980.

The growth rate per annum (GPA) was from zero percent for Antigua and Barbuda, to 5.90 percent for St. Lucia. Grenada and Montserrat had negative growth rate per annum of -4.48 percent and -1.16 percent, respectively. Overall, the OECS had a 1.39 percent growth per annum.

#### Expenditure Performance Relatives

Table 20 shows the magnitudes of the expenditure performance relative to the OECS as a base. For the three benchmark years, we note that Antigua and Barbuda performed below in all three years by percentages of 14 percent, 29 percent and 24 percent respectively. Dominica was above in all three years by 10 percent, 58 percent and six percent, respectively. Grenada was 17 percent and 23 percent above in 1974 and 1979 and 33 percent below in 1984.

In Montserrat's case, it was 10 percent above in 1974 but was six percent and 12 percent below in 1979 and 1984. St. Kitts-Nevis was three percent below in 1974, three percent above in 1979 and 42 percent above in 1984. St. Lucia was 10 percent below in 1974, 19 percent below in 1979 and 24 percent above in 1984. St. Vincent's expenditure performance was never below that of the OECS for the three years. It was equal to the OECS in 1979, but was 17 percent

TABLE 20

Expenditure to GDP Relative Performance for  
Member States and OECS, 1974, 1979, 1984

YEAR	OECS	ANTI-GUA	DOMI-NICA	GRE-NADA	MONT-SERRAT	ST.KITTS NEVIS	ST. LUCIA	ST. VINCENT
1974	100	86	110	117	110	97	90	117
1979	100	71	158	123	94	103	81	100
1984	100	76	106	67	88	142	124	133
GPA	100	0	50	-322	-83	374	424	185

SOURCE: Derived from Table 19.

and 33 percent above in 1974 and 1984.

If we set the 1974-1984 growth rate per annum of the OECS' expenditure performance equals to 100, we note that relative to that base, Antigua and Barbuda's performance was zero percent and St. Lucia was 324 percent. Grenada and Montserrat had negative growth: -222 percent for Grenada and -83 percent for Montserrat.

Revenue Effort, Expenditure Performance and Revenue to Expenditure Ratios:

In Table 21 we show the revenue effort, expenditure performance and revenue to expenditure ratios for the OECS for 1974-1984. In years, 1978 and 1980, the revenue effort and expenditure performance were equal; in 1979 the revenue effort was greater than the expenditure performance. In all other years, the expenditure performance was above the revenue effort. The overall GPA was an identical 1.39 percent per annum for effort and the performance, and .12 percent for the R/E ratio.

When the expenditure performance is correlated with the revenue effort, we get a slope of 2.062 and a correlation coefficient of  $r$  equals .693. The computed  $t$  value is 2.491 which is significant at the five percent level of significance.

Slopes and Buoyancies:

Table 22 shows the slopes (marginal propensities) and the buoyancies (elasticities) of the current revenue to GDP and the current

TABLE 21

Revenue Effort, Expenditure Performance and  
Efforts to Performance Ratio for OECS,

1974 - 1984

YEAR	R/Y	E/Y	R/E
1974	.27	.29	.93
1975	.27	.30	.90
1976	.28	.32	.88
1977	.28	.29	.97
1978	.27	.27	1.00
1979	.32	.31	1.03
1980	.29	.29	1.00
1981	.29	.30	.97
1982	.29	.31	.94
1983	.31	.34	.91
1984	.31	.33	.94
GPA	1.39	1.39	.12

SOURCE: Derived from Tables 18 and 19.

TABLE 22

Marginal Propensity (Slope) and Buoyancy or Elasticity  
of Revenues and Expenditures to GDP for the  
OECS, 1974 - 1984

YEAR	$\frac{\Delta R}{\Delta Y}$	$\frac{\Delta E}{\Delta Y}$	$\frac{\Delta R}{\Delta Y} \cdot \frac{Y}{R}$	$\frac{\Delta E}{\Delta Y} \cdot \frac{Y}{E}$
1974 - 1975	.26	.39	.96	1.30
1975 - 1976	.43	.47	1.54	1.47
1976 - 1977	.27	.10	.96	.34
1977 - 1978	.21	.15	.78	.56
1978 - 1979	.66	.53	2.06	1.71
1979 - 1980	.16	.23	.55	.79
1980 - 1981	.22	.33	.76	1.10
1981 - 1982	.37	.45	1.28	1.45
1982 - 1983	.65	.75	2.10	2.21
1983 - 1984	.26	.26	.84	.79

SOURCE: Derived from Tables 3, 4, 5, 18, 19.

expenditure to GDP for the OECS, 1974-1975 to 1983-1984. In the case of the marginal propensity of current revenue to GDP<sup>the</sup> low was .16 in 1979-1980 and the high was in 1978-1979 of .66. The corresponding figure for current expenditures was a low of .10 in 1976-1977 and a high of .75 in 1982-1983.

The revenue buoyancies or elasticities were greater than one in 1975-1976, 1978-1979, 1981-1982, and 1982-1983. Current expenditure elasticities were elastic in 1974-1975, 1975-1976, and 1977-1978 and 1980-1981 through 1982-1983. On average, the revenue elasticities was a low of .55 in 1979-1980 and a high of 2.06 in 1978-1979. Correspondingly, the expenditure elasticity was a low of .34 in 1976-1977 and a high of 2.21 in 1982-1983. Over the entire period, the current revenue marginal propensity was .32 with a correlation coefficient of .994. The t value is 27.22 which indicates significance at the five percent level of significance. For the current expenditure, over the period, the marginal propensity was .33 with a correlation coefficient of .992. The t value is 23.52 which indicates significance at the five percent level of significance.

On the other hand, the buoyancies over the period for current revenue was .001 and for current expenditures was .001. In the OECS case, the current revenue and current expenditures have very low elasticities or buoyancies: a 100 percent change in GDP brings about a

.1 percent change in current revenues and current expenditures. We derived the marginal propensities by fitting the equation  $GDP = a + b$  Revenues (Expenditures). And for the buoyancy, we use the  $\log GDP = a + b + \log \text{Revenue} [\text{Expenditure}]$ .

Fiscal Capacity: Conceptual Framework:

By fiscal capacity of the OECS member states we mean the ability of the states to raise revenues for the production and provision of public goods and services, outside of the specific level of taxes that the states opt to levy. If the OECS were closed economies, all of the taxes levied by the member states would be on the population of the states. In this case, income would be the measure of the ability of the states to obtain revenue for public expenditures. Income, therefore, would be a good surrogate for the states' fiscal capacity of the states.

Since the OECS member states are open economies, some of the tax burdens that the states impose may actually be borne by the non-

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For a discussion of this in the context of cities, see Kathrine L. Bradbury and Helen F. Ladd, "Changes in the Revenue-Raising Capacity of U.S. Cities, 1970-1982," New England Economic Review, March/April 1985, p. 20-37. See also, Stephen M. Barro "State Fiscal Capacity Measures: A Theoretical Critique," paper presented at the Round Table of the Lincoln Institute of Land Policy in Cambridge, Massachusetts, April 27, 1984.

resident OECS nationals. In this regard, it is critical that the states devise a tax strategy such that they can maximize the revenue gained from taxes imposed. All things being equal, the revenues of the OECS member states are supplemented by tax payments of non-residents subject to the "fiscal capture" by the states.

For our purposes, therefore, the specific fiscal capacity of the OECS member states is defined as the per capita revenue that the states can raise from taxes imposed in the states, assuming some identifiable tax burden on the earning capacity of resident nationals. If we know the revenue effort of the member states,  $R^*$  say, where  $R^*$  is defined as the current revenue to GDP ratio, and where  $Y_p$  is the per capita GDP, then the per capita fiscal capacity ( $FC_p$ ) of a state can be expressed as  $FC_p^* = R^* Y_p$ . Given the fact that some taxes will be "exported," there will be some addition, say  $e$ , to  $FC_p^*$ . In this respect  $e$  will be the amount of revenue that the states will generate from non-residents per dollar from residents. Thus the fiscal capacity from non-residents will be:  $FC_p^{**} = eR^* Y_p$  where  $eR^* Y_p$  represents the revenue that the states will generate from non-residents. Per capita fiscal capacity of the states from both residents and non-residents will be:<sup>3</sup>

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3

See Bradbury and Ladd (1985:21) for a similar illustration.

$$\begin{aligned}FC_p &= FC_p^* + FC_p^{**} \\ &= R^*Y_p + eR^*Y_p \\ &= R^*Y_p (1 + e)\end{aligned}$$

A Word about Tax Exporting:<sup>4</sup>

Taxes levied by the states of the OECS can be divided into taxes which impact on the population of the states and taxes which are "exported". Taxes are said to be exported when persons who live outside an economic entity or jurisdiction bear a portion of or all of the taxes levied in the jurisdiction. For example, when the states of the OECS levy an export duty, a hotel tax or an embarkation tax, non-residents who consume the services on which these taxes are imposed, bear the burden of these taxes. Likewise, a sales tax imposed in the the OECS member states is exported when non-residents purchase goods and services in the OECS community. Fundamentally, taxes can be exported when an economic entity levies a tax on an industry that is wholly owned by non-residents or an industry that produces goods and services solely for non-residents.

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<sup>4</sup>For a discussion of this concept, see Thomas F. Pogue and L. G. Sgontz, Government and Economic Choice, Houghton Mifflin Co., Boston, 1978, p. 434. Also, see Charles E. McClure, Jr., "The Interstate Exporting of State and Local Taxes: Estimates for 1962, National Tax Journal, March 1967, pp. 49-77.

All things being equal, tax exporting tends to reduce the price of domestic public goods and services. Residents would tend to pay less for the public goods and services since the costs (taxes) are exported to non-residents, ceteris paribus. From an externality point of view, tax exporting has a tendency to be countervailing to benefit spillovers and to be augmenting to cost spillovers.

The Derivation of Fiscal Capacity:

Based on the formula for per capita fiscal capacity  $FC_p = R * Y_p / (1 + e)$  we derived indices of per capita fiscal capacity for three benchmark years for the OECS member states except Grenada in 1982. We used our current revenue to GDP ratio and per capita GDP from tables three and four. We derived "e" the tax export value by summing the dollar value of export duty, hotel/guest tax and embarkation tax for the states for the available years 1975-1982. Those data are presented in table 23. Except for Dominica, we note that these duties (taxes) have grown at annual rates in excess of 20 percent. In St. Vincent the actual growth rate per annum was 50.86 percent.

The "e" values for the states for the period 1975-1982 are presented in table 24. These are the dollar values of table 23 divided by the actual current revenues for the various states. What do the "e" values or export taxes mean? Essentially, we may inter-

TABLE 23

Export Duty, Hotel/Guest Tax and Embarkation

Tax Totals, 1975-1982

YEAR	ANTI- GUA	1 DOMI- NICA	2 GRE- NADA	3 MONT- SERRAT	4 ST.KITTS NEVIS	1 ST. LUCIA	1&5 ST. VINCENT
1975	1444	440	3041	46	204	524	141
1976	1532	542	3743	65	305	1217	161
1977	2288	419	4549	95	346	2154	174
1978	3282	686	5779	134	433	2855	918
1979	5598	389	7441	146	500	3728	1455
1980	4661	359	-	258	522	3004	1700
1981	5070	466	-	350	867	3111	2050
1982	7650	525	-	370	927	3200	2525
GPA	26.72	2.67	25.17	39.40	24.25	29.67	50.86

SOURCE: Annual Digest of Statistics, Organization of Eastern Caribbean States (OECS), Economic Affairs Secretariat (EAS), 1984.

1. Overlapping years, 1975/76.
2. Exporting duty is missing for 1980-1982; hotel tax and embarkation tax is missing for 1975-1982.
3. Export duty is missing for 1975-1982.
4. Embarkation tax is missing for 1975-1982.
5. Hotel tax is missing for 1975-1978.

TABLE 24

Export Taxes to Total Revenue (e values) for  
OECS States, 1975-1982

YEAR	ANTI-GUA	DOMI-NICA	GRE-NADA	MONT-SERRAT	ST. KITTS NEVIS	ST. LUCIA	ST. VINCENT
1975	.053	.02	.16	.01	.01	.02	.01
1976	.05	.02	.13	.01	.02	.04	.01
1977	.08	.01	.13	.01	.02	.05	.01
1978	.09	.02	.13	.02	.01	.05	.06
1979	.12	.01	.13	.01	.02	.05	.05
1980	.08	.01	-	.02	.01	.04	.04
1981	.08	.01	-	.02	.02	.03	.05
1982	.09	.01	-	.02	.02	.03	.03

pret the "e" values as follows:

Each combined dollar of export duty, hotel/guest tax and embarkation tax raised in 1975, was augmented by five cents from non-residents for Antigua and Barbuda, two cents for Dominica and St. Lucia 16 cents for Grenada, and one cent each for Montserrat, St. Kitts-Nevis and St. Vincent. By 1982, Antigua was getting nine cents per non-residents, St. Lucia and St. Vincent were getting three cents, Montserrat two cents, and Dominica one cent. All of these are on a per capita basis.

Put another way, if we take the total tax burden of the combined dollar of the three types of taxes, five cents were collected from non-residents and 95 cents from residents in Antigua in 1975. The five cents were obtained by dividing "e" by "1 + e" or  $(.05 / 1 + .05) = .0476$ . Similarly, two cents were collected for non-residents in Dominica's case and 98 cents from residents, and so on and so forth.

Since the tax export effort of each country differs and since the duties (taxes) vary across the board and across the states, we illustrate the level and percentage distribution of the export duty, the hotel/guest tax and the embarkation tax for three countries over three years in table 25. There we note that in 1975, Antigua's export tax was generating .0004 cents from non-residents and 99.96

TABLE 25

The "e" Values for Export Duty, Hotel/Guest Tax  
 and Embarkation Tax for three States, 1974, and 1982

States	EXPORT DUTY		HOTEL TAX		EMBARKATION	
	1975	1982	1975	1982	1970	1985
Antigua	.0004	.0012	.0352	.0680	.0100	.0094
%	8	2	72	87	20	11
St. Kitts-Nevis	.0125	.0112	.0006	.0120	-	-
%	95	48	5	52	-	-
St. Lucia	.0057	.0025	.0080	.0200	.0046	.0095
%	31	8	44	62	25	30

SOURCE: Derived from Annual Digest of Statistics, OECS, EAS, 1982

cents from residents. By 1982, this value was about 12 cents. In St. Kitts-Nevis, in 1975, exporting was generating .0123 cents from non-residents and 98.77 cents from residents. The same logic applies to the other values. In terms of the weights of the value, we note that in terms of the export tax in 1975, export was eight percent in Antigua and Barbuda, 95 percent in St. Kitts-Nevis and 31 percent in St. Lucia. By 1982 the corresponding values were two percent in Antigua and Barbuda, 48 percent in St. Kitts-Nevis and eight percent in St. Lucia.

In the case of hotel/guest tax in 1975, this tax was 72 percent of the export tax in Antigua, five percent in St. Kitts-Nevis, and 44 percent in St. Lucia. All of the states experienced growth in this tax by 1982. Antigua got 87 percent contribution from the hotel/guest tax in terms of tax exporting, St. Kitts-Nevis got 52 percent and St. Lucia got 62 percent. Embarkation tax was a 20 percent contribution to the "e" values in Antigua in 1974 and 11 percent in 1982. In St. Lucia the corresponding figures were 25 percent in 1974 and 30 percent in 1982.

Per Capita Fiscal Capacity and Per Capita Revenue:

In table 26 we present the per capita fiscal capacity ( $FC_p$ ) and current revenue per capita ( $R_p$ ) for the member states for three benchmark years, 1975, 1979, 1982.  $FC_p$  was derived by using the

TABLE 26.

Comparison of Per Capita Fiscal Capacity and Revenue

Per Capita for the OECS States 1975, 1979, 1982

(EC\$)

STATES	1975		1979		1982	
	FC P	R P	FC P	R P	FC P	R P
Antigua	438	450	704	611	1192	1100
Dominica	260	254	741	734	738	733
Grenada	207	178	581	516	-	618
Montserrat	437	432	959	939	1733	1698
St. Kitts-Nevis	323	320	780	764	906	885
St. Lucia	266	257	621	586	830	809
St. Vincent	208	208	281	269	606	417
OECS	306	300	667	631	1001*	894

\* Grenada's data are missing.

formula  $FC_p = R Y_p (1 + e)$  and  $R_p =$  current revenues per population. We note, from table 26, that in 1975, Antigua and Barbuda's  $R_p$  was EC\$450 whereas its  $FC_p$  was EC\$438. The implication here is, the state was loosing to non-residents, \$12 per capita of the revenue raised from residents. In no other state was this phenomenon observed. So we note that Grenada gained \$29 in 1975 from non-residents while St. Vincent did not gain anything that year. Grenada again got the highest dollar value in 1979 with \$65. Dominica had the lowest with \$7. In 1982, St. Vincent received \$189, by far the highest. Dominica was the lowest with \$5. We present the data in table 27.

Over the three benchmark years, St. Vincent has shown the most improvement in terms of per fiscal capacity. Antigua has fallen slightly, Montserrat and St. Kitts-Nevis have similar improvement rates, St. Lucia has over one percent improvement. Finally, we turn to table 28.

#### Comparative Indices

In table 28 we show an array of indices of per capita GDP, per capita fiscal capacity, fiscal effort and per capita expenditure. All of these are taken relative to the OECS as the base of comparison. We define fiscal effort as the actual per capita revenue of a state as a percentage of the per capita fiscal capacity of the state.

TABLE 27

Dollar Value of Per Capita Fiscal Capacity Minus  
Revenue Per Capita for the OECS, 1975, 1979, 1982

	1975	1979	1982
	\$	\$	\$
Antigua	-12	93	92
Dominica	6	7	5
Grenada	29	65	-
Montserrat	5	20	35
St. Kitts-Nevis	3	16	21
St. Lucia	9	35	21
St. Vincent	0	12	189

SOURCE: Derived from Table 26.

TABLE 28

Indices of Per Capita Income ( $Y_p$ ), Per Capita Fiscal Capacity ( $FC_p$ ), Fiscal Effort ( $F_e$ ) and Per Capita Expenditure ( $E_p$ ), 1975, 1979, 1982

STATES	1975				1979				1982			
	$Y_p$	$FC_p$	$F_e^*$	$E_p$	$Y_p$	$FC_p$	$F_e$	$E_p$	$Y_p$	$FC_p$	$F_e$	$E_p$
Antigua	161	143	107	140	161	106	92	114	148	119	103	134
Dominica	80	85	100	84	76	111	105	121	80	74	111	98
Grenada	78	68	88	75	82	87	94	101	108	-	-	79
Montserrat	197	143	101	200	200	144	103	187	230	173	110	196
St. Kitts	159	106	101	168	121	117	103	128	120	91	110	139
St. Lucia	93	87	99	91	120	93	100	99	99	83	109	116
St. Vincent	59	68	102	76	58	42	101	58	58	61	77	60
OECS	100	100	100	100	100	100	100	100	100	100	100	100

\* Fiscal Effort ( $F_e$ ) is defined as the actual per capita revenue as a percentage of per capita fiscal capacity

We observe from table 28 that Montserrat had the highest per capita GDP in all three benchmark years. In 1975, 1979, 1982, it was above the OECS by 97 percent, 100 percent and 130 percent respectively. St. Vincent's per capita GDP was below 41 percent in 1975, and 42 percent in 1979 and 1982.

In terms of per capita fiscal capacity, Montserrat was above the OECS by 43 percent in 1975, 44 percent in 1979 and 73 percent in 1982. Meanwhile Grenada and St. Vincent were 32 percent below the OECS in 1975, for the low. St. Vincent was 58 percent below in 1979 and 39 percent below in 1982.

The highest fiscal effort in 1975 was in Antigua. It was seven percent above the OECS. The lowest was in Grenada. It was 12 percent below. In 1979, the lowest fiscal effort was in Antigua with 92 percent or eight percent below the OECS. Dominica represented the high for that year. By 1982, St. Vincent returned to the lowest fiscal effort with 23 percent below the OECS. Dominica had the highest with 111 percent or 11 percent above the OECS" level. Dominica was closely followed by Montserrat and St. Kitts-Nevis followed Dominica with a close 10 percent above the level for the OECS. There were no data for Grenada.

Finally, as we saw earlier, Montserrat had the highest current expenditure per capita in 1975. Dominica replaced it in 1979 and

Montserrat regained the top position in 1982. It is to be borne in mind, that all of these variables are assessed relative to the OECS' level as the base. The low current expenditure per capita were in Grenada in 1975 - it was 16 percent below; in St. Vincent in 1979, and 1982 it was 42 percent and 40 percent below respectively.

#### Conclusion

The main purpose of this paper was to detail the fiscal performance and capacity of the member states of the Organization of Eastern Caribbean States. Our rationale rests on the view that the states have to improve their fiscal performance and have to augment their fiscal capacity if they are to pursue a rational path of growth and structural transformation. Furthermore, if the states' fiscal performance and capacity are adequately detailed, their case for assistance from international funding sources will be improved, all things being equal. The policy-makers in the states will know, quantitatively, how the economies have performed and the technocrats will have more ideas about the possibilities for instituting fiscal reform and capacity enhancing features.

It is decidedly clear that the states have been experiencing erratic performance over the period of analysis. Montserrat stands

out as performing adequately, but we may have to be guarded in this optimism until we understand the full magnitude of population size. Population size tends to give an inflated sense of worth to some variables. Nevertheless, we can state that Montserrat performed adequately over the period. Thereafter, the performance of the other states varied widely. The states depending on agriculture and tourism showed up in the value of tax exports: for example the high value in St. Kitts-Nevis for export duty and the high value in Antigua for tourism. Currently, there is a need to rationalize the taxes to augment the fiscal capture of more revenues both from residents and from non-residents.

Over the last several years, the OECS member states suffered under a series of impacts stemming from the perturbations of the world economic system. When the international crisis was mixed in the region with the inadequate quantum of resources, the lack of significant domestic markets, the limited communications, the high unemployment, we see a region in the category of haphazard planning and implementation. This is true despite the fact that, politically, the region is making substantial strides. Economically, however, there is cause for alarm when we consider the comparative performance of the islands vis-a-vis the OECS as an economic entity.

Courses of Action:

The states have to institute some regime of fiscal responsibility relative to expenditure patterns. It is not now clear that guidelines are followed or that expenditure guidelines exist. The states seem to plan to spend and then try to raise revenues. In a state such as St. Kitt-Nevis where the growth in current expenditure was 15.45 percent per annum over the period 1974-1984 and where the growth in current revenue was 7.87 percent per annum, the course of action must be one of fiscal reorganization, restraint and responsibility without violating pareto optimality provisions. The same argument holds for Antigua where the growth rate in imports was 12.36 percent per annum and the growth rate in exports was 1.86 percent per annum. In all of the states, measures must be instituted to rationalize the balance of trade performance.

On a per capita basis, the case of Antigua is very startling in the foreign trade sector. The states's exports per capita grew by .12 percent per annum while its imports per capita grew by 10.66 percent per annum. On a per capita basis, there is graphically, a case for rationalization in the foreign trade sector. Another course of action must be one devoted to improving level of living in the states. Even if we allow for the multitude of problems in collecting data, reporting of data and presenting the comparable

data over the period, it is clear that Antigua, St. Vincent and particularly St. Kitts-Nevis are doing poorly relative to other OECS as a unit. This evidence is clear from the real growth rates in table 10.

The buoyancy of revenues in the states needs to be improved. Here the states may wish to institute new improved measures to capture more revenues vis-a-vis the administrative or compliance costs of obtaining the revenue. In 1977, Fitzgerald Francis noted that the then "Associated States represent(ed) a modern miracle of survival." That assessment still holds today. The states are all attempting to institute measures to aid the requisite transformation of the economies. These measures could be nullified, however, if the political directorate in the various states do not perform with the level of proficiency that fiscal responsibility requires. If the states continue to perform with seemingly gay abandon, then the strictures and conditionalities of international financial institutions will be the dictates of long-term survival in the member states of the Organization of Eastern Caribbean States. While external aid is critical in the survival of these states, the first, paramount course of action that the states must take, is to put their fiscal house in order. In this regard, as we have said elsewhere, monetary policies have to work

in an integrative manner with fiscal policies (Jones-Hendrickson, 1985a).

In the final analysis, the technocrats in the OECS member states have to begin to devote greater attention to understanding the dynamics of fiscal performance and fiscal capacity on the member states. Work needs to be done along the lines we outlined here. A future agenda, or course of action, must also involve some serious analyses which will attempt to get some quantitative insights into the economies. Here, for instance, we need to get a view on per capita expenditure as a function of GDP per capita, density, urbanization, foreign aid, politicization of issues, and the costs associated with degrees of bureaucracy. Another version of such a model could be total expenditures in each state as a function of population, median family income, per capita assessed property value, per capita foreign aid, density, median age, average number of employees in the public sector, number of public sector units in the state, and the number of international agencies in which the states participate. In the suggested work for the future, our central concern is to understand the institutional and structural nature of the microstates of the OECS, and assist them in institutionalizing measures to ensure smooth growth performance - a performance that will be geared to improving as opposed to retarding the level and standard of living in the member states of the OECS.

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