

## **Fiscal Research Center**

### **FINANCING GEORGIA'S FUTURE**

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# INTRODUCTION

This Session explores how Georgia finances its expenditures through various revenue sources. In particular, the Session compares Georgia's taxes across states and over time on multiple dimensions.

There are five sections to the materials:

- I. A Cross-State Comparison of Tax Levels.
- II. Fiscal Capacity and Effort.
- III. A Cross-State Comparison of Tax Structures.
- IV. Tax Burdens by Income Level.
- V. Revenue Trends in Georgia's Taxes.

## I. A CROSS-STATE COMPARISON OF TAX LEVELS

This section compares Georgia with other states in terms of tax levels and how tax burdens in Georgia have changed over time. Two measures are used: taxes per capita and taxes per \$1000 of personal income. Each measure is calculated for state and local taxes, state taxes, and local taxes, where local includes counties, municipalities, school boards, and special districts. Tax data are from the Bureau of the Census; 2002 is the latest year data is available.

The first table shows tax burden for Georgia while the second table shows how Georgia ranks nationally for each category.

- In terms of taxes per capita:
  - Georgia's total state and local taxes per capita increased 67 percent between 1981 and 2002.
  - Nationally, this was the 9<sup>th</sup> largest percent increase for the period.
  - Most of this increase, 58 percent, can be attributed to increases in Georgia's state and local sales taxes.
  - Georgia ranked 37<sup>th</sup> in 1981 and 29<sup>th</sup> in 2002.

- In terms of taxes per \$1000 of income:
  - Georgia's total state and local taxes per \$1000 of income increased 8 percent between 1981 and 2002, from \$91 in 1981 to \$98 in 2002.
  - Georgia's overall ranking fell from 30<sup>th</sup> in 1981 to 35<sup>th</sup> in 2002.
  - Georgia's state taxes per \$1000 of income decreased from \$59 to \$56.
  - Total local taxes per \$1000 increased; Georgia's went from 32<sup>nd</sup> in 1981 to 16<sup>th</sup> in 2002.

### Georgia's Tax Revenue-Summary

	-----Per Capita-----		----Per \$1000 of Personal Income----	
	1981*	2002	1981	2002
Total Taxes -State & Local	\$1,691	\$2,816	\$91	\$98
Total Taxes -State	\$1,094	\$1,612	\$59	\$56
Total Taxes – Local	\$597	\$1,204	\$32	\$42
Personal Income Tax – State	\$375	\$759	\$20	\$26
Sales Tax – State	\$366	\$704	\$20	\$24
Sales Tax – State & Local	\$445	\$1,100	\$24	\$38
Corporate Income Tax – State & Local	\$9	\$66	\$5	\$2
Property Tax - Local	\$372	\$771	\$20	\$27

Source: Bureau of the Census.

\*Inflation adjusted.

### Georgia's Ranking-Summary

	-----Per Capita-----		-----Per \$1000 of Personal Income-----	
	1981	2002	1981	2002
Total Taxes -State & Local	37	29	30	35
Total Taxes -State	39	38	29	37
Total Taxes – Local	37	21	32	16
Personal Income Tax – State	18	17	16	13
Sales Tax – State	26	41	20	40
Sales Tax – State & Local	22	23	16	19
Corporate Income Tax – State & Local	23	26	22	28
Property Tax - Local	39	30	37	31

The next table compares tax burdens across nine comparison states, which are the states used in the expenditure comparisons in the previous session. Note that “Rank” in the following table refers to the states’ ranking nationally, while the ranks in the bullet points refer to just the comparison states.

- Georgia ranks 6<sup>th</sup> in total state and local taxes per capita.
- Georgia ranks 4<sup>th</sup> in total state and local taxes per \$1000 of income.
- For states other than Tennessee, total state and local taxes per \$1000 range from \$92 to \$100.
- Georgia ranks 6<sup>th</sup> in state taxes per capita and 4<sup>th</sup> in state taxes per \$1000 of income.

### Tax Level 2002

State	-----Total State and Local-----				-----State-----				-----Local-----			
	----Per Capita---		-----Income-----		----Per Capita----		-----Income-----		---Per Capita---		-----Income-----	
	Rank	\$	Rank	\$	Rank	\$	Rank	\$	Rank	\$	Rank	\$
Colorado	20	3,088	45	92	42	1,538	48	46	6	1,550	10	46
Georgia	29	2,816	35	98	38	1,612	37	56	21	1,204	16	42
Illinois	15	3,303	29	100	24	1,786	40	54	8	1,517	11	46
Massachusetts	5	3,721	39	95	6	2,308	33	59	11	1,413	32	36
Missouri	36	2,667	41	94	41	1,539	41	54	28	1,128	23	40
North Carolina	33	2,718	34	98	21	1,871	16	67	39	847	39	31
Tennessee	50	2,241	51	81	48	1,347	46	49	36	894	36	32
Virginia	24	3,037	44	93	28	1,754	42	53	17	1,283	27	39
Washington	17	3,216	30	99	13	2,082	23	64	26	1,135	35	35

The next table shows the percentage of total state and local taxes collected by state government.

- Over the period 1981 to 2002 the state share of total taxes in Georgia fell from 65 percent in 1981 to 57 percent in 2002.
- In 2002, only two of the comparison states had a lower state share.

**State Share of Total State and Local Tax Revenue**

<b>State</b>	<b>1981</b>	<b>2002</b>
Colorado	49%	50%
Georgia	65%	57%
Illinois	55%	54%
Massachusetts	56%	62%
Missouri	55%	58%
North Carolina	72%	69%
Tennessee	58%	60%
Virginia	60%	58%
Washington	73%	65%

The next three tables show the composition of taxes for total state and local governments, state governments, and local governments for the nine comparison states.

- Georgia's total state and local taxes are fairly evenly balanced. Sales tax contributes 39 percent, while individual income tax and property tax contribute 27 percent and 28 percent, respectively.

### Tax Composition – State and Local Governments, 2002

State	-----% of Total Taxes-----					Total Taxes
	Ind. Income Tax	Corp. Income Tax	Property Tax	Sales Tax	Other Taxes	
Colorado	25%	1%	30%	38%	5%	100%
Georgia	27%	2%	28%	39%	4%	100%
Illinois	18%	3%	38%	33%	7%	100%
Massachusetts	33%	3%	36%	22%	5%	100%
Missouri	26%	2%	26%	40%	6%	100%
North Carolina	32%	3%	24%	35%	6%	100%
Tennessee	1%	4%	27%	58%	11%	100%
Virginia	30%	1%	30%	30%	8%	100%
Washington	0%	0%	30%	61%	9%	100%

### Tax Composition – State Government, 2002

State	-----% of Total Taxes-----					Total Taxes
	Ind. Income Tax	Corp. Income Tax	Property Tax	Sales Tax	Other Taxes	
Colorado	50%	3%	0%	41%	6%	100%
Georgia	47%	4%	0%	44%	5%	100%
Illinois	33%	6%	0%	50%	10%	100%
Massachusetts	53%	5%	0%	35%	6%	100%
Missouri	41%	3%	0%	47%	7%	100%
North Carolina	47%	4%	0%	42%	7%	100%
Tennessee	2%	6%	0%	78%	14%	100%
Virginia	53%	2%	0%	37%	8%	100%
Washington	0%	0%	12%	79%	10%	100%



## Tax Composition – Local Governments, 2002

State	-----% of Total Taxes-----					Total Taxes
	Ind. Income Tax	Corp. Income Tax	Property Tax	Sales Tax	Other Taxes	
Colorado	0%	0%	60%	35%	5%	100%
Georgia	0%	0%	64%	33%	3%	100%
Illinois	0%	0%	83%	14%	3%	100%
Massachusetts	0%	0%	96%	2%	2%	100%
Missouri	5%	0%	60%	30%	5%	100%
North Carolina	0%	0%	77%	18%	5%	100%
Tennessee	0%	0%	67%	27%	6%	100%
Virginia	0%	0%	72%	19%	10%	100%
Washington	0%	0%	63%	29%	8%	100%

## II. FISCAL CAPACITY AND EFFORT

The following table presents a fiscal capacity index and fiscal effort index for the 9 comparison states.

The fiscal capacity index measures the underlying ability of a state to raise tax revenue relative to the average across all states. Capacity is based on income per capita. The fiscal effort index measures the ratio of actual taxes raised to the state's capacity.

- Georgia's fiscal capacity is below the national average and is at the lower end of fiscal capacity of the comparison states.
- Georgia's fiscal effort is below the national average, but is about average for the comparison states.
- Differences across states in taxes per capita are largely explained by differences in income per capita.

### Fiscal Capacity and Effort

State	Fiscal Capacity	Fiscal Effort
Colorado	106.7	102.6
Georgia	93.2	96.2
Illinois	106.9	98.4
Massachusetts	126.4	93.7
Missouri	92.2	92.1
North Carolina	89.9	99.9
Tennessee	89.3	79.9
Virginia	106.1	91.1
Washington	105.6	97.0

### III. A CROSS-STATE COMPARISON OF TAX STRUCTURES

In this section we explore differences across nine states in the structure of specific taxes. The nine states referred to here are the nine states used in the expenditure comparisons in the previous session.

#### A. The Personal Income Tax

41 states have a broad-based income tax. Two states, Tennessee and New Hampshire, have limited income taxes. Seven states, Alaska, Florida, Nevada, Texas, South Dakota, Washington and Wyoming, have no income tax.

The following table provides details of the comparisons across the nine states.

- Washington has no income tax.
- Tennessee taxes only interest and dividend income.
- Two of the states base their income tax on Federal Taxable Income (FTI).
- Five of the states, including Georgia, base their income tax on Federal Adjusted Gross Income.
- Personal deductions in Georgia are generally larger than in the comparison states.
- Georgia's tax rates are at the higher end of the 9 states.
- Three of the states have one rate, while Georgia has 6 tax brackets.

## Tax Structure of Income Taxes

State	Tax Base	-----Deductions-----			-----Minimum-----	-----Maximum-----	# of Brackets		
		Single	Married/Joint	Dependents	Rate	Up To*		Rate	Over
Colorado	FTI	NA	NA	NA	4.63%		4.63%**		1
Georgia	FAGI	\$2,700	\$5,400	\$2,700	1%	\$1,000	6%	\$10,000	6
Illinois	FAGI	\$2,000	\$4,000	\$2,000	3%		3%**		1
Massachusetts	FAGI	\$4,400	\$8,800	\$1,000	5.3%		5.30%**		1
Missouri	FAGI	\$2,100	\$4,200	\$1,200	1.5%	\$1,000	6%	\$9,000	10
North Carolina	FTI	\$2,500	\$5,000	\$2,500	6%	\$21,250	8.25%	\$200,000	4
Tennessee	Interest & Dividends only	\$1,250	\$2,500	\$0	6%**				1
Virginia	FAGI	\$800	\$1,600	\$800	2%	\$3,000	5.75%	\$17,000	4
Washington	No Income tax								

\*Bracket levels for Georgia and North Carolina apply only to Married filing jointly.

\*\* Flat rate.

Source: Federation of Tax Administrators' website.

## **B. The Sales and Use Tax**

The following table provides details of the comparisons across the nine states.

- Georgia's state sales tax rate is one of the lowest of the comparison states.
- Georgia taxes 34 of the 164 services that the Federation of Tax Administrators has identified as being taxed in at least one state.
- Georgia sales tax base seems to be the broadest among the comparison states, as measured by the size of the sales tax base relative to the size of the economy as measured by total personal income.
- Georgia imposes its sales tax on purchases by businesses at about the same level the other states.

## Tax Structure of Sales Taxes

State	Tax Rates, January 1, 2004			Food At Home Exempted	Prescription Drugs Exempted	# of Services Taxed**	Base/Income	% Paid by Consumers
	State Rate	Maximum Local Rate	State plus Maximum Local Rate					
Colorado	2.9%	7.0%	9.9%	Yes	Yes	14	43.0%	60%
Georgia	4.0%	3.0%	7.0%	Yes*	Yes	34	53.6%	64%
Illinois	6.25%	3.0%	9.25%	1.0%	1.0%	17	30.7%	68%
Massachusetts	5.0%	0.0%	5.0%	Yes	Yes	20	27.4%	62%
Missouri	4.225%	4.5%	8.725%	1.225%	Yes	28	45.7%	64%
North Carolina	4.5%	3.0%	7.5%	Yes*	Yes	28	43.3%	62%
Tennessee	7.0%	2.75%	9.75%	6.0%	Yes	71	48.3%	63%
Virginia	3.5%^	1.0%	4.5%	3.0%	Yes	18	40.3%	70%
Washington	6.5%	2.3%	8.8%	Yes	Yes	154	47.3%	49%

\*Food is taxed at the local level.

\*\* out of 164 services taxed in at least one state.

^ Raised to 4 percent in 2004.

Source: First 6 columns from Federation of Tax Administrators website; column 7 from Donald Bruce and William F. Fox, "E-Commerce in the Context of Declining Sales Tax Base," *National Tax Journal*, December 2000: 1373-1388; column 8 from Raymond J. Ring, Jr. "Consumers' Share and Producers' Share of the General Sales Tax," *National Tax Journal*, March 1999: 81-92.

## C. Corporate Income Tax

The following table illustrates differences across the 9 comparison states in the main features of the corporate income tax.

- Washington has no corporate income tax.
- All of the comparison states base their corporate income tax on Federal Taxable Income.
- States make numerous and different adjustments before arriving at State Taxable Income.
- State rates are flat, i.e., the same rate applies regardless of the amount of taxable income.
- Only one of the comparison states has a corporate income tax lower than Georgia's 6 percent rate.
- A major issue is whether a firm with separate subsidiaries has to file a combined return.
  - Only in Illinois is there no allowance for firms to file a consolidated return.
  - In some states tax officials have authority to require combined reporting.

- Profits of multi-state firms are apportioned by formula to each state in which the firm has nexus.
  - State use different combinations of the proportion of the firm's sales, property and wages in that state to determine the percentage of the firm's profits that allocated to the state.
  - Like most states, Georgia double weights the sales factor.
  - One of the states uses only a sales factor.
  - Two of the states use the average of the three proportions.



## Tax Structure of Corporate Income Taxes

State	Base**	Tax Rates***	Consolidated Return	Apportionment Formula
Colorado	Federal Taxable Income	4.63%	Elect	3 factor
Georgia	Federal Taxable Income	6.00%	Auth to require or permit	Doubled weighted Sales
Illinois	Federal Taxable Income	7.30%	Not allowed	Sales
Massachusetts	Federal Taxable Income	9.50%	Elect/Auth to require	Doubled weighted Sales
Missouri	Federal Taxable Income	6.25%	Elect	3 factor
North Carolina	Federal Taxable Income	6.90%	Auth to require	Doubled weighted Sales
Tennessee	Federal Taxable Income	6.50%	Auth to require or permit	Doubled weighted Sales
Virginia	Federal Taxable Income	6.00%	Elect	Doubled weighted Sales
Washington*		0%		

\*Washington has a Business and Occupation Tax, but not a corporate income tax.

\*\*All states make modifications to federal taxable income, for example by subtracting certain taxes that are not deductible at the federal level.

\*\*\*All these rates are flat and apply to the 1st dollar of taxable income.

Source: *2004 Multistate Corporate Tax Guide*

## D. Excise Taxes

Most states impose excise taxes on gasoline, tobacco products and alcoholic beverages. The following table contains information about differences across states in the excise tax rates as of January 1, 2004. Note that several states operate state liquor stores and do not have excise taxes on alcoholic beverages as such.

- Georgia has the second lowest tax on gasoline.
- Florida has the lowest state excise tax on gasoline.
  - Local governments in Florida also levy an excise tax on gasoline, but local taxes on gasoline are not reflected in the table.
- Despite the recent increase in the tax on tobacco products, Georgia ranks 38<sup>th</sup> in terms of excise tax on cigarettes.
- Georgia ranks 14<sup>th</sup> for the tax on liquor.
- Georgia ranks 6<sup>th</sup> for the tax on wine.
- Georgia ranks 7<sup>th</sup> for the tax on beer.

### State Excise Tax Rates (January 1, 2004)

State	Gasoline (cents per gallon)	Cigarettes (cents per pack)	Liquor (cents per gallon)	Wine (dollars per gallon)	Beer (dollars per gallon)
Colorado	22.0	20	2.28	0.32	0.08
Georgia	7.5	37	3.79	1.51	0.48
Illinois	19.0	98	4.50	0.73	0.185
Massachusetts	21.0	151	4.05	0.55	0.11
Missouri	17.0	17	2.00	0.36	0.06
North Carolina	24.3	5	See note 1	0.79	0.53
Tennessee	20.0	20	4.40	1.21	0.14
Virginia	17.5	2.5	See note 1	1.51	0.26
Washington	28.0	142.5	See note 1	0.87	0.261

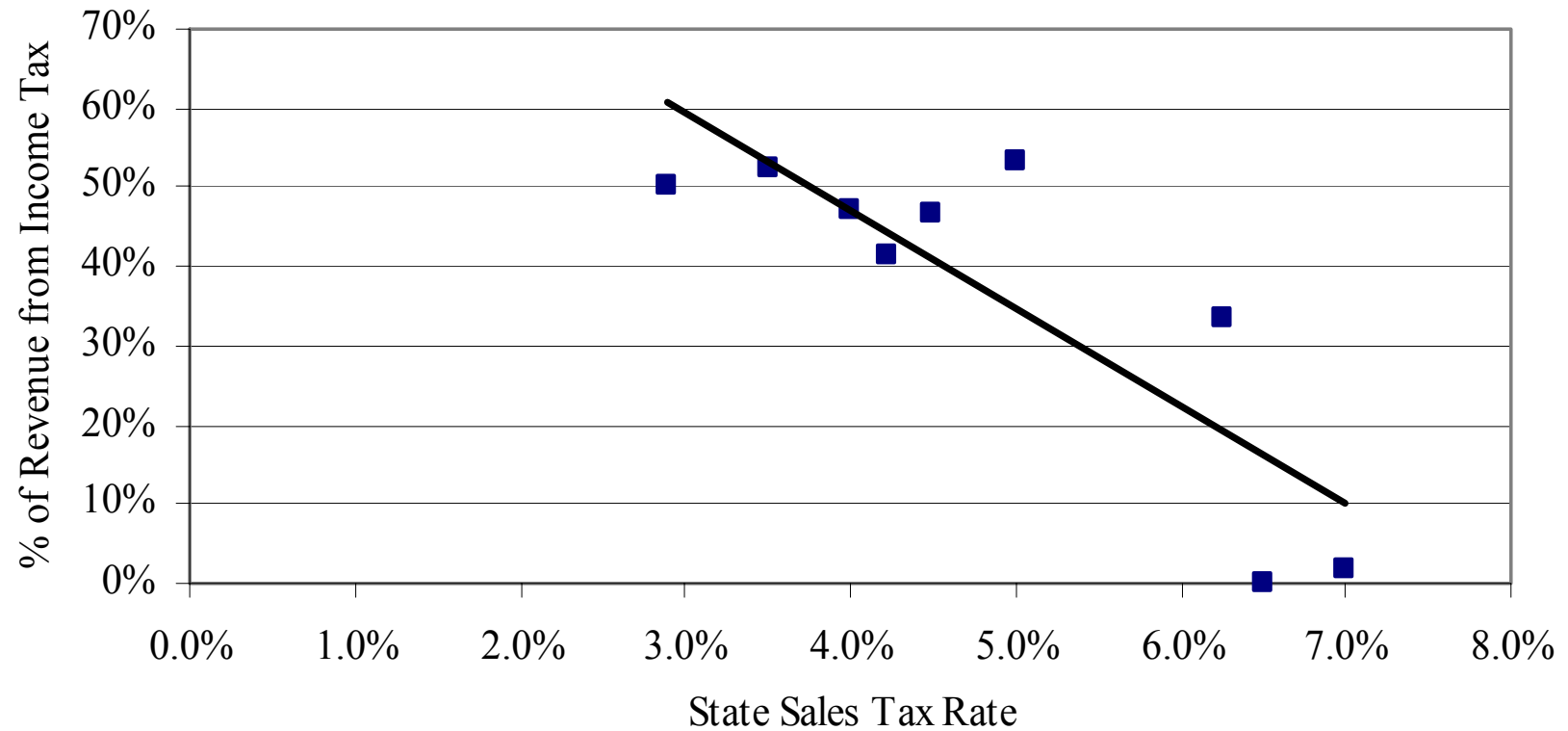
1. Government directly controls the sales, there is no specific excise tax.  
Source: Federation of Tax Administrators' website.

## E. Sales Tax Rate and the Importance of Income Tax

The following chart shows compares the importance of the income tax to a state to the sales tax rate.

- Not surprising, the less important is the income tax to a state, the higher is the state's sales tax rate, reflecting a substitution between the taxes.

## Sales Tax Rate and Importance of Income Tax



SOURCE: Government Finances; Federation of Tax Administrators.

## IV. TAX BURDENS BY INCOME LEVEL

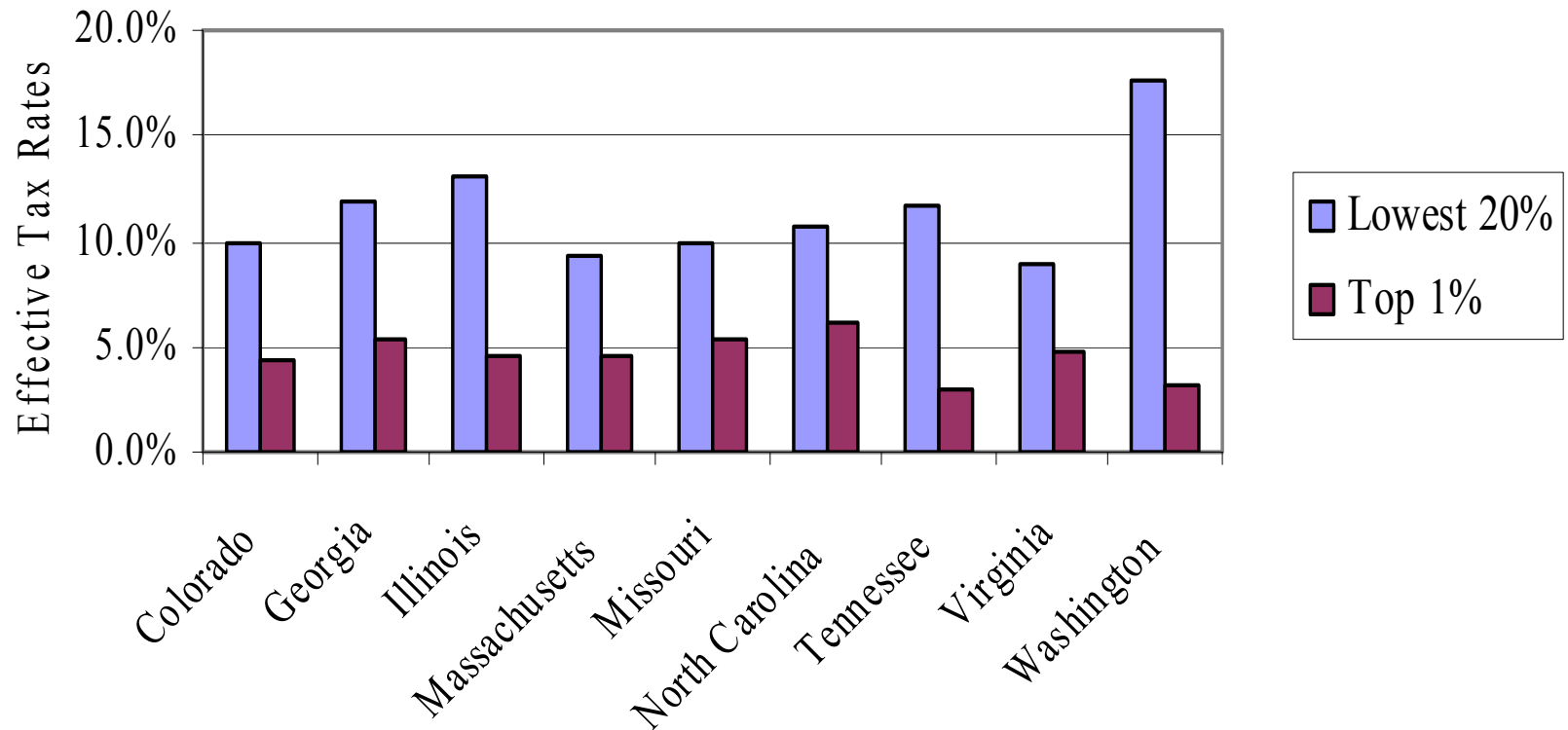
The following six charts concern the distribution across income levels of the tax burdens for the 9 comparison states.

### A. Effective Tax Rates

The first chart shows the effective tax rate for state and local taxes for households in the lowest 20 percentile of income and in the highest 1 percent. (The effective tax rate is the ratio of taxes paid to income.)

- The effective tax rate in Georgia is the third highest for both the lowest and highest income class of the 9 comparison states.

# State & Local Tax Burdens, 2002



Source: Institute on Taxation and Economic Policy, *Who Pays? A Distributional Analysis of the Tax Systems in All 50 States*, January 2003.

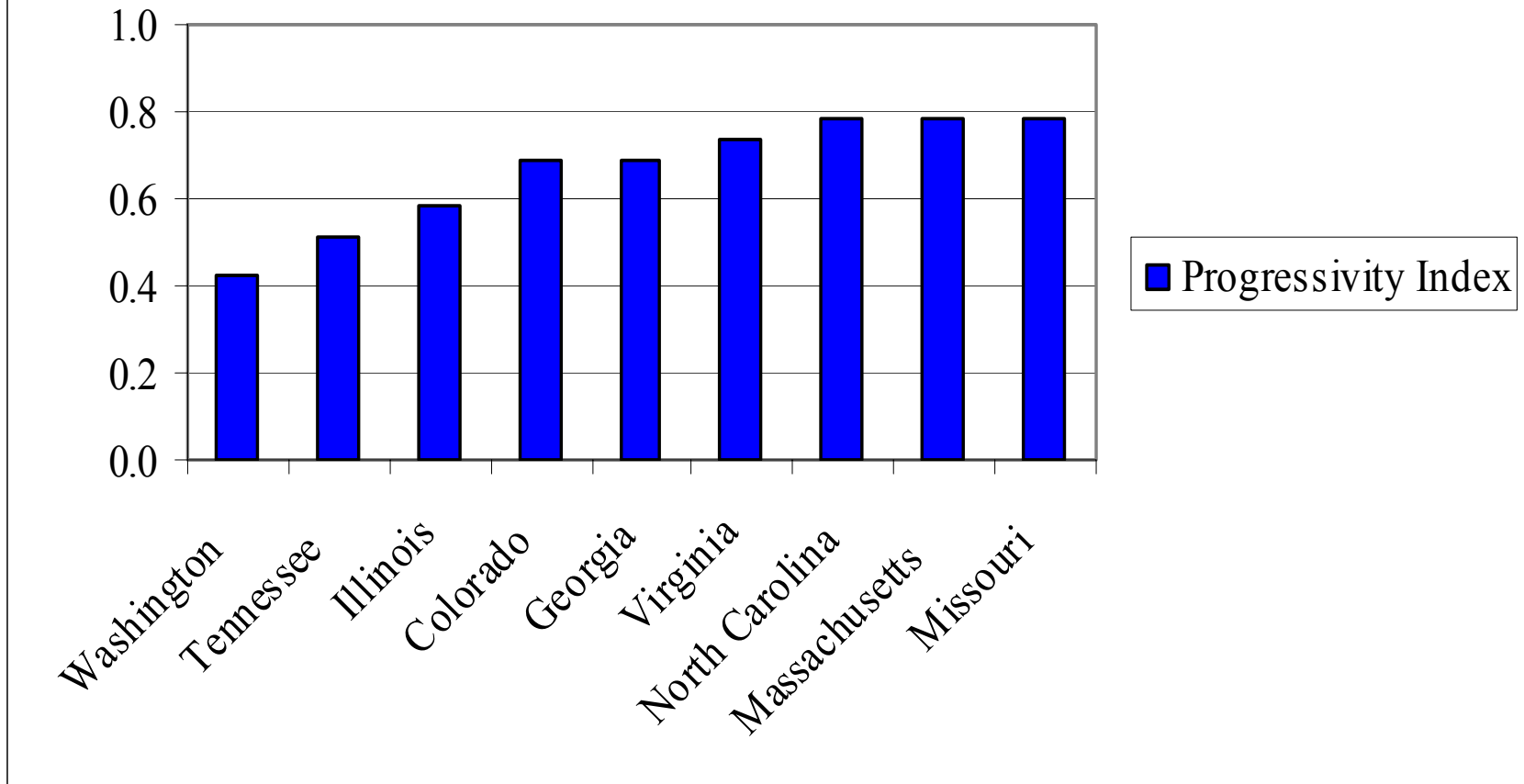
## B. Progressivity Index

The second chart shows the tax progressivity index, where the index equals the ratio of effective taxes for the highest and lowest income classes. The higher the value of the index the more progressive is the tax system, and a value of less than one suggests a regressive tax system, i.e., one in which low income households pay a higher effective tax rate than high income households.

- Georgia is in the middle of the comparisons states in terms of the progressivity of its tax system.



## State & Local Tax Progressivity, 2002

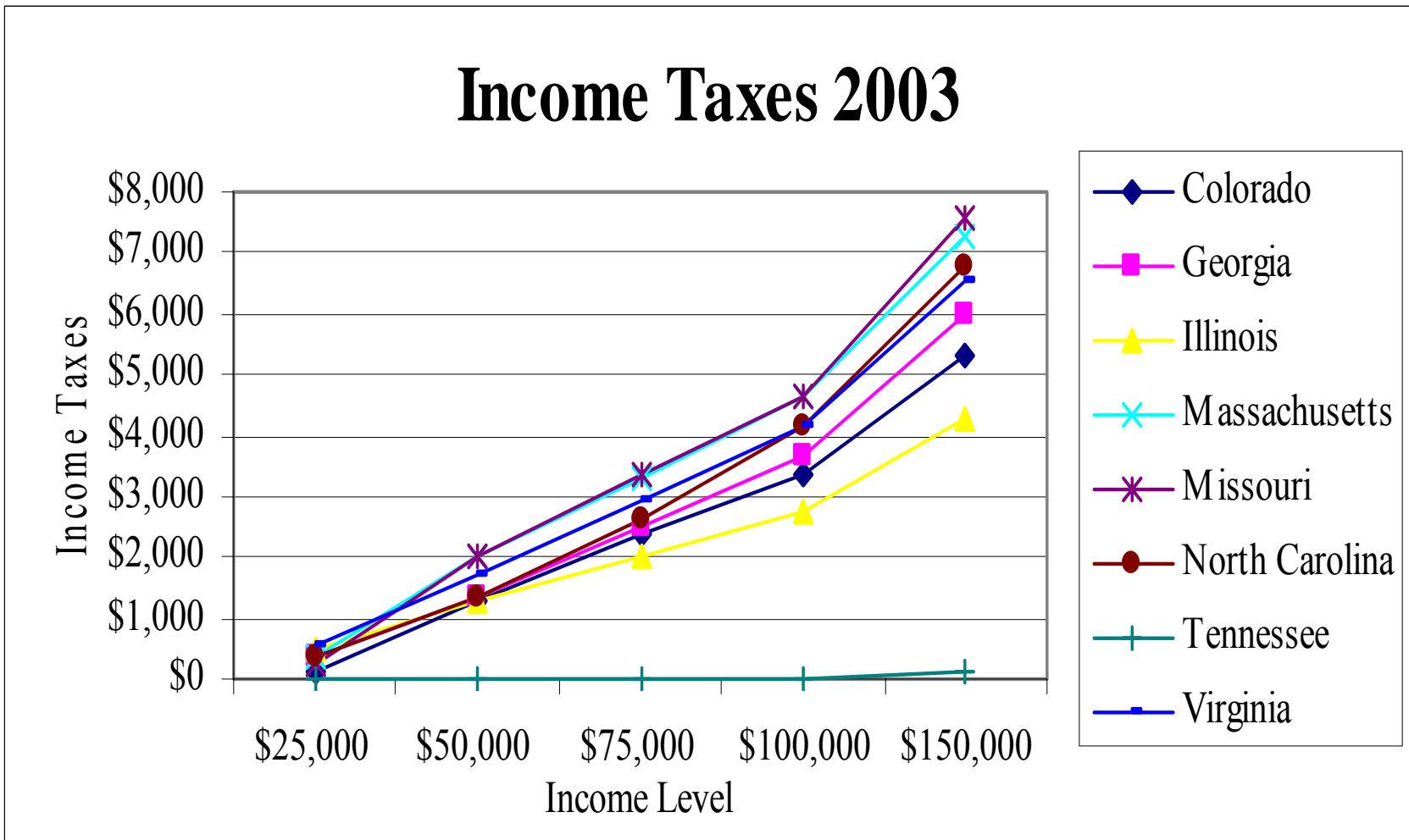


### C. Income Tax Progressivity

The third chart illustrates the progressivity of the income taxes for the 8 comparison states with an income tax. The chart shows the income tax paid by each of five income levels.

- Since Tennessee has only a very limited income tax, the income taxes paid are very low.
- Income tax burdens in Georgia are about in the middle of the comparison states.

# Income Taxes 2003



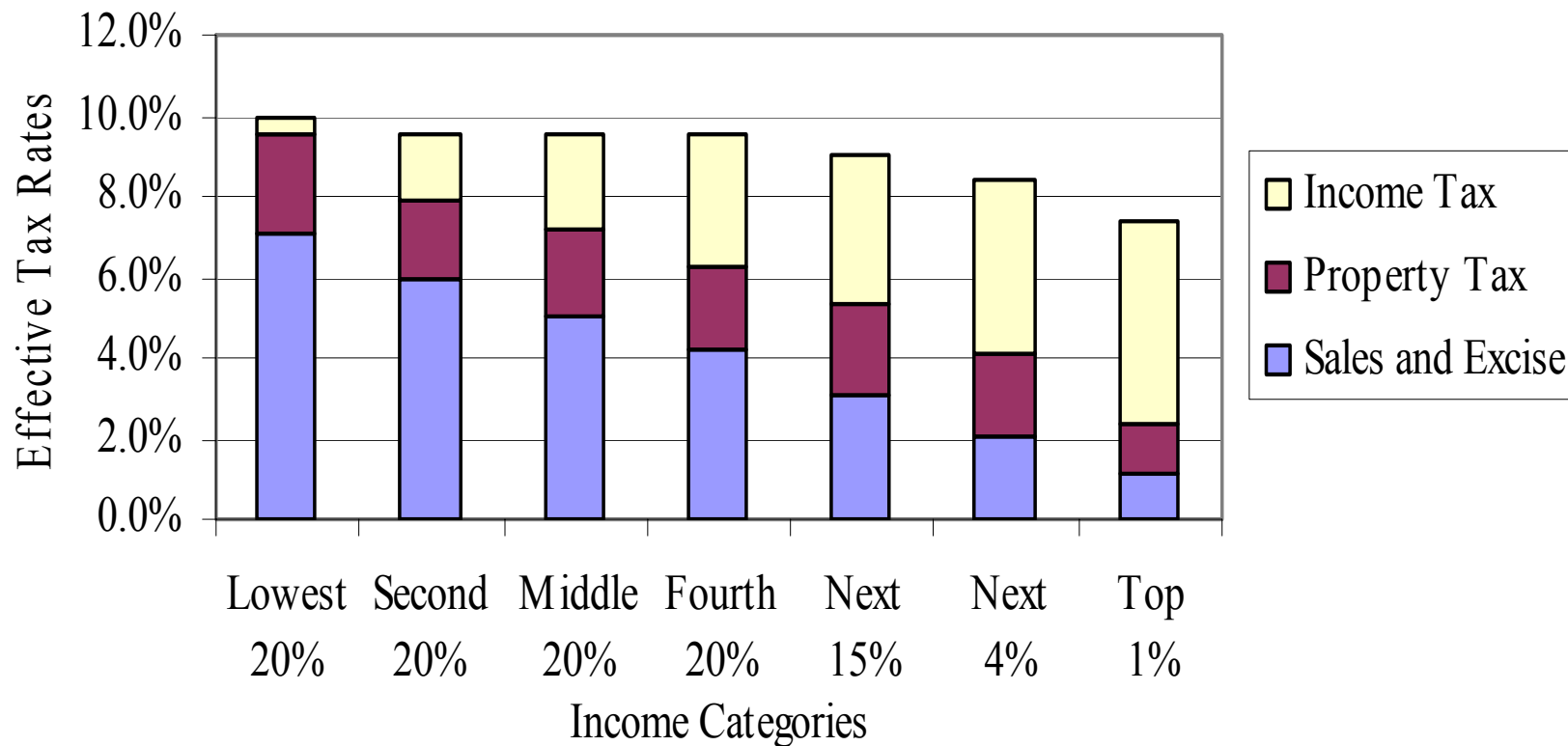
Source: Government of the District of Columbia, *Tax Rates and Tax Burdens*, August 2004.

## D. Progressivity of State and Local Taxes

The next three charts show the state and local tax burden by income class for three states: Missouri, Georgia, and Washington. Missouri has a tax system that is the least regressive of the 9 states, while Washington has the most regressive tax system of the 9 states. Georgia is in the middle.

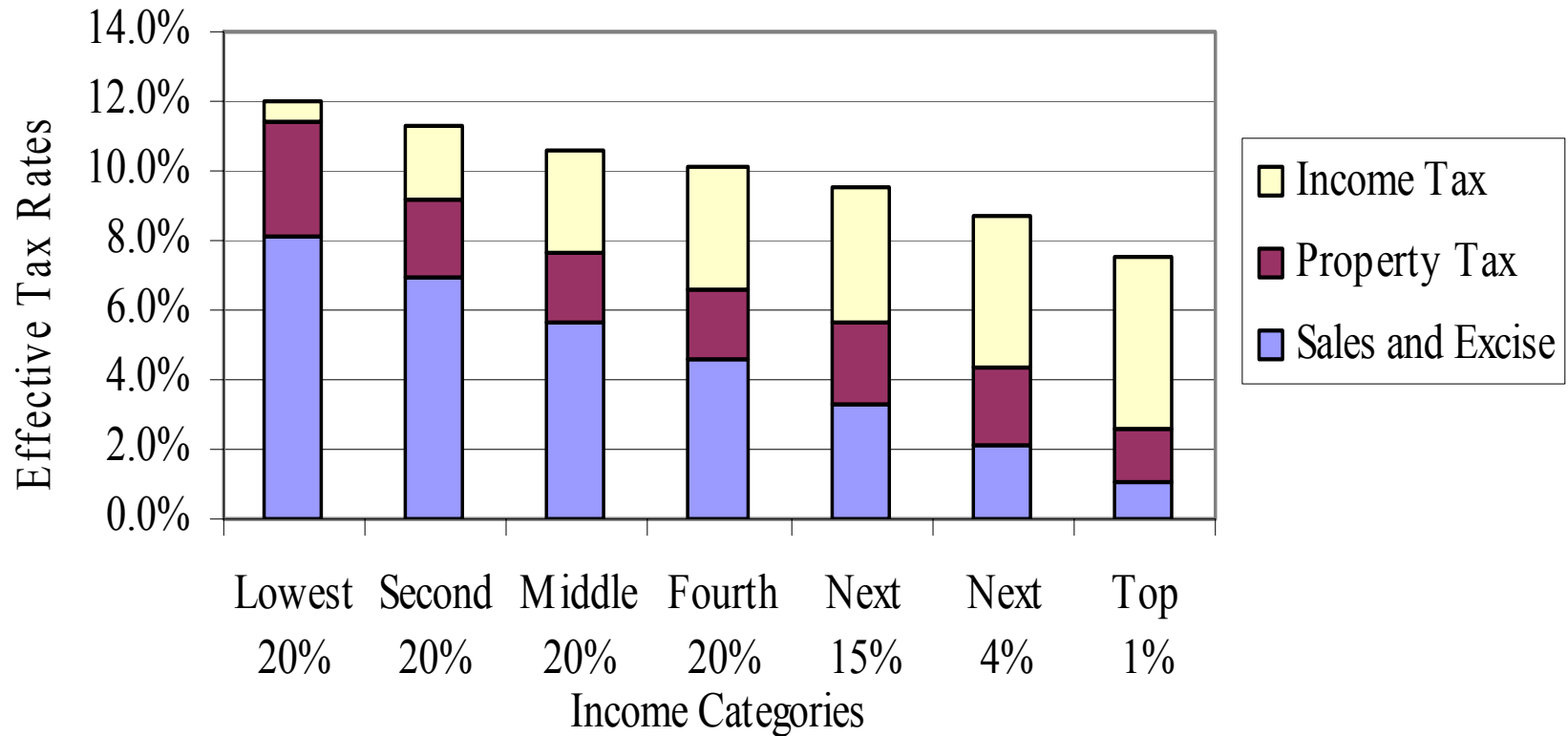
- For all states:
  - Sales and excise taxes are highly regressive.
  - Income taxes are highly progressive.
  - The property tax is mildly regressive.
- The difference in the regressivity of the tax systems is due to the progressivity of the income tax in the state.
  - Washington has no income tax and hence its tax structure is very regressive.
  - Georgia's income tax system is mildly progressive.
  - Missouri's income tax system is very progressive.

# State & Local Tax Burden - Missouri



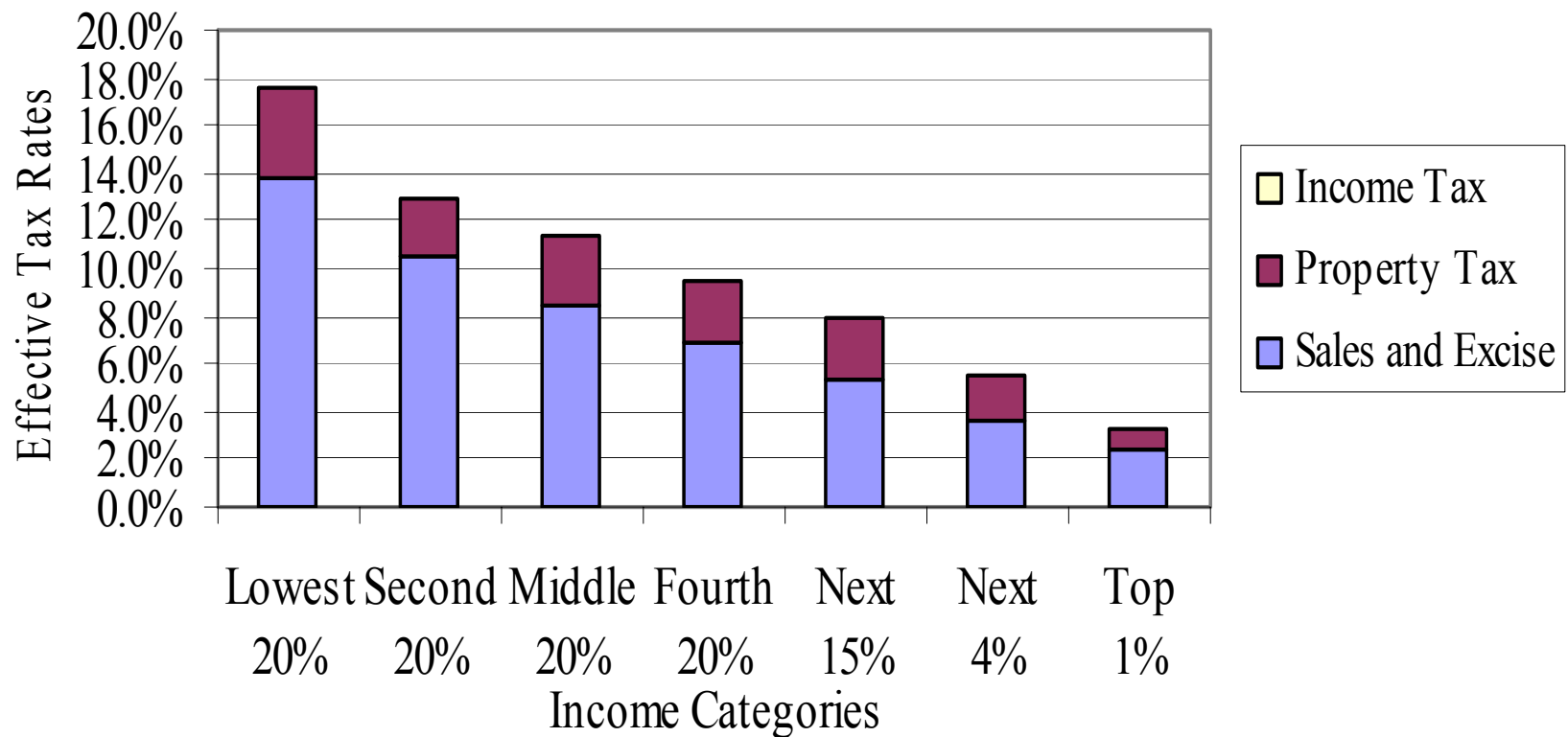
Source: Institute on Taxation and Economic Policy, *Who Pays? A Distributional Analysis of the Tax Systems in All 50 States*, January 2003.

# State & Local Tax Burden - Georgia



Source: Institute on Taxation and Economic Policy, *Who Pays? A Distributional Analysis of the Tax Systems in All 50 States*, January 2003.

# State & Local Tax Burden - Washington



Source: Institute on Taxation and Economic Policy, *Who Pays? A Distributional Analysis of the Tax Systems in All 50 States*, January 2003.

## V. REVENUE TRENDS IN GEORGIA'S TAXES

This section presents a discussion of tax revenue trends for Georgia's major taxes.

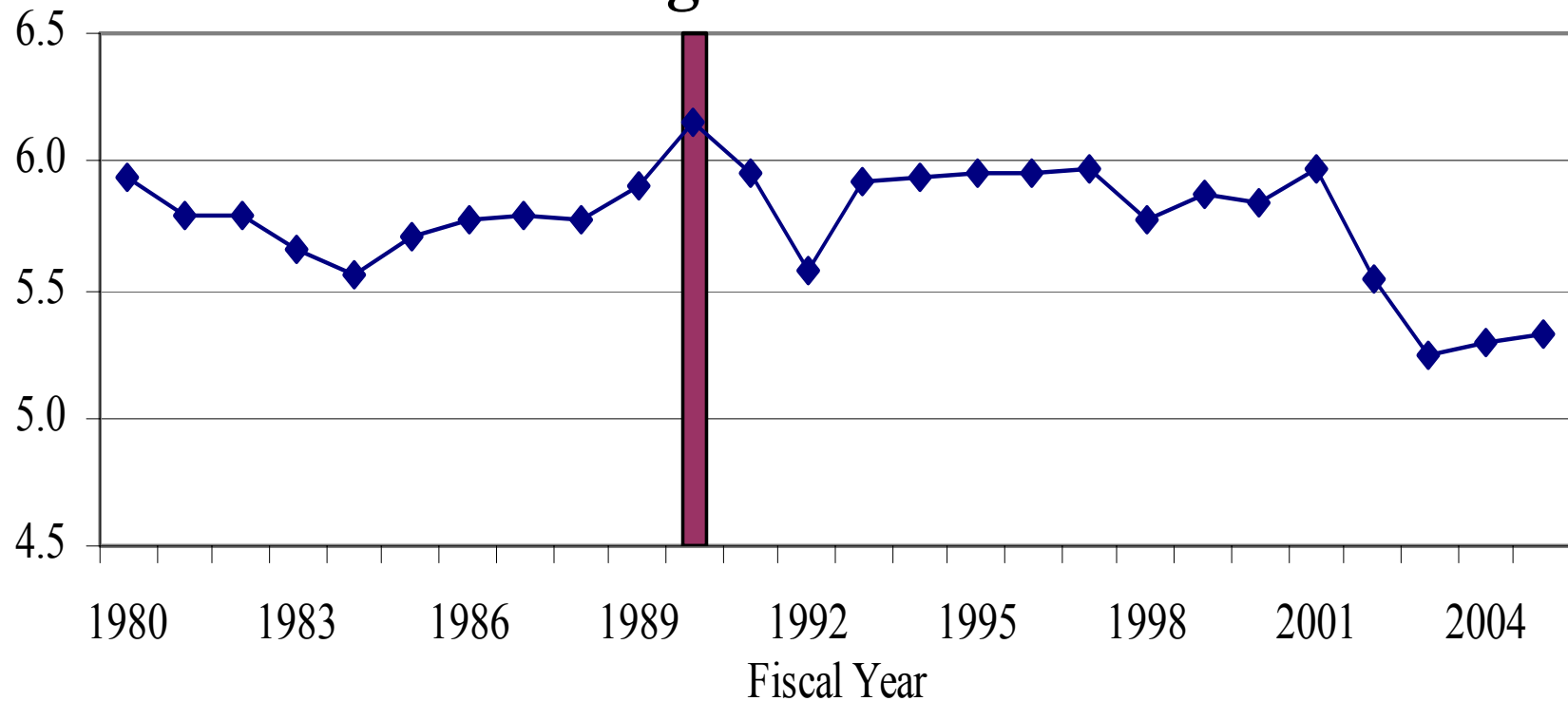
### A. Trends in Total Revenue

The following chart shows the ratio of total Georgia State government revenue raised from own-sources, i.e., excluding federal government grant revenue, divided by total personal income.

- Since 1980, the percentage of income paid to the state in the form of taxes, fees, etc., generally ranged from 5.5 percent to 6 percent.
- The percentage exceeded 6 percent in 1990 when the sales tax rate was increased.
- Since 2003, the percentage has been below 5.5 percent.



## State Own Source Revenue as a Percentage of Personal Income



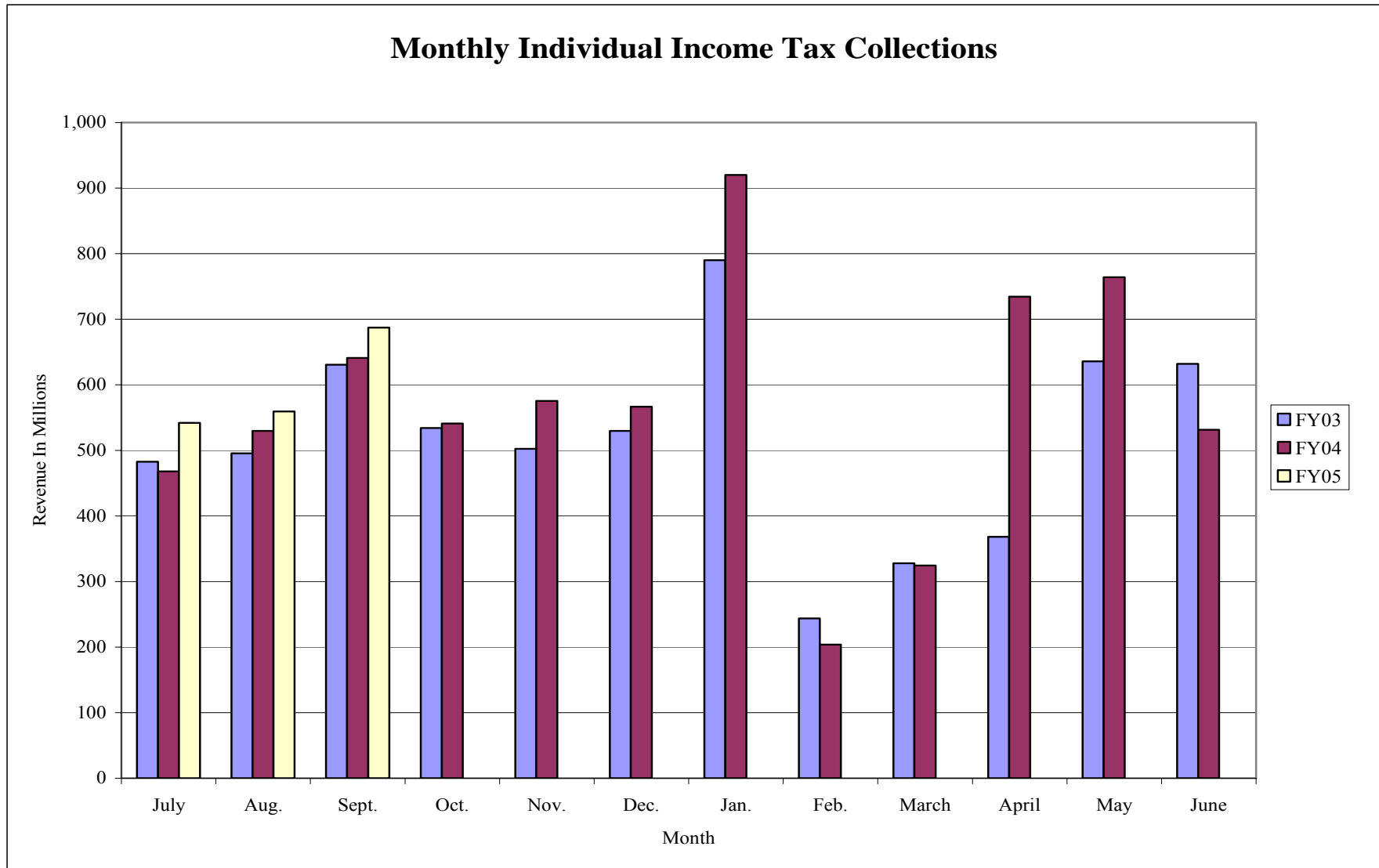
SOURCE: Alan Essig, Georgia Budget and Policy Institute.

## B. Personal Income Tax Revenue

The first graph shows how income tax revenues come into the Treasury on a month-by-month basis.

- The pattern over the months is not smooth, but there are some patterns to notice:
  - January is often a “big month” for income tax collections due to the impact of seasonal hiring and estimated tax payments.
  - April has not historically been a large month for receipts but an increased timeliness of payments and processing of final returns may boost April collections in the future.
  - FY04 receipts show a strong increase over FY03 receipts in the latter part of the fiscal year.

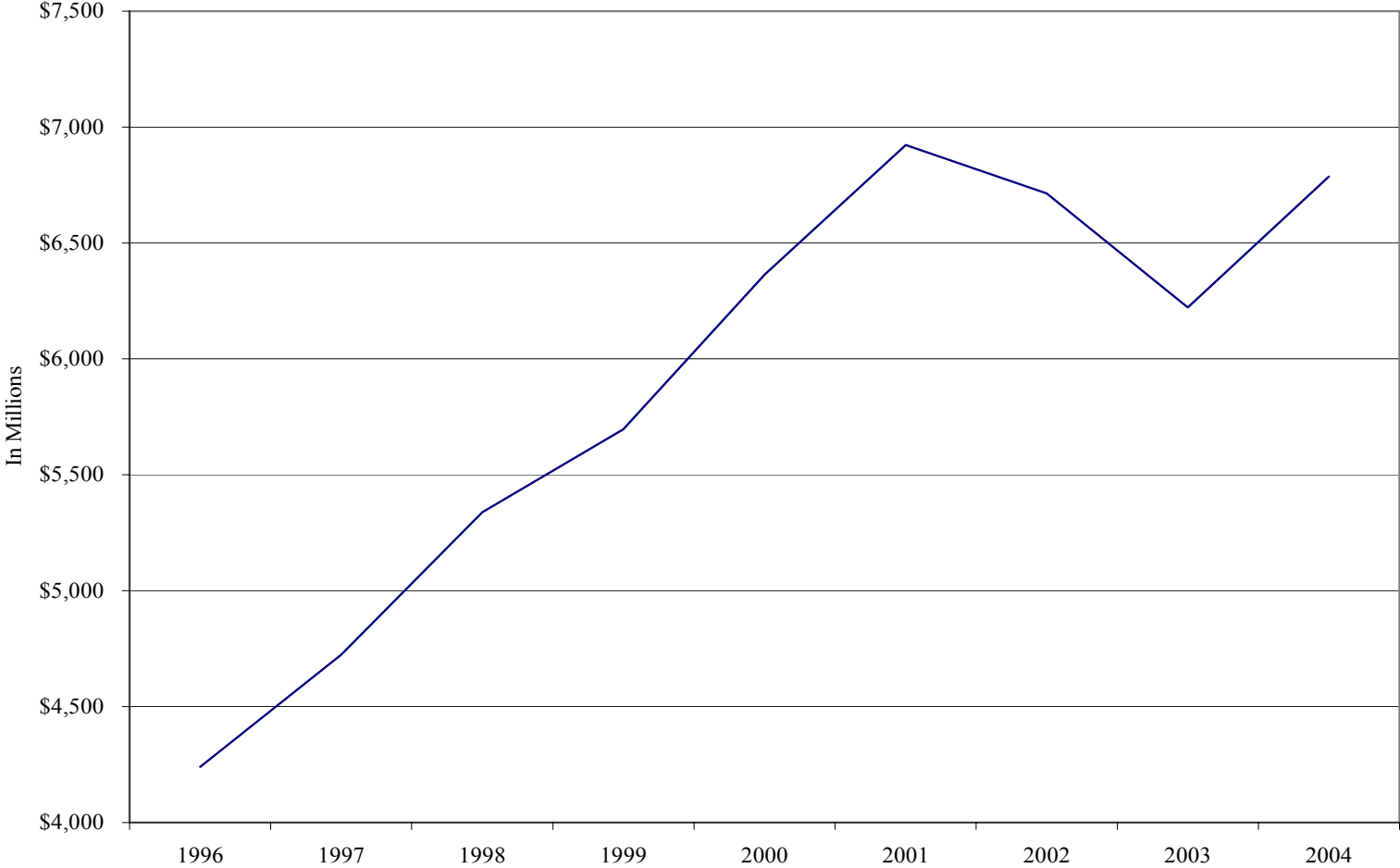
## Monthly Individual Income Tax Collections



The following chart shows the pattern of growth in individual income tax collections in nominal dollars—that is, these are the levels of collections as reported by the Department of Revenue for each fiscal year from 1996 to 2004.

- The graph demonstrates the strong and stable growth of the individual income tax, despite increased exemptions for some forms of income and increases in the level of exemptions for dependents over this time period.
- What is striking in the pattern of receipts is the downward notch in income tax receipts that hits in FY2002 and then again in FY2003. These trends are associated with the recession, which hit income tax receipts quite hard.
- FY2004 witnessed a decent recovery in individual income tax receipts, as shown on the graph. However, we do not expect to “catch up” with the pre-2002 trend line in income tax receipts for a number of years.

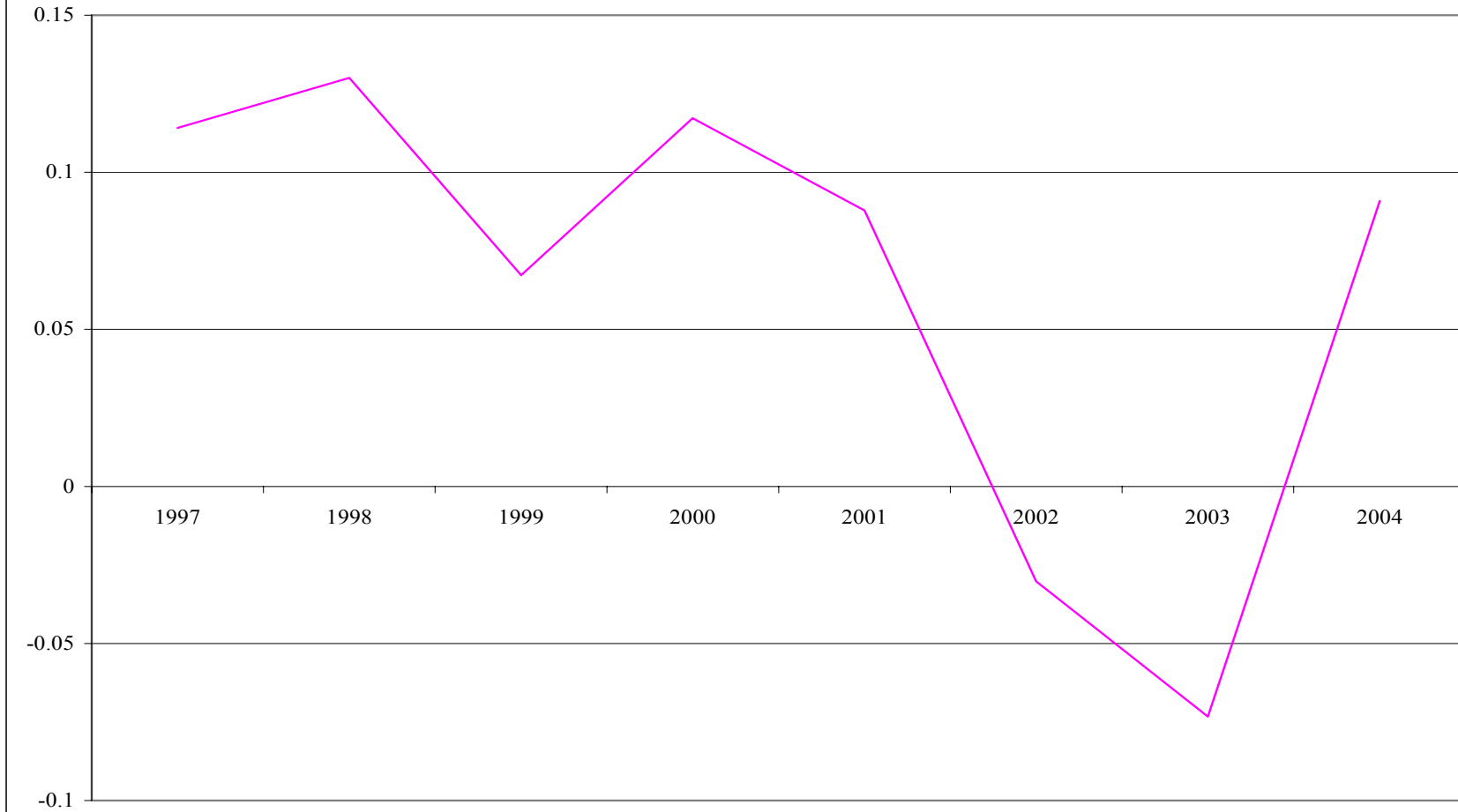
# Total Individual Income Tax Receipts



The following graph shows the percentage change in individual income tax receipts between fiscal years. It shows in more detail the pattern of ups and downs in receipts than the previous graph.

- The growth pattern shows that between FY1996 and FY2001 income tax receipts grew at a robust rate of between 7 and 13 percent per year. These figures do not take into account changes in exemptions and deductions that occurred in 1998 and 2000.
- Between FY2001 and FY2002, individual income tax receipts declined in nominal terms for the first time in recent history. This decrease in revenue continued in FY2003 but a rebound began in early FY2004.
- From FY2003 to FY2004, income tax receipts grew approximately 9 percent—still slightly below the average growth in the period from 1996-2001, but reflecting a response to the expanding economy post-recession.

## Individual Income Tax Revenue Growth

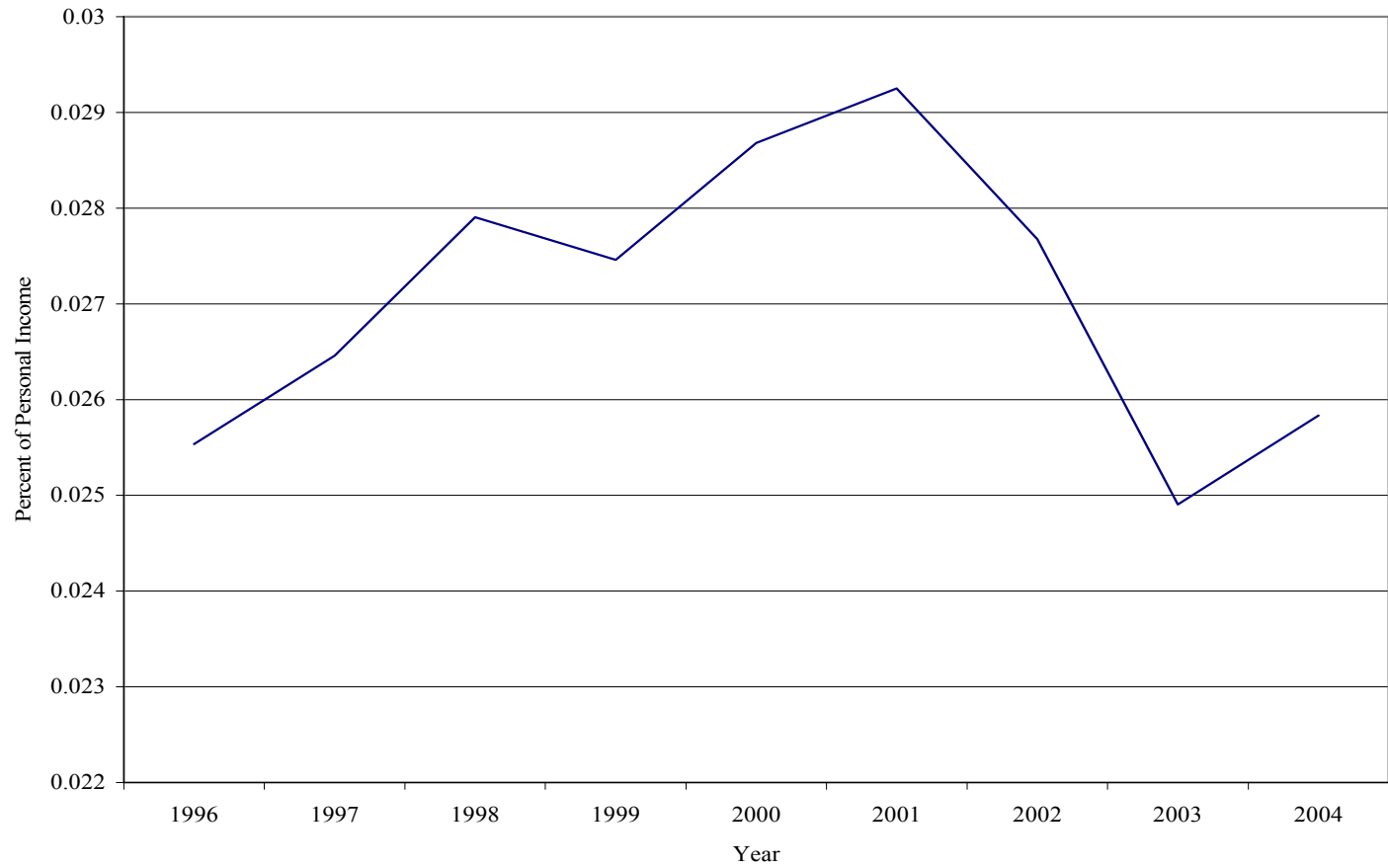


Individual income tax receipts are very closely related to personal income. Since income tax revenues are derived by taxing components of personal income, we might expect to see a close relationship between income tax revenues and personal income.

- As shown in the following graph, income tax revenues as a share of personal income grew significantly from 1996 to 2001. The ratio of income tax revenue to personal income was 2.56 in 1996, growing to 2.92 by 2001.
- The growth in income tax revenues relative to personal income was in part due to the increase in capital income and the increase in high paying jobs. These types of income would be taxed at the higher marginal tax rate according to the tax schedule for the state of Georgia.
- The relationship between income tax receipts and personal income fell dramatically from 2001. By 2002, the ratio was 2.77 and in 2003 it was 2.49.
- The decline in the ratio is due to a loss of employment, a slight increase in transfer payments (which are largely non-taxable), and a reduction in capital income.
- In 2004, this ratio increased to 2.58 due to expansion of employment. We believe that there are still numerous capital losses and that taxpayers will not report significant increases in net capital gains for another two to three years.
- The ratio of tax receipts to personal income should continue to increase somewhat, but due to the slow recovery in higher paying jobs and the stock of capital losses in the tax system, it is unlikely that the ratio would reach 2.7 or higher for the next three to four years.



### Individual Income Tax Revenue/Personal Income



## C. Sales and Use Tax

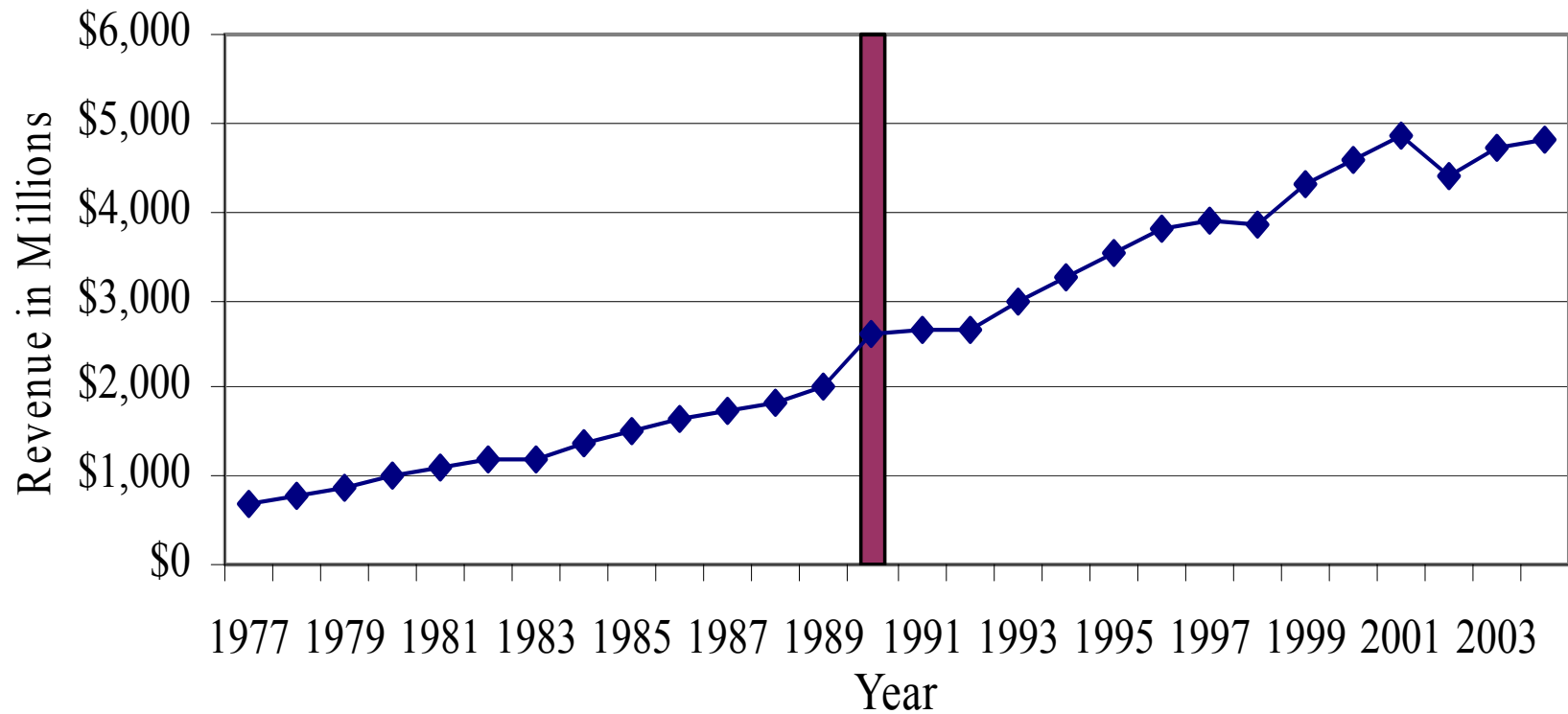
The next five charts focus on the sales tax.

### 1. Increase in Total Sales Tax Revenue

- Until recently, sales tax revenue has increased nearly continuously.
  - Between 1977 and 2004, sales tax revenue increased from \$686 million to \$4,805 million, or 7.2 percent per year (first chart).
  - Adjusted for inflation, sales tax revenue increased 3.0 percent per year (second chart).

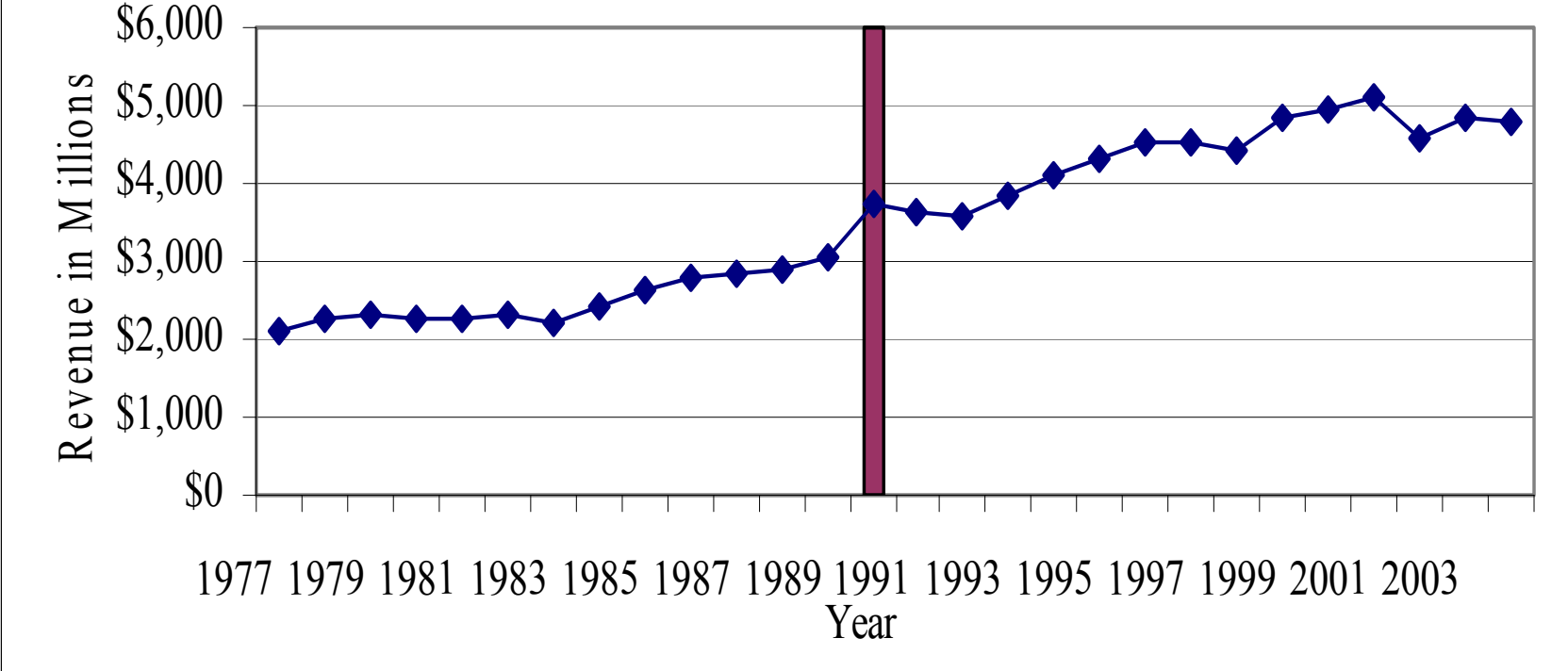
The vertical bar denotes the increase in the sales tax rate from 3 percent to 4 percent.

# Annual Sales Tax Revenue



SOURCE: Georgia Budget Report.

# Annual Sales Tax Revenue (Inflation Adjusted)



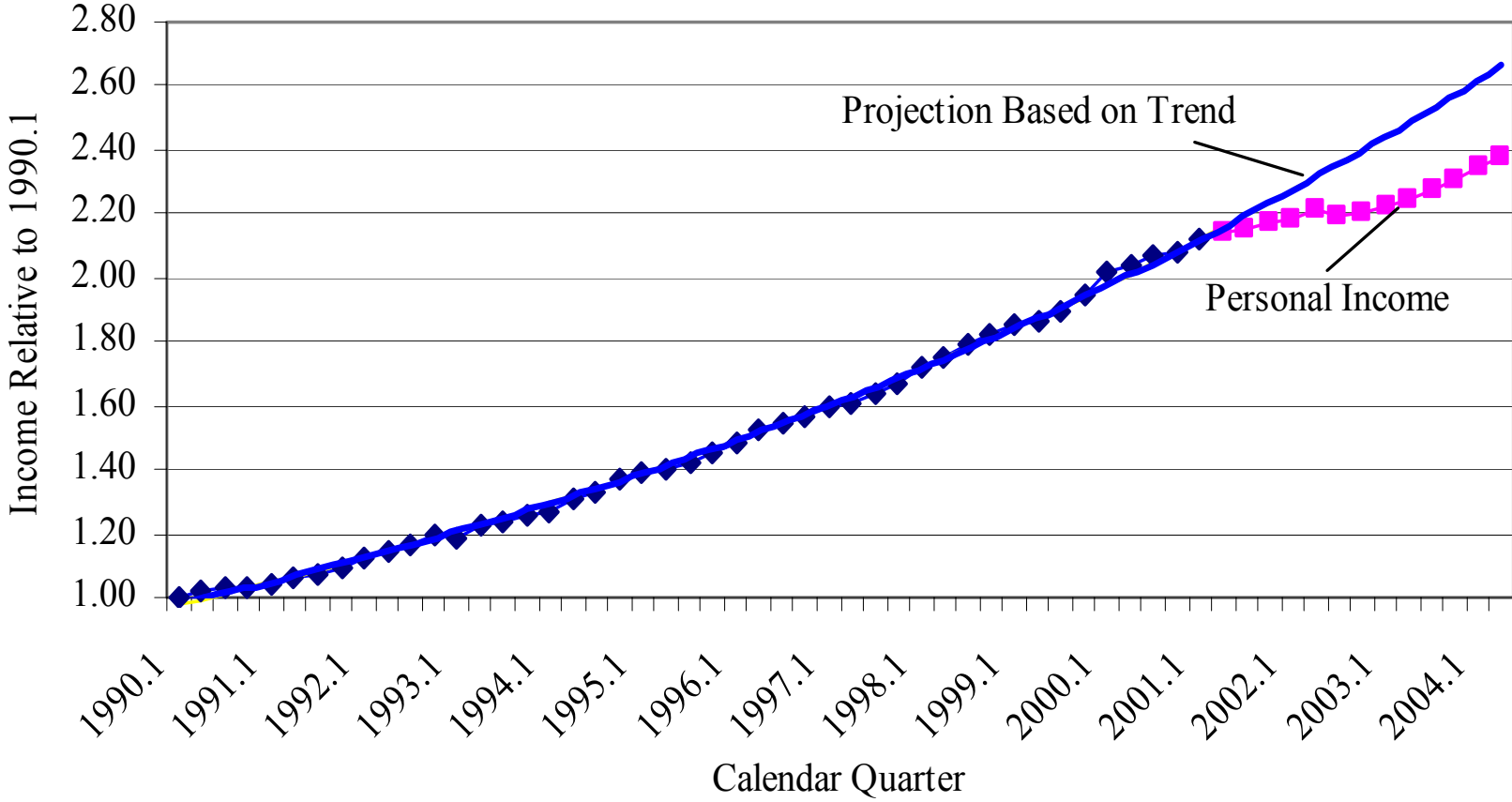
SOURCE: Georgia Budget Report; Bureau of Labor Statistics.

## 2. Income Growth

Sales tax revenue is related to the level of income. The third chart shows how income increased by calendar quarter over the period 1990 to 2004. The chart is scaled by dividing income in each period by the income in the first period. Thus, the vertical axis illustrates the growth in income.

- Total income followed a rather uniform growth path until 2001, which is the date of the recent recession.
- Beginning in 2001 income growth slowed substantially and is now only beginning to grow at the previous rate.
- For the 1991 recession we do not observe the same kind of slow down of income growth.

# Personal Income



SOURCE: Bureau of Economic Analysis.

### 3. Sales Tax Revenue and Income

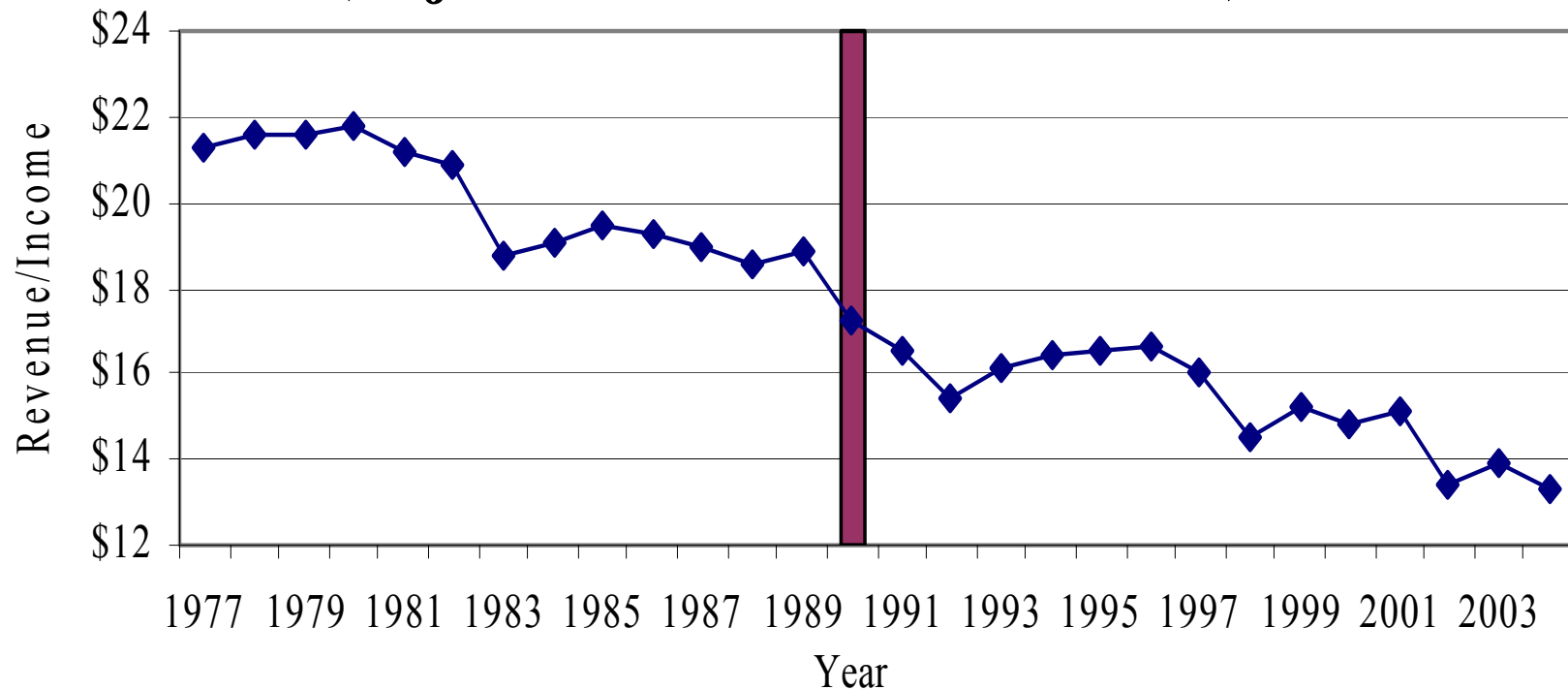
The next two charts show the trend in sales tax revenue per \$1000 of income:

- The first chart uses actual revenues.
- The second chart adjusts post-1990 revenue for the increase in the sales tax rate to 4 percent.
- Sales tax revenue per \$1000 of income has fallen nearly continuously for the past quarter of a century.
- There are many reasons for the decrease.
  - Consumption patterns have changed.
    - In 1983, commodities were 36.4 percent of personal expenditures, but 29.2 percent in 2003. If that change had not occurred, 2003 sales tax revenues would have been an estimated \$678 million more.
    - E-commerce has increased by 2.5 times between 1999 and 2003. Since much of e-commerce is not taxed, this has reduced sales tax revenue.

- Exemptions
  - The 1996 exemption for food for home consumption reduced FY 04 revenue by an estimated \$700 million.
  - Other exemptions adopted since 1987 reduced sales tax revenues by another \$100 to \$110 million.
- The recent slow down is due in part to the recession and to the post- 9/11 decrease in travel and to a shift from eating out to eating at home.
- If income had stayed on trend and if the sales tax to personal income ratio had remained at its 2000 level, sales tax revenue in FY04 would have been \$1,100 million larger.

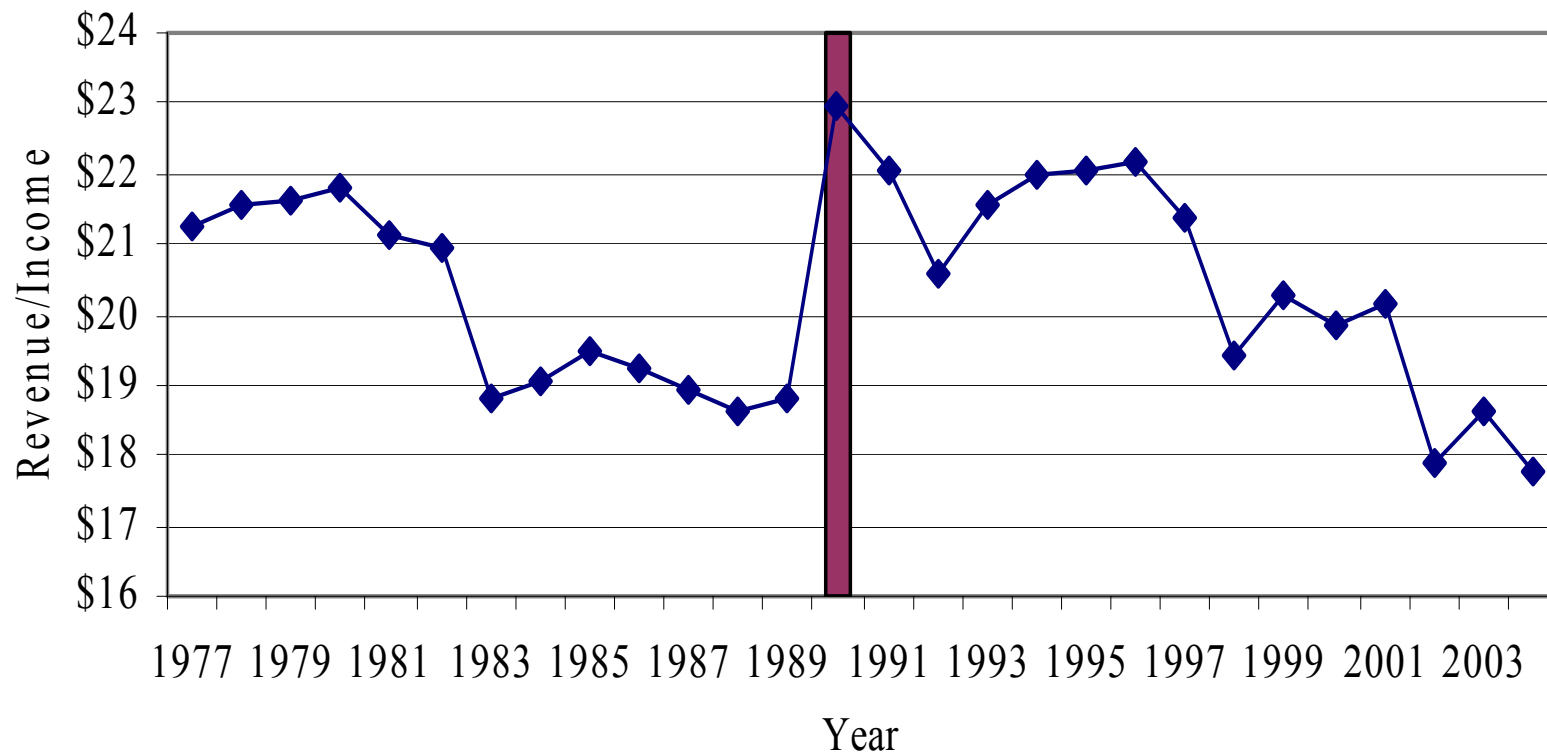


## Sales Tax per \$1000 of Personal Income (Adjusted for Tax Rate Increase)



SOURCE: Georgia Budget Reports.

# Sales Tax per \$1000 of Personal Income



SOURCE: Georgia Budget Reports, Bureau of Economic Analysis.

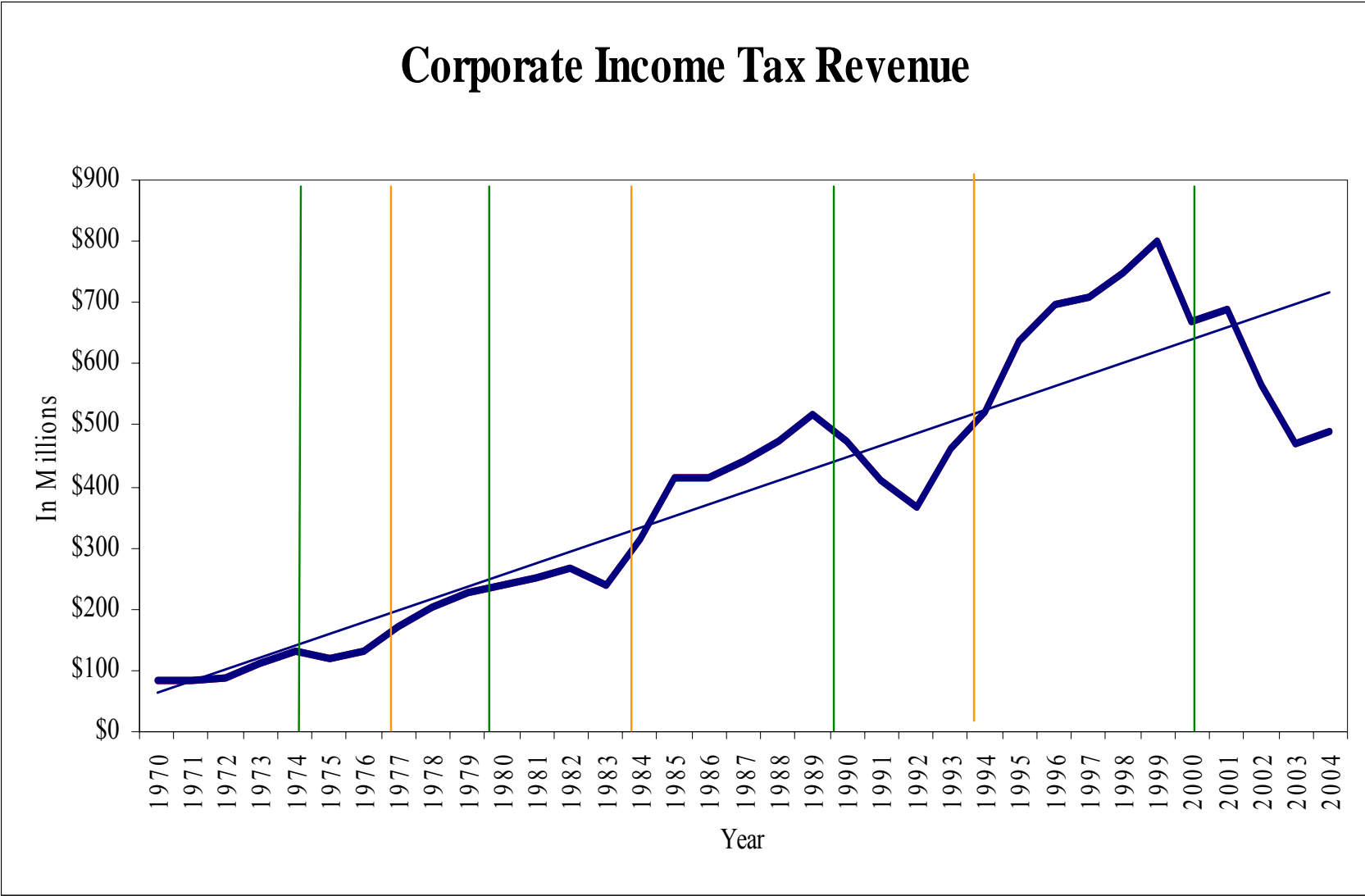
## **D. Corporate Income Tax Revenue**

### **1. Growth in Total Corporate Income Tax Revenue**

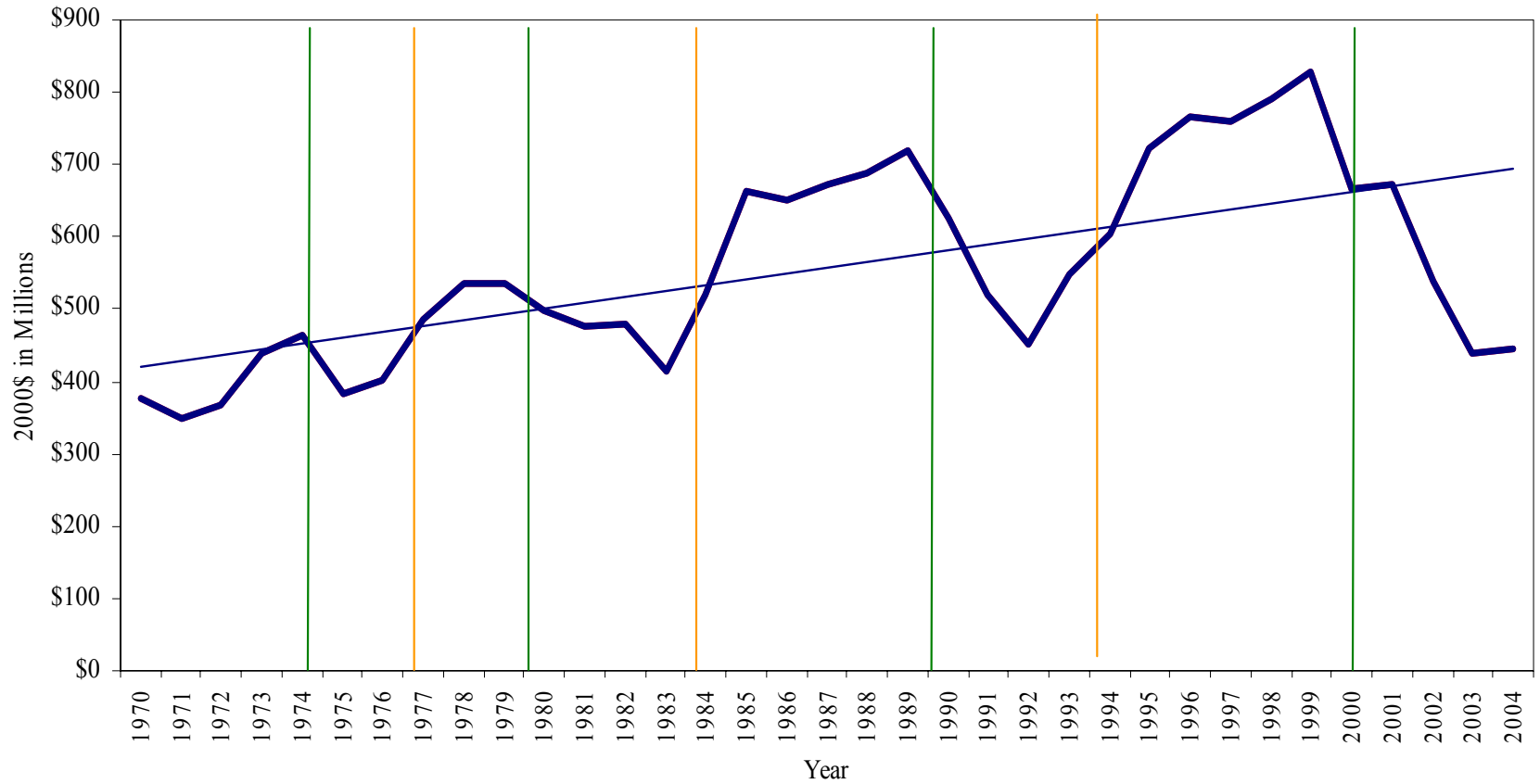
The following two charts show the growth in corporate income tax revenue for the period 1970 to 2004. The first chart shows the growth in actual revenue, while the second shows the growth in real (i.e., inflation adjusted) revenue.

- Over the 34 year period, revenues, adjusted for inflation increased at 0.5 percent per year.
- Corporate income tax revenues have declined substantial since 1999, by 44.2 percent.
- The other thing to note is the wide swings in revenue, which are associated with recessions and expansions in the economy.

# Corporate Income Tax Revenue



## Inflation-Adjusted Corporate Income Tax Revenue

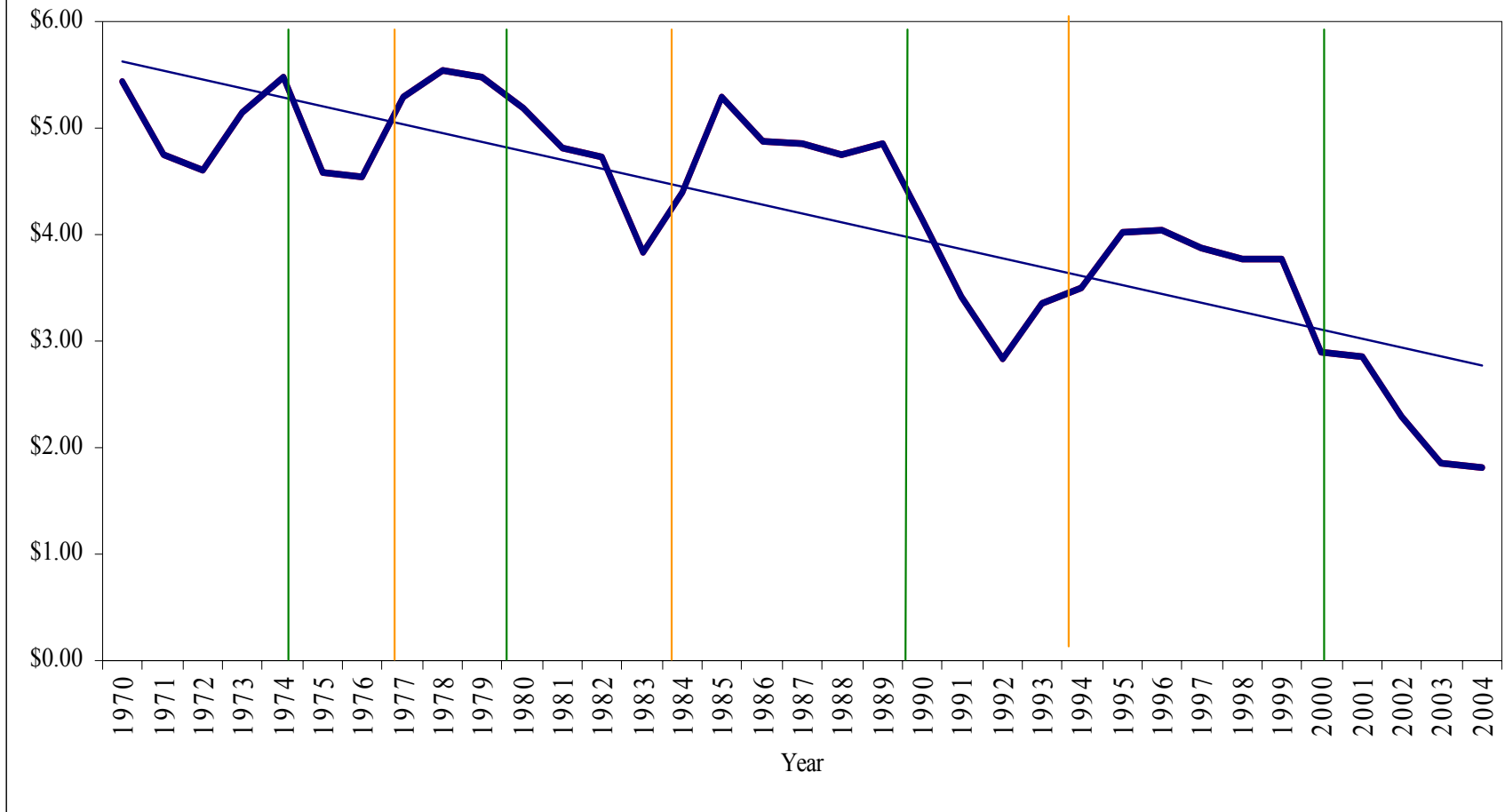


## 2. Relationship Between Corporate Tax Revenue and Total Personal Income

The following chart shows how the relationship between corporate income tax revenue and the size of the Georgia economy, as measured by personal income.

- Corporate income tax revenue per \$1000 of personal income has been on a downward trend.
- Reasons for this trend:
  - There has been a shift from traditional corporations (called C-corps) to other forms of business (called S-corps and limited partnerships).
  - A shift to a double weighted sales apportionment formula reduced revenue.
  - An increase in tax credits for economic development purposes. In 1991, such credits amounted to \$179,924. By 2000 they amounted to \$85,573,335. It is reported that there are substantial credits that have been carried forward by firms that have been unable to use the credits.
  - Firms have been more active in tax planning. For example, by setting up what are known as Delaware holding companies firms can move profits to states with no corporate income tax.
  - Because the calculation of taxable income in Georgia is tied to the federal corporate income tax code, changes in the federal system translate into changes in Georgia. Several changes in the 1980s at the federal level, for example, accelerated depreciation, reduced taxable profit in Georgia.

## Corporate Income Tax per \$1000 of Personal Income



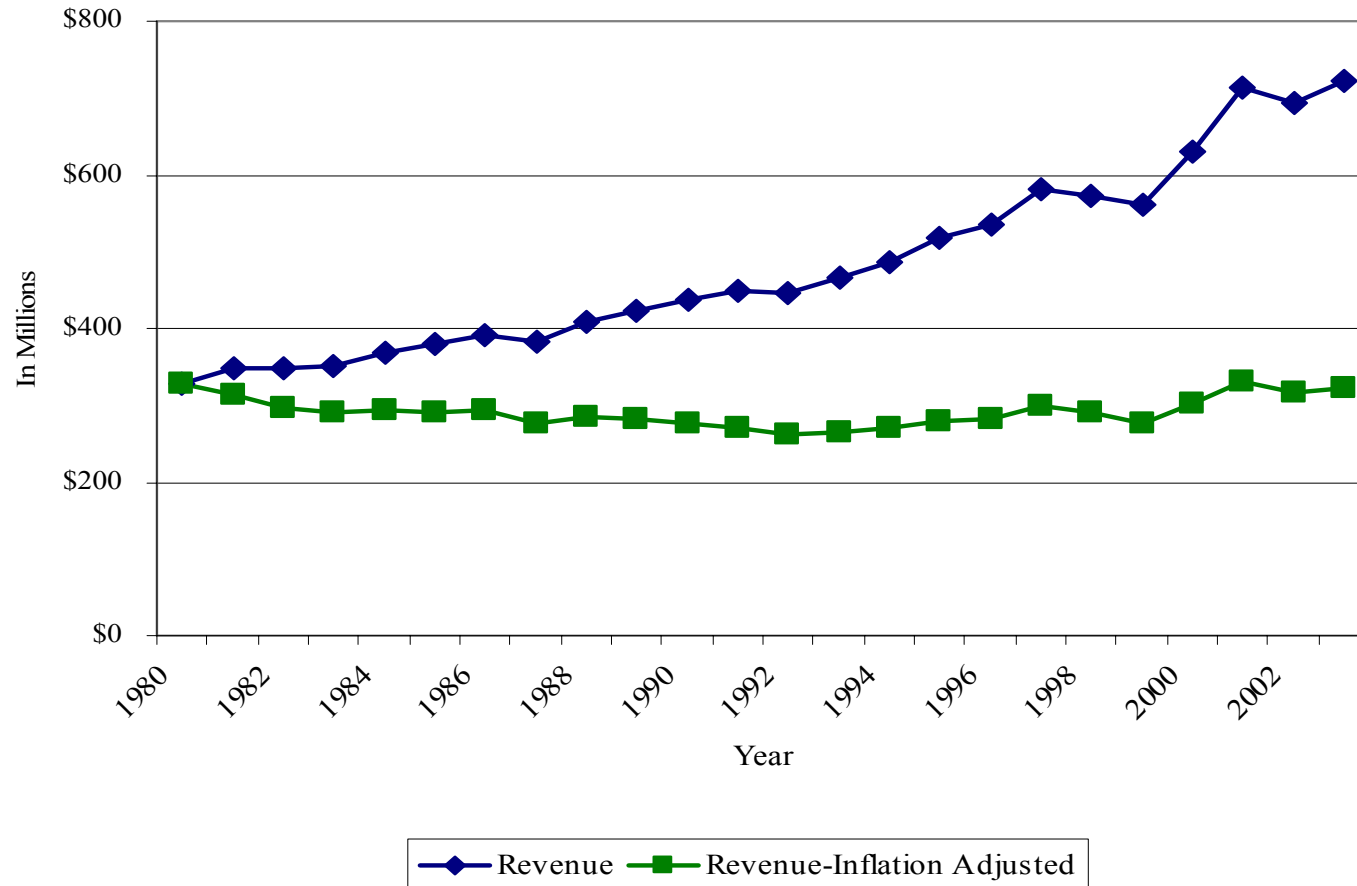
## E. Fuel Tax Revenue

The next two charts focus on fuel tax revenue, including both the 7.5 cents per gallon tax and the 3 percent prepaid sales tax.

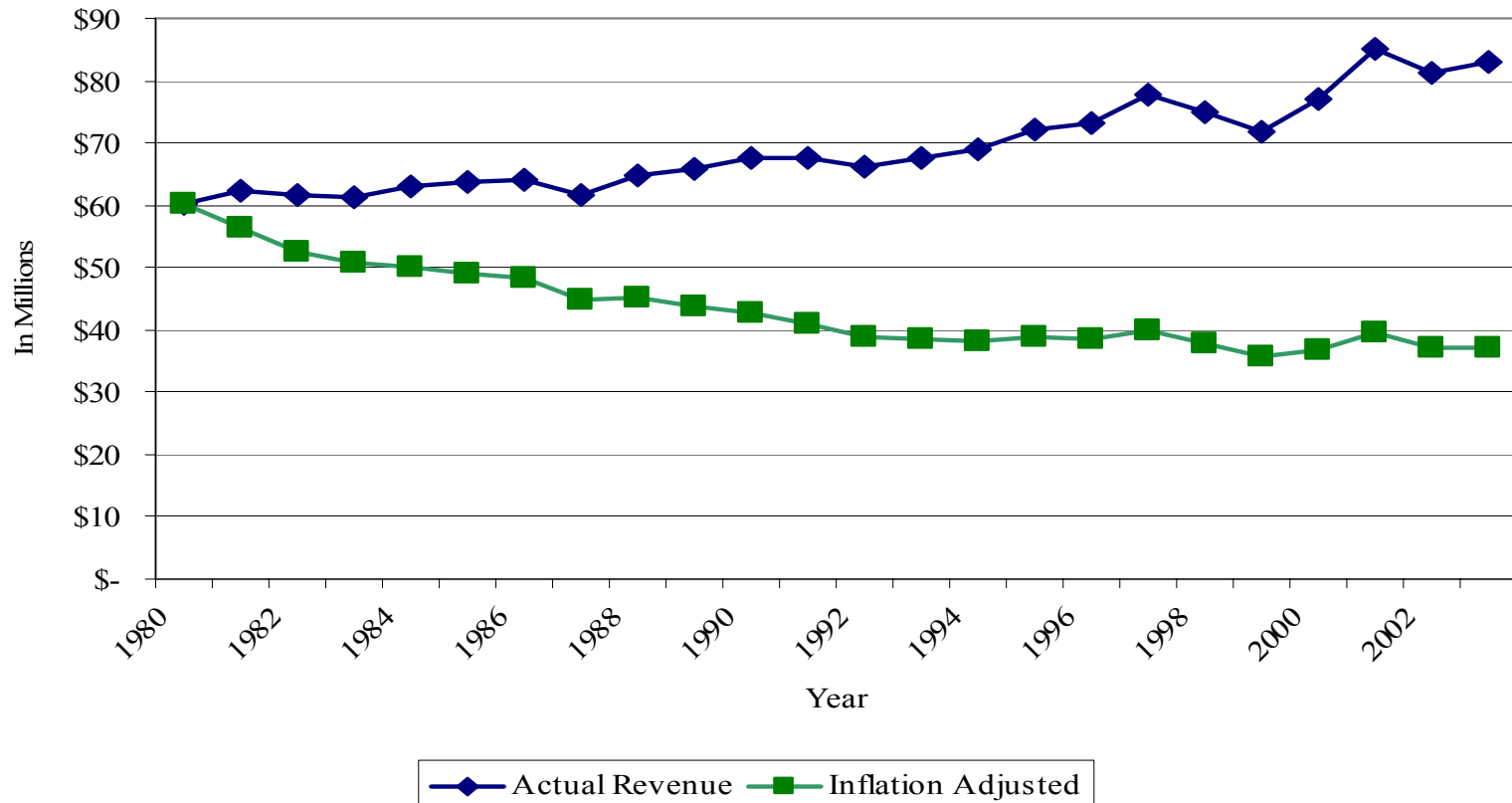
- Since 1980, Georgia's fuel taxes increased 119.0 percent.
- Controlling for inflation, real fuel tax revenues decreased by 1.9 percent.
- On a per capita basis, fuel taxes increased 37.8 percent.
- On an inflation-adjusted basis, gas tax revenue per capita decreased 38.3 percent since 1980.



## Georgia Fuel Tax Revenues (1980-2003)



## Georgia Fuel Tax Revenues Per Capita (1980-2003)

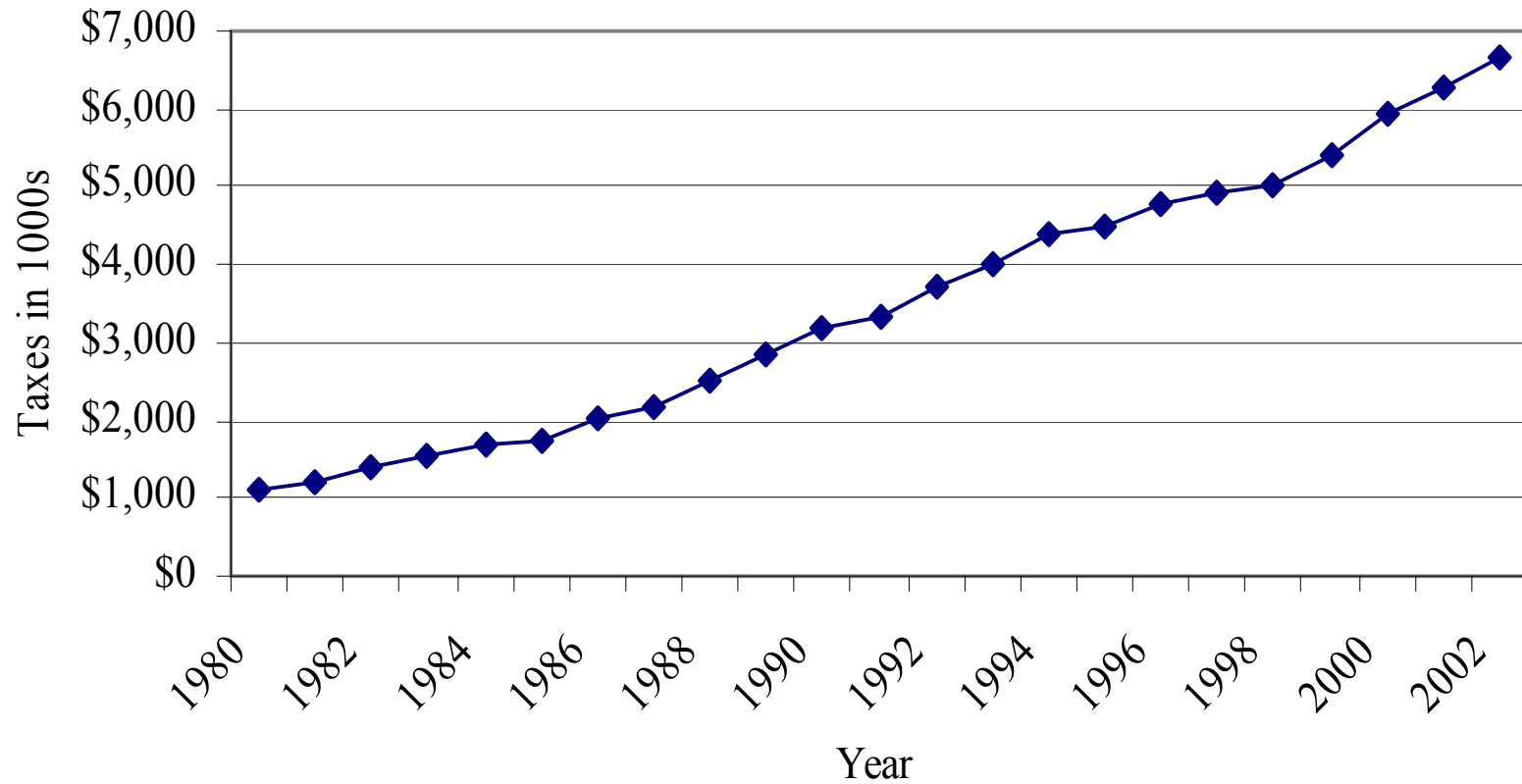


## F. Property Tax Revenue

The following five charts focus on the property tax.

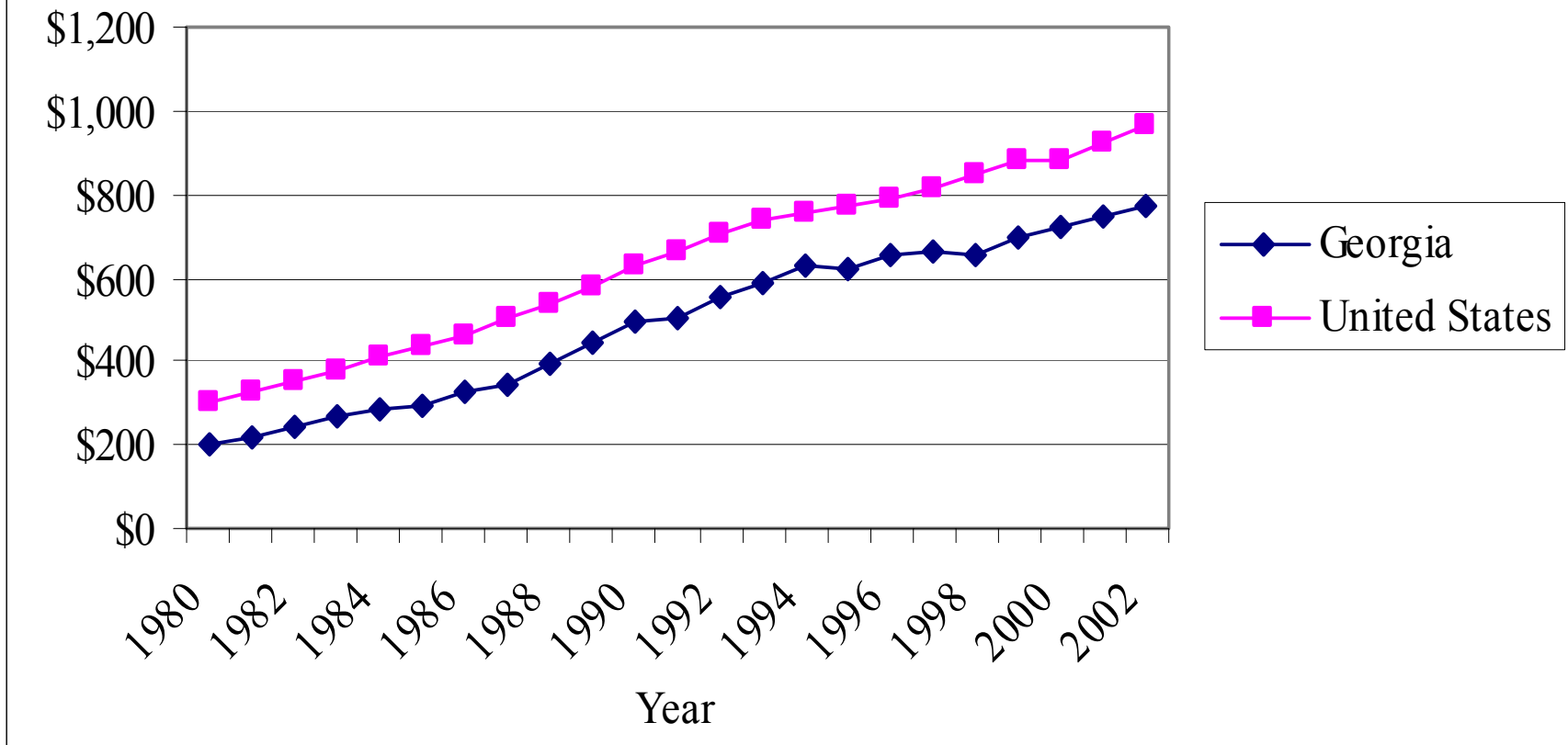
- Property taxes in Georgia increased from about \$1.1 billion in 1980 to nearly \$6.6 billion in 2002, or by 8.5 percent per year (first chart).
- On a per capita basis property tax increased from \$199 in 1980 to \$776 in 2002, or by 6.4 percent per year (second chart).
- Property tax per \$1000 of income increased from \$23.53 to \$26.91, or by 0.6 percent per year (third chart).
- Property taxes per capita were 66 percent of the US average in 1980, but 80 percent in 2002 (fourth chart).
- Property taxes per \$1000 of income were 79 percent of the US average in 1980, but 85 percent in 2002 (fifth chart).

# Property Taxes - Georgia



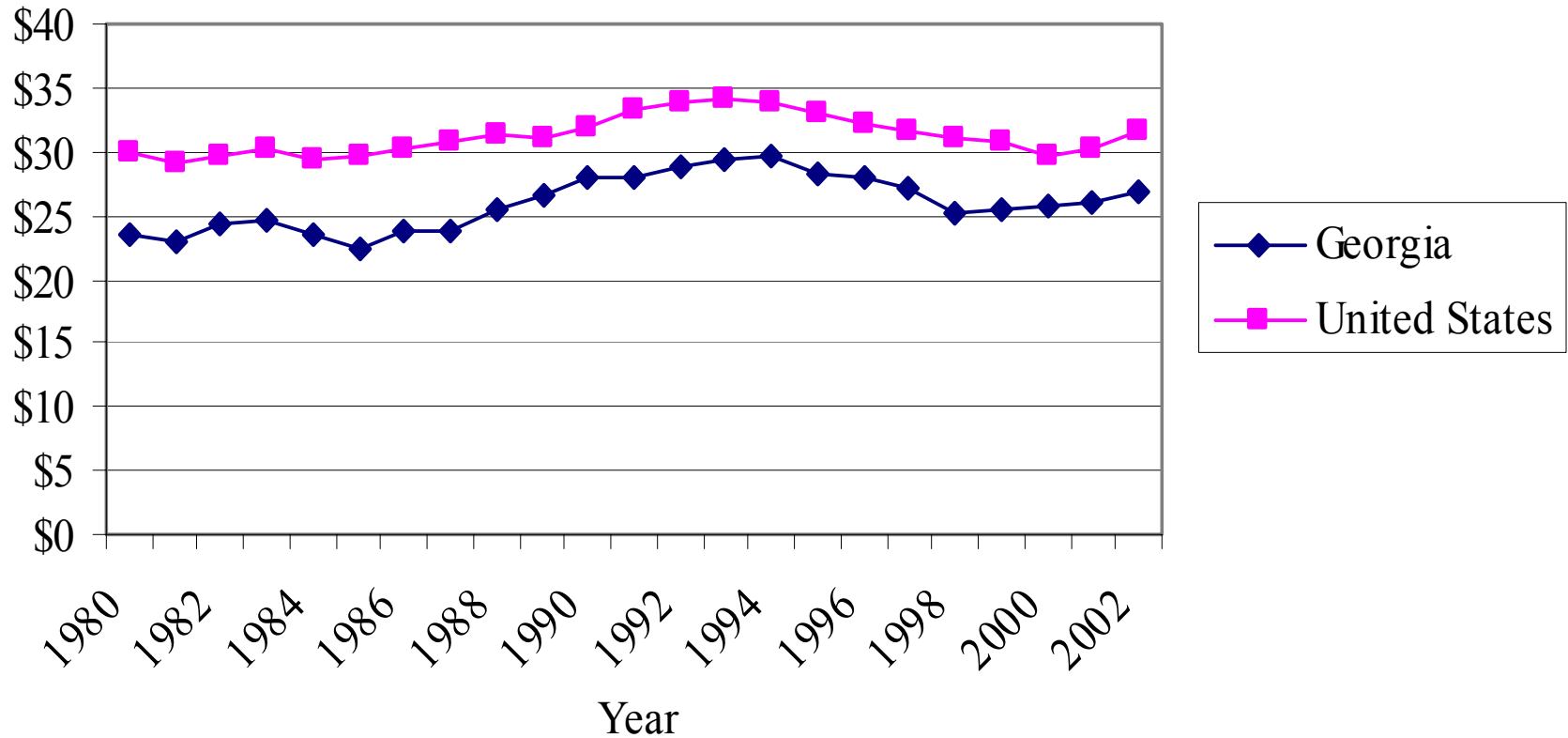
Source: U.S. Bureau of the Census.

# Property Taxes Per Capita



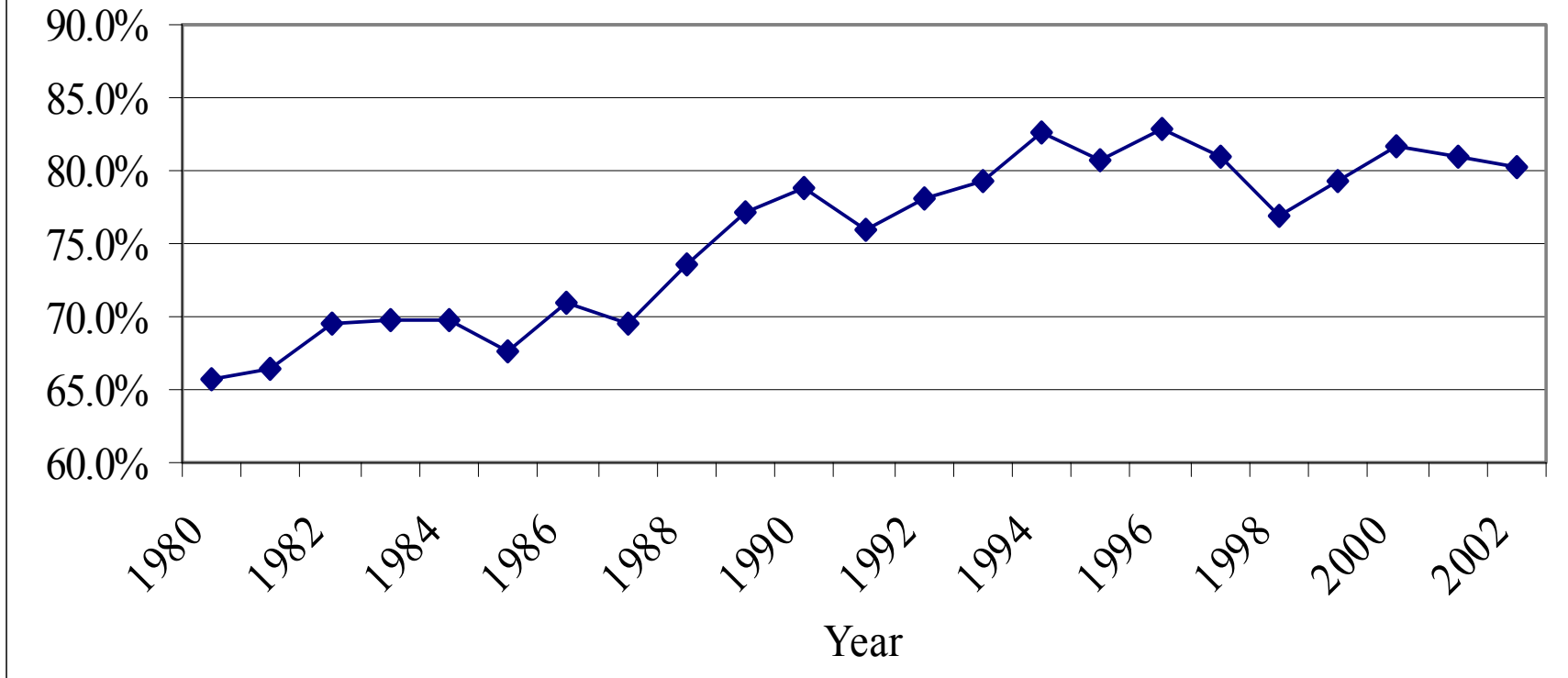
Source: U.S. Bureau of the Census.

# Property Taxes Per \$1000 of Income



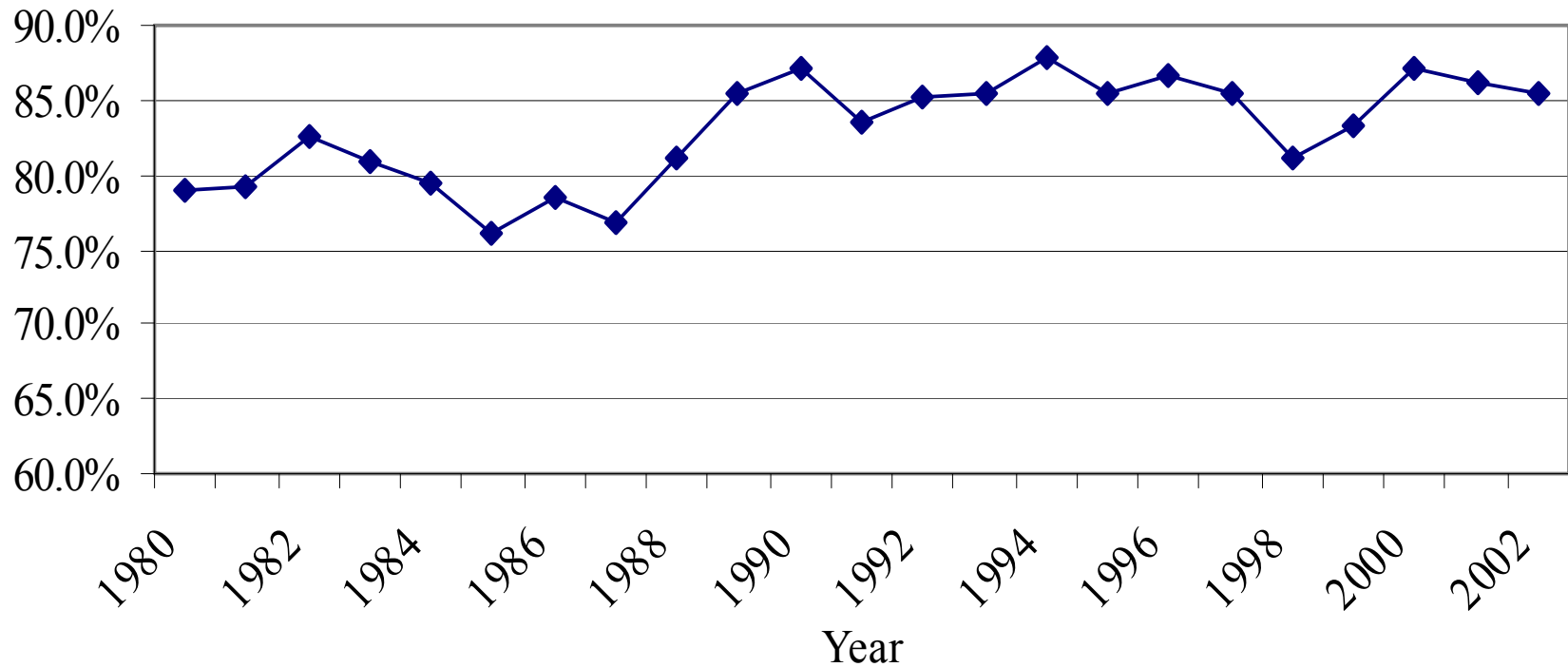
Source: U.S. Bureau of the Census.

# Property Taxes Per Capita Georgia as a % of US



Source: U.S. Bureau of the Census.

# Property Taxes Per \$1000 of Income Georgia as a % of US



Source: U.S. Bureau of the Census.



## E. Income Elasticity of Taxes

The income elasticity of a tax measures the responsiveness of tax revenue to changes in the size of the economy as measured by changes in income. The elasticity is measured as the ratio of the percentage change in tax revenue to the percentage change in income. Thus, an elasticity of 1.25 means that a 10 percent increase in total income within the state results in an increase in tax revenue of 12.5 percent.

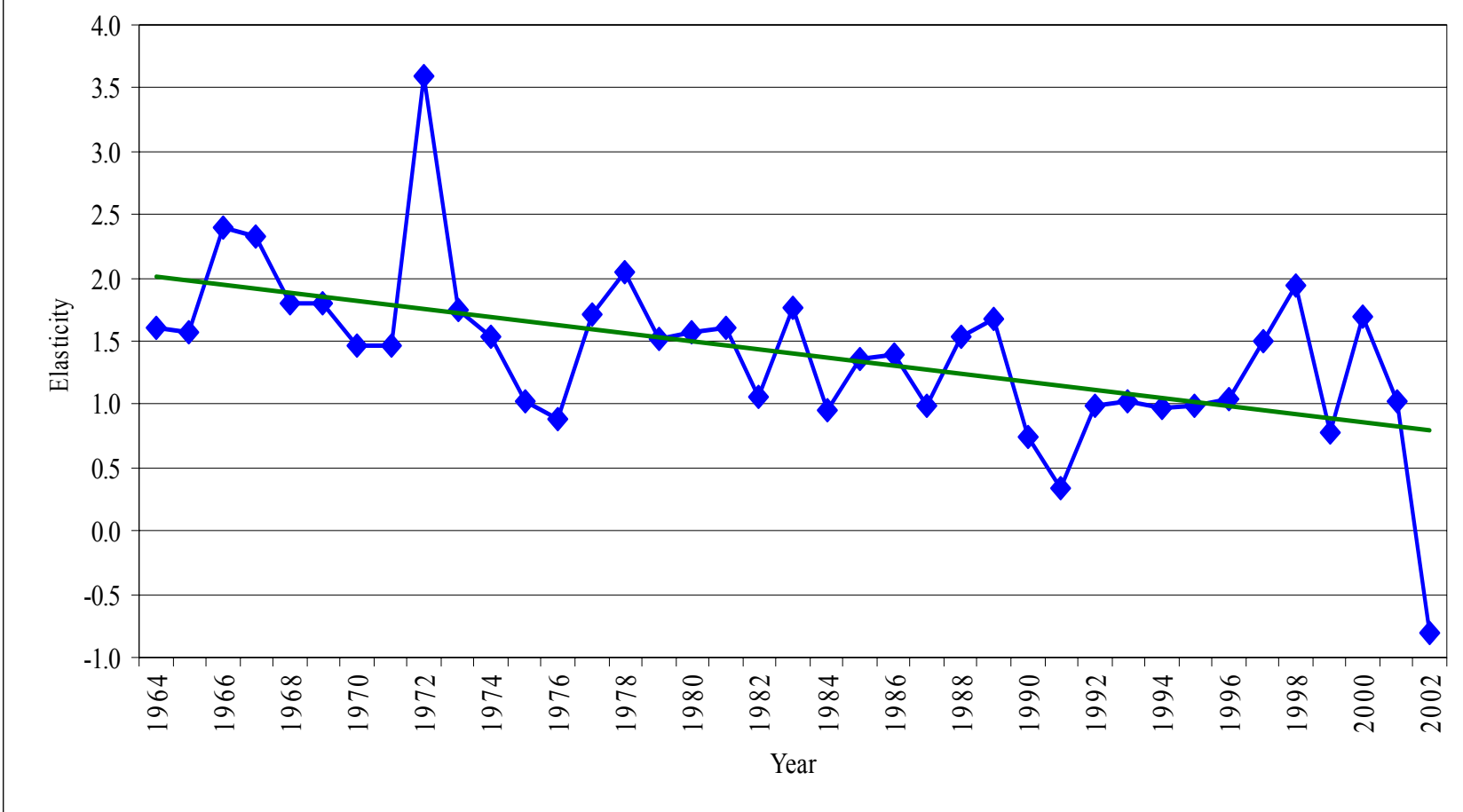
The following charts show the annual elasticity for the period 1964 to 2002 for the state sales and income taxes.

- The elasticities have declined over time. (The trend line is shown only for the income tax.)
- The big spike in 1990 of the sales tax elasticity is due to the increase in sales tax rate.
- The elasticities have declined because:
  - More of the increase in income has come in the form of income that is not taxed.
  - Increases in income do not result in households paying higher tax rates.

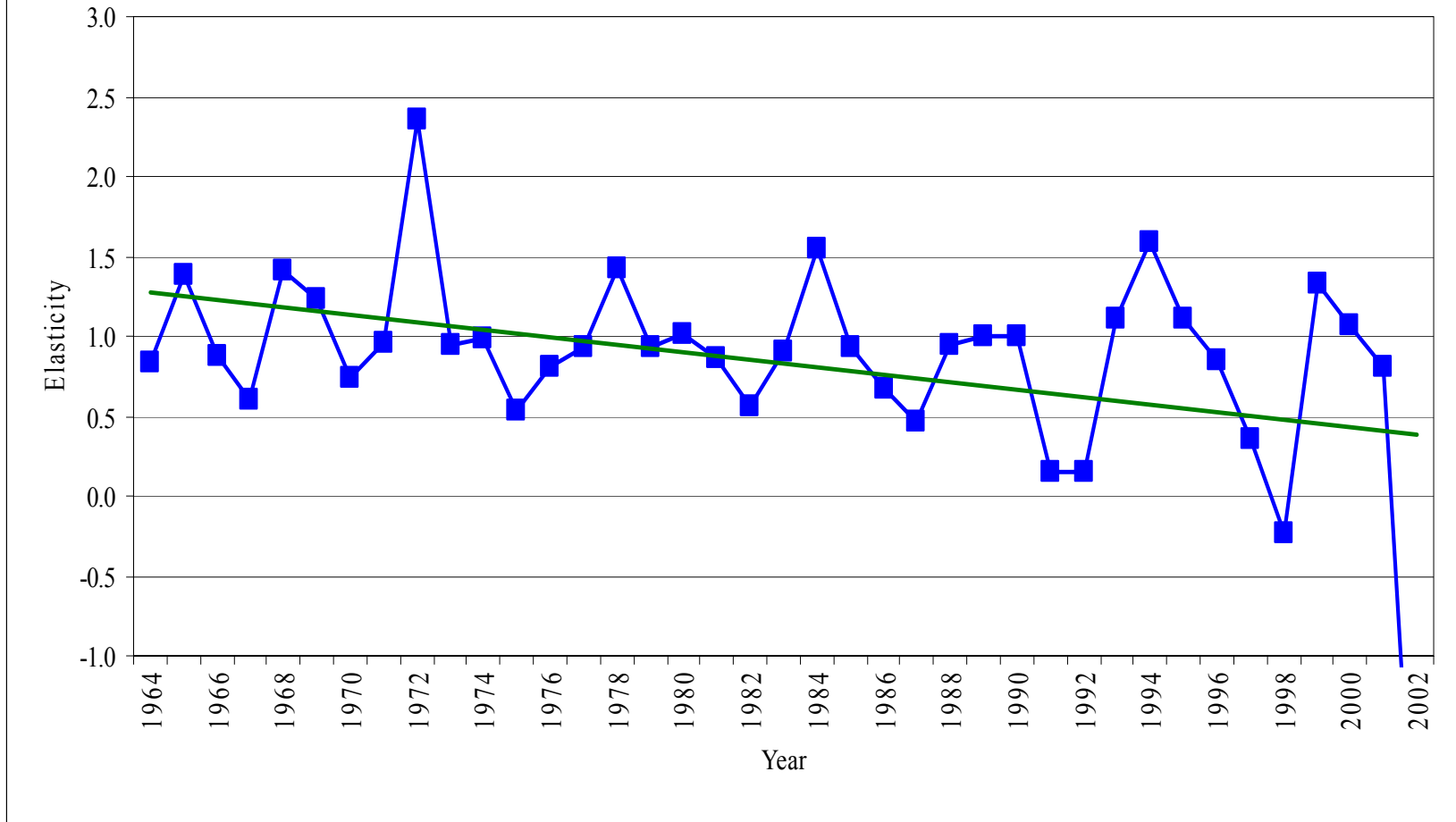
(Because the top marginal income tax rate is reached at \$10,000 and most household have incomes that exceed this amount, there is little increase in income tax revenue due to taxpayers moving into higher income tax brackets.)

- Consumption patterns are changing so that the share of income spent on taxable items is declining.
- The additions of sales tax exemptions have reduced revenue growth.

# Income Tax Elasticities



# Sales Tax Elasticities



### About the Authors

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