

A REPORT FROM

POLICY MATTERS OHIO

STATE ECONOMIC GROWTH AND THE PUBLIC SECTOR

JON HONECK, PH.D.

SEPTEMBER, 2006

AUTHOR

Jon Honeck is a Research Analyst in the Columbus office of Policy Matters Ohio. He tracks workforce development, international trade, economic development, taxation, and other issues. He has a Doctorate in Political Science from the University of Wisconsin-Madison.

ACKNOWLEDGEMENTS

Many people helped to provide information and direction that helped prepare this report, though its conclusions and findings are solely the responsibility of the author. I am extremely grateful for the enthusiastic assistance of interns David Rowland, Ben Moss, and William Chamberlin, who performed much of the data preparation and initial data analysis for this report. I am also grateful to my colleagues Amy Hanauer, Zach Schiller, and Wendy Patton for their comments and editing. I would also like to thank Dr. Susan Helper, SBC Professor of Economics at Case Western Reserve University, Dr. Peter Fisher, Research Director of the Iowa Policy Project and Professor of Urban and Regional Studies at the University of Iowa, and Dr. David Ellis, Senior Fellow and Director of Policies, Planning, and Program at the Center for Community Solutions for their comments on earlier drafts of this report.

POLICY MATTERS OHIO, the publisher of this study, is a nonprofit, nonpartisan statewide research institute dedicated to researching an economy that works for all in Ohio. Policy Matters seeks to broaden the debate about economic policy in Ohio, by providing quantitative and qualitative analysis of important issues facing working people in the state. Policy Matters has done research on policies affecting work, wages, economic development, education, taxes, energy and other issues. We are grateful to the Cleveland, George Gund, Joyce, and St. Ann Foundations, as well as Greater Cleveland Community Shares and the Economic Policy Institute, for funding.

EXECUTIVE SUMMARY

In May 2006, the Ohio General Assembly adopted a state spending limitation that represents an official endorsement of a highly restrictive fiscal policy that curbs public services with the expectation of fostering greater economic growth. What evidence exists to support this expectation? This study compares trends in inflation-adjusted, per capita gross state product (GSP) over the 1990 to 2004 period among all fifty states in order to analyze the relationship between public sector growth and private sector economic performance. We perform separate analyses for each half of the period due to a time series break in the 1997 GSP data. Our main findings are:

- There is no evidence of a tradeoff between the size of states' public sectors and private sector growth. Across all states, the average state and local government share of total GSP showed a positive association with private sector GSP growth per capita in the 1990-1997 period, and no association in the 1997-2004 period.
- There is no evidence of a tradeoff between public sector growth rates and private sector growth. Across all states, increases in state and local government GSP per capita showed a positive association with changes in private output in both the 1990-1997 and 1997-2004 periods.
- States with expanding public sectors experienced more rapid private sector growth, on average, than did states that reduced their public sectors. This result occurred in both the 1990-1997 and 1997-2004 periods. States with expanding public sectors had private sector growth, on average, of 19.6 percent in the earlier period and 16.9 percent in the latter period. States with shrinking public sectors had private sector growth, on average, of 11.6 percent in the earlier period and 11.7 percent in the latter period.
- Ohio's private sector grew faster than its public sector over the 1990 to 2004 period. This trend occurred even in the latter half of the time period, when the state experienced a recession and a weak recovery. From 1997 to 2004, Ohio's state and local government GSP per capita increased by 6.4 percent, while private sector GSP per capita increased by 10.5 percent. As a consequence, the public sector's share of Ohio's economy declined over time.

These results have important implications for state fiscal policy. Ohio will not receive economic rewards for arbitrarily restraining its public sector, nor will our economy be punished if the state budget exceeds the new 3.5 percent annual spending limit. Cutting back on essential public services will not stimulate economic growth. Policy debates should not juxtapose the needs of Ohio's residents for education, transportation, health care, and law enforcement with private sector economic performance. In order to have a meaningful discussion about our future, we must break the grip of this false dichotomy.

TAX AND EXPENDITURE LIMITATIONS AND PUBLIC POLICY

Much of the fiscal debate in Ohio in recent years has revolved around the issue of whether the public sector has grown too fast in relation to our economy. Both Governor Taft and the majority legislative leadership have touted the most recently enacted state budget, which covered state fiscal years (FY) 2006 and 2007, as a model of fiscal restraint that will improve the state's economy. The budget also made extensive changes to the state's tax code. These changes took place despite the fact that there is little evidence that Ohio's state tax system is excessively burdensome. U.S. Census Bureau data from 2005 show that Ohio ranked 27th highest in the nation in state tax revenue per capita, and a calculation by the Federation of Tax Administrators using U.S. Department of Commerce data show that Ohio ranks 28th highest in the nation in state taxes as a percentage of personal income.¹

Despite the enactment of a low-growth budget that was inadequate to fund many state services, a group called Citizens for Tax Reform, with close ties to Republican gubernatorial candidate Ken Blackwell, started in 2005 to push for an amendment to Ohio's constitution that would have placed severe fiscal restrictions on both state and local governments.² The proposal was modeled after a tax and expenditure limitation (TEL) adopted in Colorado in the early 1990s. The Colorado TEL, known as the Taxpayer Bill of Rights or TABOR, imposed state and local revenue limits based on a formula that allowed revenue to grow only at a rate equal to population and inflation. The devastating impact of TABOR on public services in Colorado has been well documented.³ Over time, some business groups began to oppose the amendment because the state's underinvestment in higher education and infrastructure became a threat to Colorado's economic future. In November, 2005, Coloradans voted to suspend the state revenue limit portion of TABOR for five years.⁴

Besides devastating Colorado's public sector, TABOR did not improve Colorado's economy. Although Colorado experienced a boom in the 1990s, the state was slower to come out of the 2001 recession than its Mountain state neighbors. A study released by

¹ Census data on taxation is available at <http://www.census.gov/govs/statetax/05staxrank.html>. Data from the Federation of Tax Administrators (FTA) is available at <http://www.taxadmin.org/fta/rate/05taxbur.html>. These statistics cover state taxes only. If local taxes are added, Ohio's combined state and local tax burden in 2004 was 21st highest in the nation on a per capita basis, and the 13th highest in the nation as a percentage of personal income, including Washington, D.C. See http://www.taxadmin.org/fta/rate/04stl_pi.html and <http://www.taxadmin.org/fta/rate/04stlrev.html>. States are closely grouped in the ranking of taxes as a percentage of personal income. Only one-half of one percent separates Ohio from Pennsylvania (11.4 percent vs. 10.9 percent), which is ranked 23rd.

² Policy Matters Ohio analyzed some of the flaws of the amendment in a report released in July 2005 entitled *Flawed by Design*, available at http://www.policymattersohio.org/pdf/flawed_by_design.pdf.

³ See the report *Ten Years of TABOR* available from the Bell Policy Institute in Colorado at <http://www.thebell.org/TaborFP.html>.

⁴ The campaign to suspend the amendment attracted support from many segments of Colorado's political scene, including business groups and some former legislators who originally supported it. For more information see the Policy Matters Ohio brief *Lessons for Ohio: Colorado voters decide to suspend spending limits* at http://www.policymattersohio.org/pdf/Colorado_rejects_TABOR.pdf. Also see the Bell Policy Institute's post-election roundup at <http://www.thebell.org/RefC-roundup.html#election>.

<http://www.policymattersohio.org>

the Economic Policy Institute found that TABOR had no long-term impacts on Colorado's personal income growth or employment growth.⁵

In Ohio, the Citizens for Tax Reform proposal encountered vociferous opposition from a wide variety of groups.⁶ In May 2006, majority leadership in the legislature worked out a political deal with Citizens for Tax Reform that secured the group's pledge to withdraw the amendment from the November ballot in return for the enactment of a statutory TEL that applies only to the state general revenue fund (GRF).⁷

Ohio's statutory TEL uses the same public sector spending limit formula as proposed by Citizens for Tax Reform. The formula allows the GRF to grow at an annual rate that is the higher of 3.5 percent, or the sum of consumer inflation and population. In essence, the formula is designed to shrink the public sector in relation to the economy.⁸ The Ohio Legislative Service Commission's fiscal analysis of the TEL used a historical simulation with previously enacted state budgets to demonstrate the formula's effects. The analysis found that a TEL that began in FY 1988 would have reduced GRF appropriations by \$2.8 billion in FY 2006, an amount that exceeds the entire annual state operating appropriation for higher education.⁹

We may have entered a period of higher inflation that will cause the spending limit formula to allow budgetary increases above 3.5 percent each year. Unfortunately, absent extremely robust economic growth, it will be difficult for annual GRF growth to reach the minimum 3.5 percent level due to changes in the state's tax code.¹⁰ One of the typical rationales for tax cuts is that over time they will pay for themselves by stimulating

⁵ McGuire, Therese J., and Rueben, Kim S. "The Colorado Revenue Limit: The Economic Effects of TABOR." Washington, DC: Economic Policy Institute (March 2006). Available at <http://www.epi.org/content.cfm/bp172>.

⁶ Most notably the Coalition for Ohio's Future. See the group's website at <http://www.ohiosfuture.org/>.

⁷ "Legislature Passes State Spending Cap in Blackwell Deal; Promise to Kill Constitutional TEL in Hand, Taft Signs Ballot Withdrawal Bill," Gongwer News Service, *Ohio Report*, May 23, 2006.

⁸ Ohio's population grows annually by about two-tenths of one percent, and the minimum 3.5 percent allowable growth rate is not far above the rate of consumer price inflation in recent years. Even if the formula is taken at face value, it leaves little or no room for real increases in state spending that exceed inflation. The formula itself is flawed, however, for several reasons. First, the consumer price index is a poor measure of the rate of inflation in major components of state spending, such as health care. Second, public programs must respond to the growth in specific sub-populations and their needs. Trends in these sub-populations may diverge substantially from the overall population growth rate (e.g., low-income children with asthma). See Corlett, John R., "Education Shoulders Greatest Burdens Under Proposed Statutory TEL," The Center for Community Solutions, May 2006, available at <http://www.communitysolutions.com>.

⁹ The LSC's analysis is contained in the fiscal note for Sub. S.B. 321, 126th General Assembly, As Reported by the House Finance & Appropriations Committee, available at <http://www.lbo.state.oh.us/fiscal/fiscalnotes/126ga/SB0321HR.htm>. For more information on the statutory TEL, see the Policy Matters Ohio release "State GSP Limit Proposal is Flawed" (May 2006) at http://www.policymattersohio.org/pdf/TEL_2006_0523.pdf.

¹⁰ Recent cuts to state income tax rates will severely limit revenue increases from this tax, which accounts for about one-fifth of GRF revenue and normally would track changes in personal income. Also, legally prescribed revenue targets for the commercial activity tax are inadequate to replace revenues lost from the phase-out of the corporate franchise tax and the local tangible personal property tax.

increased economic activity. In the case of Ohio's tax reform, the revenue losses are so severe that even a problematic and incomplete state-sponsored economic modeling exercise found that substantial net losses in revenue continued for the foreseeable future.¹¹

In short, Ohio now has a set of tax and budget policies that straitjacket state spending into the future. The costs of these policies are already being felt in the current budget biennium. These costs include, but are no by means limited to, the removal of 25,000 low-income adults from the Medicaid program, six percent tuition increases at most of the state's four-year universities, and a prison system that needs 1,400 additional beds this year alone and forces some institutions to operate at over 200 percent of designed capacity.¹² The rationale for this state of affairs is a mistaken assertion that restraint in government spending will enhance economic growth. As discussed below, this study finds no evidence to support this claim.

GROSS STATE PRODUCT DATA SERIES

This study makes use of gross state product (GSP) data that is developed by the Bureau of Economic Analysis (BEA) of the U.S. Department of Commerce. The BEA defines GSP as "the value added in production by the labor and capital located in a state." GSP is the state counterpart of national gross domestic product (GDP), which is a measurement of the value of the goods and services produced nationally. GDP per capita is a common measure used in international comparisons to indicate the level of wealth in a country. A measure using GSP per capita performs the same function for comparisons among states and regions.

The methods used to calculate public sector GSP are not the same as those used to calculate GSP for the private sector. In the private sector, value added for an industry is calculated by subtracting intermediate inputs from an industry's gross sales. The U.S. Department of Commerce does not attempt to determine a market value for public services because many of them are unique and hard to value. Instead, value added for general government services is equal to government compensation for employees and consumption of fixed capital.¹³ Government enterprises, which are largely self-financing

¹¹ The Ohio Department of Development contracted with Regional Economic Models, Inc. (REMI) for an economic analysis of some of proposed tax changes using an input-output model of Ohio's economy. The analysis did not take into account the budget cuts that would have to take place to balance the state's budget in the face of the revenue losses, and it did not model all of the tax changes. For more information see the Policy Matters Ohio brief entitled *REMI Report Presents Just Half the Equation* (May 2005) available at http://www.policymattersohio.org/pdf/REMI_Report_Brief_May_2005.pdf.

¹² The FY 2006-2007 biennial budget (H.B. 66) capped tuition at four-year public colleges at six percent, or \$500, whichever is higher. The same bill removed 25,000 adults with incomes between 90 and 100 percent of the poverty level from the Medicaid program. As of July 1, 2006 the state prison system operated at 131 percent of capacity. Lorain Correctional and the Correctional Reception Center in Columbus are operating at over 200 percent of capacity. Johnson, Alan. "Two state prisons might reopen: Rising inmate population puts costly option in play, chief says." *Columbus Dispatch*, July 6, 2006, p. 1B.

¹³ McCulla, Stephanie H., and Moylan, Carol E. "Preview of Revised NIPA Estimates for 1997." *Survey of Current Business*, January 2003, 10-16. See page 16. Available at <http://www.bea.gov/bea/pubs.htm>.

organizations that keep separate accounts (such as utilities and liquor stores), are not counted as government agencies.

The BEA GSP data series includes detailed breakouts for a number of business sectors and for government. The government component contains separate estimates for federal military, federal civilian, and state and local government. State and local governments are combined in one estimate because their financing is typically so intertwined. This study uses the “state and local government” GSP component as a measurement of state and local public sector activity.

The analysis that follows covers the period from 1990 to 2004. Preliminary estimates are available for total GSP for 2005 but not for its components. Unfortunately, a methodology change relating to the classification of business establishments prevents researchers from constructing a time series for the entire 1990 to 2004 time period. The time series break occurs in 1997. The BEA prepared the 1997 data in both the new and old methodology. Consequently, each section of the paper presents an analysis from 1990 to 1997, and another from 1997 to 2004.¹⁴ For most states, including Ohio, private GSP increased and state and local government GSP decreased because of the new methodology.

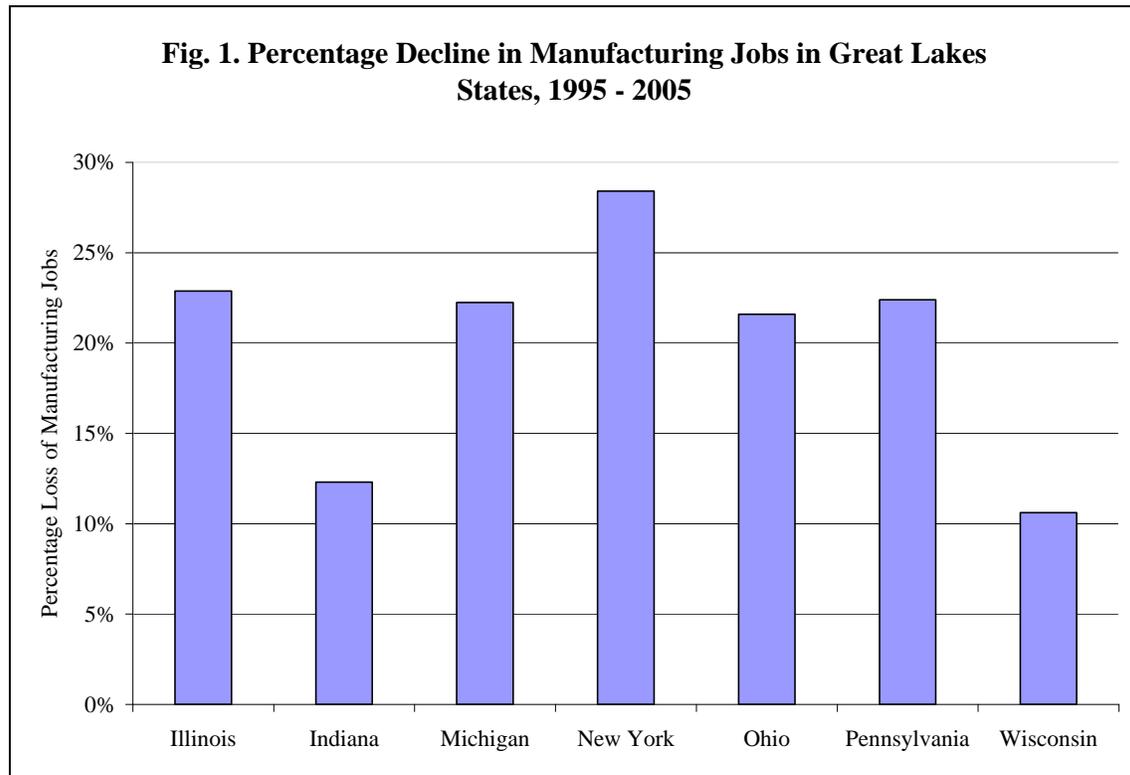
Readers who are familiar with the literature on state taxation and economic growth may be used to seeing comparisons of tax burdens using state revenue and expenditures as a percentage of personal income. State and local personal income is another data series provided by the BEA. In general, the difference between the two types of data is that GSP is a measure of the value added by industries located in a state, whereas personal income is a measure of the income received by residents of a state. For instance, GSP estimates capture the total value of the output of all Ohio businesses, regardless of where the resulting income is actually received. Personal income estimates capture the value of the wages and unearned income received by Ohio residents regardless of that income’s state (or country) of origin.¹⁵ This study uses GSP because it is a direct measurement of state economic growth, rather than a function of how income is distributed. The analysis that follows is not an attempt to measure tax burdens.

This analysis also does not attempt to account for other factors that influence private sector GSP growth. In fact, it is likely that a state’s “industry mix” and its geographic location exert far greater influences over economic performance than changes in state and local government share of total GSP. For example, much of our recent slow growth in Ohio can be traced to demand conditions and changing investment patterns in the manufacturing sector. Manufacturing employment has declined dramatically nationwide

¹⁴ The U.S. Department of Commerce-BEA bases many of its analyses on Census Bureau economic data. When the Census Bureau changed the way it classifies businesses and other organizations from the Standard Industrial Classification system (SIC) to the current North American Industrial Classification System (NAICS), the GSP data series followed suit. The BEA warns against constructing a time series that mixes pre-1997 and post-1997 GSP data. See <http://www.bea.gov/bea/regional/gsp/>.

¹⁵ The BEA presents personal income data “by the place of residence of the income recipients.” [http://bea.gov/bea/regional/definitions/nextpage.cfm?key=Personal income](http://bea.gov/bea/regional/definitions/nextpage.cfm?key=Personal%20income).

since the late 1990s. As shown in Figure 1, the level of manufacturing employment in Ohio and other Great Lakes states is significantly less than it was ten years ago.



Source: Policy Matters Ohio analysis of Bureau of Labor Statistics data (CES).

Unfortunately, important factors that influence short-to-medium term economic growth, such as interest rates, foreign exchange rates, and foreign trade policy are all beyond the control of state governments. While targeted economic development policies that promote the adoption of new technologies and better trained workers have been shown to be effective at the micro-economic level, these policies cannot compensate for deficiencies in federal policy. In general, state and local governments have little influence over short-to-medium term economic performance.¹⁶

METHODOLOGY

The discussion that follows presents tests of the proposition that state and local government expenditures are a major factor in explaining economic growth. Each test uses linear (ordinary least squares) regression analysis to examine the relationship between the state and local public sector and total private output among the states.¹⁷

¹⁶ Brierly, Allen Bronson, and Costello, Robert. "Accounting for State Economic Performance: A Time-Series Cross-Sectional Analysis of the Limits of State Economic Policy." *International Journal of Economic Development*, Vol. 1, No. 3 (1999), pp. 280-310.

¹⁷ Regression analysis is an attempt to construct an equation for a straight line that best fits the relationship between two variables by minimizing the distance between the known and predicted values of the dependent variable.

The first set of analyses (summarized in “Government Size and Economic Growth,” p. 8) tests the hypothesis that states with smaller public sectors experienced more rapid private sector growth. We measure the size of government by calculating the average state and local government share of total GSP over two eight-year time periods (1990 to 1997, and 1997 to 2004). Total GSP is the sum of public and private sector GSP (including federal government contributions to GSP). This figure is plotted against changes in private sector GSP per capita.

The second set of analyses (summarized in “Rates of Change in Government GSP,” p. 11) tests the hypothesis that states that had lower rates of public sector growth experienced higher rates of private sector economic growth. We measure public sector growth rates by calculating the percentage change in real state and local government GSP per capita over the same two eight-year time periods. This figure is plotted against the growth rate of real private sector GSP per capita. This calculation makes no reference to the public sector’s size in relation to the total economy. If the spending restraint argument is correct, shrinking the public sector should produce a beneficial effect on private sector growth that is independent of its initial size.

We use scatter plots (Figures 2 through 5) to display the relationship between the public sector and private sector output in both of these analyses. The figures show the public sector variable on the horizontal axis. Each figure displays an equation for a linear regression line when the coefficient of determination, or R^2 , has a value greater than zero. The coefficient of determination represents the amount of variation in the dependent variable (real private sector GSP growth per capita) that is explained by the independent variable (level or rate of change in public sector GSP).

Unless otherwise noted, the analyses in this report are adjusted for both inflation and population. The inflation adjustment is performed by the BEA for data from 1990 and thereafter using chained 2000 dollars. BEA uses national deflators (which are like a price index) for both private industries and government. Policy Matters Ohio performed a population adjustment to account for the vast differences among the states in the size of population and rate of population change.¹⁸ The combination of these two adjustments produces data that is expressed as “real GSP per capita,” and will differ from published BEA estimates because of the population adjustment.

If the spending restraint argument behind the TEL were true, one would expect a negative (or inverse) association between state and local GSP and private sector output. In other words, states with smaller public sectors or states that restrained public sector growth on a per capita basis would be expected to experience higher levels of private output growth. The spending restraint argument would result in an arrangement of data points that slopes downward to the right (negative slope): private sector growth rates should grow weaker when the public sector is large, or grows more rapidly. The findings of this study, described below, did not support the expected results of a spending restraint argument.

¹⁸ Per capita calculations use population estimates from the U.S. Census Bureau for July of each year.

GOVERNMENT SIZE AND ECONOMIC GROWTH

The optimal “size” of government has been a persistent source of controversy in public policy debates. It is sometimes alleged that government GSP “crowds out” private sector investment if the size of the public sector is too large. This view ignores a growing body of evidence that government investments in education and infrastructure have significant long-term positive returns.¹⁹ In reality, higher state and local tax levels are often associated with stronger economies. During the state budget hearings in the spring of 2005, Dr. David Ellis of the Center for Community Solutions used data from fiscal year 2001-2002 to perform a regression analysis that showed that “...higher state and local taxes are associated with higher levels of per capita gross state product and higher per capita personal income.”²⁰ Policy Matters Ohio updated these calculations using more recent data and again obtained results that showed a strong positive association between total state and local taxes and the same two dependent variables (see Figures 6 and 7, Appendix I).²¹

Another way to measure the size of government is to analyze the public sector’s contributions to GSP. In this analysis, we use the average share of total gross state product that is derived from state and local government GSP over the time period as a proxy to measure the size of the public sector. This is plotted against the distribution of real per capita private industry growth over the 1990 to 1997 period (Figures 2 and 3). The analysis finds that the relationship between the size of the public sector and economic growth in the fifty states was mildly positive in the first time period studied, 1990 to 1997. No relationship existed in the 1997 to 2004 time period.

In Figure 2, each diamond represents a state. The national average for the state and local government share of total GSP was 10.3 percent. Most states averaged between 8.5 and 12.5 percent. Ohio averaged 9.6 percent. New Mexico had the highest average state and local share of total GSP (14.1 percent), and also had the highest real per capita private industry growth at 54.3 percent. Alaska and Hawaii were the only two states to experience declines in real private sector GSP per capita. These two states are somewhat unique in their economic dependence on a narrow set of sectors. Alaska’s economy was

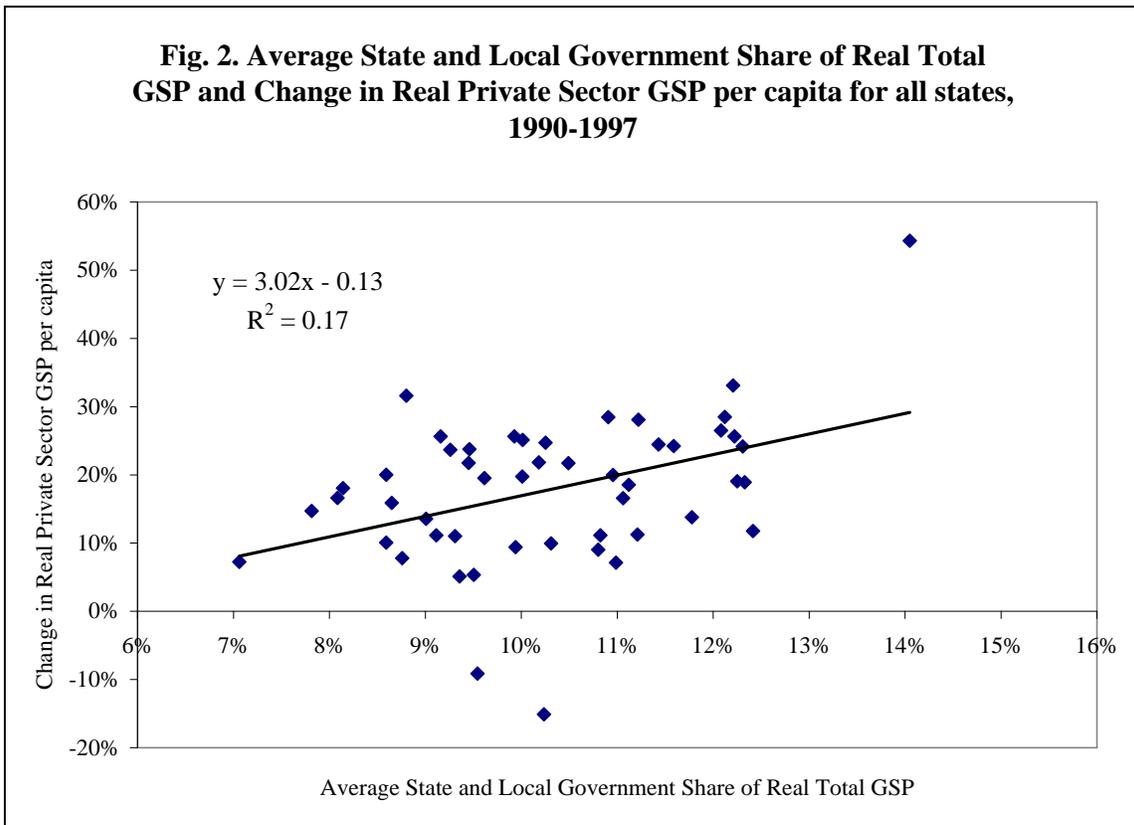
¹⁹ For a literature review see Chapter 6 of Lynch, Robert G., *Rethinking Growth Strategies: How State and Local Taxes and Services Affect Economic Development*, Washington, DC: Economic Policy Institute, 2004. See also Bartik, Timothy J., “Increasing the Economic Development Benefits of Higher Education in Michigan,” Upjohn Institute Staff Working Paper No. 04-106. September 2004. Available at <http://www.upjohninst.org/publications/wp/04-106.pdf>.

²⁰ Testimony of David A. Ellis, Ph.D., Senior Fellow and Director of Policy, Planning, & Programs, Center for Community Solutions on S.B. 1 Before the Ohio Senate Committee on Ways and Means and Economic Development – March 15, 2005, p. 3. Using data from revenue data from fiscal year 2001-2002 and personal income data from 2002, the regression showed that the level of state and local taxes per capita explained 53 percent of the variation in GSP per capita, and 73 percent of the variation in personal income per capita. Although Dr. Ellis cautions that the results should not be interpreted to imply causation, they refute the assertion that lower taxes *per se* will lead to better economic performance.

²¹ Changes in the independent variable total tax revenue per capita explained 69 percent of the variation in state personal income, and 49 percent of the variation in total GSP per capita.

impacted by declining oil prices following the Gulf War, while Hawaii’s tourism and real estate sectors suffered because of the economic slump in Japan.

The positive slope to the regression line indicates that states with higher state and local government shares of total GSP experienced more rapid private sector growth. Here, as with the other regressions shown in this study, this result should not be interpreted to imply causation. The R² result indicates that the state and local government share of total GSP explains 17 percent of the variation in private sector growth.²² Three of the states (Alaska, Hawaii, and New Mexico) are outliers. But, even if these states are removed from the analysis, the slope of the regression line remains positive.²³



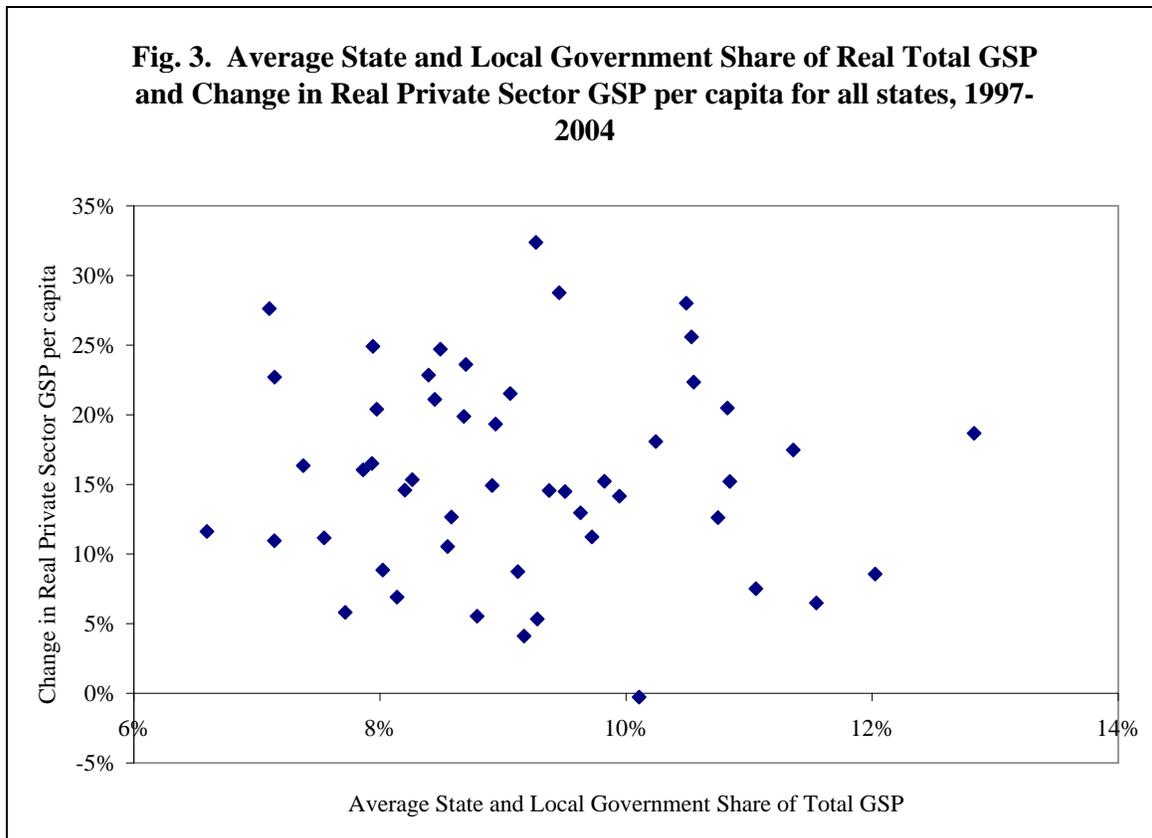
The distribution of real per capita private industry growth, when plotted against the average state and local government share of total GSP during the second period of analysis, 1997 to 2004, shows no relationship (Figure 3). During this time period, the national average for the state and local government share of total GSP was 9.2 percent. Most states’ shares were between eight and eleven percent. State private sector growth averaged 15.8 percent over the period. The state and local government share of Ohio’s total GSP averaged 8.6 percent, while private sector GSP increased by 10.5 percent. New

²² Other regression results for coefficient(x): std. error = .973, t-stat = 3.10, p-value = .003.

²³ The R² declines to 10.9 percent, and the slope of the regression line is 1.76. Other regression results for coefficient(x): std. error = .750, p-value = .024, t-stat = 2.34.

Mexico again had the highest average state and local share of total GSP (12.8 percent), but also experienced an above-average private sector growth of 18.7 percent. Alaska was the only state that experienced a decline in real per capita private sector growth.

Figure 3 does not display a regression line because it has no explanatory power ($R^2=0$).²⁴ As can be seen from the distribution of the points on the graph in Figure 2, there is no discernible relationship between the size of state and local government and private sector output during the 1997 to 2004 time period.



Source: Policy Matters Ohio analysis of BEA data (chained 2000 dollars).

Note: Each diamond represents a state.

The results from these two time periods indicate that the higher state and local government shares of total GSP do not have a detrimental effect on real per capita private sector growth.

²⁴ Other regression results: coefficient(x) = -.29, std. error = .758, t-stat = -.389, p-value = .699.

RATES OF CHANGE IN GOVERNMENT GSP

The previous section examined whether the size of government influenced private sector growth. This section analyzes rates of change in state and local government GSP without reference to its share of the total state economy. We compare the growth rate of the public sector to the private sector GSP growth rate. If the spending restraint argument is correct, then states that reduce their government GSP on a per capita basis ought to experience stronger economic growth.

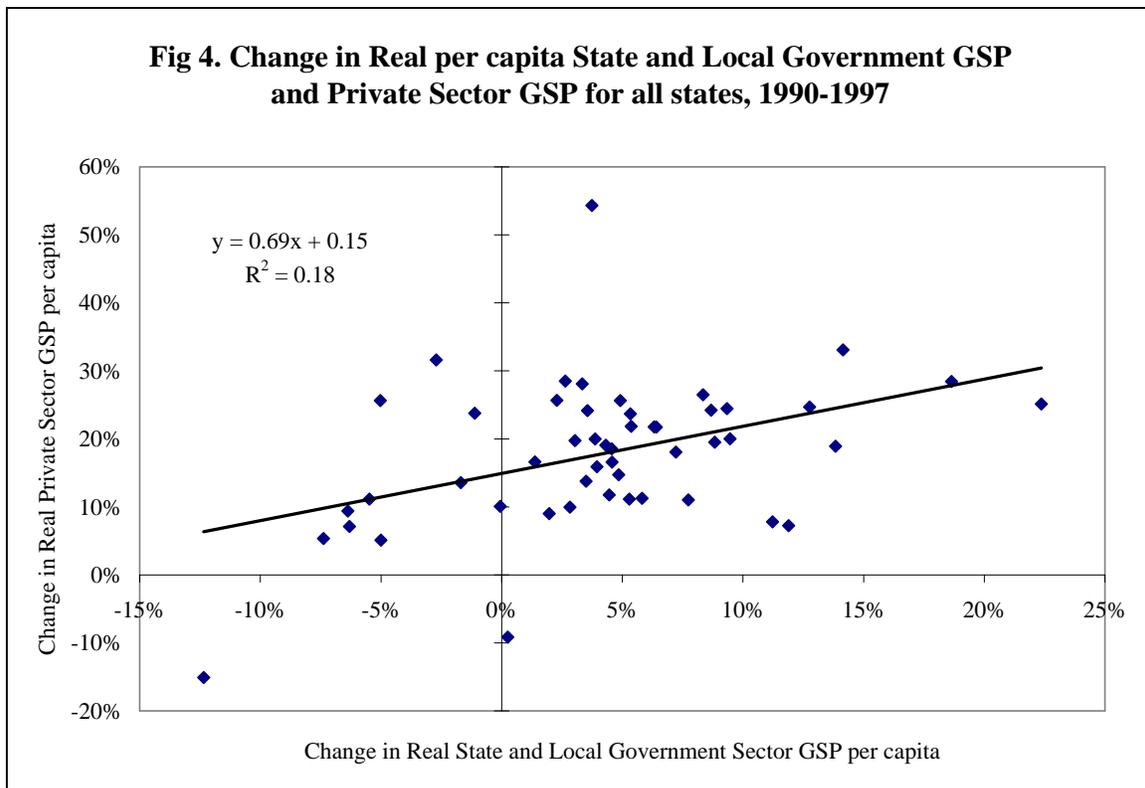
The overall trend for the fifty states was that private sector growth exceeded public sector growth in the 1990 to 1997 period. The average for all states over this period was a 4.2 percent increase in real state and local government GSP per capita and a 17.8 percent increase in real private sector GSP per capita. Ohio participated in this trend. Our state and local government GSP grew by 8.8 percent (\$220 per capita) but private sector GSP grew by 19.5 percent (\$4,316 per capita).

Eleven states had declines in real state and local government GSP per capita between 1990 and 1997. These eleven states averaged a 4.9 percent decline in per capita public sector GSP, and an average increase in private sector growth per capita of 11.6 percent. If Alaska is excluded, private sector output for the other ten states increased on average by 14.3 percent.

The average increase in state and local government GSP per capita among the other 39 states was 6.7 percent. Average private industry growth for this group was 19.6 percent. Even if we exclude Alaska as a special case, states with positive growth in state and local GSP achieved an average increase in private output that is 37 percent higher (19.6 percent vs. 14.3 percent) than states with declines in public GSP. Only three of the 20 states with the highest private sector growth rates had declines in real public sector GSP per capita (New Hampshire, Arizona, and Georgia).

Figure 4 below shows the relationship between changes in real per capita state and local government GSP and private sector GSP growth in the 1990 to 1997 period. The regression line with positive slope indicates that higher state and local government GSP is associated with greater gains in private sector output. The R² value indicates that changes in state and local government GSP explain 18 percent of the variation in private sector output.²⁵

²⁵ Other regression results for coefficient(x): std. error = .214, t-stat = 3.238, p-value = .002.



Source: Policy Matters Ohio analysis of BEA data (chained 2000 dollars).
 Note: Each diamond represents a state.

The 1997 to 2004 period included a recession and a national recovery that had anemic employment growth by post-Second World War standards. The average for all states was a 5.3 percent increase in real per capita state and local government GSP and a 15.8 percent increase in real per capita private sector output. Ohio’s state and local government GSP increased by 6.4 percent, while private sector output per capita increased by 10.5 percent.

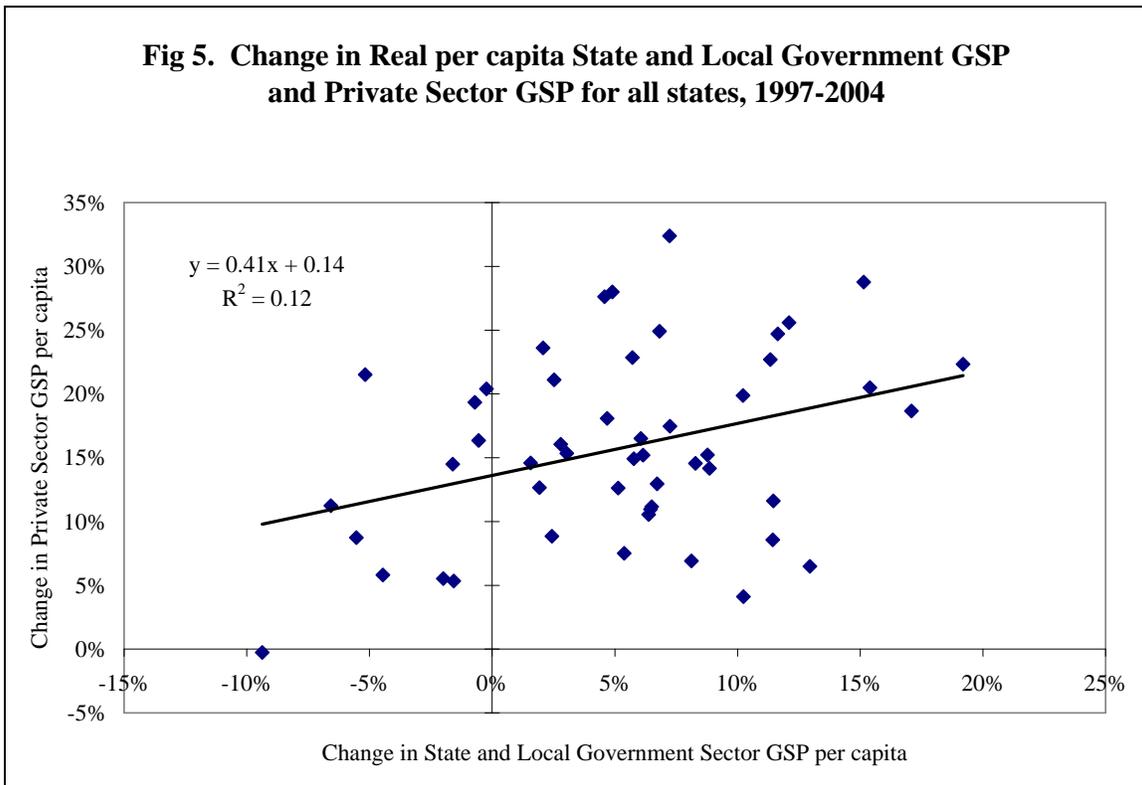
Eleven states had declines in real per capita state and local government GSP. These eleven states included Alaska, which was the only one of the 50 states that experienced a decline in private sector output. The average decline in state and local government GSP per capita among these eleven states was 3.4 percent. As a group, these states experienced an average 11.7 percent increase in private sector output. If Alaska is excluded, the group’s average gain in real per capita private output rises to 12.9 percent.

Thirty-nine states had increases in real state and local government GSP per capita between 1997 and 2004. The average increase was 7.8 percent. Their average increase in real private sector output per capita was 16.9 percent, which outperformed the states with declines in government GSP (even if Alaska is excluded.)

Arizona experienced the highest rate of private sector GSP growth (21.5 percent) among the eleven states with declines in state and local government GSP. Eleven states with increases in state and local government GSP outperformed Arizona’s private sector

growth rate. There was wide variation in the rate of increase in per capita public sector GSP among these high performing states, with a high of 19.2 percent (North Dakota) to a low of 2.1 percent (New York). Only three of the states with the 20 highest private sector growth rates had declines in real public sector GSP per capita (Arizona, Colorado, and Florida).

Higher rates of growth in state and local government GSP are again associated with greater gains in private sector output between 1997 and 2004 (Figure 5). The slope of the regression line is positive, and the R^2 value indicates that changes in state and local government GSP explain 12 percent of the variation in private sector output.²⁶



Source: Policy Matters Ohio analysis of BEA data (chained 2000 dollars).

Note: Each diamond represents a state.

The results from both time periods contradict the assertions made in support of the tax and expenditure limitation. Increases in state and local government GSP were associated with increases in private sector output. As with other regressions in this study, this result should not be interpreted to imply causation. The level of association is low, but there is no indication in the data that there is a tradeoff between increased public services and state private sector growth.

²⁶ Other regression results for coefficient(x): std. error = .158, t-stat = 2.576, p-value = .013.

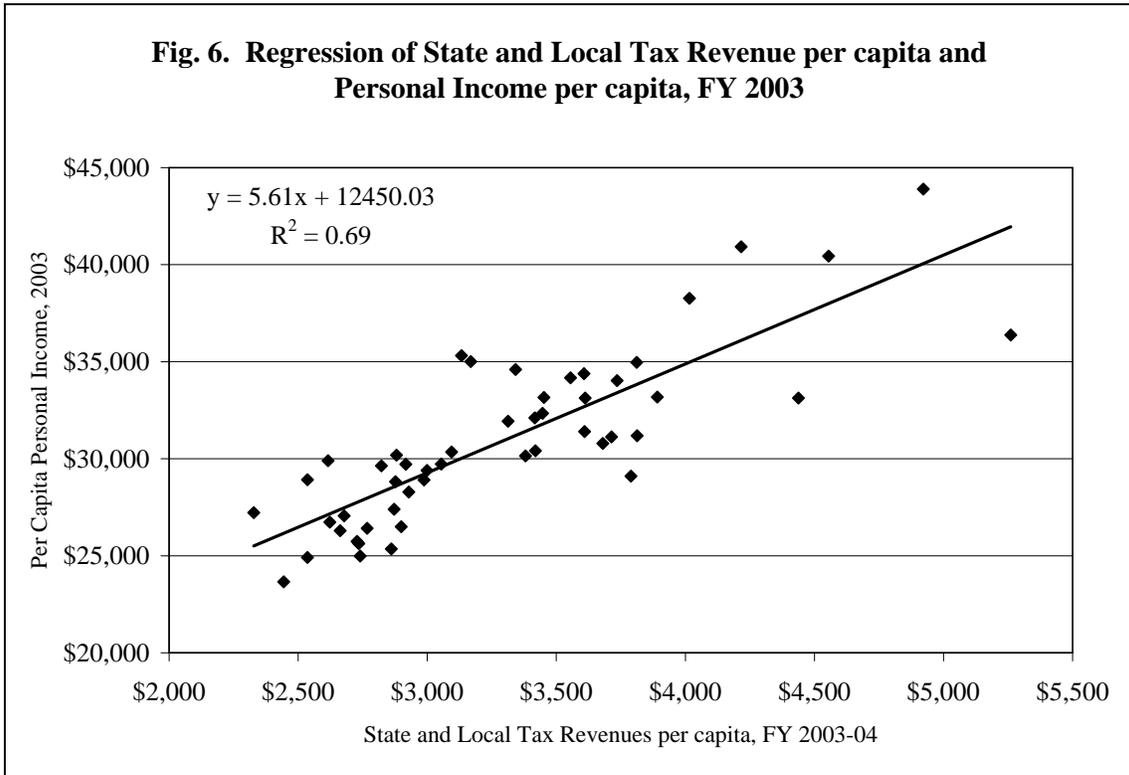
CONCLUSION

This study reviewed the economic track record of all fifty states from 1990 to 2004 in order to analyze how the state and local public sector affected economic growth. We used real, inflation-adjusted data on gross state product from the U.S. Bureau of Economic Analysis. The results produced no support whatsoever for the state budget restraint arguments advanced in support of the tax and expenditure limitation. The first set of analyses tested the proposition that the size of the public sector, as measured by the state and local government share of total GSP, is related to private sector growth. In the 1990 to 1997 period, states with larger public sectors performed better economically. In the 1997 to 2004 time period, the size of the public sector was not related to economic performance.

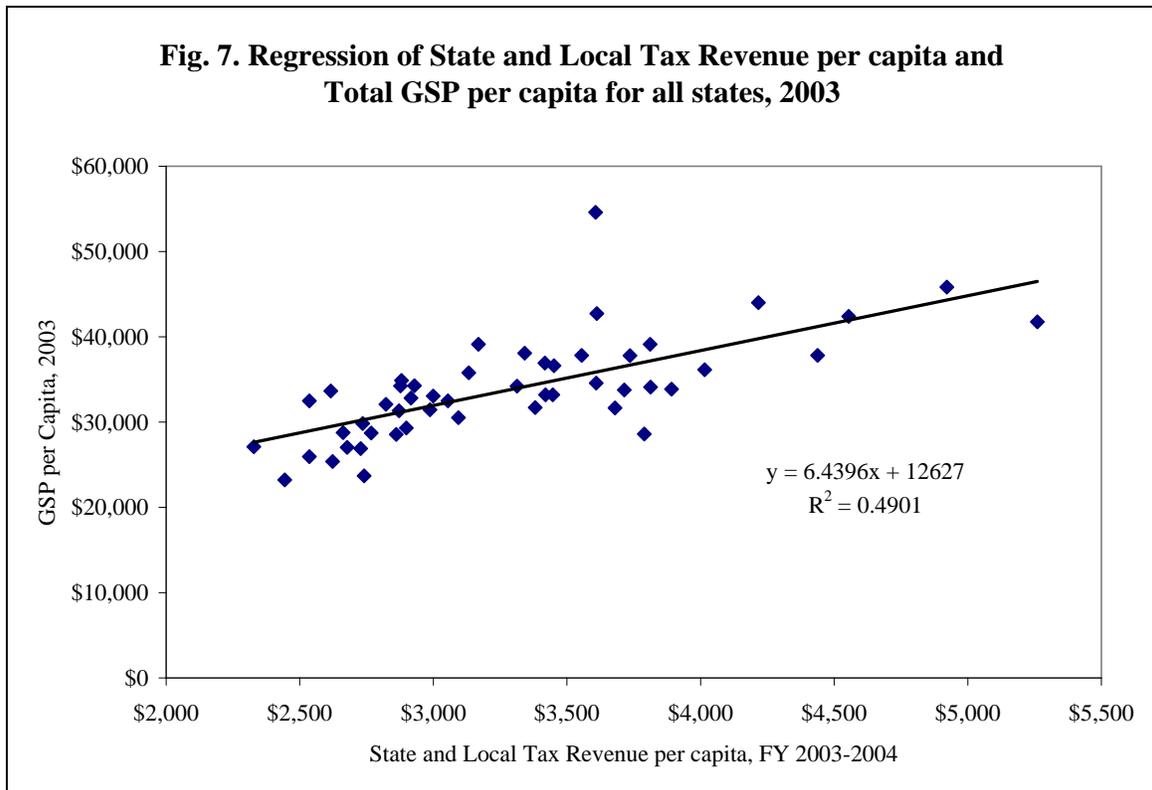
The second set of analyses examined the relationship between changes in state and local government GSP and private sector GSP per capita. There was wide variation in changes in state and local government GSP per capita. Some states even experienced a decline. In both the 1990-1997 and 1997-2004 time periods, increases in public sector GSP were associated with increases in private sector GSP. As a group, states that experienced a decline in public sector GSP did not perform as well as states with growing public sectors. These results should not be interpreted to imply causality. On the whole, they reflect the negligible influence that states and local governments have over short-to-medium term economic performance. This is reflected in the relatively low R^2 figures: the size of the public sector and the growth of the public sector simply do not explain much of the variation among states in private sector economic growth. On the other hand, many studies have shown that public investments in training and education have beneficial long-term effects, but we cannot make adequate long-term investments if the state's budget process is held hostage to a false premise of a tradeoff between public sector GSP and economic growth.

These results have profound implications for state fiscal policy. Ohio will not receive economic rewards for arbitrarily restraining state and local government GSP, nor will our economy be punished if the state budget exceeds the artificial 3.5 percent limit. Cutting back on essential public services will not stimulate economic growth. Policy debates should not juxtapose the needs of Ohio's residents for education, transportation, health care, and law enforcement with private sector economic performance. In order to have a meaningful discussion about our future, we must break the grip of this false dichotomy.

APPENDIX



Source: Policy Matters Ohio analysis of BEA and U.S. Census Bureau data (nominal dollars).
Note: Each diamond represents a state.



Source: Policy Matters Ohio analysis of BEA data (nominal dollars).

Note: Each diamond represents a state.

POLICY MATTERS OHIO IS A NON-PROFIT, NON-PARTISAN RESEARCH INSTITUTE DEDICATED TO RESEARCHING AN ECONOMY THAT WORKS FOR ALL IN OHIO. POLICY MATTERS SEEKS TO BROADEN DEBATE ABOUT ECONOMIC POLICY BY PROVIDING RESEARCH ON ISSUES THAT MATTER TO OHIO'S WORKING PEOPLE AND THEIR FAMILIES. AREAS OF INQUIRY FOR POLICY MATTERS INCLUDE WORK, WAGES, AND BENEFITS; EDUCATION; ECONOMIC DEVELOPMENT; ENERGY POLICY; AND TAX POLICY. WE ARE GRATEFUL TO THE CLEVELAND, GUND, JOYCE, AND ST. ANN FOUNDATIONS AND THE ECONOMIC POLICY INSTITUTE FOR UNDERWRITING POLICY MATTERS OHIO'S WORK. TO THOSE WHO WANT A MORE FAIR AND PROSPEROUS ECONOMY.... **POLICY MATTERS.**

3631 PERKINS AVENUE, SUITE 4C - EAST • CLEVELAND, OHIO 44114 • 216/361-9801

COLUMBUS: 1372 GRANDVIEW AVE, SUITE 242 • COLUMBUS, OHIO 43212 • 614/486-4601

[HTTP://WWW.POLICYMATTERSOHIO.ORG/](http://www.policymattersohio.org/)



© 2006 Policy Matters Ohio. Permission to reproduce this report is granted provided that credit is given to Policy Matters Ohio. All rights reserved.