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HIGHER TAXES, LESS GROWTH: THE IMPACT OF TAX BURDEN ON ECONOMIC GROWTH IN U.S. METROPOLITAN AREAS

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EXECUTIVE SUMMARY

A new analysis shows U.S. metropolitan areas with lower taxes exhibit higher employment growth, faster population growth, and greater increases in real personal income than areas with a higher tax burden. These findings are particularly relevant at a time when many states and cities are proposing to raise taxes to address short and long-term budget problems. This research found areas with higher taxes had lower employment growth, smaller personal income gains and slower growth of population.

Among the findings of the research:

- Employment growth between 2000-2006 was 54 percent higher in the 50 metropolitan areas with the lowest tax burden than in the 50 highest-tax metro areas (measuring the tax burden as state and local taxes as a percent of personal income in 1997 for all 381 metropolitan areas).
- Real personal income growth was 80 percent higher between 2000 and 2006 in the 50 areas with the lowest state and local tax burden (as a percent of personal income in 1997) than in the 50 highest-tax metro areas.
- In the 50 lowest-tax areas, population growth at 8.6 percent (between 2000 and 2007) was more than three times higher than in high-tax metro areas (2.6 percent).
- The results suggest a clear negative relationship between state and local tax burdens and local economic growth.
- The tax burden was nearly 50 percent higher in the 50 highest-tax areas than in the 50 lowest tax areas (13.1 percent of income vs. 8.8 percent of income).
- Eight of the top 10 metro areas with the greatest employment growth between 2000 and 2006 had a lower than average tax burden, with the other two areas only slightly above average. The 10 metro areas were 1) Palm Coast, FL (67.7 percent employment growth), 2) St. George, UT (48.5 percent), 3) Cape Coral-Fort Myers, FL (41.7 percent), 4) Naples-Marco Island, FL (35.4 percent), 5) Lake Havasu City-Kingman, AZ (34.8 percent), 6) Port St. Lucie, FL (34.5 percent), 7) Las Vegas-Paradise, NV (32.2

percent), 8) Bend, OR (31.7 percent), 9) McAllen-Edinburg-Mission, TX (29.8 percent), and 10) Prescott, AZ (28 percent).

- Nine of the top 10 metro areas with the highest growth in real personal income between 2000 and 2006 possessed lower than average tax burdens, with the 10th only just above average. The 10 metro areas were 1) Palm Coast, FL, (71 percent real personal income growth), 2) Naples-Marco Island, FL (53.5 percent), 3) Cape Coral-Fort Myers, FL (51.7 percent), 4) St. George, UT (50.5 percent), 5) Sebastian-Vero Beach, FL (42.1 percent), 6) Las Vegas-Paradise, NV (40.9 percent), 7) Bend, OR (35.9 percent), 8) Fayetteville-Springdale-Rogers, AR (35.1 percent), 9) Hanford-Corcoran, CA (34.3 percent), and 10) Killeen-Temple-Fort Hood, TX (33.4 percent).
- Nine of the top 10 metro areas with the largest population growth between 2000 and 2007 had a lower than average tax burden, with the 10th only slightly above average. The 10 metro areas were 1) Palm Coast, FL, (77.4 percent population growth), 2) St. George, UT (48.1 percent), 3) Greeley, CO (34.7 percent), 4) Cape Coral-Fort Myers, FL (33.9 percent), 5) Bend, OR (33.5 percent), 6) Las Vegas-Paradise, NV (33.5 percent), 7) Raleigh-Cary, NC (31.4 percent), 8) Provo-Orem, UT (30.9 percent), 9) Gainesville, GA (29.4 percent), 10) Phoenix-Mesa-Scottsdale, AZ (28.5 percent).
- Contemporary research provides evidence that political jurisdictions with higher taxes tend to experience slower economic growth. This is true for nations, states and provinces, counties, and metropolitan areas.
- All else being equal, individuals will tend to flee high-tax areas and flock to low-tax areas. That is another reason why we would expect areas with lower taxes to see higher growth of population, employment, and income. Much of the literature in this area has focused on the state level. However, the mobility of residents will tend to be even higher at the local level than at the state level.

The research, which was made possible by a grant from the Searle Freedom Trust, shows that rather than blaming poor economic performance on trade, outsourcing or other factors, elected officials should look at their own policies on tax rates and other factors that affect capital formation, returns to investment, and the cost of labor. The research demonstrates cities and states possess the ability to adopt sound policies that will attract capital and lead to faster growth in employment, population, and income.

Taxes remove money from the hands of private individuals and place it in the hands of government agencies. Those private individuals have a stronger incentive to use that money productively because they directly bear the cost of not doing so. In contrast, government employees do not as directly (if at all) bear the cost of wasteful

spending, nor can they legally reap the benefits of keeping those costs low. That's not to suggest that government spending produces no benefit at all; however, it is likely to produce a smaller benefit than if that money were left in private hands. High taxes not only take excessive amounts of money out of private hands, they also make the jurisdictions levying those high taxes less attractive places to live and thereby put them at a competitive disadvantage. The mobility of taxpayers gives them an opportunity to "vote with their feet" by moving to more attractive places to live. Statistical evidence confirms that.

Tax burden in the study is measured as a percentage of personal income in order to make meaningful comparisons across metro areas. To facilitate such comparisons across state lines, 1997 state taxes as a percent of personal income was added to the local tax percent of income number to obtain the state and local tax burden data used in the study. In addition to the state and local tax burden data, the research included a variable for human capital (the percent of those age 25 and over with a college degree), the unemployment rate, and the manufacturing industry's share of employment. Each of these other variables reflects conditions in the initial year of the growth period.

Economic prosperity is more likely to occur if tax burdens are kept low, especially relative to neighboring areas. This requires a strong emphasis on spending taxpayer resources wisely. This is particularly true in periods of economic downturn when taxpayers are especially sensitive to the various costs of living. If high-tax, low-growth metro areas like Buffalo, Cleveland, and Detroit want to be more like high-growth areas such as Austin, McAllen, Orlando, Phoenix, and Raleigh, they should lower the burden of taxation and bring spending under control. All else equal, U.S. metropolitan areas with higher taxes tended to have slower growth of population, employment, and income. These findings have clear policy implications for local politicians and for those at all levels of government.

Introduction

The issue of the impact of government economic policy on economic growth has long been debated. While it was once believed that tax changes had no impact on economic growth that is now very much a minority view. Most economists believe that taxes have at least some impact on economic growth. Economic theory suggests that, all else being equal, economies with higher taxes will have slower-growing and less prosperous economies. Taxes remove money from the hands of private individuals and place it in the hands of government. Those private individuals have a stronger incentive to use that money efficiently because they directly bear the cost of not doing so.

In contrast, government employees do not as directly (if at all) bear the cost of wasteful spending, nor can they legally reap the benefits of keeping those costs low. In fact, when government agencies spend less than they were budgeted, they tend to get a smaller budget the next year. This creates perverse incentives for government employees. They actually face a disincentive to keeping costs low. That's not to suggest that government spending produces no benefit at all; however, it is likely to produce a smaller benefit than if that money were left in private hands.

In a recent example, the state of Washington spent \$250,000 to send \$1 food stamp checks to 250,000 residents in the hopes it would lead to additional federal aid. Even if such aid was forthcoming it would not create good jobs or expand wealth in the economy. It would simply transfer money from working taxpayers in other states to residents of Washington state.¹

For years, economists have been testing the theory that high taxes have a negative impact on economic growth. Contemporary research provides evidence that political jurisdictions with higher taxes tend to experience slower economic growth. This is true for nations, states and provinces, counties, and metropolitan areas, but we will focus our attention here on the state and local evidence.

For example, Vedder (1990) found that real per capita state income growth was negatively associated with the growth of the state tax burden. Bartik (1991) provided a thorough summary of the literature up to that point and found that business taxes are typically found to have effects on state and local growth. Becsi (1996) found similar results for state and local tax rates (relative to those of other states). Crain and Lee (1999) also found a negative relationship between government revenue as a percent of income and state per capita income. More recently, Reed (2008) found that taxes used to fund general expenditures are negatively related to state income growth.²

In addition to data on taxes, one particularly useful tool that we have to examine this issue is the Fraser Institute's Economic Freedom of North America (Karabegović and McMahon, 2008). This provides an index of economic freedom for U.S. states and Canadian provinces. (This is similar to the two national indices of economic freedom, the Fraser Institute's Economic Freedom of the World and the Heritage Foundation's Economic Freedom Index, which measure economic freedom at the national level.)

There is a large literature showing that nations with high levels of economic freedom have higher and fastergrowing per capita incomes as well as better performances on other measures of well-being such as poverty and literacy rates. (Ashby (2007) provides a summary of that literature.) There is growing evidence that states with higher economic freedom scores have more prosperous economies. For example, Ashby (2007) examined residential migration flows between states from 1995-2000 and found that states with higher economic freedom scores attracted more residents. Kreft and Sobel (2005) and Gohmann, Hobbs, and McCrickard (2008) found higher growth of entrepreneurial activity in states with higher levels of economic freedom, while Campbell and Rogers (2007) and Hall and Sobel (2008) found higher levels of entrepreneurial activity in freer states. Ashby and Sobel (2008) even found lower levels of economic inequality in higher freedom states.

High taxes not only take excessive amounts of money out of private hands, they also make the jurisdictions levying those high taxes less attractive places to live and thereby put them at a competitive disadvantage. The mobility of taxpayers gives them an opportunity to "vote with their feet" by relocating to a more desirable jurisdiction (Tiebout, 1956). This requires governments to compete with each other to attract residents. All else being equal, individuals will tend to flee high-tax areas and flock to low-tax areas. That is another reason why we would expect areas with lower taxes to see higher growth of population, employment, and income.

Much of the literature in this area has focused on the state level. However, the mobility of residents will tend to be even higher at the local level than at the state level. (It's usually easier to move to a new city within the same metro area or within the same state than to move to a different state.) The literature examining local jurisdictions is limited. However, Bradbury, Downs, and Small (1982) examined a subset of the largest metro areas and found that local taxes were negatively associated with metro area job growth. Dalenberg and Partridge (1995) also found that taxes were negatively related with metro area employment growth. Crihfield and Panggabean (1995) found a negative relationship between state taxes and metro area economic growth.

More recently, Holcombe and Lacombe (2004) found that marginal state income tax rates were negatively associated with per capita income growth in counties in the U.S. that border other states. Higgins, Levy, and Young (2006) also looked at county-level outcomes and found that the percentage of the population employed by the government was negatively related to per capita income growth. Stansel, Gohmann, and Hobbs (2008) found

a negative relationship between increases in local revenue used to fund welfare spending and entrepreneurial activity in metro areas. While some argue that spending stimulates economic growth, Stansel (2009) found no significant relationship between the overall level of spending and economic growth in U.S. metropolitan areas.

STATISTICAL ANALYSIS

As noted, economic theory suggests that, all else being equal, economies with higher taxes will have slowergrowing and less prosperous economies. Taxes remove money from the hands of private individuals and place it in the hands of government. Those private individuals would have likely used that money more productively than would government employees with no profit incentive. Statistical evidence confirms that. In the figures below, we examine state and local taxes and economic growth since 2000 in all 381 U.S. metropolitan areas. A detailed description of the sample is provided in the Appendix. The most recent county population data are for 2007 and the most recent county data for employment and personal income are for 2006. By using 2000 as the initial year of our growth period, we were able to include one full business cycle. (The previous recession started in early 2001 and the current one started in late 2007.) However, the unavailability of more recent county data means that, unfortunately, the analysis herein could not directly incorporate the effects of the current recession.

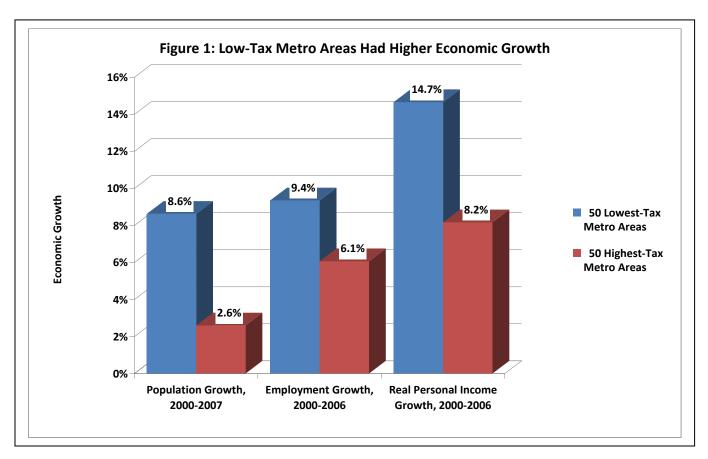
The bursting of the housing bubble has hit some of the highest growth areas in this decade particularly hard. especially in regards to unemployment rates. As Harvard economist Edward Glaeser (2009) has explained, part of the reason is that the decline in housing construction "doesn't mean just a reduction in building jobs, but also a big hit to the retail sector that supplies furniture and appliances for new homes." Despite this current downturn, a recent survey of CEO's in Chief Executive magazine shows that the states with the highest growth areas - such as Florida, Texas, and Arizona - remain at or near the top of the list of "best states for business." So while our results may not perfectly reflect current conditions, they do correspond very well to longer-term trends.

Given the variation in size among the 381 areas, in order to make meaningful comparisons, we must first adjust the tax numbers. For example, a tax burden of \$5,000 is a lot more burdensome for a household in an area where average household income is \$50,000, then where average income is \$100,000. To reflect those differences, we measure tax burdens as a percentage of personal income. The local tax data we use is for 1997.3 It includes taxes collected by all local governments in each metro area (i.e., county, city, school district, and special district), divided by personal income. However, there is wide variation across states in the way that government services are divided amongst local and state governments. As a result, using only the local tax burden does not allow us to make meaningful comparisons across metro areas in different states. To facilitate such comparisons, 1997 state taxes as a percent of personal income was added to the local tax percent of income number to get the state and local tax burden data we use below.4

GROWTH IN HIGH-TAX VS. LOW-TAX METRO AREAS

To examine the relationship between taxes and growth, first, we divide our 381 metro areas into the 50 highesttax areas and the 50 lowest-tax areas, measured by 1997 state and local taxes as a percent of personal income. Then we examine economic growth in those two groups. (Table A1 in the appendix lists the data for all 381 metro areas.)

Table 1 shows the average tax burden in the two groups and the average for each of the three economic growth measures. The tax burden was nearly 50 percent higher in the 50 highest-tax areas than in the 50 lowest tax areas (13.1 percent vs. 8.8 percent of 1997 state and local taxes as percent of personal income). As Figure 1 indicates, in the 50 highest-tax metro areas, population grew by only 2.6%. In the 50 lowest-tax areas, population growth was more than three times higher (at 8.6%). That same pattern holds for the other two growth measures, real personal income growth was about 80% higher and employment growth was 54% higher in the low-tax areas.

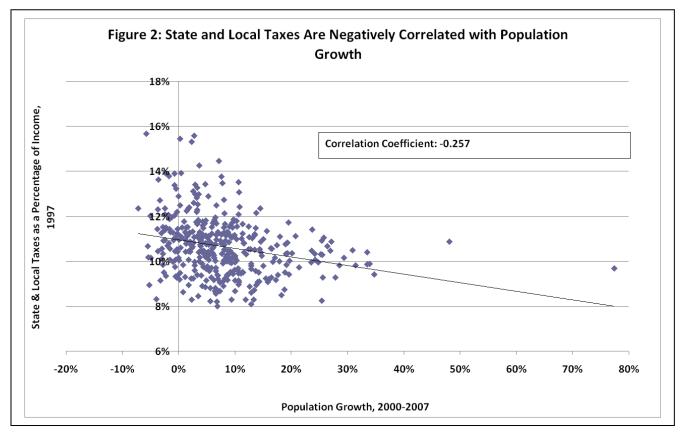


Source: U.S. Census Bureau and the U.S. Bureau of Economic Analysis

Table 1 **Low-Tax Metro Areas Exhibited Higher Economic Growth**

	Population Growth, 2000-2007	Employment Growth, 2000-2006	Real Personal Income Growth, 2000-2006	Average 1997 State & Local Taxes as a % of Income	
50 Lowest-Tax Metro Areas	8.6%	9.4%	14.7%	8.8%	
50 Highest-Tax Metro Areas	2.6%	6.1%	8.2%	13.1%	

Source: U.S. Census Bureau and the U.S. Bureau of Economic Analysis



Source: U.S. Census Bureau and the U.S. Bureau of Economic Analysis

As Figure 2 shows, there is a negative correlation between 2000-2007 population growth and 1997 state and local taxes as a percent of personal income. The correlation coefficient is -0.257. A similar negative relationship exists between taxes and the other two measures of economic growth. If higher taxes were not a drag on economic growth, we would expect to see the opposite results.

TAXES IN HIGH-GROWTH VS. LOW-GROWTH METRO AREAS

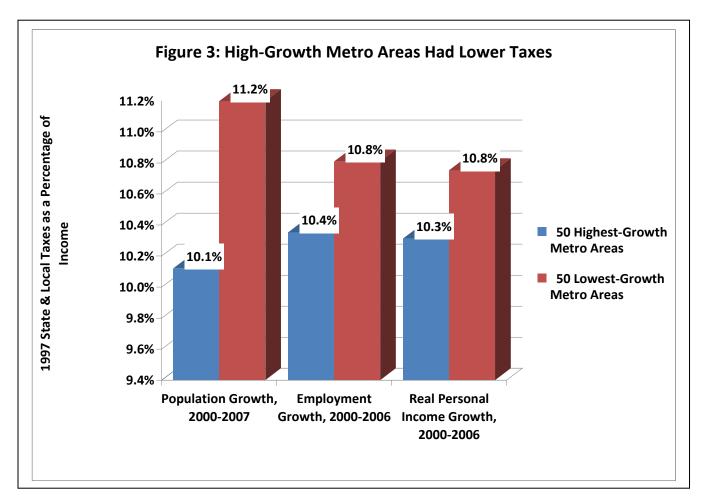
Another way to examine the relationship between taxes and growth is to divide the areas into the 50 highestgrowth areas and the 50 lowest-growth areas, measured three ways: by 2000-2007 population growth, by 2000-2006 employment growth, and by 2000-2006 real personal income growth. Then we examine state and local taxes in those two groups. (Table A1 in the Appendix lists the data for all 381 metro areas.)

Further evidence of the benefits of lower taxes can be found in Table 2, which shows the averages for the three growth measures and the tax burden in the 50 highest-growth and 50 lowest-growth areas. As Figure 3 shows, in the 50 fastest growing metro areas (by population growth), the average state and local tax burden was 10.1% of personal income. It was more than 10% higher (11.2% of income) in the 50 slowest growing areas. A similar disparity exists when growth is measured with employment or real personal income.

Table 2 **High-Growth Metro Areas Have Lower Taxes**

	Average Growth for the Group	1997 State & Local Taxes as a % of Income
Population Growth, 2000-2007		
50 Highest-Growth Metro Areas	24.7%	10.1%
50 Lowest-Growth Metro Areas	-2.6%	11.2%
Employment Growth, 2000-2006		
50 Highest-Growth Metro Areas	24.2%	10.4%
50 Lowest-Growth Metro Areas	-3.2%	10.8%
Real Personal Income Growth,		
2000-2006		
50 Highest-Growth Metro Areas	30.3%	10.3%
50 Lowest-Growth Metro Areas	-1.2%	10.8%

Source: U.S. Census Bureau and the U.S. Bureau of Economic Analysis



Source: U.S. Census Bureau and the U.S. Bureau of Economic Analysis

TOP PERFORMING METRO AREAS

A common theme can be seen in the top performing metropolitan areas – their tax burdens were almost uniformly low. Eight of the top 10 metro areas with the greatest employment growth between 2000 and 2006 had a lower than average tax burden, with the other two areas only slightly above average. The 10 metro areas were 1) Palm Coast, FL (67.7 percent employment growth), 2) St. George, UT (48.5 percent), 3) Cape Coral-Fort Myers, FL (41.7 percent), 4) Naples-Marco Island, FL (35.4 percent), 5) Lake Havasu City-Kingman, AZ (34.8 percent), 6) Port St. Lucie, FL (34.5 percent), 7) Las Vegas-Paradise, NV (32.2 percent), 8) Bend, OR (31.7 percent), 9) McAllen-Edinburg-Mission, TX (29.8 percent), and 10) Prescott, AZ (28 percent).

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Higher Taxes, Less Growth

Nine of the top 10 metro areas with the highest growth in real personal income between 2000 and 2006 possessed lower than average tax burdens, with the 10th only just above average. The 10 metro areas in real personal income growth were 1) Palm Coast, FL, (71 percent), 2) Naples-Marco Island, FL (53.5 percent), 3) Cape Coral-Fort Myers, FL (51.7 percent), 4) St. George, UT (50.5 percent), 5) Sebastian-Vero Beach, FL (42.1 percent), 6) Las Vegas-Paradise, NV (40.9 percent), 7) Bend, OR (35.9 percent), 8) Fayetteville-Springdale-Rogers, AR (35.1 percent), 9) Hanford-Corcoran, CA (34.3 percent), and 10) Killeen-Temple-Fort Hood, TX (33.4 percent).

Nine of the top 10 metro areas with the largest population growth between 2000 and 2007 had a lower than average tax burden, with the 10th only just above average. The 10 metro areas in population growth were 1) Palm Coast, FL, (77.4 percent), 2) St. George, UT (48.1 percent), 3) Greeley, CO (34.7 percent), 4) Cape Coral-Fort Myers, FL (33.9 percent), 5) Bend, OR (33.5 percent), 6) Las Vegas-Paradise, NV (33.5 percent), 7) Raleigh-Cary, NC (31.4 percent), 8) Provo-Orem, UT (30.9 percent), 9) Gainesville, GA (29.4 percent), 10) Phoenix-Mesa-Scottsdale, AZ (28.5 percent).

Table 3
Top Ten Metro Areas in Employment Growth, 2000-2006

	2000-2006 Employment		1997 State & Local Taxes, % of	
Metro Area	Growth	Rank	Income	Rank
Average	8.2%		10.7%	
Median	6.9%		10.5%	
Palm Coast, FL MSA	67.7%	1	9.7%	89
St. George, UT MSA	48.5%	2	10.9%	230
Cape Coral-Fort Myers, FL MSA	41.7%	3	9.9%	106
Naples-Marco Island, FL MSA	35.4%	4	9.3%	57
Lake Havasu City-Kingman, AZ MSA	34.8%	5	11.0%	251
Port St. Lucie, FL MSA	34.5%	6	10.3%	153
Las Vegas-Paradise, NV MSA	32.2%	7	9.9%	105
Bend, OR MSA	31.7%	8	10.4%	167
McAllen-Edinburg-Mission, TX MSA	29.8%	9	9.9%	111
Prescott, AZ MSA	28.0%	10	10.5%	181

Source: U.S. Census Bureau and the U.S. Bureau of Economic Analysis. Note: Rankings are from highest to lowest for employment growth. Rank is from lowest to highest for taxes.

Table 4
Top Ten Metro Areas in Real Personal Income Growth, 2000-2006

	2000-2006 Real Personal Income		1997 State & Local Taxes, % of	
Metro Area	Growth	Rank	Income	Rank
Average	12.3%		10.7%	
Median	10.9%		10.5%	
Palm Coast, FL MSA	71.0%	1	9.7%	89
Naples-Marco Island, FL MSA	53.5%	2	9.3%	57
Cape Coral-Fort Myers, FL MSA	51.7%	3	9.9%	106
St. George, UT MSA	50.5%	4	10.9%	230
Sebastian-Vero Beach, FL MSA	42.1%	5	10.0%	115
Las Vegas-Paradise, NV MSA	40.9%	6	9.9%	105
Bend, OR MSA	35.9%	7	10.4%	167
Fayetteville-Springdale-Rogers, AR-MO MSA	35.1%	8	10.3%	151
Hanford-Corcoran, CA MSA	34.3%	9	9.8%	97
Killeen-Temple-Fort Hood, TX MSA	33.4%	10	8.3%	6

Source: U.S. Census Bureau and the U.S. Bureau of Economic Analysis. Note: Rankings are from highest to lowest for real personal income growth. Rank is from lowest to highest for taxes.

Table 5
Top Ten Metro Areas in Population Growth, 2000-2007

			1997	
			State &	
			Local	
	2000-2007		Taxes,	
	Population		% of	
Metro Area	Growth	Rank	Income	Rank
Average	7.8%		10.7%	
Median	6.4%		10.5%	
Palm Coast, FL MSA	77.4%	1	9.7%	89
St. George, UT MSA	48.1%	2	10.9%	230
Greeley, CO MSA	34.7%	3	9.4%	68
Cape Coral-Fort Myers, FL MSA	33.9%	4	9.9%	106
Bend, OR MSA	33.5%	5	10.4%	167
Las Vegas-Paradise, NV MSA	33.5%	6	9.9%	105
Raleigh-Cary, NC MSA	31.4%	7	9.8%	100
Provo-Orem, UT MSA	30.9%	8	10.5%	182
Gainesville, GA MSA	29.4%	9	10.2%	137
Phoenix-Mesa-Scottsdale, AZ MSA	28.5%	10	9.8%	101

Source: U.S. Census Bureau and the U.S. Bureau of Economic Analysis. Note: Rankings are from highest to lowest for population growth. Rank is from lowest to highest for taxes.

ECONOMETRIC ANALYSIS

The statistical results suggest that there is a negative relationship between state and local tax burdens and local economic growth. However, there could be other factors affecting economic growth that this analysis ignores. Econometrics is a tool that economists and others use to test hypotheses about relationships between various variables. It allows us to incorporate some of those other factors.

In order to more definitively examine the relationship between taxes and growth, we need to control for other factors that vary from place to place that may also affect growth. In addition to the state and local tax burden data, we have included a variable for human capital (the percent of those age 25 and over with a college degree), the unemployment rate, and the manufacturing industry's share of employment. Each of these other variables reflects conditions in the initial year of the growth period.⁵ Areas with more human capital would be expected to have higher levels of economic output, but not necessarily more rapid economic growth. Those with a higher unemployment rate and where the declining manufacturing industry makes up a higher percentage of the area's employment would be expected to grow slower.

As is customary, the initial level of the growth variable (population, employment, or personal income) is also included. In order to account for variations in factors that may be unique to specific regions, we have included four regional dummy variables (each variable equals 1 for metro areas located in that region and 0 for those not in that region). The omitted region is the northeast. Inclusion of regional dummy variables is fairly common practice in studies of this nature.

We utilize ordinary least squares (OLS) regression to examine the relationship between taxes and economic growth for our cross section of 381 U.S. metropolitan areas. Table 6 (see Appendix) shows the results. As expected, column (1) indicates that state and local taxes as a percent of personal income in 1997 had a negative relationship with 2000-2007 population growth that was highly statistically significant. This confirms our earlier results. A one standard deviation decline in tax burden was associated with a 1.4 percentage point increase in population growth. That implies that if a declining area like Toledo, Ohio had lowered taxes in 1997, they would have been able to reverse their 1.2% decline in population since 2000.

Column (2) shows the results for 2000-2006 employment growth. Here, too, the expected negative relationship with state and local taxes exists and is statistically significant. A one standard deviation decline in the tax burden was associated with a 0.7 percentage point increase in employment growth. That result implies that a declining area like Fort Wayne, Indiana could have reversed their 0.3% decline in employment since 2000 had they lowered taxes in 1997.

The results for 2000-2006 real personal income growth are found in Column (3). The state and local tax variable is statistically significant and does have the expected negative sign. A one standard deviation decline in the tax burden was associated with a 0.8 percentage point increase in real personal income growth. If a declining area like Binghamton, New York had lowered taxes in 1997, that result implies that it could have reversed its 0.5% decline in personal income since 2000.

CONCLUSION

All else equal, U.S. metropolitan areas with higher taxes tended to have slower growth of population, employment, and income. These findings have clear policy implications for local politicians (and for those at all levels of government). Economic prosperity is more likely to occur if tax burdens are kept low, especially relative to neighboring areas. This requires a strong emphasis on spending taxpayer resources wisely. However, that's no different than what private businesses must do. Just like businesses must keep costs low in order to successfully compete with other businesses for customers, governments must keep spending and taxes low in order to successfully compete with other governments for mobile residents and businesses. This is particularly true in periods of economic downturn when taxpayers are especially sensitive to the various costs of living. If high-tax, low-growth metro areas like Buffalo, Cleveland, and Detroit want to be more like high-growth areas such as Austin, McAllen, Orlando, Phoenix, and Raleigh, they should lower the burden of taxation and bring spending under control.

APPENDIX

The data set includes all 381 U.S. metropolitan areas for which comparable historical data are available. The data are from the U.S. Census Bureau (www.census.gov) and the U.S. Bureau of Economic Analysis (www.bea.gov). To provide a consistent unit of analysis, all metro area data are for the area as defined for 2009. Since official metro area boundaries often expand over time, rather than using published metro area totals, I have collected county level data for each component county in those areas and aggregated that to get metro area totals.

The 381 metropolitan areas consist of 352 metropolitan statistical areas (MSAs) and 29 metropolitan divisions (MDs), as defined for 2009. MDs are the component areas within large MSAs. For example, San Francisco-San Mateo-Redwood City and Oakland-Fremont-Hayward are the two MDs within the San Francisco-Oakland-Fremont MSA. Since such large MSAs (previously called CMSAs, for consolidated metropolitan statistical areas) are fundamentally different from the standard MSAs, the eleven such MSAs are not considered separately herein. Instead each of their, more comparable, 29 component MDs are included.⁷

As is often done in studies of this sort, Anchorage, Alaska; Fairbanks, Alaska; and Honolulu, HI have been dropped due to peculiarities in their fiscal systems. However, with the exception of these three areas, every other metro area is included in the analysis. This new, expanded data set contrasts with those used in previous work, which typically consisted of a sub-sample of the largest metro areas.

For the nine areas most heavily impacted by the aftermath of Hurricane Katrina (Reeves, 2005), which hit the Gulf coast in August 2005, the average annual economic growth rates were calculated for 2000-2004. That average annual rate was used to calculate an estimated overall growth for 2000 through 2006 (for employment and income) or through 2007 (for population). Those areas are Mobile, Alabama; Alexandria, Baton Rouge, Houma, Lafayette, Lake Charles, and New Orleans, Louisiana; and Gulfport-Biloxi, and Pascagoula in Mississippi.

Table 6 Regression Results

		Dependent varia	ıble:
	2000 2007	2000 2006	2000-2006 Real
	2000-2007	2000-2006	Personal
	Population	Employment	Income
	Growth	Growth	Growth
	(1)	(2)	(3)
State & local taxes, % of personal income, 1997	-1.093***	-0.510*	-0.580*
	(4.06)	(1.71)	(1.85)
Percent of population 25 & older with a	0.033	-0.130*	-0.161**
college degree, 2000	(0.40)	(1.73)	(2.23)
Population, 2000	2.95^-9		
	(0.84)		
Employment, 2000		-1.05^-8***	
		(2.70)	
Real personal income, 2000			-3.46^-11
			(0.61)
Unemployment rate, 2000	-0.238	-0.399	-0.253
	(0.98)	(1.50)	(1.03)
Manufacturing employment, % of total	-0.243***	-0.598***	-0.698***
employment, 2000	(3.26)	(7.58)	(7.86)
Midwest	0.018**	-0.017**	0.006
	(2.37)	(2.03)	(0.64)
South	0.053***	0.020**	0.070***
	(4.83)	(1.97)	(6.59)
West	0.089***	0.039***	0.072***
	(6.33)	(2.86) 0.262***	(5.27)
Constant	0.186***	0.262***	0.290***
	(3.75)	(5.22)	(5.50)
N	381	381	381
R-squared	0.243	0.340	0.434

Numbers in parentheses are absolute values of t-statistics.

^{***}Two-tailed statistical significance at 99% confidence, **95% confidence, *90% confidence.

Table A1
State and Local Taxes and Economic Growth Since 2000 in All 381 Metro Areas

	1997							
	State & Local					1	2000-2006 Real	
	Taxes,		2000-2007		2000-2006		Personal	
	% of		Population		Employment		Income	
Metro Area		Rank	Growth			Rank		State
Average	10.7%		7.8%		8.2%		12.3%	
Median	10.5%		6.4%		6.9%		10.9%	
Anniston-Oxford, AL MSA	8.6%	15	0.8%		6.9%	192	17.0% 112	Alabama
Auburn-Opelika, AL MSA	8.7%	19	13.4%	74	20.4%	29	18.8% 82	Alabama
Birmingham-Hoover, AL MSA	10.1%	130	5.3%	215	7.4%	184	17.3% 106	Alabama
Decatur, AL MSA	8.3%	7	2.3%		0.7%	322	12.1% 170	Alabama
Dothan, AL MSA	8.8%	21	6.6%		6.3%	209	17.4% 105	Alabama
Florence-Muscle Shoals, AL MSA	9.2%	45	0.1%	319	3.8%	264	5.7% 279	Alabama
Gadsden, AL MSA	9.4%	62	-0.2%	327	2.6%	292	8.1% 241	Alabama
Huntsville, AL MSA	8.6%	14	12.9%	77	12.3%	96	18.2% 94	Alabama
Mobile, AL MSA	10.1%	127	-0.5%	332	-2.1%	350	2.3% 332	Alabama
Montgomery, AL MSA	8.8%	23	5.6%	210	8.9%	147	15.3% 138	Alabama
Tuscaloosa, AL MSA	8.0%	1	6.9%	175	12.8%	90	17.5% 101	Alabama
Flagstaff, AZ MSA	11.1%	258	9.6%	121	16.4%	50	20.9% 57	Arizona
Lake Havasu City-Kingman, AZ MSA	11.0%	251	25.7%	15	34.8%	5	32.6% 12	Arizona
Phoenix-Mesa-Scottsdale, AZ MSA	9.8%	101	28.5%	10	20.7%	27	27.2% 29	Arizona
Prescott, AZ MSA	10.5%	181	26.9%	13	28.0%	10	32.3% 13	Arizona
Tucson, AZ MSA	10.4%	165	14.6%	60	13.3%	82	24.1% 37	Arizona
Yuma, AZ MSA	10.3%	158	19.1%	36	24.7%	14	31.1% 16	Arizona
Fayetteville-Springdale-Rogers, AR-MO MSA	10.3%	151	25.5%	17	24.5%	15	35.1% 8	Arkansas
Fort Smith, AR-OK MSA	10.3%	161	6.0%	200	5.7%	220	16.3% 122	Arkansas
Hot Springs, AR MSA	10.4%	164	9.4%	125	12.6%	93	16.8% 115	Arkansas
Jonesboro, AR MSA	10.0%	123	8.0%	157	7.4%	183	12.0% 173	Arkansas
Little Rock-North Little Rock-Conway, AR MSA	10.5%	179	9.2%	131	7.4%	185	19.4% 77	Arkansas
Pine Bluff, AR MSA	10.7%	200	-5.5%	379	-0.4%	337	6.6% 265	Arkansas
Bakersfield, CA MSA	11.7%	318	19.5%	32	12.1%	103	23.2% 39	California
Chico, CA MSA	10.3%	159	7.7%	164	6.8%	193	14.0% 146	California
El Centro, CA MSA	11.5%	296	13.7%	69	10.7%	124	21.3% 56	California
Fresno, CA MSA	11.1%	253	12.5%	84	7.2%	186	16.2% 123	California
Hanford-Corcoran, CA MSA	9.8%	97	15.0%	58	17.3%	45	34.3% 9	California
Los Angeles-Long Beach, CA MD	11.3%	288	3.8%	252	2.6%	293	13.0% 156	California
Madera-Chowchilla, CA MSA	10.8%	208	19.0%	38	11.7%	111	22.6% 44	California
Merced, CA MSA	10.6%	194	16.6%	49	8.3%	161	16.0% 129	California
Modesto, CA MSA	10.5%	190	14.4%	63	5.7%	223	13.9% 149	California
Napa, CA MSA	11.2%	267	6.7%	181	6.8%	194	13.1% 155	California
Oakland-Fremont-Hayward, CA MD	11.0%	245	3.8%	249	0.6%	325	4.0% 312	California
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	1997 State & Local Taxes, % of		2000-2007 Population		2000-2006 Employment		2000-2006 Real Personal Income	
Metro Area				Rank		Rank	GrowthRan	
Oxnard-Thousand Oaks-Ventura, CA MSA	10.6%	193	6.0%	201	7.9%	169	14.3% 145	
Redding, CA MSA	11.2%	268	9.9%	118	10.2%	132	17.1% 111	
Riverside-San Bernardino-Ontario, CA MSA	10.9%	234	25.4%	19	24.1%	17	27.5% 28	
Sacramento—Arden-Arcade—Roseville, CA MSA	10.6%	196	16.4%	51	13.6%	72	20.5% 64	
Salinas, CA MSA	11.1%	260	1.5%	299	1.6%	309	10.1% 207	
San Diego-Carlsbad-San Marcos, CA MSA	10.4%	166	5.7%	208	7.5%	180	16.3% 123	
San Francisco-San Mateo-Redwood City, CA MD	11.0%	248	-0.6%	335	-7.3%	379	1.5% 339	
San Jose-Sunnyvale-Santa Clara, CA MSA	10.9%	232	3.9%	247	-12.2%	381	-10.2% 383	
San Luis Obispo-Paso Robles, CA MSA	11.8%	323	6.4%	192	8.6%	154	17.2% 107	
Santa Ana-Anaheim-Irvine, CA MD	10.4%	170	5.3%	216	7.1%	189	16.0% 131	
Santa Barbara-Santa Maria-Goleta, CA MSA	10.9%	238	1.2%	305	4.2%	248	15.7% 133	
Santa Cruz-Watsonville, CA MSA	10.6%	192	-1.5%	345	-4.0%	365	-3.4% 372	
Santa Rosa-Petaluma, CA MSA	10.4%	172	1.3%	304	1.6%	310	2.0% 337	
Stockton-Lodi, CA MSA	10.8%	217	19.1%	37	10.1%	134	12.5% 164	
Vallejo-Fairfield, CA MSA	10.4%	168	3.6%	257	9.8%	138	11.7% 177	
Visalia-Porterville, CA MSA	10.9%	227	14.5%	61	8.1%	164	18.3% 93	
Yuba City, CA MSA	11.1%	257	18.0%	42	7.9%	170	16.9% 113	
Boulder, CO MSA	9.3%	54	-0.4%	330	-3.1%	359	2.6% 329	
Colorado Springs, CO MSA	8.3%	8	13.3%	75	7.9%	173	10.2% 20	
Denver-Aurora-Broomfield, CO MSA*	9.5%	77	14.2%	65	6.5%	207	12.0% 17	
Fort Collins-Loveland, CO MSA	9.1%	37	14.3%	64	12.6%	92	11.2% 184	
Grand Junction, CO MSA	9.4%	69	19.6%	31	18.4%	41	20.2% 66	
Greeley, CO MSA	9.4%	68	34.7%	3	19.6%	33	14.0% 147	
Pueblo, CO MSA	9.5%	79	9.2%	129	5.6%	227	5.0% 297	
Bridgeport-Stamford-Norwalk, CT MSA	12.2%	341	1.4%	301	5.6%	226	8.7% 225	
Hartford-West Hartford-East Hartford, CT MSA	13.0%	360	3.5%	258	5.3%	233	6.6% 266	
New Haven-Milford, CT MSA	13.1%	362	2.6%	279	6.0%	213	5.2% 289	
Norwich-New London, CT MSA	12.8%	356	3.2%	268	7.8%	174	8.4% 233	
Dover, DE MSA	10.4%	163	20.2%	29	18.2%	42	19.7% 73	
Wilmington, DE-MD-NJ MD	11.7%	313	6.7%	180	4.0%	257	14.8% 14	
Washington-Arlington-Alexandria, DC-VA-MD-WV MD	11.6%	310	11.4%	95	12.8%	91	19.7% 74	
Bradenton-Sarasota-Venice, FL MSA	9.3%	56		50	16.7%	49	28.5% 24	
Cape Coral-Fort Myers, FL MSA	9.9%	106	33.9%	4	41.7%	3	51.7% 3	Florida
Deltona-Daytona Beach-Ormond Beach, FL MSA	9.8%	98	12.9%	79	23.0%	23	20.8% 59	
Fort Lauderdale-Pompano Beach-Deerfield Beach, FL MI		143	8.4%	145	22.1%	25	20.0% 69	
Fort Walton Beach-Crestview-Destin, FL MSA	8.7%	18	6.5%	190	16.2%	51	27.1% 30	
Gainesville, FL MSA	9.0%	31	10.6%	105	12.3%	95	21.5% 55	
Jacksonville, FL MSA	9.1%	34	15.9%	54	13.5%	75	23.6% 38	
Lakeland-Winter Haven, FL MSA	8.7%	20	18.8%	40	17.4%	44	28.4% 25	Florida
Miami-Miami Beach-Kendall, FL MD	11.5%	305	5.9%	203	11.1%	121	18.1% 95	
Naples-Marco Island, FL MSA	9.3%	57	25.6%	16	35.4%	4	53.5% 2	Florida

Metro Area	1997 State & Local Taxes, % of		2000-2007 Population Growth		2000-2006 Employment Growth I	Rank	2000-2006 Real Personal Income Growth R	onk	State
	8.2%	5	25.5%	18	27.4%	11		<u>анк</u> 14	Florida
Ocala, FL MSA	9.9%	113	23.6%	26	20.1%	31		32	Florida
Orlando-Kissimmee, FL MSA Palm Bay-Melbourne-Titusville, FL MSA	8.9%	25	12.6%	83	18.6%	37		65	Florida
Palm Coast, FL MSA	9.7%	89	77.4%	1	67.7%	1		1	Florida
Panama City-Lynn Haven-Panama City Beach, FL MSA	9.5%	81	10.6%	103	23.4%	20		26	Florida
Pensacola-Ferry Pass-Brent, FL MSA	8.7%	16	10.0%	113	10.0%	136		86	Florida
Port St. Lucie, FL MSA	10.3%	153	25.3%	20	34.5%	6		17	Florida
Punta Gorda, FL MSA	9.9%	109	7.9%	160	23.8%	18		68	Florida
Sebastian-Vero Beach, FL MSA	10.0%	115	16.7%	48	25.5%	12		5	Florida
Tallahassee, FL MSA	9.1%	41	10.7%	115	9.0%	146	16.4% 1		Florida
Tampa-St. Petersburg-Clearwater, FL MSA	9.6%	83	13.7%	70	12.4%	94		84	Florida
West Palm Beach-Boca Raton-Boynton Beach, FL MD	10.3%	154	12.0%	87	22.9%	24		47	Florida
Albany, GA MSA	10.9%	226	4.0%	246	1.7%	307	5.1% 2		Georgia
Athens-Clarke County, GA MSA	9.9%	107	12.8%	81	13.6%	74	11.4% 1		Georgia
Atlanta-Sandy Springs-Marietta, GA MSA	10.1%	129	24.3%	22	10.9%	122	11.4% 1		Georgia
Augusta-Richmond County, GA-SC MSA	9.7%	92	5.8%	207	6.6%	197	9.4% 2		Georgia
Brunswick, GA MSA	11.0%	250	9.4%	126	11.8%	108	16.5% 1		Georgia
Columbus, GA-AL MSA	10.6%	197	0.4%	315	2.7%	288	17.5% 1		Georgia
Dalton, GA MSA	10.8%	218	11.7%	89	4.5%	247	9.4% 2		Georgia
Gainesville, GA MSA	10.2%	137	29.4%	9	14.6%	64		83	Georgia
Hinesville-Fort Stewart, GA MSA	10.4%	173	-0.2%	324	11.6%	114		61	Georgia
Macon, GA MSA	11.1%	263	3.4%	262	3.1%	282	6.3% 2		Georgia
Rome, GA MSA	10.9%	231	5.6%	211	10.7%	125	14.4% 1		Georgia
Savannah, GA MSA	11.5%	306	12.4%	86	16.9%	47	20.5%		Georgia
Valdosta, GA MSA	10.2%	144	8.9%	136	15.2%	59	12.0% 1		Georgia
Warner Robins, GA MSA	8.5%	12	18.3%	41	23.6%	19		78	Georgia
Boise City-Nampa, ID MSA	10.7%	202	26.4%	14	19.8%	32		49	Idaho
Coeur d'Alene, ID MSA	11.4%	292	23.7%	24	25.4%	13		21	Idaho
Idaho Falls, ID MSA	10.7%	204	17.4%	45	21.4%	26		20	Idaho
Lewiston, ID-WA MSA	11.8%	321	3.6%	256	2.9%	285	4.6% 3		Idaho
Pocatello, ID MSA	11.1%	261	5.4%	213	10.2%	133	9.6% 2		Idaho
Bloomington-Normal, IL MSA	9.9%	112	9.2%	130	2.1%	300	5.8% 2		Illinois
ChampaignUrbana, IL MSA	9.8%	96	5.1%	221	3.8%	265	3.5% 3		Illinois
Chicago-Naperville-Joliet, IL MD	11.8%	322	4.2%	239	3.2%	278	5.4% 2		Illinois
Danville, IL MSA	9.1%	40	-3.3%	368	-3.1%	358	-0.8% 3		Illinois
Decatur, IL MSA	8.9%	30	-5.2%	377	-5.9%	372	1.6% 3		Illinois
Kankakee-Bradley, IL MSA	9.6%	84	6.6%	182	2.3%	297	0.6% 3		Illinois
Lake County-Kenosha County, IL-WI MD	10.2%	148	10.0%	116	7.5%	181	7.4% 2		Illinois
Peoria, IL MSA	9.3%	58	1.2%	306	4.1%	253	10.2% 2		Illinois
Rockford, IL MSA	10.0%	114	10.0%	112	-0.2%	334	-0.2% 3		Illinois
Springfield, IL MSA	9.2%	52	2.6%	280	0.4%	328	0.8% 3		Illinois

Materia Auro	1997 State & Local Taxes, % of		2000-2007 Population		2000-2006 Employment		2000-2006 Real Personal Income	State
Metro Area			Growth			Rank		
Anderson, IN MSA	10.1%	128	-1.5%	346	-6.2%	375	-1.7% 366	Indiana
Bloomington, IN MSA	10.2%	145	4.7%	232	4.8%	243	7.4% 259	Indiana
Columbus, IN MSA	11.7%	314	4.6%	233	2.2%	299	1.3% 341	Indiana Indiana
Elkhart-Goshen, IN MSA	10.9%	236	8.3%	147	7.1%	187	12.7% 160	
Evansville, IN-KY MSA	10.8%	212 252	2.0%	289 220	0.7%	321 335	10.2% 204	Indiana Indiana
Fort Wayne, IN MSA	11.1%		5.1%		-0.3%		-0.5% 357	
Gary, IN MD	12.5%	352	3.4%	261	3.4%	273	4.1% 311	Indiana
Indianapolis-Carmel, IN MSA	11.0%	244	11.1%	96	5.7%	221	10.2% 203	Indiana
Kokomo, IN MSA	11.9%	329	-1.7%	348	-8.0%	380	-6.8% 379	Indiana
Lafayette, IN MSA	10.8%	215	7.6%	165	1.2%	315	2.1% 336	Indiana
Michigan City-La Porte, IN MSA	12.2%	339	-0.3%	328	0.1%	332	-2.0% 370 5.40/ 376	Indiana
Muncie, IN MSA	10.3%	155	-2.8%	364	-6.8%	377	-5.4% 376	Indiana
South Bend-Mishawaka, IN-MI MSA	10.2% 10.9%	135 237	0.0%	322 340	-0.4%	339 331	7.4% 255	Indiana Indiana
Terre Haute, IN MSA		211	-0.9%	202	0.2% 5.9%	215	2.5% 330	
Ames, IA MSA	10.8%		6.0%			283	12.8% 159	Iowa
Cedar Rapids, IA MSA	10.8%	210	6.6%	187	3.1%		4.4% 305	Iowa
Davenport-Moline-Rock Island, IA-IL MSA	11.0%	240	0.0%	321	1.8%	305	7.6% 252	Iowa
Des Moines-West Des Moines, IA MSA	11.2%	269	13.5%	71	9.7%	140	18.5% 88	Iowa
Dubuque, IA MSA	11.0%	247	3.6%	255	7.6%	176	8.9% 222	Iowa
Iowa City, IA MSA	10.4% 11.4%	169	11.7%	90 325	13.5% -2.7%	77 355	11.0% 188	Iowa
Sioux City, IA-NE-SD MSA		294	-0.2%				-0.5% 356	Iowa
Waterloo-Cedar Falls, IA MSA	11.2%	276	-0.2%	326	4.8%	244	9.8% 209	Iowa
Lawrence, KS MSA	10.5% 11.1%	185	13.5%	73	5.3%	232	15.6% 135 26.2% 33	Kansas
Manhattan, KS MSA	11.1%	255	4.2%	240	8.8%	149		Kansas
Topeka, KS MSA	10.3%	275 157	1.8% 4.4%	293 235	-3.0% 5.0%	357 239	2.3% 333 18.5% 89	Kansas Kansas
Wichita, KS MSA				233 94				
Bowling Green, KY MSA	11.2%	278 138	11.4%	251	13.7%	70	14.8% 142	Kentucky
Elizabethtown, KY MSA	10.2% 11.7%		3.8%		8.1%	165	13.8% 151	Kentucky
Lexington-Fayette, KY MSA			9.5%	124 197	4.2%	250272	7.9% 246	Kentucky Kentucky
Louisville-Jefferson County, KY-IN MSA	11.7% 10.9%	315 229	6.2%	288	3.5% 1.4%	311	9.6% 211 3.0% 318	Kentucky
Owensboro, KY MSA	10.9%		2.0%					-
Alexandria, LA MSA		303	1.6%	298	3.6%	269	18.0% 97	Louisiana
Baton Rouge, LA MSA	11.1%	266	4.8%	227	2.9%	286	11.5% 180	Louisiana
Houma-Bayou Cane-Thibodaux, LA MSA	10.6%	195	2.3%	284	11.5%	116	16.0% 128	Louisiana
Lafayette, LA MSA	9.6%	87 374	4.9%	223	7.9%	172	10.3% 200	Louisiana
Lake Charles, LA MSA	13.9%	374		313	-2.4%	353	11.7% 178	Louisiana
Monroe, LA MSA	11.5%	300	1.3%	303	4.0%	258	9.5% 214	Louisiana
New Orleans-Metairie-Kenner, LA MSA	12.0%	333	-0.7%	337	3.2%	277	10.8% 192	Louisiana
Shreveport-Bossier City, LA MSA	11.8%	319	3.1%	269	8.3%	160	16.5% 117	Louisiana
Bangor, ME MSA	12.6%	353	2.7%	278	5.8%	217	8.4% 235	Maine
Lewiston-Auburn, ME MSA	13.0%	359	2.9%	270	7.1%	188	9.3% 218	Maine

Metro Area	1997 State & Local Taxes, % of Income		2000-2007 Population Growth		2000-2006 Employment Growth	Rank	2000-2006 Real Personal Income Growth Rank	: State
Portland-South Portland-Biddeford, ME MSA	12.9%	358	5.2%	218	8.5%	157	11.0% 189	Maine
Baltimore-Towson, MD MSA	10.5%	177	4.5%	234	8.7%	153	15.0% 139	Maryland
Bethesda-Frederick-Rockville, MD MD	10.5%	187	8.1%	153	11.8%	107	16.4% 119	Maryland
Cumberland, MD-WV MSA	9.5%	75	-2.6%	360	4.1%	256	5.2% 292	Maryland
Hagerstown-Martinsburg, MD-WV MSA	9.2%	44	17.2%	46	10.8%	123	21.6% 53	Maryland
Salisbury, MD MSA	9.9%	110	9.3%	128	14.3%	68	16.0% 130	Maryland
Barnstable Town, MA MSA	12.9%	357	0.0%	323	13.0%	88	8.7% 224	Massachusetts
Boston-Quincy, MA MD	11.3%	289	2.5%	281	2.1%	301	9.7% 210	Massachusetts
Cambridge-Newton-Framingham, MA MD	11.0%	249	0.5%	312	0.2%	330	2.2% 334	Massachusetts
Peabody, MA MD	10.8%	216	1.3%	302	4.1%	255	3.0% 319	Massachusetts
Pittsfield, MA MSA	11.4%	293	-3.8%	373	8.5%	158	5.7% 281	Massachusetts
Springfield, MA MSA	11.1%	256	0.4%	314	3.1%	279	5.2% 294	Massachusetts
Worcester, MA MSA	10.5%	183	4.0%	244	5.2%	234	5.1% 295	Massachusetts
Ann Arbor, MI MSA	11.1%	265	8.4%	146	-0.1%	333	2.7% 326	Michigan
Battle Creek, MI MSA	11.3%	281	-1.0%	341	-5.4%	371	1.1% 344	Michigan
Bay City, MI MSA	11.4%	291	-2.4%	356	-4.9%	369	-5.3% 375	Michigan
Detroit-Livonia-Dearborn, MI MD	12.3%	343	-3.7%	371	-7.0%	378	-6.7% 377	Michigan
Flint, MI MSA	10.5%	189	-0.3%	329	-2.4%	351	-6.7% 378	Michigan
Grand Rapids-Wyoming, MI MSA	10.8%	209	4.9%	226	2.2%	298	5.2% 293	Michigan
Holland-Grand Haven, MI MSA	10.5%	178	8.8%	139	-2.4%	352	5.7% 280	Michigan
Jackson, MI MSA	9.8%	99	2.9%	272	-1.5%	349	-1.3% 362	Michigan
Kalamazoo-Portage, MI MSA	10.8%	224	2.7%	277	1.3%	313	5.5% 285	Michigan
Lansing-East Lansing, MI MSA	10.8%	223	1.9%	290	1.8%	302	3.0% 320	Michigan
Monroe, MI MSA	11.1%	262	5.3%	217	3.9%	262	-0.5% 358	Michigan
Muskegon-Norton Shores, MI MSA	10.6%	199	2.5%	282	3.9%	263	0.2% 348	Michigan
Niles-Benton Harbor, MI MSA	10.8%	221	-1.8%	350	-4.2%	367	-0.3% 353	Michigan
Saginaw-Saginaw Township North, MI MSA	10.4%	176	-3.7%	372	-5.0%	370	-7.0% 380	Michigan
Warren-Troy-Farmington Hills, MI MD	10.7%	205	3.8%	250	-1.5%	348	-1.7% 367	Michigan
Duluth, MN-WI MSA	13.2%	363	-0.4%	331	3.5%	271	4.1% 310	Minnesota
Mankato-North Mankato, MN MSA	12.5%	351	6.7%	178	10.5%	130	10.1% 206	Minnesota
Minneapolis-St. Paul-Bloomington, MN-WI MSA	12.7%	355	8.1%	156	6.9%	190	9.1% 219	Minnesota
Rochester, MN MSA	12.1%	336	10.7%	101	11.4%	117	14.8% 140	Minnesota
St. Cloud, MN MSA	12.4%	349	10.9%	98	11.8%	106	10.9% 191	Minnesota
Gulfport-Biloxi, MS MSA	11.7%	317	6.1%	199	1.8%	304	4.4% 304	Mississippi
Hattiesburg, MS MSA	10.8%	219	11.6%	91	12.8%	89	19.8% 72	Mississippi
Jackson, MS MSA	10.9%	233	7.4%	168	7.5%	179	15.7% 134	Mississippi
Pascagoula, MS MSA	11.5%	297	4.4%	236	-6.0%	373	7.0% 262	Mississippi
Cape Girardeau-Jackson, MO-IL MSA	9.4%	67	3.3%	264	4.9%	242	4.1% 309	Missouri
Columbia, MO MSA	9.5%	78	11.4%	92	10.1%	135	11.1% 185	Missouri
Jefferson City, MO MSA	9.4%	63	4.0%	245	6.1%	211	8.8% 223	Missouri
Joplin, MO MSA	9.4%	70	8.9%	137	4.6%	246	8.4% 234	Missouri

	1997 State & Local Taxes, % of		2000-2007 Population		2000-2006 Employment	2	2000-2006 Real Personal Income	
Metro Area			-	Rank		Rank	Growth Rank	State
Kansas City, MO-KS MSA	10.7%	207	8.1%	152	5.8%	219	8.1% 242	Missouri
Springfield, MO MSA	9.1%	33	14.0%	66	13.6%	73	13.8% 150	Missouri
St. Joseph, MO-KS MSA	9.8%	103	0.8%	309	6.7%	196	3.9% 313	Missouri
St. Louis, MO-IL MSA**	9.7%	94	4.4%	237	6.6%	200	7.4% 258	Missouri
Billings, MT MSA	10.8%	213	7.7%	163	13.5%	76	20.8% 60	Montana
Great Falls, MT MSA	10.4%	174	1.8%	295	6.4%	208	12.8% 157	Montana
Missoula, MT MSA	11.8%	324	10.3%	111	15.4%	58	19.7% 75	Montana
Lincoln, NE MSA	11.5%	301	9.5%	122	9.6%	141	7.4% 257	Nebraska
Omaha-Council Bluffs, NE-IA MSA	11.2%	270	8.2%	150	5.0%	240	16.0% 127	Nebraska
Carson City, NV MSA	8.9%	24	4.7%	229	7.7%	175	16.0% 132	Nevada
Las Vegas-Paradise, NV MSA	9.9%	105	33.5%	6	32.2%	7	40.9% 6	Nevada
Reno-Sparks, NV MSA	10.0%	121	19.7%	30	18.0%	43	22.7% 42	Nevada
Manchester-Nashua, NH MSA	8.2%	4	5.6%	209	6.6%	198	2.9% 321	New Hampshire
Rockingham County-Strafford County, NH MD	8.7%	17	7.3%	169	11.8%	109	6.9% 263	New Hampshire
Atlantic City-Hammonton, NJ MSA	14.5%	377	7.2%	171	7.4%	182	2.6% 328	New Jersey
Camden, NJ MD	10.8%	214	5.0%	222	13.2%	83	12.4% 166	New Jersey
Edison-New Brunswick, NJ MD	11.0%	241	6.7%	179	8.4%	159	7.9% 245	New Jersey
Newark-Union, NJ-PA MD	11.2%	274	1.4%	300	5.9%	216	6.2% 274	New Jersey
Ocean City, NJ MSA	15.7%	381	-5.8%	380	20.1%	30	5.7% 278	New Jersey
Trenton-Ewing, NJ MSA	11.2%	273	4.2%	243	11.7%	112	11.9% 175	New Jersey
Vineland-Millville-Bridgeton, NJ MSA	10.3%	150	6.2%	196	8.5%	156	11.0% 187	New Jersey
Albuquerque, NM MSA	12.4%	347	14.5%	62	12.2%	98	20.9% 58	New Mexico
Farmington, NM MSA	13.8%	371	7.6%	166	18.5%	38	30.3% 18	New Mexico
Las Cruces, NM MSA	12.1%	338	13.8%	67	18.7%	36	29.0% 22	New Mexico
Santa Fe, NM MSA	13.5%	369	10.6%	104	23.4%	21	27.7% 27	New Mexico
Albany-Schenectady-Troy, NY MSA	13.3%	364	3.3%	263	4.2%	249	10.4% 199	New York
Binghamton, NY MSA	13.9%	375	-2.3%	355	-1.1%	346	-0.5% 359	New York
Buffalo-Niagara Falls, NY MSA	13.6%	370	-3.6%	370	0.9%	318	2.9% 322	New York
Elmira, NY MSA	12.7%	354	-3.4%	369	-4.0%	363	-0.4% 354	New York
Glens Falls, NY MSA	14.3%	376	3.7%	254	6.7%	195	8.5% 229	New York
Ithaca, NY MSA	13.4%	367	4.7%	230	8.0%	167	10.4% 196	New York
Kingston, NY MSA	15.3%	378	2.3%	285	6.6%	203	12.1% 169	New York
Nassau-Suffolk, NY MD	15.4%	379	0.2%	318	7.9%	171	10.2% 205	New York
New York-White Plains-Wayne, NY-NJ MD	15.6%	380	2.8%	275	4.8%	245	9.5% 213	New York
Poughkeepsie-Newburgh-Middletown, NY MSA	13.5%	368	7.8%	162	11.1%	120	12.0% 172	New York
Rochester, NY MSA	13.4%	365	-0.7%	338	0.8%	319	4.6% 301	New York
Syracuse, NY MSA	13.9%	373	-0.7%	339	1.7%	308	4.4% 306	New York
Utica-Rome, NY MSA	13.8%	372	-1.7%	349	1.3%	312	3.7% 314	New York
Asheville, NC MSA	10.1%	132	9.5%	123	10.6%	129	8.0% 244	North Carolina
Burlington, NC MSA	9.5%	73	11.1%	97	-0.7%	343	-0.1% 349	North Carolina
Charlotte-Gastonia-Concord, NC-SC MSA	10.3%	156	24.1%	23	11.6%	113	19.8% 71	North Carolina

Motro Ano	1997 State & Local Taxes, % of		2000-2007 Population Growth		2000-2006 Employment Growth	, Rank	2000-2006 Real Personal Income Growth Rank	State
Metro Area	10.5%	186	12.5%	85	11.3%	119	13.1% 154	North Carolina
Durham-Chapel Hill, NC MSA	10.5%	120	3.7%	253	9.5%	142	24.9% 36	North Carolina
Fayetteville, NC MSA	9.5%	74	0.2%	316	-0.8%	344	5.5% 283	North Carolina
Goldsboro, NC MSA Greensboro-High Point, NC MSA	10.3%	152	8.6%	144	2.7%	290	5.2% 290	North Carolina
Greenville, NC MSA	9.6%	88	12.9%	78	10.7%	127	11.2% 183	North Carolina
Hickory-Lenoir-Morganton, NC MSA	9.6%	82	5.4%	212	-4.0%	364	0.6% 346	North Carolina
Jacksonville, NC MSA	9.2%	48	8.2%	149	14.4%	67	28.6% 23	North Carolina
Raleigh-Cary, NC MSA	9.8%	100	31.4%	7	16.2%	52	17.5% 100	North Carolina
Rocky Mount, NC MSA	10.1%	126	1.8%	294	0.7%	324	1.3% 343	North Carolina
Wilmington, NC MSA	10.5%	180	23.7%	25	23.1%	22	22.1% 48	North Carolina
Winston-Salem, NC MSA	11.9%	328	9.8%	119	5.2%	236	7.4% 256	North Carolina
Bismarck, ND MSA	11.5%	308	9.0%	133	13.6%	71	22.0% 50	North Dakota
Fargo, ND-MN MSA	11.5%	307	10.4%	108	13.1%	85	16.2% 124	North Dakota
Grand Forks, ND-MN MSA	12.5%	350	0.2%	317	8.1%	163	9.0% 221	North Dakota
Akron, OH MSA	11.5%	299	0.6%	311	5.7%	222	2.2% 335	Ohio
Canton-Massillon, OH MSA	10.0%	125	0.1%	320	-2.9%	356	-3.6% 373	Ohio
Cincinnati-Middleton, OH-KY-IN MSA	10.6%	198	6.2%	198	4.1%	254	8.2% 238	Ohio
Cleveland-Elyria-Mentor, OH MSA	12.3%	345	-2.4%	357	-1.2%	347	-1.0% 361	Ohio
Columbus, OH MSA	11.3%	285	8.8%	138	5.2%	237	7.5% 253	Ohio
Dayton, OH MSA	11.3%	286	-1.5%	344	-2.6%	354	-1.8% 368	Ohio
Lima, OH MSA	10.5%	191	-3.0%	366	-4.1%	366	-1.6% 365	Ohio
Mansfield, OH MSA	10.9%	239	-2.5%	359	-3.7%	362	-1.6% 364	Ohio
Sandusky, OH MSA	11.5%	304	-2.8%	362	-0.7%	342	-0.4% 355	Ohio
Springfield, OH MSA	10.1%	131	-2.9%	365	-6.2%	374	-4.8% 374	Ohio
Toledo, OH MSA	12.0%	331	-1.2%	343	-0.9%	345	-1.9% 369	Ohio
Youngstown-Warren-Boardman, OH-PA MSA	10.2%	142	-5.4%	378	-3.5%	361	-2.1% 371	Ohio
Lawton, OK MSA	10.0%	117	-1.0%	342	5.6%	224	21.6% 54	Oklahoma
Oklahoma City, OK MSA	10.8%	225	8.9%	135	6.9%	191	23.0% 41	Oklahoma
Tulsa, OK MSA	10.7%	206	5.4%	214	5.1%	238	16.7% 116	Oklahoma
Bend, OR MSA	10.4%	167	33.5%	5	31.7%	8	35.9% 7	Oregon
Corvallis, OR MSA	9.9%	108	4.2%	242	8.7%	150	8.5% 231	Oregon
Eugene-Springfield, OR MSA	10.2%	136	6.4%	191	8.7%	152	8.6% 226	Oregon
Medford-Ashland, OR MSA	9.6%	86	9.9%	117	15.7%	54	17.9% 98	Oregon
Portland-Vancouver-Beaverton, OR-WA MSA	10.5%	188	12.8%	82	8.6%	155	8.0% 243	Oregon
Salem, OR MSA	9.5%	80	11.4%	93	10.7%	126	10.9% 190	Oregon
Allentown-Bethlehem-Easton, PA-NJ MSA	11.3%	284	8.6%	142	8.8%	148	8.1% 239	Pennsylvania
Altoona, PA MSA	9.8%	102	-2.8%	363	4.2%	252	1.3% 342	Pennsylvania
Erie, PA MSA	10.4%	175	-0.6%	334	0.5%	326	-0.2% 352	Pennsylvania
Harrisburg-Carlisle, PA MSA	10.7%	201	3.9%	248	5.2%	235	7.7% 250	Pennsylvania
Johnstown, PA MSA	10.1%	133	-5.0%	375	3.1%	280	1.4% 340	Pennsylvania
Lancaster, PA MSA	10.3%	160	5.9%	205	8.2%	162	4.3% 308	Pennsylvania

Metro Area	1997 State & Local Taxes, % of Income		2000-2007 Population Growth		2000-2006 Employment Growth	Rank	2000-2006 Real Personal Income Growth Ran	k State
Lebanon, PA MSA	10.2%	141	6.3%	194	12.2%	102	10.5% 195	
Philadelphia, PA MD	11.8%	320	1.0%	308	4.0%	260	10.0% 208	•
Pittsburgh, PA MSA	11.2%	279	-3.1%	367	2.7%	289	4.6% 299	•
Reading, PA MSA	11.2%	271	7.6%	167	4.2%	251	5.6% 282	•
Scranton—Wilkes-Barre, PA MSA	10.7%	203	-2.0%	352	3.0%	284	2.4% 331	-
State College, PA MSA	10.0%	122	6.6%	188	13.4%	78	12.8% 158	<u>-</u>
Williamsport, PA MSA	10.9%	235	-2.7%	361	1.7%	306	3.4% 316	·
York-Hanover, PA MSA	10.0%	124	10.3%	110	6.6%	202	6.3% 271	<u>-</u>
Providence-Warwick-Pawtucket, RI MSA	11.3%	283	1.1%	307	5.5%	228	10.4% 198	•
Anderson, SC MSA	9.4%	65	8.6%	141	-0.6%	341	4.7% 298	
Charleston-North Charleston-Summerville, SC MSA	10.2%	146	14.8%	59	16.8%	48	22.0% 51	South Carolina
Columbia, SC MSA	9.4%	72	10.6%	102	6.5%	206	12.5% 165	
Florence, SC MSA	9.6%	85	2.9%	273	2.7%	291	10.4% 197	
Greenville-Mauldin-Easley, SC MSA	9.4%	71	9.6%	120	3.3%	275	5.5% 284	
Myrtle Beach-North Myrtle Beach-Conway, SC MSA	10.9%	228	27.1%	12	18.4%	40	20.1% 67	South Carolina
Spartanburg, SC MSA	10.0%	118	8.6%	143	0.7%	323	5.3% 288	South Carolina
Sumter, SC MSA	9.8%	95	-0.7%	336	-3.2%	360	8.5% 228	South Carolina
Rapid City, SD MSA	9.7%	91	6.6%	183	-0.4%	336	16.8% 114	South Dakota
Sioux Falls, SD MSA	9.7%	93	21.4%	27	13.3%	81	20.7% 62	South Dakota
Chattanooga, TN-GA MSA	8.9%	27	8.0%	159	4.9%	241	7.2% 261	Tennessee
Clarksville, TN-KY MSA	8.1%	2	12.9%	80	14.0%	69	29.8% 19	Tennessee
Cleveland, TN MSA	8.2%	3	6.8%	177	4.0%	259	11.6% 179	Tennessee
Jackson, TN MSA	9.1%	38	4.9%	225	1.8%	303	4.6% 303	Tennessee
Johnson City, TN MSA	8.6%	13	6.6%	185	6.2%	210	12.3% 168	Tennessee
Kingsport-Bristol-Bristol, TN-VA MSA	8.9%	28	1.7%	296	3.2%	276	6.4% 267	Tennessee
Knoxville, TN MSA	9.1%	39	10.6%	106	12.2%	100	11.0% 186	Tennessee
Memphis, TN-MS-AR MSA	9.2%	43	6.3%	195	5.5%	229	11.8% 176	Tennessee
Morristown, TN MSA	8.3%	9	9.4%	127	2.5%	295	7.8% 249	Tennessee
Nashville-Davidson—Murfreesboro—Franklin, TN MSA	9.2%	46	16.0%	53	10.6%	128	19.0% 79	Tennessee
Abilene, TX MSA	9.3%	59	-0.6%	333	5.5%	230	4.4% 307	Texas
Amarillo, TX MSA	9.4%	61	6.9%	174	3.8%	266	12.6% 163	Texas
Austin-Round Rock, TX MSA	9.3%	53	27.9%	11	13.3%	80	15.5% 136	Texas
Beaumont-Port Arthur, TX MSA	11.5%	298	-2.3%	354	3.5%	270	8.5% 230	Texas
Brownsville-Harlingen, TX MSA	9.2%	50	15.5%	56	15.5%	56	19.8% 70	Texas
College Station-Bryan, TX MSA	10.2%	139	10.0%	114	13.2%	84	18.9% 80	Texas
Corpus Christi, TX MSA	11.1%	254	2.8%	276	8.0%	166	18.8% 81	Texas
Dallas-Plano-Irving, TX MD	9.8%	104	19.1%	35	7.5%	178	14.5% 143	Texas
El Paso, TX MSA	10.5%	184	8.1%	154	9.8%	139	22.4% 46	Texas
Fort Worth-Arlington, TX MD	9.5%	76	18.9%	39	11.9%	105	18.3% 92	Texas
Houston-Sugar Land-Baytown, TX MSA	10.4%	162	19.4%	34	12.2%	101	25.8% 34	Texas
Killeen-Temple-Fort Hood, TX MSA	8.3%	6	11.9%	88	11.3%	118	33.4% 10	Texas

	1997 State & Local Taxes, % of		2000-2007 Population		2000-2006 Employment		2000-2006 Real Personal Income	
Metro Area	Income			Rank		Rank	Growth Rank	
Laredo, TX MSA	11.1%	259	20.7%	28	24.4%	16	33.3% 11	Texas
Longview, TX MSA	10.2%	149	4.9%	224	9.0%	145	16.1% 126	Texas
Lubbock, TX MSA	9.2%	47	7.0%	172	6.5%	205	7.8% 248	Texas
McAllen-Edinburg-Mission, TX MSA	9.9%	111	24.8%	21	29.8%	9	31.6% 15	Texas
Midland, TX MSA	10.2%	140	9.0%	134	18.8%	35	25.5% 35	Texas
Odessa, TX MSA	11.3%	287	7.0%	173	15.6%	55	23.2% 40	Texas
San Angelo, TX MSA	9.2%	49	2.2%	286	3.3%	274	8.2% 237	Texas
San Antonio, TX MSA	9.2%	51	16.3%	52	12.3%	97	18.0% 96	Texas
Sherman-Denison, TX MSA	9.0%	32	7.3%	170	2.4%	296	7.8% 247	Texas
Texarkana, TX-Texarkana, AR MSA	8.5%	11	3.4%	259	6.6%	201	13.6% 152	Texas
Tyler, TX MSA	8.9%	29	13.7%	68	11.9%	104	13.5% 153	Texas
Victoria, TX MSA	11.3%	282	1.9%	291	2.6%	294	8.5% 232	Texas
Waco, TX MSA	9.4%	64	6.8%	176	7.6%	177	12.6% 162	Texas
Wichita Falls, TX MSA	9.3%	60	-2.2%	353	0.2%	329	12.3% 167	Texas
Logan, UT-ID MSA	10.0%	119	17.9%	43	14.7%	63	18.7% 87	Utah
Ogden-Clearfield, UT MSA	10.1%	134	17.1%	47	15.4%	57	18.5% 90	Utah
Provo-Orem, UT MSA	10.5%	182	30.9%	8	20.5%	28	22.6% 43	Utah
Salt Lake City, UT MSA	11.2%	272	13.5%	72	10.4%	131	19.5% 76	Utah
St. George, UT MSA	10.9%	230	48.1%	2	48.5%	2	50.5% 4	Utah
Burlington-South Burlington, VT MSA	11.6%	309	4.3%	238	6.1%	212	9.1% 220	Vermont
Blacksburg-Christiansburg-Radford, VA MSA	8.9%	26	4.2%	241	3.7%	268	10.8% 193	Virginia
Charlottesville, VA MSA	9.1%	35	10.8%	99	14.4%	66	17.2% 108	Virginia
Danville, VA MSA	8.3%	10	-4.0%	374	-6.4%	376	-0.2% 350	Virginia
Harrisonburg, VA MSA	9.2%	42	8.7%	140	11.5%	115	12.7% 161	Virginia
Lynchburg, VA MSA	8.8%	22	6.5%	189	6.6%	199	8.3% 236	Virginia
Richmond, VA MSA	9.7%	90	10.6%	107	8.0%	168	16.2% 125	Virginia
Roanoke, VA MSA	10.0%	116	2.9%	274	5.3%	231	8.5% 227	Virginia
Virginia Beach-Norfolk-Newport News, VA-NC MSA	10.2%	147	5.2%	219	8.7%	151	18.7% 85	Virginia
Winchester, VA-WV MSA	9.4%	66	17.7%	44	17.1%	46	18.3% 91	Virginia
Bellingham, WA MSA	11.3%	290	15.7%	55	18.5%	39	21.8% 52	Washington
Bremerton-Silverdale, WA MSA	10.4%	171	2.1%	287	14.4%	65	17.1% 110	Washington
Kennewick-Pasco-Richland, WA MSA	10.8%	222	19.4%	33	14.9%	61	15.4% 137	Washington
Longview, WA MSA	11.5%	302	8.1%	155	-0.4%	338	2.7% 327	Washington
Mount Vernon-Anacortes, WA MSA	11.0%	246	13.0%	76	13.0%	87	17.2% 109	Washington
Olympia, WA MSA	11.0%	243	15.0%	57	16.0%	53	17.4% 104	Washington
Seattle-Bellevue-Everett, WA MD	11.7%	312	8.2%	148	5.6%	225	8.1% 240	Washington
Spokane, WA MSA	11.1%	264	9.1%	132	9.4%	143	6.2% 273	Washington
Tacoma, WA MD	11.0%	242	10.3%	109	13.1%	86	17.8% 99	Washington
Wenatchee-East Wenatchee, WA MSA	11.3%	280	8.0%	158	15.0%	60	10.7% 194	Washington
Yakima, WA MSA	10.8%	220	4.7%	231	9.4%	144	6.3% 268	Washington
Charleston, WV MSA	12.1%	334	-1.8%	351	1.3%	314	6.8% 264	West Virginia

	1997 State & Local					2	2000-2006 Real	
25.	Taxes, % of		2000-2007 Population	L	2000-2006 Employment		Personal Income	a
Metro Area	Incomel			Rank		Rank	Growth Rank	
Huntington-Ashland, WV-KY-OH MSA	11.4%	295	-1.6%	347	2.9%	287	6.3% 269	West Virginia
Morgantown, WV MSA	11.2%	277	5.9%	204	14.9%	62	22.4% 45	West Virginia
Parkersburg-Marietta-Vienna, WV-OH MSA	12.1%	335	-2.4%	358	1.1%	316	2.8% 324	West Virginia
Weirton-Steubenville, WV-OH MSA	12.3%	346	-7.1%	381	-4.8%	368	-1.5% 363	West Virginia
Wheeling, WV-OH MSA	12.0%	332	-5.0%	376	3.8%	267	3.4% 317	West Virginia
Appleton, WI MSA	12.1%	337	8.1%	151	13.3%	79	9.4% 216	Wisconsin
Eau Claire, WI MSA	11.8%	327	6.4%	193	5.8%	218	4.6% 300	Wisconsin
Fond du Lac, WI MSA	12.4%	348	1.9%	292	-0.6%	340	2.9% 323	Wisconsin
Green Bay, WI MSA	11.9%	330	6.6%	186	6.5%	204	5.4% 287	Wisconsin
Janesville, WI MSA	11.8%	325	4.8%	228	3.1%	281	2.7% 325	Wisconsin
La Crosse, WI-MN MSA	12.2%	340	3.2%	267	5.9%	214	6.2% 272	Wisconsin
Madison, WI MSA	13.1%	361	10.7%	100	11.7%	110	13.9% 148	Wisconsin
Milwaukee-Waukesha-West Allis, WI MSA	13.4%	366	2.9%	271	1.0%	317	5.8% 276	Wisconsin
Oshkosh-Neenah, WI MSA	11.8%	326	3.4%	260	0.8%	320	5.2% 291	Wisconsin
Racine, WI MSA	11.6%	311	3.3%	265	0.5%	327	7.6% 251	Wisconsin
Sheboygan, WI MSA	12.3%	344	1.6%	297	3.9%	261	6.1% 275	Wisconsin
Wausau, WI MSA	12.3%	342	3.3%	266	9.9%	137	7.5% 254	Wisconsin
Casper, WY MSA	9.1%	36	7.8%	161	19.0%	34	17.4% 103	Wyoming
Cheyenne, WY MSA	9.3%	55	5.8%	206	12.2%	99	26.7% 31	Wyoming

Source: U.S. Census Bureau and the U.S. Bureau of Economic Analysis. Note: Rankings are from highest to lowest for employment growth, population growth and real personal income growth. Rank is from lowest to highest for taxes.

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REFERENCES

- Ashby, Nathan J. "Economic Freedom and Migration Flows Between U.S. States." *Southern Economic Journal*, 2007, 73, 3 (January): 677-97.
- Ashby, Nathan J., and Russell S. Sobel. (2008) "Income Inequality and Economic Freedom in the U.S. States." *Public Choice*, 134, 3-4 (March): 329-46.
- Bartik, Timothy, Who Benefits from State and Local Development Policies? (Kalamazoo, MI: W.E. Upjohn Institute, 1991).
- Becsi, Zsolt. 1996. "Do State and Local Taxes Affect Relative State Growth?" *Economic Review* 81, 2 (March/April), 18-36.
- Bradbury, Katharine L., Anthony Downs, and Kenneth A. Small, *Urban Decline and the Future of American Cities* (Washington: Brookings Institution, 1982).
- Campbell, Noel, and Tammy Rogers (2007) Economic Freedom and Net Business Formation. *Cato Journal*, 27(1), 23-36.
- Chief Executive. 2009. "CEOs Select Best, Worst States for Job Growth and Business," *Chief Executive*, January/February. [Available at: http://www.chiefexecutive.net/ME2/Audiences/dirmod.asp?sid=&nm=&type=Publishing&mod=Publications%3
 http://www.chiefexecutive.net/ME2/Audiences/dirmod.asp?sid=&nm=&type=Publishing&mod=Publications%3
 https://www.chiefexecutive.net/ME2/Audiences/dirmod.asp?sid=&nm=&type=Publishing&mod=Publications%3
 https://www.chiefexecutive.net/ME2/Audiences/dirmod.asp?sid=&nm=&type=Publishing&mod=Publications%3
 https://www.chiefexecutive.net/ME2/Audiences/dirmod.asp?sid=&nm=&type=Publishing&mod=Publications%3
 https://www.chiefexecutive.net/ME2/Audiences/dirmod.asp?sid=&nm=&type=Publishing&mod=Publications%3
 https://www.chiefexecutive.net/ME2/Audiences/dirmod.asp?sid=&nm=&type=Publishing&mod=Publications%3
 https://www.chiefexecutive.net/ME2/Audiences/dirmod.asp?sid=&nm=&type=Publishing&nod=Publications%3
 https://www.chiefexecutive.net/ME2/Audiences/dirmod.asp?sid=&nm=&type=Publishing&nod=Public
- Crain, W. Mark, and Katherine J. Lee, "Economic Growth Regressions for the American States: A Sensitivity Analysis," *Economic Inquiry*, 37, 2 (April 1999), 242-57.
- Crihfield, John B., and Martin P. H. Panggabean, "Growth and Convergence in U.S. Cities," *Journal of Urban Economics*, 38, 2 (Sep. 1995), 138-165.
- Dalenberg, Douglas R., and Mark D. Partridge, "The Effects of Taxes, Expenditures, and Public Infrastructure on Metropolitan Area Employment," *Journal of Regional Science*, 35, 4 (1995), 617-40.
- Glaeser, Edward. 2009. "Why Is New York's Unemployment Rate (Relatively) Low?" *Economix (New York Times Blog)*, March 17, 2009. [Available at: <a href="http://economix.blogs.nytimes.com/2009/03/17/why-is-new-yorks-unemployment-rate-relatively-low/?scp=2&sq=glaeser&st=Search]
- Gohmann, Stephan, Bradley Hobbs, and Myra McCrickard, (2008) Economic Freedom and Service Industry Growth in the United States. *Entrepreneurship Theory and Practice*, 32, 5 (September), 855-874.
- Hall, Joshua C. and Russel S. Sobel (2008) Institutions, Entrepreneurship, and Regional Differences in Economic Growth. *Southern Journal of Entrepreneurship*, 1, 1 (March): 69-96.
- Higgins, Matthew John, Daniel Levy, and Andrew T. Young, "Growth and Convergence Across the U.S.: Evidence from County-Level Data," *Review of Economics and Statistics*, 88, 4 (Nov. 2006), 671-681.

- Holcombe, Randall G., and Donald J. Lacombe, "The Effect of State Income Taxation on Per Capita Income Growth," *Public Finance Review*, 32, 3 (May 2004), 292-312.
- Karabegović, Amela, and Fred McMahon (2008) *Economic Freedom of North America: 2008 Annual Report.*Vancouver, B.C.: Fraser Institute.
- Kreft, S. F., and R. S. Sobel (2005) Public Policy, Entrepreneurship, and Economic Freedom. *Cato Journal*, 25(3), 595–617.
- Reed, W. Robert. 2008. "The Robust Relationship Between Taxes and U.S. State Income Growth." *National Tax Journal* 61, 1 (March), 57-80.
- Reeves, Scott. 2005. "Katrina's Impact Is Spreading." *Forbes,* August 31. [Available at http://www.forbes.com/2005/08/31/katrina-hurricane-impact-cx sr 0831impact.html]
- Stansel, Dean, 2009. "Local Government Investment and Long-Run Economic Growth," *Journal of Social, Political, and Economic Studies*, forthcoming (Spring 2009). [Available at: http://ssrn.com/abstract=1287419]
- Stansel, Dean, Stephan F. Gohmann, and Bradley K. Hobbs, 2008. "Local Government Finance and Entrepreneurial Activity in U.S. Metropolitan Areas," working paper. [Available at: http://ssrn.com/abstract=1303264]
- Tiebout, Charles, 1956. "A pure theory of local expenditures." Journal of Political Economy 64, 416–24.
- Vedder, Richard, "Tiebout, Taxes, and Economic Growth," Cato Journal (Spring-Summer 1990), 91-108.
- Wasylenko, Michael, "Taxation and Economic Development: The State of the Economic Literature," *New England Economic Review*, (March-April 1997), 37-52.

END NOTES

- ¹ Associated Press, "Washington Sends \$1 Food Stamp Checks to 250,000," Seattle Post-Intelligencer, February 21, 2009.
- ² For a more thorough review of the literature on taxes and state and local economic growth, see Wasylenko (1997).
- ³ The tax data come from the U.S. Census Bureau's Census of Governments, taken every five years in the years ending in "2" and "7." The 2007 data are not yet available. Because economic growth can have an impact on the size of the tax burden (due to higher population, employment, and income), it is important to use tax data from before the growth period began. That is why we have used tax data for 1997. Growth after 2000 could not possibly have impacted taxes in 1997, though it may have impacted taxes in 2002.
- ⁴ In the case of metro areas that cross state boundaries, the state tax burden for the state with the largest central city in that area was the one used.
- ⁵ As mentioned previously, the tax data are for three years before the initial year of the growth period. However, this three-year lag is beneficial as it helps to address any potential problem with reverse causality (i.e., economic growth causing higher taxes).
- ⁶ U.S. Office of Management and Budget, "Update of Statistical Area Definitions and Guidance on Their Uses," OMB Bulletin No. 09-01, November 20, 2008 (http://www.whitehouse.gov/omb/bulletins/fy2009/09-01.pdf).
- ⁷ Those eleven areas are: Boston-Cambridge-Quincy, MA-NH MSA; Chicago-Naperville-Joliet, IL-IN-WI MSA; Dallas-Fort Worth-Arlington, TX MSA; Detroit-Warren-Livonia, MI MSA; Los Angeles-Long Beach-Santa Ana, CA MSA; Miami-Fort Lauderdale-Pompano Beach, FL MSA; New York-Northern New Jersey-Long Island, NY-NJ-PA MSA; Philadelphia-Camden-Wilmington, PA-NJ-DE-MD MSA; San Francisco-Oakland-Fremont, CA MSA; Seattle-Tacoma-Bellevue, WA MSA; and Washington-Arlington-Alexandria, DC-VA-MD-WV MSA.

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