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REPORT OF REVENUE OUTLOOK FOR
LAST SIX MONTHS OF FY...

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STATE OF SOUTH CAROLINA
BOARD OF ECONOMIC ADVISORS

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To: South Carolina Budget and Control Board

Subject: Report of Revenue Outlook for Last Six Months
of FY 1990-91

The Board of Economic Advisors is required by Section 11-9-880 of the 1976 South Carolina Code of Laws to provide a synopsis of the revenue outlook for the last six months of the fiscal year on December 31st of each year. The synopsis for December 31, 1990 is provided herein with supporting tables.

The nation's economy has deteriorated since the Board of Economic Advisors Reports of November. Most mainstream economists now expect two or three quarters of decline in Gross National Product rather than one or two quarters beginning with the quarter just ending and an earlier onset than anticipated only two months ago. A recent informal ruling of the DC Dating Committee of the National Bureau of Economic Research, the recognized authority on cyclical turning points, suggests that the recession may have begun in the third quarter of 1990. At some point in the past few months, after 92 months of continued expansion since 1982, the economy took a different, less favorable direction. The Middle East situation with its impact on prices and consumer confidence acted as the catalyst for the

change and shift in outlook. Forecasts for real GNP have been revised downward from minimal growth to near zero change for Fiscal Year 1990-91. Forecasts of Consumption, Personal Income and Disposable Income for the fiscal year have all been revised downward by a few tenths of a percentage point. In the other direction, the unemployment rate has been revised upward by a similar amount. Further deterioration in Corporate Profits and Housing is expected to continue. By the recent action taken by the Federal Reserve to ease credit and align official rates with market rates, it seems the Federal Reserve has recognized the extent of the deterioration. The depth, the duration and diffusion of these negative events are the points of difference among forecasters.

With the heavy concentration of manufacturing in South Carolina, and the pattern of the economy of the State historically following that of the nation with variation, it was to be anticipated that the negative trends developing in the U.S. economy would be mirrored in the South Carolina economy. To date, the data do not support this, at least not from the numbers on overall employment. In the U.S., persons employed decreased in July and continued to decline each month through November for a loss of 573,000 jobs. South Carolina, in contrast, has added 28,400 jobs since July with the numbers employed showing positive change month by month through October, the last period for which State data are available. In October, seasonally adjusted nonagricultural employment in the State increased by 7,000 jobs, or 5.5% at annual rates, in contrast to a decline in the U.S. of 0.2% in October, and 2.4% in November. The unemployment rate in the U.S. has risen from 5.5% in July to 5.7% in October, and 5.9% in November. In South Carolina, the unemployment rate dropped from 5.4% in July to 5.2% in October. It would appear that the weakening of the dollar, which increases exports, has been one of the favorable factors in

supporting the growth and, along with lower interest rates, will continue to provide a comparative lift to the State's economy for the rest of the period.

Revenue results to date reflect these conditions but because of distortions in collections from Hugo, the implications for the remainder of the year are not clear. It has to be assumed that the negative events in the national economy will at some point have their impact on the South Carolina economy with revenues mirroring the weakening. The extent of any weakening over and beyond the forecast made in November will be determined in large measure by the relative strength of holiday retail sales. With the usual one month lag, this information will not be available until February. The dollar amount and number of refunds beginning the first of the year will also be an important determinant in FY 1990-91 revenue collections.

It is the intent of the BEA to review the data as they become available. On February 15, after two more months of data and a clearer indication of trends in the national economy in the fourth quarter of 1990 and an evaluation of the performance of the South Carolina economy, an assessment of revenues for the remainder of the fiscal year in relation to the estimate will be made. Until that time, with the uncertainties that abound and with the information at hand, the Board of Economic Advisors sees inadequate basis for change in the revised estimate of \$3510.3 million for Fiscal Year 1990-91 made November 9.

Board of Economic Advisors

W.R.P.

December 31, 1990

TABLE I
GENERAL FUND REVENUES
FORECAST FISCAL YEARS 1990-91 AND 1991-92
(In Millions of Dollars)

	ACTUAL FY 1989-90	BEA 11/9/90 REVISED ESTIMATE FY 1990-91	BEA 11/1/90 ESTIMATE FY 1991-92
TOTAL GENERAL FUND (1)	3294.8	3510.3	3654.0
Total Regular Sources (1)	3252.8	3464.7	3607.5
Sales Tax (1)	1155.8	1224.2	1283.5
Individual Income Tax	1380.2	1491.0	1587.0
Corporation Income Tax	140.9	150.0	145.0
All Other	575.9	599.5	592.0
Miscellaneous Sources	42.0	45.6	46.5
Education Improvement Fund	301.362	306.050 *	320.875 *
Interest on Education Improvement Fund	2.110	1.900	1.900
TOTAL	303.472	307.950	322.775
		<u>RATES OF CHANGE**</u>	
TOTAL GENERAL FUND		6.5 %	4.1 %
Total Regular Sources		6.5	4.1
Sales Tax		5.9	4.8
Individual Income Tax		8.0	6.4
Corporation Income Tax		6.5	-3.3
All Other		4.1	-1.2
Miscellaneous Sources		8.7	2.0
Education Improvement Fund		1.6	4.8
Interest on Education Improvement Fund		-10.0	0.0
TOTAL		1.5	4.8

(1) Net of Education Improvement Fund.

* One-fifth of total sales tax.

** Percent change based on unrounded figures.

TABLE II

REVIEW OF GENERAL FUND REVENUE COLLECTIONS AND STATE INCOME GROWTH

FISCAL YEARS	PERSONAL INCOME AT ANNUAL RATES (MILLIONS OF \$)	PERCENT CHANGE PRIOR YEAR QUARTER	CUMULATIVE GENERAL FUND REVENUE (MILLIONS OF \$)	PERCENT CHANGE PRIOR YEAR QUARTER	RATIO OF REVENUE GROWTH TO INCOME GROWTH
1987-88					
1987:	3 41,606	8.02	726.531	9.16	1.142
	4 42,803	9.19	1,472.082	7.92	0.862
1988:	1 43,312	7.97	2,127.654	6.87	0.862
	2 44,446	8.76	2,938.379	9.12	1.041
1988-89					
1988:	3 45,241	8.74	781.428	8.11	0.928
	4 45,969	7.40	1,561.795	6.09	0.823
1989:	1 47,861	10.50	2,290.089	7.63	0.727
	2 48,343	8.77	3,142.455	6.95	0.792
1989-90					
1989:	3 45,636 *	0.87	785.029	0.46	0.529
	4 49,686 *	8.09	1,626.553 *	4.15	0.513
1990:	1 51,328 *	7.24	2,409.636 *	5.22	1.721
	2 51,947 *	7.46	3,294.771 *	4.85	.650
1990-91					
1990:	3 52,650	15.37	866.215	10.34	0.673
	4 53,125	6.92	1,747.500	7.44	1.075
1991:	1 53,875	4.96	2,569.200	6.62	1.335
	2 54,450	4.82	3,510.323	6.54	1.357

*: Forecasts, Board of Economic Advisors, November 9, 1990.

REVENUE FORECASTING PROCEDURES
BOARD OF ECONOMIC ADVISORS
FISCAL YEARS 1991 and 1992

The procedures and methodology of the Board of Economic Advisors in the preparation of the Revenue Outlook for Fiscal Years 1990-91 and 1991-92 as of December 31, 1990 and January 1, 1991 involved three major stages: 1) providing the economic background and setting at the national and State levels for the revenue forecasts; 2) interpreting recent and historical revenue relationships; and 3) interacting with officials of other states with responsibility for revenue forecasting.

The Board members consulted as in the past with business and financial experts and professional economists for economic intelligence gathering. This included a meeting held on October 26, 1990 in Columbia with the National Advisory Council to the Board of Economic Advisors. Present at the meeting were: J. Alfred Broadus, Jr., Ph.D., Senior Vice President and Director of Research, Federal Reserve Bank of Richmond; James A. Morris, Ph.D., Distinguished Professor of Economics Emeritus, University of South Carolina; Ronald P. Wilder, Ph.D., Chairman, Department of Economics, University of South Carolina; David A. Wyss, Ph.D., Senior Vice President and Research Director, Data Resources, Inc.; and Bruce Yandle, Jr., Ph.D., Alumni Professor of Economics, Clemson University.

The resources of the national forecasting groups by which the SCOPE model and other forecasts are driven, Data Resources, Inc., Evans Economics, Inc., and WEFA, Inc., were available weekly and monthly to Board members and staff. Materials from a variety of sources--international, national and State publications--were also made available to Board members and staff. In addition, there was Board interaction by the Executive Director with numerous outstanding national economists at the 32nd Annual Meeting of the National Association of Business Economists held September 23-27, 1990 in Washington, D.C. and by the Chairman and Executive Director at the November 15, 1990 Economic Forecasting Conference at the Economic Forecasting Center of Georgia State University, Atlanta, Georgia. Further, there was BEA staff representation at the 45th Annual FTA Conference on Revenue Estimating and Tax Research held September 20-October 3, 1990 in San Francisco, California, and at the Economic Outlook Conference, Strom Thurmond Institute, Clemson University, October 18, 1990 and at the 1990 Fall Economic Outlook Conference, Daniel Management Center, University of South Carolina, November 20, 1990.

BRIEF OVERVIEW OF THE SCOPE MODEL

The SCOPE (South Carolina Operations Planning and Evaluation) Model was initiated in 1972 in the Office of Chief Economist (originally in the Governor's office). It was designed and operated as a policy and forecasting tool for top level executive, legislative and management decision making. SCOPE is an econometric model designed to reflect the South Carolina economy and to forecast the performance of major economic variables in the State, particularly tax revenues, employment and income. The model is based on a framework of economic activity in the State relative to national economic activity with approximately 85 exogenous national variables provided by leading national forecasting services such as Data Resources, Inc., the WEFA Group, and Evans Economics, Inc.

The SCOPE core economic model consists of 51 equations, of which 37 are stochastic* and 14 are identities. SCOPE attempts to reflect the diversity of the South Carolina economy by including 19 industrial sectors of manufacturing and nonmanufacturing employment, and a series of equations for wages, personal income and unemployment.

Durable Manufacturing Employment

The durable manufacturing employment block consists of ten stochastic equations for the major industries in the State as reported by the South Carolina Employment Security Commission. The employment equations for each separate industry are expressed as a function of a national consumption expenditure index appropriate for that particular industry, a national industrial production index corresponding to that industry and the national level of employment in that industry. The durable employment forecasts include the following industries: Lumber and Wood Products, Stone, Clay and Glass, Primary and Fabricated Metal Products, Electrical and Nonelectrical Machinery and Other Durables which includes Furniture and Fixtures, Transportation, Instruments and Related Products.

Nondurable Manufacturing Employment

The nondurable manufacturing employment block consists of seven stochastic equations for the major nondurable industries in the State. Like the durable block, the employment equation for each industry is expressed as a function of a national consumption index appropriate for that particular industry, a national industrial production index for that particular industry and the national level of employment in that industry. Employment forecasts are available for each of the following nondurable industries: Food and Kindred Products, Textile Mill Products, Apparel, Paper, Printing and Publishing, Chemicals and Other Nondurables, such as Rubber and Miscellaneous Plastics Products.

* Stochastic is defined as a type of modeling for time series analysis explaining future probability from historical experience.

Nonmanufacturing Employment

The nonmanufacturing employment block is disaggregated into eight stochastic equations: Mining, Construction, Transportation and Public Utilities, Services, Trade, Finance-Insurance-Real Estate, State and Local Government and Federal Government. Employment growth in these industries is specified as functions of State population, national employment in these industries and national consumption indices.

Personal Income

The personal income block is composed of 12 equations, one equation for the unemployment rate, one equation to adjust for nonresidents, and ten additional equations for each of the ten major components of personal income as published by the Bureau of Economic Analysis, Department of Commerce. These equations are specified as functions of their respective national and State income and employment variables. In addition, equations are estimated for wage and salary disbursements for all major industries and are specified as functions of national wage trends and State employment levels.

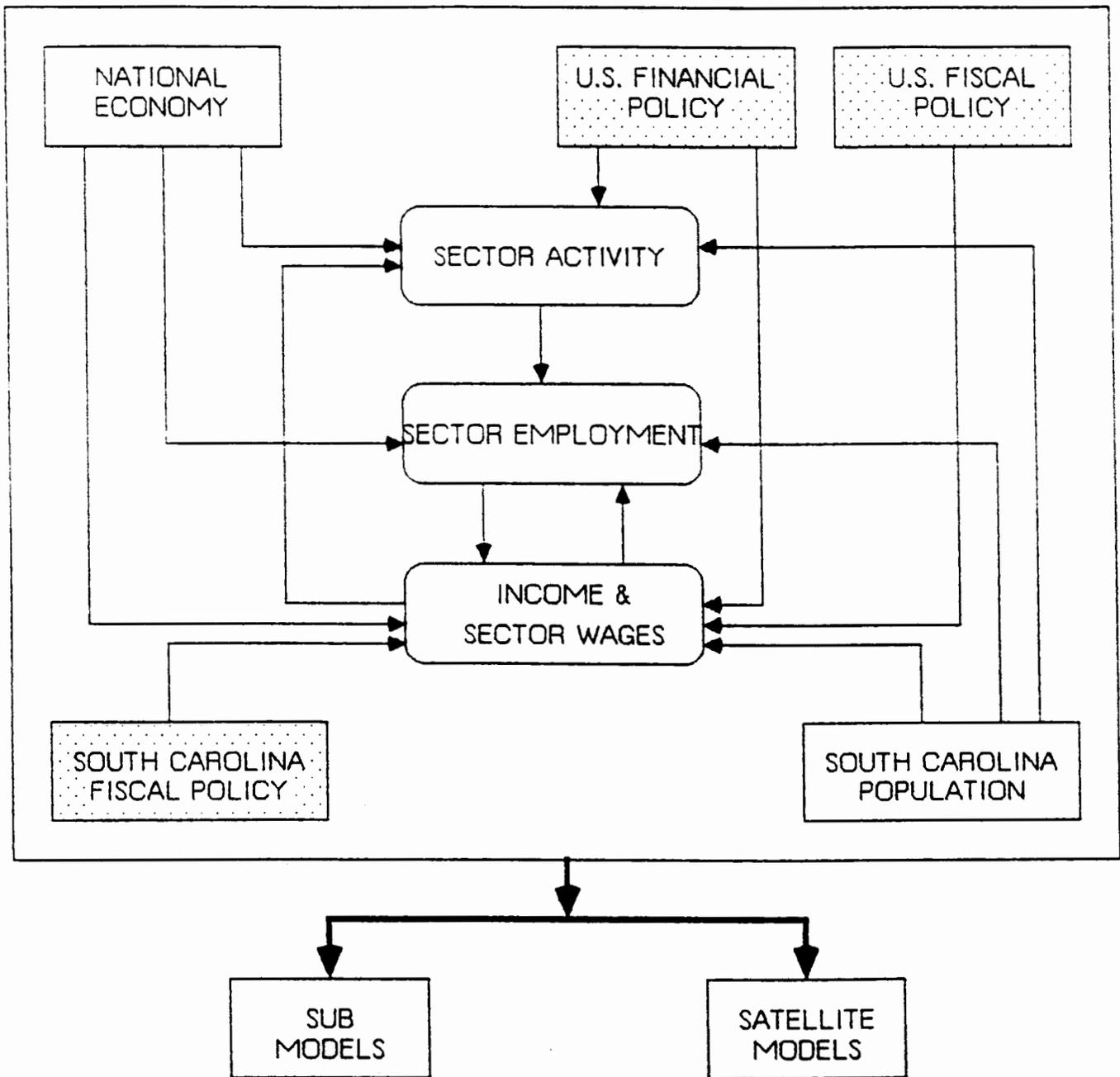
Revenues

The revenue section of the model is being structured to emphasize four major stochastic Regular Revenue Sources equations: 1) South Carolina corporate income tax, 2) South Carolina individual income taxes, 3) South Carolina retail sales tax, and 4) all other taxes. These equations are individually specified as functions of aggregate employment and income with their respective coefficients and constants. In addition, there are two stochastic equations for taxable sales and refunds.

The core economic model is completed and operative. The equations are currently being respecified to account for major revisions in historical data from the U.S. Department of Commerce. Reformulation and respecification of the revenue model is in progress.

SCOPE MODEL

SOUTH CAROLINA OPERATIONS, PLANNING & EVALUATION MODEL



-  Exogenous Variables
-  Exogenous Policy Variables
-  Endogenous Variables



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REVENUE OUTLOOK - FISCAL YEAR 1991-92

AS OF JANUARY 1, 1991

The Board of Economic Advisors is required by Section 11-9-880 of the 1976 South Carolina Code of Laws to consider adjustments to the official revenue forecast for the 1991-92 fiscal year on January 1, 1991. It has done so. The Board of Economic Advisors accepts the consensus forecast of a turnaround in economic activity from negative to positive in the quarter coinciding with the beginning of Fiscal Year 1991-92 (July, 1991). Thus, the revenue forecast for Fiscal Year 1991-92 can be derived more independently of the previous year than in other periods. Further, while the consensus economic forecast for Fiscal Year 1990-91 has been revised, the timing of the turning point has not changed and remains the beginning of Fiscal Year 1991-92 and provides the basis for the Fiscal Year 1991-92 revenue estimate. Therefore, no adjustment in the forecast of \$3654.0 million made on November 1, 1990 is warranted.

Board of Economic Advisors

W.R.P.

January 1, 1991

STATE OF SOUTH CAROLINA
TOTAL BUDGETARY GENERAL FUND
QUARTERLY ESTIMATES
Fiscal Years 1990-91 and 1991-92
(In Millions of Dollars)

	FY 1990-91 -----	FY 1991-92 -----
FIRST QUARTER	866.2 *	917.2
SECOND QUARTER	1747.5	1838.0
THIRD QUARTER	2569.2	2685.7
FOURTH QUARTER	3510.3	3654.0

PERCENT OF TOTAL REVENUES
COLLECTION BY QUARTER

	FY 1990-91 -----	FY 1991-92 -----
FIRST QUARTER	24.7	25.1
SECOND QUARTER	25.1	25.2
THIRD QUARTER	23.4	23.2
FOURTH QUARTER	26.8	26.5

*: Actual.

Board of Economic Advisors
November 9, 1990