

# Competitiveness: Connecticut's Economy and the Role of Fiscal Variables in Growth

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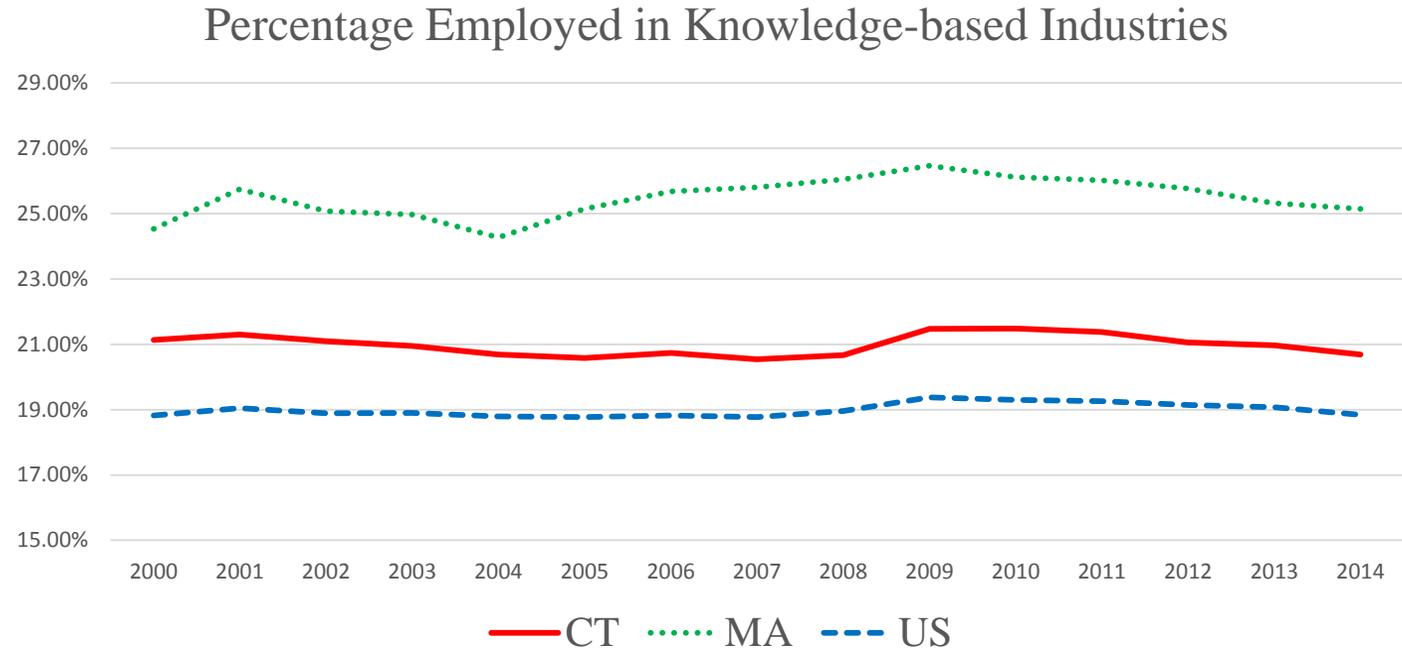
# Connecticut's Economic Strengths

- An advanced state economy with a per capita Gross State Product that is 31% higher than the U.S. average and one of the highest in the nation.
- A highly educated workforce; 39.6 percent of persons between the ages of 25 and 60 hold a bachelor's degree or higher. Ranks second to Massachusetts.
- 21 percent of Connecticut's workforce is employed in the high-productivity, high-earnings, knowledge-based industries. Connecticut's workers annual earnings average \$105,000 in 2013.
- (19 percent of the U.S. workforce is in knowledge-based industries; the figure is 25 percent for Massachusetts.)

# Employment in Knowledge-based Industries as a Percentage of Total Employment: U.S., Connecticut and Massachusetts

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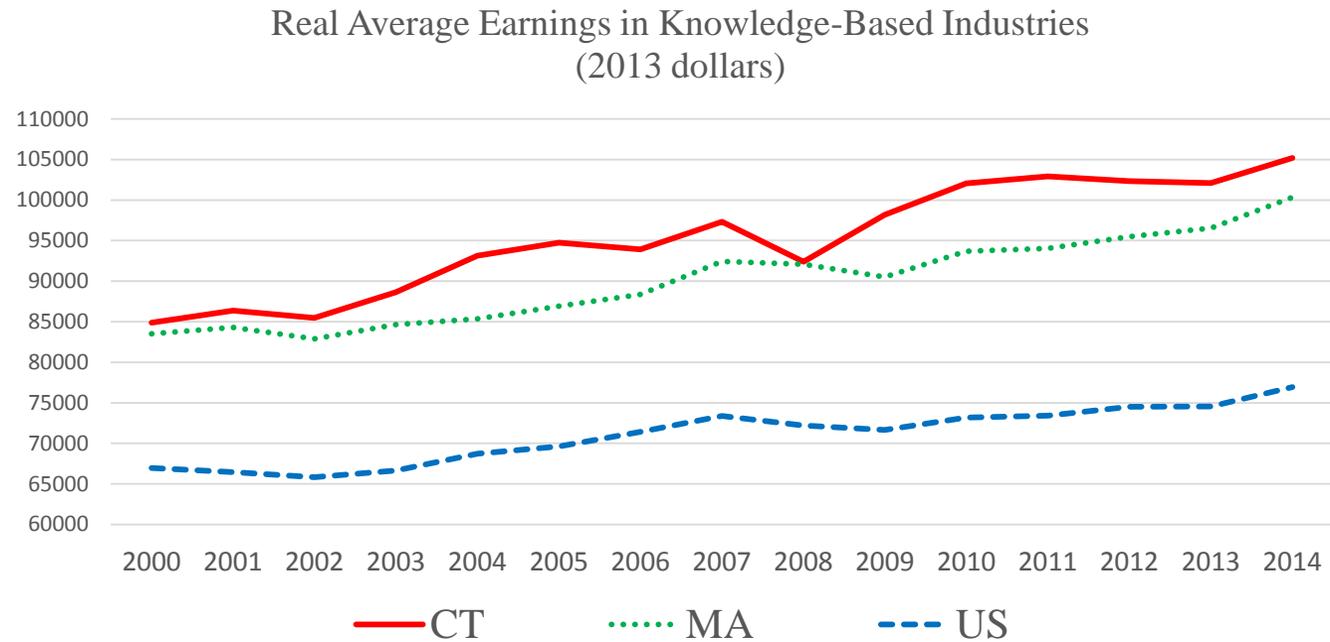
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Source: U.S. Bureau of Labor Statistics. Quarterly Census of Employment and Wages.  
<http://www.bls.gov/cew/datatoc.htm>

# Real Average Earnings Knowledge-based Industries: U.S., Connecticut and Massachusetts

Connecticut's  
workers annual  
earnings in  
knowledge-  
based  
industries  
average  
\$105,000 in  
2013.



The comparable  
earnings figure  
in these same  
industries for  
the U.S. overall  
is \$77,000.)

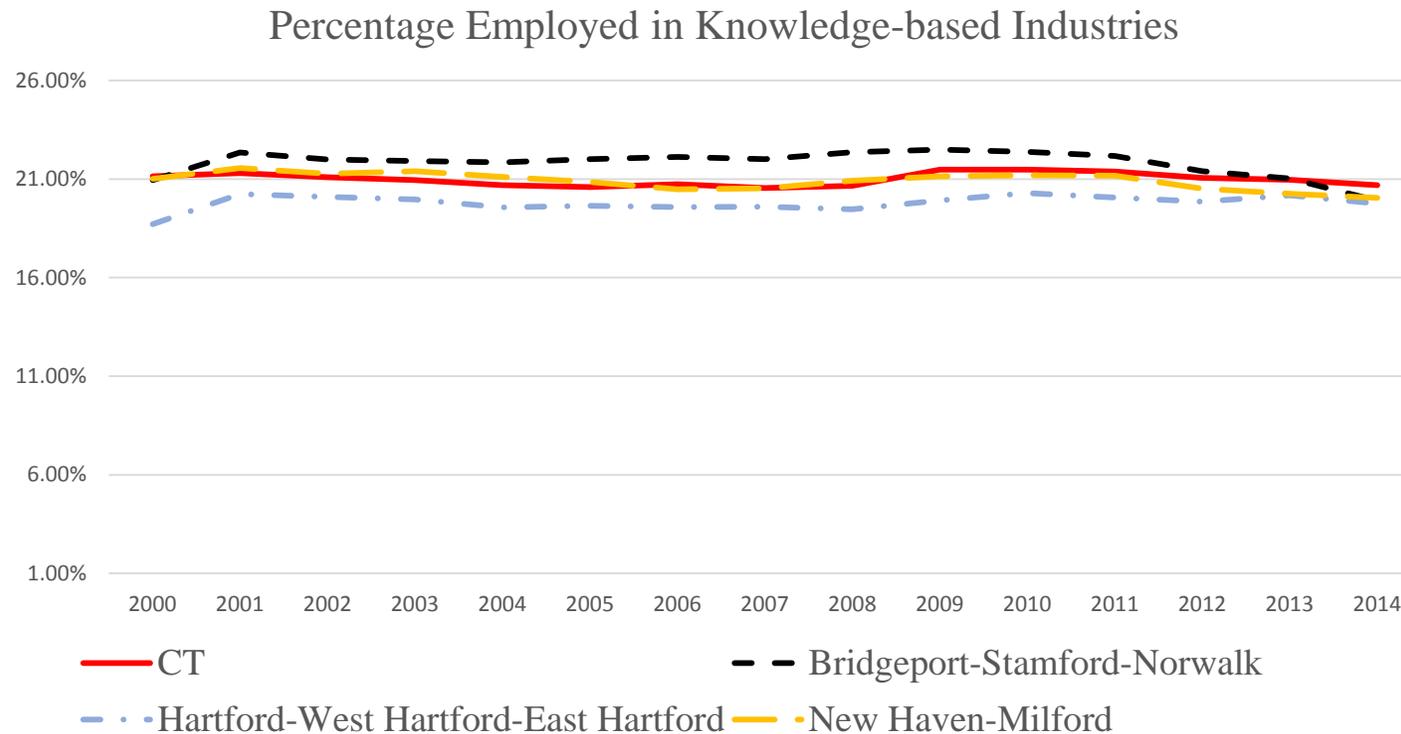
# Connecticut's Strengths

- All three MSAs in Connecticut have about 21 percent of their employment in knowledge-based industries
- Since 2012 the Hartford-West Hartford-East Hartford MSA has had a higher employment growth rate for knowledge-based industries than the other two MSAs in Connecticut.
- The high earnings industries also have a large multiplier and create as many as five local service jobs for each high earning job. Moretti (2010).
- Connecticut has a diverse economy, and with exceptions, its economy is structured like New York and Massachusetts.

Figure 3

Employment in Knowledge-based Industries as a Percentage of Total Employment: Connecticut's Metropolitan Statistical Areas

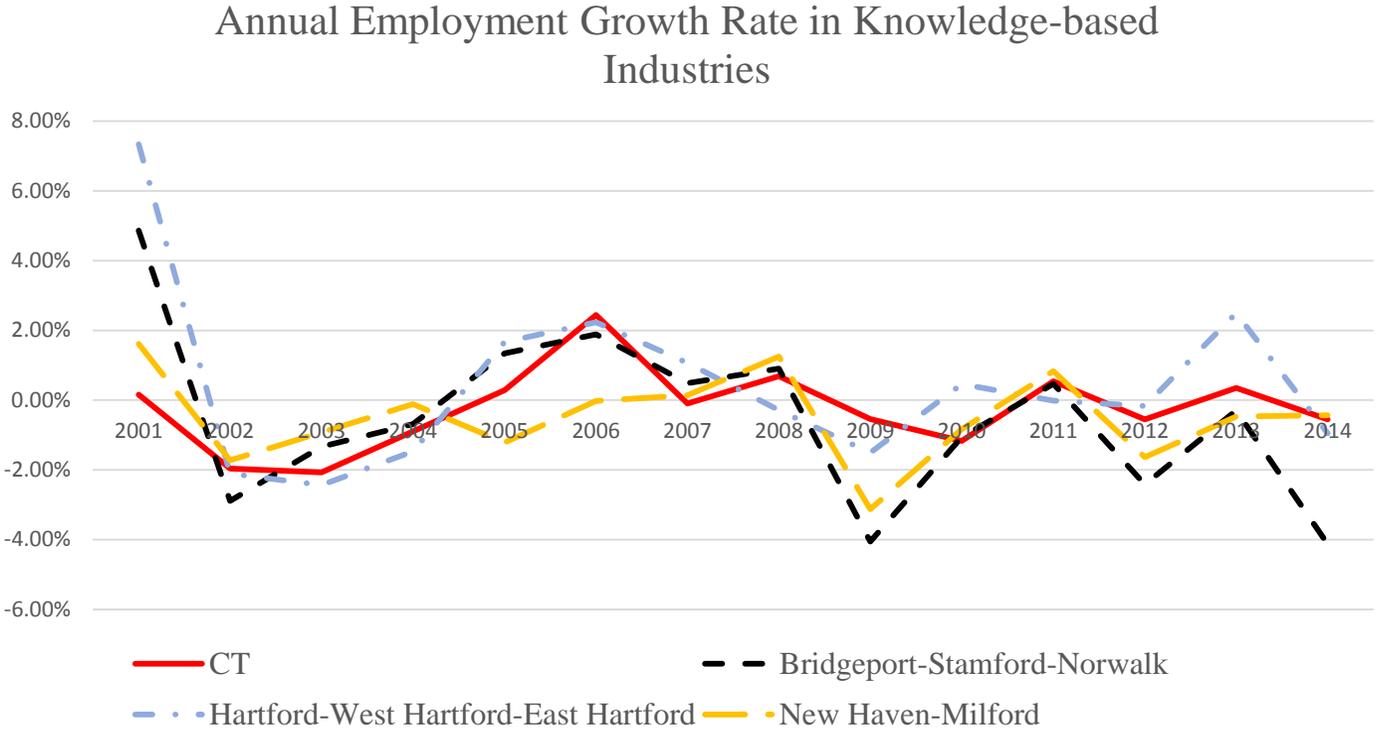
All three MSAs in Connecticut have about 21 percent of their employment in knowledge-based industries



Source: U.S. Bureau of Labor Statistics. Quarterly Census of Employment and Wages. <http://www.bls.gov/cew/datatoc.htm>

# Figure 4

## Annual Employment Growth Rates Knowledge-based Industries in Connecticut's MSAs

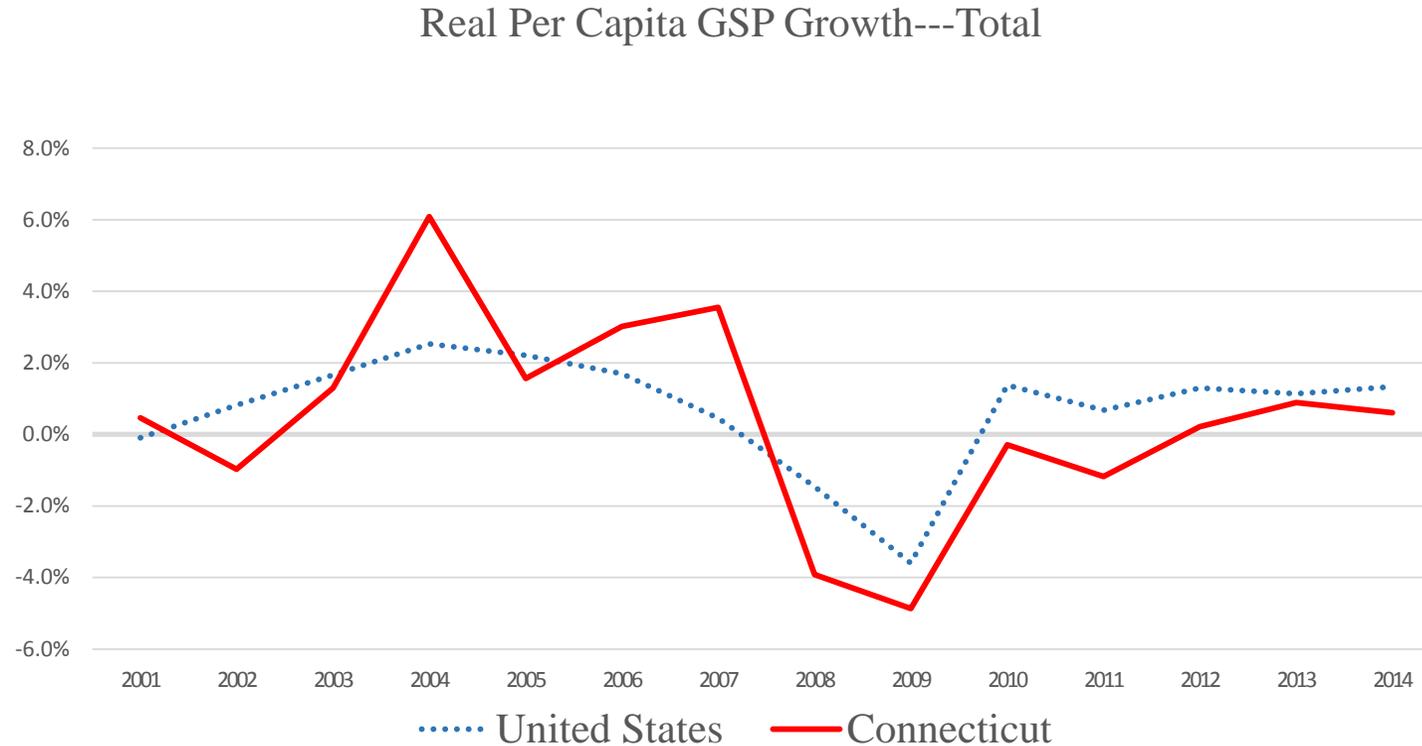


Source: U.S. Bureau of Labor Statistics. Quarterly Census of Employment and Wages. <http://www.bls.gov/cew/datatoc.htm>

# Vulnerabilities

- As a relatively small state economy, national trends in trade, automation or recession can buffet Connecticut's industries and affect livelihoods in Connecticut more than in larger states.
- Connecticut's economy experienced a larger downturn in its economy during the 2008/2009 recession than the nation overall, and Connecticut's economic recovery has not kept pace with the national recovery. Figure 5.
- The lagging recovery in Connecticut is present across industry groups, although professional business services; and education, health and social assistance show signs of stronger growth since 2013.
- And the slow economic growth pattern is similar across its three metropolitan areas.
- Whatever has caused the low growth rate in Connecticut since 2007 appears to affect the entire State and is not confined to a particular area or industry.

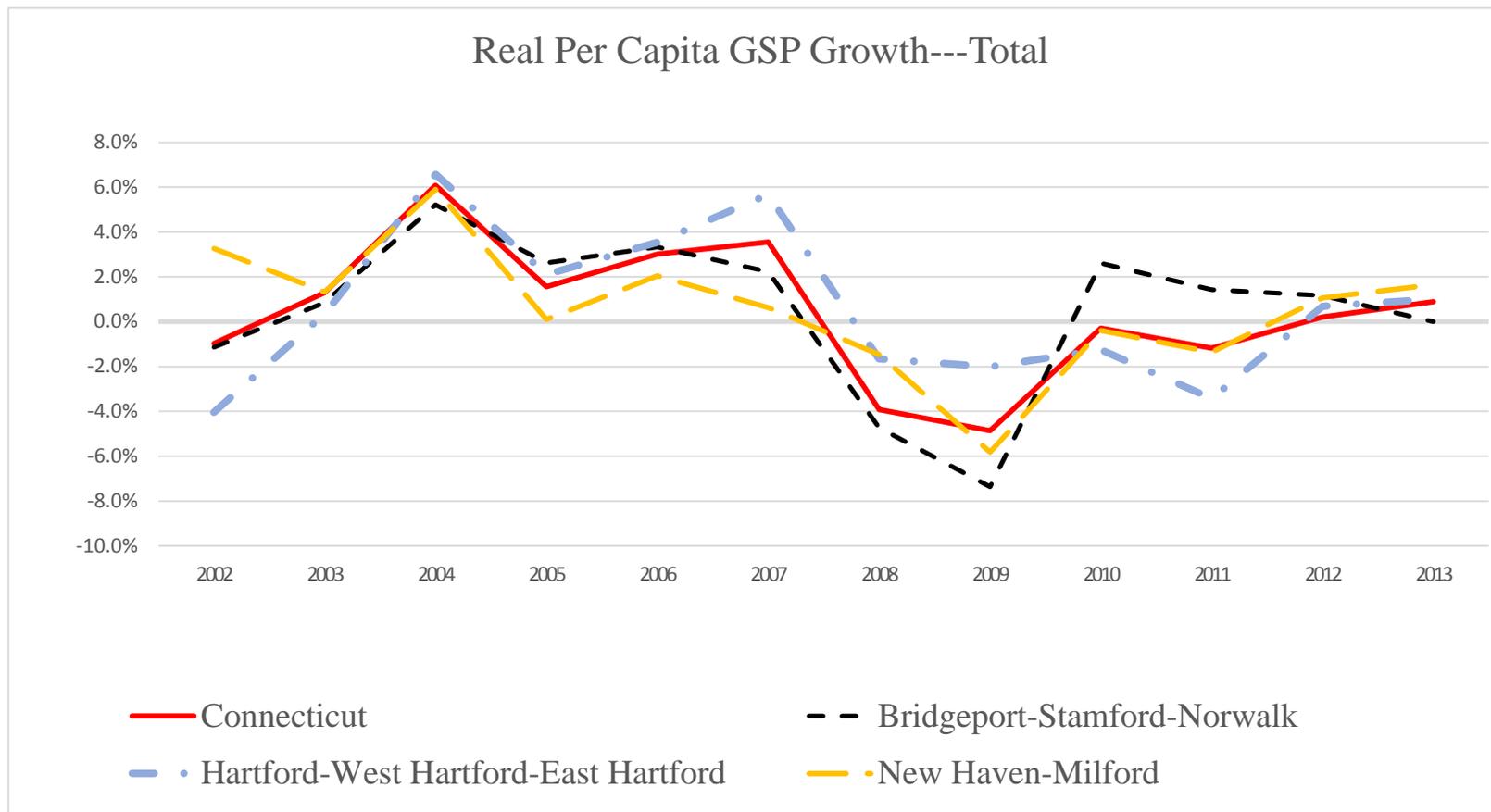
Figure 5  
Growth in Real Per Capita GSP for Connecticut and the United States:  
2001-2014



Source: Real per capita GDP is in chained 2009 dollars from the U.S. Bureau of Economic Analysis.  
<http://www.bea.gov/iTable/iTable.cfm?reqid=70&step=1&isuri=1&acrdn=1#reqid=70&step=1&isuri=1>

# Figure 6

## Growth in Real Per Capita GSP for Connecticut and Three MSAs: 2001-2013



Source: Real per capita GSP is in chained 2009 dollars from the U.S. Bureau of Economic Analysis.  
<http://www.bea.gov/iTable/iTable.cfm?reqid=70&step=1&isuri=1&acrdn=1#reqid=70&step=1&isuri=1>

# Competitiveness: Growth

- Growth in national, state and urban area economies has three major components. Growth in labor units of efficiency units; growth in capital efficiency; and an unexplained components that has its origins in technological change or innovation.
- Periods of high growth rates are generally characterized by a large unexplained component.
- At a subnational, state or metropolitan level, the unexplained component takes the form of new knowledge created through interactions of educated, skilled and innovative workers. The most productive of the interactions are those that occur frequently and in face-to-face encounters. (Jacobs externalities.)
- A consistent finding is that agglomeration explains rapid growth in urban areas.
- Connecticut's educated workforce and core of knowledge workers is a major resource for growth.

# Competitiveness: Explaining GSP Growth

- Observations from a large number of studies.
- Agglomeration.
- State and metropolitan areas compete most often for growth with nearby or neighboring states.
- Put another way, businesses come to the Northeast for its workforce and largely go to other regions for the workforce in those regions.
- Differences in taxes or public services have the most effects on business expansion and location decisions when competition is between nearby states – Massachusetts and New York.
- Fiscal differences have less effect on location decisions and growth when states are farther apart.

# Competitiveness

- Findings in this report among others show that Connecticut is not a high tax state relative to its income or fiscal capacity. It is also not a high business tax state.
- Connecticut has a relatively high property tax, and its individual income tax is higher than the average for states.
- Unbalanced tax system.

# Do Taxes and Expenditures Matter for Economic Growth?

- Based on earlier studies, taxes have limited effect on state economic growth.
- Recent empirical work (Reed and Gale, Krupkin and Rueben) find that higher property taxes reduce growth.
- Empirical estimates done for this report find that high property taxes and individual income taxes depress growth.
- The estimates also show that states that spend more on elementary and secondary education have higher economic growth.
- By how much do they affect growth?

# Do Taxes and Expenditures Matter for Economic Growth?

- Simulations of tax effects suggest that cutting property and /or individual income taxes and increasing other revenue sources to pay for the cuts might increase growth by as much as 0.2 percentage points, depending on the size of the tax changes.
- Cutting property taxes and paying for the cuts by increasing revenues from the individual income would have a neutral to negative effect on economic growth.
- Some combinations of tax and spending reforms might hurt growth. Cutting property and/or individual income taxes and paying for the cuts by reducing spending on elementary and secondary education would harm growth.
- Fiscal reform by itself would not have a dramatic effect on a lagging economy. At the same time, doing nothing to reform those two taxes would hinder growth.

# Expected Changes in Connecticut's Annual Growth When Taxes and Spending Change

Tax Reduction	Annual growth rate change when a fiscally neutral tax reduction is paid for by increasing another tax or reducing spending as follows:		
	Increase "other revenues"	Increase individual income tax	Cut spending on Elementary and secondary education
Reduce the property tax by 1 percentage point of personal income	+0.10%	-0.02%	-0.05%
Reduce property tax and the individual income tax each by 1 percentage point of income	+0.21%		-0.08%

Source: Author calculations

# Do Taxes and Expenditures Matter for Economic Growth? Other Considerations

- Connecticut has high electrical energy prices. Energy costs are high in the Northeast states in general, and high energy costs may be endemic to the region and structural in nature.
- Connecticut has underfunded public employee pension systems. Although not confirmed in the statistical analysis on growth, that situation is unlikely to help future growth, because it represents an unfunded liability and perhaps higher taxes in the future.

# Conclusions and Implications

- Mirrlees (2011) “Look at the fiscal system as a whole rather than at its individual components.” The system should be progressive, neutral and a system.
- The above are major principles of fiscal design.
- They imply broad tax bases and low rates to foster neutral tax system that taxes all income and uses of income the same.
- Elements of Connecticut’s taxation discourage income growth. Property tax and individual income tax.
- Reform should broaden bases and lower tax rates to put in place a more balanced tax system and create a better environment for growth.

# Conclusions and Implications

- The Northeast Corridor of the United States has a high concentration of knowledge workers. Connecticut has a substantial share of its economy in knowledge-based industries. These high earnings industries produce a large number of service jobs.
- Most economic growth or decline stems from a state's current employers and expansion in existing industries.
- Connecticut will need to continue to attract knowledge workers and with them knowledge industries. Agglomeration economies are at the heart of growing these industries.
- An important finding in the literature on state and regional growth is that knowledge workers learn from one another and through their interactions create new ideas that enhance economic growth. Agglomeration economies. Knowledge-based industries rely on a continuing flow of highly educated and innovative workers to a state or region.

# Conclusions and Implications

- Connecticut should adopt policies that attract and retain knowledge workers.
- It has attractive coasts and recreation.
- A lower cost of housing can give Connecticut an edge over its neighboring states – Massachusetts and New York – in the competition for knowledge workers. Examine local zoning laws to address unduly restrictive zoning that may drive land and housing prices upward.
- And it should consider strategic investment in its university laboratories and STEM disciplines to enhance knowledge creation and the supply of knowledge workers.

# Conclusions and Implications

- Balance the tax system
- Maintain a strong primary and secondary education system.
- Invest in higher education fields.
- Adopt policies that attract and retain knowledge workers.
- Examine laws to maintain a lower cost of housing to compete for knowledge workers.