THE CONNECTICUT ECONOMY

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LIST OF DEFINITIONS OF TERMS

Source: Investopedia.com and Bureau of Economic Analysis

Gross Domestic Product (GDP) and Gross State Product (GSP):

- The monetary value of all the finished goods and services produced within a country's borders in a specific time period.
- GDP = private and public consumption + government outlays + investments + exports imports that occur within a defined territory.
- Put simply, GDP is a broad measurement of a territory's overall economic activity.

Personal Income (PI):

- Total compensation received by an individual.
- Personal income = salaries + wages and bonuses received from employment or selfemployment + dividends and distributions received from investments + rental receipts from real estate investments + profit-sharing from a business + transfer income, etc.
- Capital Gains is not included in Personal Income.
- Personal income is generally computed on a pre-tax basis.

Per Capita:

- Average per person.
- Used in any number of statistical observations.

Introduction

Connecticut, settled in 1633, became the fifth state to ratify the United States Constitution in 1788. The state is the most southern of the New England states, located on the northeast coast and bordered by Long Island Sound, New York, Massachusetts and Rhode Island. Connecticut enjoys a favorable location within New England and the rest of the Eastern seaboard as rail, truck, air transport and ports in the region provide easy access to local and regional markets in this country, Canada, and even Europe and South America. More than one-quarter of the total population of the United States (US) and more than 50% of the Canadian population live within a 500-mile radius of Connecticut.

With a total resident population of 3.6 million (2014), Connecticut ranks 29th among the states (New York is 19.8 million, New Jersey 8.9 million, Massachusetts 6.8 million, New Hampshire 1.3 million, Rhode Island 1.1 million, Vermont 0.6 million; the US is 319 million). If Connecticut were ranked by population among the nations of the world, it would be about 132 out of 214 countries (World Bank Development Indicators, 2015).

Though ranked 29th in total population, Connecticut is among the most highly urbanized states (the 4th just behind Rhode Island, New Jersey, and Massachusetts) with a population density of 743 persons for each of its 4,842.4 square miles of land, compared with 87 persons per square mile of land for the United States (3,531,905 square miles) (US Census Bureau, 2014).

Industrial activity in the state is concentrated in two regions: the Naugatuck valley, extending from Bridgeport north, and a belt extending from Hartford west to New Britain and Bristol, and south to New Haven. Hartford, the capital, is a center for the insurance industry and a major service center for business and commerce. The southwestern portion of the state, with its easy access to New York City, makes up the core of financial activity in the stateⁱ.

In terms of Gross Domestic Product (\$253.0 billion in 2014), Connecticut is 23rd among the US states. When ranked per capita it is 6th behind the District of Columbia, Alaska, Wyoming, North Dakota, and New York, and larger than any other country other than Luxembourg, Norway, Qatar, and Switzerland (International Monetary Fund, 2015).

Educational attainment data show 89.2% of Connecticut residents 25 years and older are high school graduates or higher, compared to 86.0% nationally (US Census Bureau, QuickFacts, 2015). Connecticut ranks 5th in percent of 25 year olds and older with at minimum a bachelor's degree (36.5%), behind the District of Columbia, Massachusetts, Colorado, and Maryland (US Census Bureau, American Community Survey 2009 – 2013, 2015).

Connecticut's Employment Profile (1950 – 2014)

A look back at employment over the last few decades helps broadly define the factors that shaped Connecticut into its current form today.

Table 1: United States and Connecticut Employment (1950 – 2014)

Connecticut (Thousands)	<u>1950</u>	<u>1960</u>	<u>1970</u>	<u>1980</u>	<u>1990</u>	<u>2000</u>	<u>2010</u>	<u>2014</u>
Total Non-Farm Employment	766.1	915.4	1,197.5	1,426.8	1,623.5	1,693.1	1,608.0	1,666.1
Growth	26.7%	19.5%	30.8%	19.1%	13.8%	4.3%	-5.0%	3.6%
Share of Total Non-Farm Empl	oyment							
Construction & Mining	4.9%	4.9%	5.0%	3.5%	3.9%	3.9%	3.1%	3.4%
Manufacturing	49.6%	44.5%	36.9%	30.9%	21.0%	15.5%	12.2%	11.5%
Transp. And Public Utilities	5.5%	4.9%	4.6%	4.3%	4.5%	4.7%	3.0%	3.2%
Trade	16.5%	17.5%	18.8%	21.0%	22.2%	21.5%	21.8%	22.4%
Fin., Ins., And Real Estate	4.8%	5.8%	6.2%	7.4%	9.3%	8.4%	8.4%	7.7%
Services	10.1%	12.3%	15.4%	20.0%	26.2%	31.7%	36.2%	37.6%
Total Government	8.6%	10.2%	13.2%	13.0%	13.0%	14.3%	15.2%	14.3%
	I							
<u>United States (Thousands)</u>	<u>1950</u>	<u>1960</u>	<u>1970</u>	<u>1980</u>	<u>1990</u>	2000	<u>2010</u>	<u>2014</u>
Total Non-Farm Employment	45,197	54,189	70,880	90,406	109,403	131,720	130,275	139,042
Growth	39.7%	19.9%	30.8%	27.5%	21.0%	20.4%	-1.1%	6.7%
Share of Total Non-Farm Empl	oyment							
Construction & Mining	7.2%	6.7%	5.9%	5.9%	5.3%	5.5%	4.8%	5.1%
Manufacturing	33.7%	31.0%	27.3%	22.4%	17.4%	14.0%	10.9%	10.7%
Transp. And Public Utilities	8.9%	7.4%	6.4%	5.7%	5.3%	5.3%	3.6%	3.7%
Trade	20.8%	21.0%	21.2%	22.5%	23.6%	23.0%	23.8%	24.3%
Fin., Ins., And Real Estate	4.2%	4.8%	5.1%	5.7%	6.1%	5.8%	5.9%	5.7%
Services	11.9%	13.6%	16.3%	19.8%	25.5%	30.7%	33.7%	34.7%
Total Government	13.3%	15.4%	17.7%	18.0%	16.7%	15.7%	17.3%	15.7%

Source: Bureau of Labor Statistics, Not Seasonally Adjusted

1950 to 2000 data is based on the Standard Industrial Classification (SIC) system.

2010 data was modified from the North American Industry Classification System (NAICS) to SIC.

By the 1950's manufacturing made up 50% of Connecticut's employment, compared to 34% nationwide. Manufacturing employment peaked in Connecticut in 1967 at 479.5 thousand jobs, and has been falling ever since. However, as a share of total employment, manufacturing has been falling since the 1950's; as of 2014, Connecticut's share in manufacturing was only slightly higher than the US (11.5% in Connecticut compared to 10.7% for the US).

Delving into the subsectors of the manufacturing industry shows the underlying variability. Transportation Equipment manufacturing made up about 24,000 jobs in 1950, and rose to just under 90,000 jobs by the 1980's and 1990's. As of 2010, there were 42,200 jobs in Transportation Equipment. Conversely, Textile Mills, which made up 33,600 jobs in 1950, fell to 2,600 jobs by 1990. In aggregate, manufacturing employment in durable goods has ranged from 65% to 75% of total manufacturing jobs from the 1950's onwards, with the remainder made up by employment in manufacturing of non-durable goods.

Connecticut's share of employment in Finance, Insurance and Real Estate was on par with the nation in the 1950's, and since has steadily outpaced the US's growth, most dramatically between 1980 to 1990. However, Connecticut lost employment in the Finance & Insurance industry between 1990 to 2000, primarily due to restructuring within the industry in the early part of the decade.

From 1950 to 2014, the share of employment in Services tripled for the US and almost quadrupled for Connecticut. Connecticut's share of Government employment was about 5 percentage points below the nation in 1950, by 2014 Connecticut was 1.4 percentage points below the US.

Total non-farm employment growth in Connecticut slowed compared to the US by 1980, when it fell to about two-thirds of the nation as a whole. From 1990 to 2000, Connecticut's total employment only grew a quarter of the rate in the nation. Connecticut and the nation were working their way out of a recession in 2010, resulting in negative employment growth for both over the decade. Between 2010 and 2014, the US has gained jobs at almost double the rate as Connecticut.

Population Trends



Graph 2 shows total population growth over the decades for the United States, New England, and Connecticut.

Source: 2015 Economic Report of the Governor

Between 1930 to 1970, population growth in Connecticut was on pace with or exceeded national growth. But by 1980 growth in Connecticut fell to less than a fourth of the national rate, and to the present continues to lag national growth, as well as growth in New England.

On top of a decline in overall population growth, Connecticut is older compared to the United States, as shown in Table 3. This has workforce implications as well as implications on health and social services in the state, which will be examined by Sally Wallace forthcoming in this series (Fiscal Architecture of Connecticut, 2015).

	Percentage Points difference between Connecticut and					
	the	e United Star	tes]	New England	1
Age Groups	<u>1994</u>	<u>2004</u>	<u>2014</u>	<u>1994</u>	2004	<u>2014</u>
0 thru 4	-0.4	-0.6	-1.0	0.1	0.2	0.0
5 thru 14	-1.2	-0.1	-0.7	0.0	0.6	0.7
15 thru 24	-1.2	-1.5	-0.1	-0.8	-0.8	-0.1
25 thru 34	-0.1	-1.5	-1.3	-0.3	-0.5	-0.5
35 thru 44	0.7	1.0	-0.4	0.1	0.2	0.1
45 thru 54	0.7	0.9	1.5	0.4	0.0	0.3
55 thru 64	0.5	0.6	1.0	0.3	0.0	-0.2
65 & Older	1.2	1.2	1.0	0.2	0.2	-0.2
Sources IUS						

Table 3: Share of Population by Age Group

Source: IHS

An aging workforce is an issue endemic to New England. Table 3 shows Connecticut's demographics are more in line with New England than the nation. Connecticut does, however, compare slightly favorably to New England in number of 5-14 year olds, and less favorably in 25-34 year olds.

Some of the trends exhibited in Connecticut are caused by natural demographic changes introduced from the baby boom phenomenon. The dashed line in Graph 4 shows population growth between 1994 and 2004 by age group. Similarly, the solid line shows population growth from 2004 to 2014 by age group. Graph 4 emphasizes how population growth in each age category between 2004-2014 (the solid line) closely matches its trajectory from the prior decade (the dashed line).



Economic Prosperity of the 1980's

Employment Growth

The decade of 1980's until February 1989, which marked the start of the early 1990's recession for Connecticut, was a period of rapid economic growth and prosperity in Connecticut. Between prerecession peaks, July 1981 to February 1989, Connecticut gained 234,100 jobs, or 16.2% of employment. About 60% of the job growth over this period was in the Services sector, followed by about 30% from Trade, and 20% from Finance, Insurance, and Real Estate. Government accounted for approximately 11% growth over this period. Manufacturing was the only industry to lose employment during the 1980's. However, the Transportation Equipment subsector of Manufacturing, which provides defense related goods, held steady over the decade.

The 1980's decade also drove growth in Connecticut's Gross State Product (GSP) and Personal Income (PI), impacts which have lasted to today (see List of Definitions of Terms). Ranked against the other states and the District of Columbia, as of 2014 Connecticut is currently second in per capita PI, right behind DC, and sixth in per capita GSPⁱⁱ. Since the 1990's, Connecticut has ranked second in per capita PI and between third and fourth in per capita GSP.

Gross Domestic Product and Personal Income Trends

Graph 5 compares Connecticut's GDP and PI to the national average. The bars in Graph 5 represent the difference in <u>growth</u> between Connecticut and the US, and the lines in Graph 5 represent the difference in <u>per capita</u> between Connecticut and the US. The solid line and bar represent GDP and the dashed line and bar represent PI. In summary, the bars in Graph 5 show how much more or less Connecticut grew in total GDP and PI compared to the nation. And the lines in Graph 5 represent how much greater Connecticut is than the nation in per capita GDP and PI.



Source: IHS, Bureau of Economic Analysis

The lines in Graph 5 remain in positive territory throughout, showing Connecticut has historically and consistently outpaced the national average in both per capita GDP and per capita PI. Moreover, not only does Connecticut rank higher, but the positive difference between Connecticut and the nation in both per capita GDP and PI has grown over time. However, as the bars in Graph 5 show, except for the 1980-1990 decade, overall growth in the state's total GDP and PI has been lower than the nation's growth (there is one other time frame, 1961-1970, when Connecticut's PI grew faster than the nation).

The reason both Connecticut's per capita GDP and PI continue to climb and outpace the nation despite slow total growth is due to Connecticut's slow population growth. Essentially, in the per capita formula the numerator (GSP or PI) is growing slowly, but the denominator (population) is growing even more slowlyⁱⁱⁱ.

Sectorial Contributions to GDP

To recognize which industries contributed to Connecticut's prosperity of the 1980's, GSP growth by industry is analyzed over the decade. Connecticut's GSP growth in the 1980's was driven by Finance, Insurance, and Real Estate, which accounted for 30% of the growth in GSP between 1980 and 1990. Services accounted for the next largest share of GSP growth at 22%. During the decade, manufacturing's contribution to Connecticut's GSP actually fell compared to the nation. In 1980, the share of GSP from manufacturing accounted for 28.3% of Connecticut's total GSP, compared to 21.3% for the nation. By 1990, Connecticut was on par with the US, with manufacturing accounting for 19.3% of total GSP compared to 18.1% for the nation.

The Era of Slow Growth

Graph 6 shows Connecticut's total nonfarm employment from 1939 to 2015. Employment in Connecticut steadily increased, save for recession related downturns, until the late 1980's. Connecticut has had slow job growth since the economic boom of the 1980's, or slow job growth in over a quarter of a century.



Source: Moody's Economy.com, Bureau of Labor Statistics

A series of events since 1989 led to Connecticut's slow job growth over the quarter of a century. Defense cutbacks that followed the fall of the Berlin Wall in 1989 and the end of the Cold War hit Connecticut particularly hard, as many of the manufacturing industries in the region were related to national defense. The real estate market started to bottom out and this, coupled with the completion of regional projects, led to layoffs in the construction industry. The finance industry was impacted by bank failures leading to the elimination of many jobs (Slepski, Regional Economic Retrospective, 2001). A \$15 billion hurricane related claim in 1992 against the insurance industry led to massive restructuring of major multi-line insurers. This reorganization caused downsizing within the industry just as Connecticut was emerging from the recession of 1989-1992 (Dyer, Keep Connecticut's Home FIRE Burning, 2000). The latter part of the 1990's was dominated by the tech bubble, or dot-com boom. Between 1997 and 2000, the NASDAQ gained approximately 80% (Kane and Motsonelidze, NASDAQ: the bubble returns?, 2015). After the dot-com related recession of 2000-2003, the nation and Connecticut along with it entered a housing bubble; US housing prices increased by 135% in inflation-adjusted terms between 1997-2006 (Levitin and Wachter, Explaining the Housing Bubble, 2012). A crash in the housing market led to the Great Recession, which lasted from March 2008-February 2010 in Connecticut. Connecticut currently continues its recovery from the last recession.



Graph 7a indexes employment over this period of slow growth for Connecticut and its neighbors.

Source: Bureau of Labor Statistics

Connecticut's job growth closely paralleled New York State until the late 1990's, and then only slightly fell behind New York up until 2007. Employment in Massachusetts, on the other hand, grew strongly during the 1990's but then slowed during the 2000's. In fact, Massachusetts' employment peak in 2008 did not surpass its prior peak set back in 2001. Connecticut's recovery from the 2008-2010 Great Recession, however, has significantly lagged both New York and Massachusetts. Connecticut's recovery from the recent recession is more closely aligned with New Jersey.

Similar analysis starting from an earlier period results in dramatically different findings. Instead of indexing from Connecticut's employment trough in 1992 (Graph 7a), Graph 7b indexes employment for Connecticut and its neighbors from 1970. Over this period Connecticut's employment grew 39%, 12 percentage points higher than New York's 27%. Even in this analysis, however, Connecticut does continue to lag Massachusetts and New Jersey by 13 percentage points.



Source: IHS

The Great Recession

Jobs and Wages

Connecticut lost 119,000 seasonally adjusted jobs, or 6.9% of the workforce, during the Great Recession which lasted from March 2008 to February 2010 in Connecticut. The unemployment rate rose from 5.1% in March 2008 to 9.2% at its highest (between October 2010 to February 2011). Since the recovery began in February 2010, Connecticut has gained back 101,700 jobs (85.5% of the jobs lost to the recession) and returned to an unemployment rate of 5.4% (based on July 2015 employment data). In comparison, the nation recovered its number of jobs lost as a result of the Great Recession by early 2014.

In addition to lagging the nation in recovery from the Great Recession, the composition of Connecticut's labor market has changed since the recession. Graph 8 shows how the number of Connecticut jobs by industry changed both during the recession (stripped bars) and after the recession during the recovery phase (solid bars). The dots on the graph represent the 2014 average annual wage for the industry.



Source: IHS, Bureau of Labor Statistics

As displayed in Graph 8, some sectors of the economy continued to gain jobs even during the recession, including Health Services and Educational Services. On the other hand, four industries continued to lose jobs even after the recession ended and recovery phase began, including: Manufacturing (which has been a multi decade decline), Finance & Insurance, Government, and Information. On a positive note, these sectors have started to show job gains based on recent employment reports.

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Both the Construction and Wholesale Trade industries, though they are growing since the recession ended, are still more than 10% below their pre-recession peak. Conversely, employment in Leisure & Hospitality, Educational Services, and Health Services are over 10% greater than their pre-recession peak. Though Management of Companies represents a smaller share of the total jobs gained during the recovery, this high-wage industry has grown by 12.0% from its pre-recession peak.

Taking into consideration the (2014) average wage by sector displayed by the bullets in Graph 8 show a clear trend, lower wage industries have been driving Connecticut's job growth in this recovery. Four out of the five lowest wage industries have gained the most in employment since the recession ended (Leisure & Hospitality, Health Care, Administration & Support, and Retail Trade). Moreover, three out of the six highest wage sectors have lost jobs even during the recovery phase (Finance & Insurance, Manufacturing, and Information). However, the high-wage Management of Companies and Professional Scientific, & Technical industries have grown by 12% and 2.3%, respectively, over their pre-recession peak.

Employment Change by Industry (Pre versus Post-Recession)

In total, Connecticut's employment grew 6.4% (as of July 2015) since the trough of the Great Recession in February 2010. In comparison, Connecticut's employment grew 4.5% from September 2003 to March 2008 – the period just prior to the Great Recession. Graph 9 investigates how employment growth by industry differed over these two periods, by plotting each industry's employment growth both pre- and post-recession. The vertical axis represents employment growth by industry pre-recession (September 2003 to March 2008), the horizontal axis represents growth post-recession (February 2010 to July 2015), and the size of bubble represents each industry's July 2015 share of total nonfarm employment. Industries to the right of the 45 degree line in Graph 9 are growing faster post-recession than pre-recession, and vice versa.



Source: Bureau of Labor Statistics

Industries growing faster post-recession:

The high-wage Management of Companies, which declined pre-recession, has picked up steam and grew 15% post-recession (as of July 2015). Similarly, Retail Trade, which barely exhibited positive growth pre-recession, grew over 8% since the recovery began. Construction, which suffered a 29.0% decline in employment during the recession, has grown by 19.8% post-recession. Construction is growing at a faster pace than pre-recession, though off a lower base. Growth in low-wage jobs under the Administration & Support and Leisure & Hospitality sectors have also picked up post-recession, growing almost double of their pace from pre-recession. Pre-recession high-wage jobs in Professional, Scientific, & Technical Services grew 7.5%, post-recession this sector has grown close to 12%.

Industries growing slower post-recession:

The high wage Finance & Insurance industry has seen a significant decline in jobs during the recession (-6.2%) as well as post-recession (-4.2%). Before the recession Finance & Insurance, a traditionally strong sector for Connecticut, was seeing modest job growth at 1.2%. Similarly, Government grew a modest 3.1% pre-recession, but has fallen to -2.5% growth post-recession. The only two sectors which gained jobs throughout the recession, Education and Healthcare Services, continued their positive growth post-recession – though at almost half the rate as pre-recession for Educational Services. As previously noted, employment in Wholesale Trade remains 10% below its pre-recession peak, primarily due its slow 1.1% growth post-recession compared to 7.0% pre-recession.

Finally, Manufacturing continues to lose jobs post-recession as it did pre-recession. However, job losses in Manufacturing slowed post-recession (-1.8%) compared to pre-recession (-4.9%).

Gross State Product by Industry

Turning from employment to GSP, Graph 10 shows each sector's contribution to Connecticut's 2014 real GSP (base year 2009). Financial Activities is the largest contributor at 29%. Transportation, Trade, & Utilities was the next largest at 14.5%. Professional & Business Services was the third largest at 12.5%; this sector includes Administration & Support and Management of Companies.



Gross State Product - Pre versus Post-Recession

Table 11a shows change in real GSP by industry pre-recession (2003-2007) and post-recession (2010-2014) for Connecticut and the US. For comparative purposes, the data are stated in "real" dollars (base year 2009). Real GSP growth in Connecticut slowed from 16% pre-recession to 1% post-recession. Over this same period GSP growth for the nation also slowed, though not as dramatically as in Connecticut. Real GDP in the US grew 12.1% between 2003-2007 (less than Connecticut), and by 8.0% between 2010-2014. As of the latest data, Connecticut's real GSP growth between 2013-2014 was one of the slowest in the nation at 0.6%.

Table 11a also provides growth in real personal income for Connecticut and the US. Connecticut's total real personal income grew 16.2% pre-recession (2003-2007), and fell to 7.0% post-recession (2010-2014). For the US, real personal income grew slightly less than Connecticut pre-recession at 14.0%, but only declined to 9.7% post-recession.

	Pre-Recession		Post-Re	ecession
Connecticut Real GSP (Millions of 2009 \$)	2003	2007	2010	2014
Total	\$211,900	\$245,764	\$230,268	\$232,620
Change		\$33,864		\$2,352
Growth		16.0%		1.0%
Connecticut Real PI (Millions of 2009 \$)	2003	2007	2010	2014
Total	\$157,606	\$183,065	\$178,044	\$190,557
Change		\$25,460		\$12,514
Growth		16.2%		7.0%
United States	2003	2007	2010	2014
Real GDP Growth		12.1%		8.0%
Real PI Growth		14.0%		9.7%

Table 11a: Real GS	P and PI Growth ir	Connecticut and the	US Pre/Post Recession
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Source: IHS

Table 11b shows the actual numerical change in Connecticut GSP over the same two periods as in Table 11a, but at the industrial sector level. Table 11b shows real GSP from the Manufacturing and Finance & Insurance industries declined post-recession. Moreover, the level of decline in each of these two industries, individually, is greater in magnitude than Connecticut's total real GDP growth post-recession. As previously noted, Finance & Insurance has been losing employment post-recession; however pre-recession, even with a modest 1.2% employment growth, Finance & Insurance contributed 23.7% to Connecticut's total growth in real GSP. Manufacturing has also been declining in employment, both pre-and post-recession. However, even with declining employment pre-recession, Manufacturing contributed 33.6% to Connecticut's growth in real GSP.

The top drivers of real GSP growth in Connecticut post-recession are Management of Companies, Information, and Professional, Scientific, & Technical Services. The contribution of Management of Companies and Professional, Scientific, & Technical Services to growth in real GSP is especially significant considering both were essentially flat or declining pre-recession.

	Pre-Recessio	n (2003 - 2007)	Post-Recession	on (2010 - 2014)
Real GSP (Millions of 2009 \$)	Growth	% of Growth	Growth	% of Growth
Manufacturing	\$11,101	33.6%	-\$3,371	-128.0%
Finance & Insurance	\$7,816	23.7%	-\$2,604	-98.9%
Government	\$1,336	4.0%	-\$274	-10.4%
Other Services	\$264	0.8%	-\$25	-0.9%
Construction and Mining	-\$50	-0.2%	\$27	1.0%
Educational Services	\$210	0.6%	\$155	5.9%
Wholesale Trade	\$2,919	8.8%	\$213	8.1%
Transportation & Utilities	\$1,459	4.4%	\$438	16.6%
Administrative & Support	\$1,139	3.5%	\$555	21.1%
Health Care	\$1,211	3.7%	\$636	24.1%
Leisure & Hospitality	\$77	0.2%	\$691	26.2%
Retail Trade	-\$525	-1.6%	\$775	29.4%
Real Estate	\$2,647	8.0%	\$856	32.5%
Prof., Sci., and Tech. Services	\$50	0.2%	\$1,185	45.0%
Information	\$3,741	11.3%	\$1,512	57.4%
Management of Companies	-\$394	-1.2%	\$1,865	70.8%
Total Real GSP Growth	\$33,864	100.0%	\$2,352	100.0%

 Table 11b: Real GSP Growth in Connecticut by Industry

Note: Industries do not add to total Source: IHS

Post-Recession: Connecticut Compared to the United States

Employment

Graph 12 shows many of the employment trends in Connecticut are similar to what the nation is facing. The bars in Graph 12 represent percent of jobs created by industry, of the total jobs created since the trough of the Great Recession. Connecticut closely follows the direction and magnitude for most industries as the nation, though with greater growth in Leisure & Hospitality and Health Care. Unlike Connecticut, however, the nation on average is gaining employment in the high-wage Finance & Insurance and Manufacturing sectors.



Source: Bureau of Labor Statistics

Employment and Gross Domestic Product

Connecticut Industries Lagging the US

Graph 13a takes a closer look at the top industries in which Connecticut's employment growth is lagging the US, along with real GDP growth within the sector post-recession. Manufacturing employment, which has declined 2.9% post-recession, is 10.0 percentage points behind the nation's post-recession employment growth in this sector of 7.2%. Furthermore, Connecticut's real GDP growth in manufacturing post-recession is almost 18 percentage points behind the US.

Connecticut's employment growth in Finance & Insurance lags the nation by 7.1 percentage points, and by almost 20 percentage points in real GDP growth post-recession. Declining real GDP within this sector

is especially concerning considering the importance of Finance & Insurance to Connecticut's economy. Finance & Insurance, along with Real Estate, drove Connecticut's economic growth during the 1980's. And even after the declines post-recession, in calendar year 2014 Connecticut's share of GDP from Finance & Insurance was 6.9 percentage points greater than the nation (while Connecticut's 2014 share of employment in this sector was 4.6 percentage points greater than the nation).

Connecticut's employment growth in Wholesale Trade is slightly positive post-recession, though 3.1 percentage points behind the nation. Similarly, real GDP growth is positive but 8.0 percentage points behind the US.



Source: Bureau of Labor Statistics, Bureau of Economic Analysis Note: Post-Recession is defined as 2010-2014 for GDP and February 2010 to July 2015 for Employment.

Connecticut Industries Leading the US

Graph 13b displays industries in which Connecticut is leading the nation. Connecticut's 25% employment growth in Leisure & Hospitality surpasses the nation by 7.1 percentage points. Similarly, Connecticut ranks stronger in employment growth in Health Care and Retail Trade by 5.5 and 3.8 percentage points, respectively. Of interest is the high-wage Management of Companies, which not only exceeds the nation in employment growth by 0.8 percentage points, but also in real GDP growth by almost 6 percentage points. Moreover, real GDP growth in Management of Companies actually fell pre-recession; post-recession this sector is leading Connecticut's real GDP growth (Table 11b).



Source: Bureau of Labor Statistics, Bureau of Economic Analysis Note: Post-Recession is defined as 2010-2014 for GDP and February 2010 to July 2015 for Employment.

Connecticut's Exports

In 2014, Connecticut exported a total of \$15.9 billion in goods. Graph 14a shows Connecticut's top export markets and Graph 14b shows Connecticut's leading export industries in 2014.



Source: WISERTrade



^{*} Not Elsewhere Specified or Included Source: WISERTrade

Exports from the Transportation Equipment sector, which includes Aerospace manufacturing, accounts for more than three times the exports from the next largest sector (Machinery). The Transportation Equipment sector is driven by Connecticut's strength in defense. In Federal Fiscal Year 2013, Connecticut based firms received \$10.0 billion in prime contract awards, or 3.7% of total national awards. Connecticut ranks eighth in total defense dollars awarded, or second in per capita dollars awarded among the 50 states (United States Department of Defense).

Connecticut by Region

The three most populous counties in Connecticut contain the state's largest urban centers. Fairfield, Hartford, and New Haven counties all have populations nearing one million persons. The remaining five counties make up about one quarter of the state's population (3.6 million in 2014). The combined GSP for Fairfield, Hartford, and New Haven counties represent about 90% of Connecticut's total.

	СТ	Fairfield	Hartford	Litch- field	Middle- sex	New Haven	New London	Tolland	Wind- ham
Population	3,596.7	945.4	898.0	185.0	164.9	861.3	273.7	151.4	117.0
High School (%)	89.2	89	88.1	91.3	93.8	88.3	90.5	93	86.8
Bachelors (%)	36.5	44.8	34.9	36.5	39.1	32.9	31.3	36.9	22.3
Median Household Income (\$)	69,461	82,283	64,967	69,461	76,994	61,996	69,461	80,529	59,333
GSP (\$M)	253,036	93,502*	86,609			44,165			

 Table 15: Connecticut and Regional Indicators (2014)

*Bridgeport-Stamford Metropolitan Statistical Area (MSA)

Fairfield County has seen the fastest population growth in the state, as well as the highest income. Fifteen percent of Fairfield County residents work in New York State compared to 6.8% of all Connecticut workers that work out of state (US Census Bureau, OnTheMap Application, 2015). Fairfield County is home to much of the state's Finance industry.

Hartford County is home to Connecticut's Insurance industry, including companies such as Travelers and Aetna. The aerospace manufacturer Pratt and Whitney has also been based out of Hartford County since the 1920's. The other populous county, New Haven County, is home to Yale University, a center for research.

The economy in New London, the fourth largest county in Connecticut, is built around its submarine base, Electric Boat (a manufacturer of submarines), the Coast Guard Academy, and the pharmaceutical giant Pfizer. A majority of Pfizer's research and development operations were recently moved out of Connecticut to Cambridge, Massachusetts, but a portion of manufacturing operations remain in New London County. This southeastern county is also home to a thriving tourism industry and the world's largest casinos, built on tribal lands. Regardless, New London County remains in recession from the recent 2008-2010 recession; this county has continued to lose jobs since 2008.

Connecticut's smaller counties have historically been manufacturing centers, especially along the Naugatuck Valley. Litchfield County is known as the destination for second homes and Windham County for its farmland.

Regardless of the different industries and geographies that characterize each county, Connecticut overall is one of the nation's best educated states and is home to several of the nation's best universities. Further, Connecticut is overall wealthy; if Connecticut's counties were ranked as states, six of the eight counties would rank within the top ten in terms of per capita personal income.

Rank	Geography	Per Capita Personal Income	Rank	Geography	Per Capita Gross State Product
1	District of Columbia	\$69,708	1	District of Columbia	\$174,925
2	Connecticut	\$64,862	2	Alaska	\$77,449
3	Massachusetts	\$58,694	3	Wyoming	\$75,616
4	New Jersey	\$57,594	4	North Dakota	\$74,401
5	North Dakota	\$55,683	5	New York	\$71,108
6	New York	\$55,595	6	Connecticut	\$70,351
7	Wyoming	\$54,560	7	Massachusetts	\$68,136
8	Maryland	\$54,131	8	Delaware	\$66,981
9	Alaska	\$53,993	9	New Jersey	\$61,405
10	New Hampshire	\$52,746	10	Texas	\$61,005

ⁱ Based on the 2014 Quarterly Census of Employment and Wages, 74.2% of Securities, Commodity Contracts, and Investments employment was in the Bridgeport-Stamford Labor Market Area.

Source: IHS

ⁱⁱⁱ Between 1990 to 2014, Connecticut's population growth has averaged 0.4%. In comparison, over this same period, Personal Income growth has averaged 4.0% and Gross State Product has averaged 3.9%.