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Changes in Income Distribution in New England

On many measures New England is a prosperous region, and its residents are doing well economically.[1] Three New England states—Connecticut, Massachusetts, and New Hampshire—rank among the top six of the U.S. states in per capita and household median income.[2] Vermont and Rhode Island have per capita and median household income close to the national average.

New England also has four states ranking among the lowest in the percentage of the population living in poverty. New Hampshire has the lowest poverty rate in the nation, and Connecticut, Vermont, and Massachusetts are among the eight U.S. states with the lowest percentage of residents below the poverty line.

All the New England states have poverty rates below the national average.

But over the last 15 years, when household income inequality increased nationwide, New England experienced the largest jump in inequality of all the nine census divisions. It went from relatively low income disparity to about the national average, with a significant increase in the proportion of income concentrated among the highest-income households.[3]

Growing Disparity

The main reasons for the increase in the gap in New England were higher than average growth at the top of the income distribution and declines in real household income in the lower quintiles that contrasted with national household income increases. (See Table 1.) The average real income in the top 5 percent of New England households increased 27 percent, and the real incomes of the top 20 percent of households increased 20 percent. At the same time, average real incomes of households in the bottom fifth declined by 5 percent, and incomes in the second-to-bottom quintile fell by 2 percent.

A commonly used summary measure of income distribution is the Gini Coefficient. The Gini is a statistic based on the difference between a given income distribution and a hypothetical distribution in which income is uniformly distributed across all households. The Gini is bounded between 0 and 1, where 0 represents perfect income equality and 1 represents complete inequality. In 1989, New England was among the census regions with the smallest disparity in household income. By 2004, it was in the middle, just below the U.S. average of .464; it experienced the largest increase in Gini coefficient and income disparity of all the census regions, followed by the Pacific region. (See Table 2.) The East South Central and West North Central regions had the smallest increases.

All the states in New England experienced a decline in household earnings equality and dropped in equality rank relative to other states. Over the period 1989 to 2004, Connecticut, Vermont, and Massachusetts ranked among the top five states for increased income disparity. (See Table 3 for New England data and for the five states with the greatest increase in income disparity and the least.) All the New England states' increases in disparity were among the top half of states.

Table 1: Changes in Average Household Income, New England and the Nation*

New England

	Average Household Income 2004	Percent Change 1989-2004
Lowest-Income Quintile	12,437	-5.1%
Quintile 2	34,291	-2.1%
Quintile 3	57,310	1.7%
Quintile 4	87,043	6.2
Highest-Income Quintile	184,828	19.8%
Top 5 percent	336,819	26.9%

United States

	Average Household Income 2004	Percent Change 1989-2004
Lowest-Income Quintile	10,744	4.0%
Quintile 2	28,300	2.6%
Quintile 3	47,326	3.5%
Quintile 4	73,167	6.6%
Highest-Income Quintile	156,795	17.0
Top 5 percent	282,276	20.0%

Source: U.S. Census, Public Use Micro Data, 1990 and 2000. American Community Survey, 2005
*All percentage change figures have been adjusted for inflation.

Table 2: Changes in an Income-Inequality Measure (Gini) for Each Census Division*

Division	Gini Coefficients (Household Income) 1989	2004	Gini Change 1989-2004
New England	0.417	0.461	0.044
Pacific	0.422	0.462	0.040
Mid-Atlantic	0.441	0.477	0.036
South Atlantic	0.429	0.463	0.034
West South Central	0.451	0.482	0.031
United States	0.433	0.464	0.030
East North Central	0.418	0.443	0.025
Mountain	0.417	0.440	0.022
West North Central	0.417	0.435	0.017
East South Central	0.450	0.464	0.014

*Based on author calculations.

Across the nation, metropolitan statistical areas (MSAs) tend to have higher income disparity than nonmetropolitan areas. The increase in disparity also was more pronounced in metro areas over the last 15 years. New England not only had three of the top five states with the largest increase in disparity, but also six of the top 20 metropolitan areas. (See Table 4.) In Connecticut, Stamford-Norwalk, Bridgeport, Waterbury, and Danbury ranked among the top 10 U.S. MSAs showing increased disparity in income; Nashua, New Hampshire, and New Bedford, Massachusetts, ranked among the top 20, and Boston—New England's largest metro area—ranked in the mid-50s. Providence-Fall River and Brockton, Massachusetts, saw small increases in equality.

What Happened?

The change in household income distribution in the region reflects a fundamental shift in the economy. The shift involves not only productivity improvements but also an increased concentration of well-paying jobs among those with advanced education and training.

Table 3: Measuring Increased Income Disparity*

	Gini	Rank	Gini	Rank	Gini	Rank
	1989		2004		1989-2004	
Connecticut	0.414	27	0.477	3	0.063	1
Vermont	0.390	47	0.439	31	0.049	2
New Jersey	0.416	25	0.459	11	0.044	3
California	0.424	19	0.467	6	0.043	4
Massachusetts	0.420	22	0.462	10	0.042	5
New Hampshire	0.375	50	0.409	48	0.034	13
Rhode Island	0.414	26	0.448	22	0.034	14
Maine	0.399	43	0.426	40	0.027	22
Kentucky	0.448	5	0.455	16	0.008	46
Idaho	0.409	34	0.414	46	0.005	47
Arkansas	0.444	7	0.447	24	0.003	48
Mississippi	0.464	2	0.466	7	0.002	49
Wyoming	0.402	41	0.402	50	0.001	50

Top ranks denote highest inequality and highest increase in inequality

*Ranking among 50 states. Based author calculations.

Table 4: Metro Areas in New England: Greatest to Lowest Increase in Income Disparity, 1989 to 2004*

Metropolitian Statistical Area	Gini Change 1989-2004	Rank of Gini Change 1989-04
Stamford-Norwalk	0.0862	1
Bridgeport	0.0714	3
Waterbury	0.0704	4
Danbury	0.0699	5
Nashua	0.0598	11
New Bedford	0.0550	18
Lowell	0.0524	26
New Haven-Meriden	0.0495	30
Springfield	0.0453	39
Manchester	0.0427	54
Boston	0.0427	56
Lawrence	0.0405	67
Hartford	0.0377	79
Worcester	0.0305	118
Brockton	-0.0061	236

*Ranking is out of 250 U.S. metro areas, which sometimes span two states. It is based on author calcultions.

On the lower and middle end of the wage distribution, workers have felt the decline of unionization and the effects of globalization, with low and moderately skilled production and repetitive service functions going offshore to the lowest-cost locations. The result has been a reduction in employment demand and income-earning opportunities for those workers—and increased demand and opportunities for highly skilled workers.

The states with the greatest increase in income inequality nationally—including Connecticut, Massachusetts, California, and New Jersey—tended to have a high concentration of employment in industries requiring advanced education and training. And the states with the least change in income inequality during the 1990s—including Mississippi, Louisiana, and Oklahoma—had the lowest percentage of employment in those industries.

The changes were especially pronounced in New England, which has a strong technology base and where the population overall is highly educated and the relatively high cost of business operations causes some companies that use low-skilled workers to leave. New England led the nation in the late 1990s and early 2000s in the loss, on a percentage basis, of manufacturing employment. (See Table 5.) Many manufacturers had paid good salaries and provided a strong income base for middle-income households in the region. Their loss was keenly felt.

Looking Forward

A key concern for the future is what types of employment will replace the manufacturing and other well-paying jobs lost to productivity gains and the lure of lower-cost locations.

New England not only had three of the top five states with the largest increase in disparity, but also six of the top 20 metropolitan areas.

In manufacturing, the low-skill jobs likely will continue to be located in the lowest-cost areas, leaving New England with research-based, product-development manufacturing that requires workers with advanced skills. At the same time, the offshoring of services will continue to expand into activities including data processing, management, and sales and customer support. The demand for the highest-skilled workers in professional and

Table 5: Changes in Manufacturing Employment, 1990 to 2004

Percentage	Change	Rank
VT	-10%	21
NH	-19%	29
MA	-35%	45
ME	-34%	46
CT	-34%	47
NJ	-37%	48
NY	-39%	49
RI	-40%	50
NE	-33%	
US	-20%	

Source: U.S. Bureau of Labor and Statistics.

financial-services fields is increasing, along with pay levels.

Fortunately, New England has a stronger economic and workforce foundation to address rising income inequality than other regions. It does not suffer, as regions in the South do, from high overall rates of poverty and low educational achievement. The way to change the trajectory of New England's current increasing-disparity path is to focus economic development efforts on upgrading the education and technological skills of workers in all households.

That requires expanding access to quality education and training, and linking program participants to well-paying economic opportunities. The Boston Workforce Development Coalition's program Career Ladders, for example, is designed to meet both entry-level, incumbent workers' needs (for opportunities to advance toward positions with more responsibility, skill, and compensation) and employers' needs (to recruit and retain a skilled, highly trained workforce). Expansion of this type of program across the region might help more workers create successful career strategies to deal with the new economic realities. Available child care and affordable housing near workplaces are also needed.

Efforts such as these would help all New England workers to succeed in the transformed economy. With business and political leadership and with significant commitment of public and private resources, it is not too late to reverse the region's unwelcome leadership in increased income disparity.

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Endnotes

[1] The basis of this article is the authors' research and the issue brief they wrote for the University of New Hampshire's Carsey Institute in spring 2007.

[2] The primary data sources of gini coefficients and other income inequality measures were the 1990 and 2000 *U.S. Census* and the 2005 *American Community Survey* Public Use Micro Data sets. Poverty and median household income were also derived from the Public Use Micro Data sets.

[3] The definition of household income here includes wage and salary income and all other income earned by persons over 15 living in the household. The measure of income is comprehensive. It includes income from business profits, interest, dividends, and real estate investment.