

Research and Evaluation Brief

Facts, figures, and insights for workforce development practice and policy

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Who Benefited from the 1990s Boom?

The early years of the 1990s were characterized by steep wage and salary job losses and rapidly rising unemployment. In 1991, Massachusetts' annual average unemployment rate was 9.1%, and there were more than 300,000 unemployed workers on an average month during that year. But, from 1992 through the end of the decade, the state added nearly 500,000 net new wage and salary jobs, and the unemployment rate fell steadily, declining to a historical low of 2.6% in calendar year 2000.

Growth in employment opportunities over the decade, however, varied quite considerably across industries, occupations, and geographic areas across the state. Most new wage and salary jobs came from private service industries (especially business and professional services), retail trade, and construction, while manufacturing industries shed workers over nearly all of the decade. Employment in professional, management-related, and service occupations grew most rapidly while many entry-level clerical positions, blue collar operative, fabricator, and assembler occupations, and unskilled laborer positions declined in number over the decade due to the continued job losses in manufacturing and changes in technology.

This paper intends to identify and assess how the

changes in Massachusetts labor markets during the 1990s influenced the real annual earnings of workers in the state over the past decade. Did the state economic boom from 1992-1999 help lift the real earnings of Massachusetts workers sufficiently to offset the real earnings declines experienced by many workers during the recessionary years of the early 1990s? How much did the typical Massachusetts worker's earnings improve over the decade? How did those earnings changes vary across gender and educational subgroups of workers?

Earnings Concepts, Measures and Data Sources

The analysis is restricted to full-time, year-round workers between 20 and 64 years of age at the time of the 2000 or 1990 Census. Teenagers and workers over 65 were excluded from the analysis due to lower rates of career jobs among many of the members of both age groups. The Public Use Microdata Samples (PUMS files) from the 1990 and 2000 Censuses were used to conduct the analysis. The annual earnings data for Massachusetts workers from the 1990 Census were measured in current dollars; i.e., they were not adjusted for inflation. To compare the 1989 annual earnings data for Massachusetts workers with those for 1999, 1989 earnings data was converted into their 1999 dollar equivalents.

REPORT FOCUS

Who Benefited from the Labor Market Boom of the 1990s in Massachusetts? Changes in Real Annual Earnings Levels and the Distribution of Earnings Among Massachusetts Workers

Report Released: October 2003

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Key Findings

The median real annual earnings of the typical full-time, year-round worker in Massachusetts increased by \$1,539 or 4%. This was a modest increase, considering the strong job growth and record low unemployment. This modest increase exceeded the 0% gain for the median worker in the nation and the region. The median earnings of women in Massachusetts increased more strongly than among men (8% vs. 2%), a finding similar to that for the nation and the region.

Among both men and women, the gains in median real annual earnings were concentrated among those holding a bachelor’s or higher degree. Median real earnings of males declined in all educational subgroups lacking a bachelor’s degree, with the steepest declines experienced by high school dropouts. Among women, there were either no gains or declines in the median annual earnings of those workers with no post-secondary schooling while women with bachelor degrees fared the best. The gaps in annual earnings between college graduates and high school graduates continued to widen sharply over the 1990s for both men and women.

The size of the annual earnings changes among both men and women varied considerably by their position in the annual earnings distribution. Among men, those in the bottom 40% of the earnings distribution experienced declines in their real annual earnings while very large absolute and relative gains took place among those men in the top decile of the distribution. Among women, only those in the bottom twenty percent failed to boost their real annual earnings; however, only very modest gains were experienced by most women up to the 70th percentile of the distribution while gains were extraordinarily strong among women in the top ten percent.

The sizes of the relative earnings differences among both men and women in Massachusetts widened across the board in the 1990s. The increases in these relative

earnings differentials were far greater between those workers at the top and bottom of the distribution and between those at the top and middle of the distribution than between those in the middle and bottom of the distribution.

The distribution of annual earnings among both men and women in Massachusetts became much more unequal during the 1990s, with the top quintile (i.e., the top fifth) of earners substantially increasing their share of annual earnings over the decade. Among men, the top quintile of earners conservatively obtained between 47% and 48% of total earnings during 1999, exceeding the national share of earnings obtained by the top quintile of male earners and being the largest share of earnings ever obtained by the top quintile in Massachusetts since the end of World War II. The male earnings distribution in Massachusetts by 1999 had become one of the most inegalitarian in the country. A substantial rise in the share of earnings obtained by the top quintile of female earners also took place in Massachusetts during the 1990s, with their share exceeding that of the nation’s and also being the highest in the state since the end of World War II. During 1999, the degree of earnings inequality among men and women in Massachusetts exceeded that of the nation for the first time since annual earnings data became available from the decennial censuses beginning in 1950.

Implications

Many of the changes in earnings inequality were generated by the very large gains in earnings among the state’s highest paid earners (top 10%). There is very little that the workforce development system can do to alter these earnings developments at the very top of the distribution since the jobs occupied by most of these highly paid workers and the underlying compensation systems may not be influenced by the state and local workforce development systems in our region or demand and supply developments. There are, however, certain

strategies that might be pursued to boost the earnings of the state's workers in the bottom half of the distribution and help reduce the growing earnings inequalities in our region.

First, the heavy loss of jobs in the state's manufacturing industries over the past decade has substantially reduced employment opportunities in well-paid blue collar occupations that were most frequently held by workers with little to no post-secondary education. These job losses contributed to the absence of real earnings growth among males with no post-secondary schooling. Workforce development programs will need to work together with state and local economic development agencies to maintain, if not expand, our state's manufac-

turing base, including mature industries as well as high technology and biotechnology industries. Efforts to upgrade the skills of existing frontline workers in these industries needs to be expanded to improve their productivity, their wages, and our state's economic competitiveness.

Second, incumbent worker training programs, which are currently financed by state legislatures in many New England states including Connecticut, Massachusetts, and Rhode Island, and more modestly under the federal Workforce Investment Act, also can help boost the productivity, wages and earnings of the existing employed. Such training services should ideally target incumbent workers in the bottom half of the earnings distribution.

Table 1 Trends in the Median Real Annual Earnings of 20-64 Year Old Full-Time, Year Round Workers in Massachusetts by Educational Attainment and Gender, 1989-1999 (in 1999 Dollars)

Gender/Educational Group	(A) 1989	(B) 1999	(C) Absolute Change	(D) Percent Change
Men				
<12 years	\$30,117	\$27,500	-2,617	-9
12 years	\$36,261	\$35,000	-1,261	-3
13-15 years, no degree	\$40,290	\$40,000	-290	-1
Associate's degree	\$42,976	\$42,000	-976	-2
Bachelor's only	\$49,691	\$54,000	+4,309	+9
Master's or higher	\$67,150	\$70,000	+2,850	+4
Women				
<12 years	\$21,458	\$20,700	-758	-4
12 years	\$25,517	\$25,500	-17	0
13-15 years, no degree	\$28,203	\$29,000	+797	+3
Associate's degree	\$30,889	\$32,000	+1,111	+4
Bachelor's only	\$36,261	\$40,000	+3,739	+10
Master's or higher	\$45,662	\$47,400	+1,738	+4

Source: 1990 and 2000 Census PUMS data files, tabulations by authors.

There also is a clear need for more careful, systematic evaluations of the short and long-term outcomes and impacts of such workforce development strategies in our state.

Third, for dislocated workers, especially those whose skills have become economically obsolete, occupational skills training and educational interventions might be required to prevent them from incurring substantial earnings losses upon becoming re-employed. Again our existing knowledge base on the effectiveness of intensive training programs in improving the longer-term outcomes for dislocated workers is quite thin; however, recent evaluations of JTPA training programs for dislocated workers in the state of Washington show some promise.¹

Fourth, for those jobless out-of-school youth and disadvantaged adults entering or re-entering the labor market,



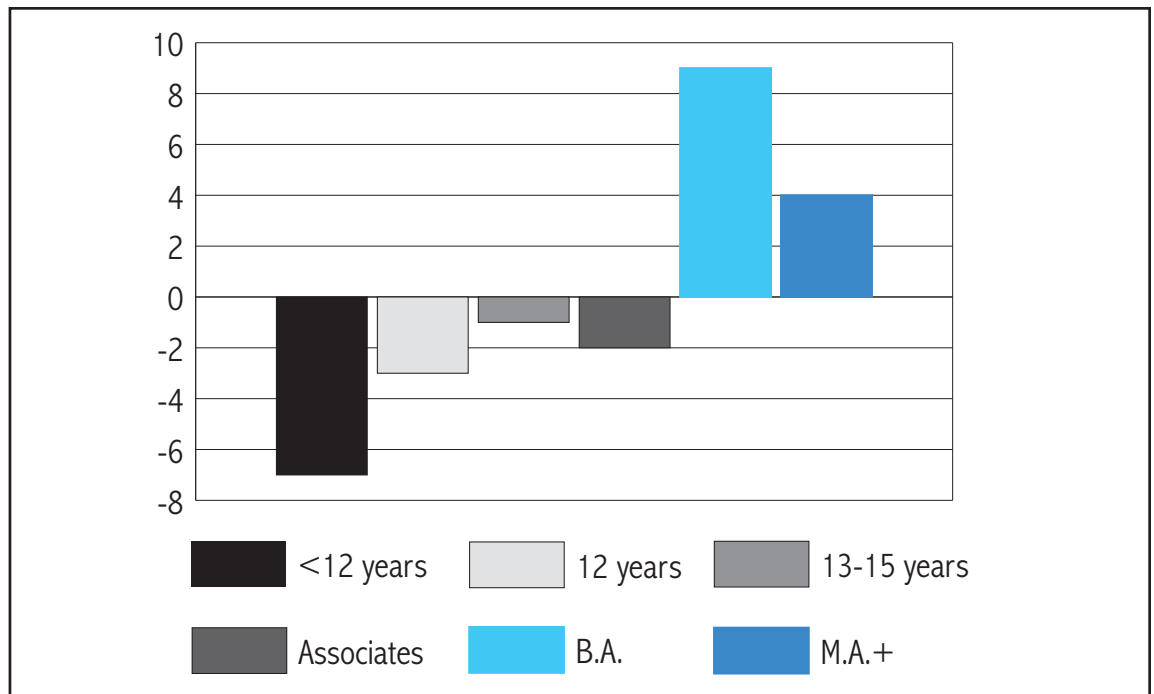
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more intensive investments in formal education and occupational training, both on and off the job, will be needed to boost their earnings potential. A recent longer-term evaluation of JTPA training programs in Massachusetts sponsored by Commonwealth Corporation and implemented by the Center for the Study of Urban Poverty at UCLA revealed substantive gains in earnings in the second and third year after program entry for those adults who participated in long-term occupational training or combined basic education with occupational training.²

The rising tide of earnings inequality in the state will

not be turned around by any one single economic development, workforce development, or educational strategy. A comprehensive and coordinated set of short and long-term strategies will be needed to upgrade the educational qualifications and skills of the state’s work force, to create more high-skilled and high-wage jobs, and to redesign work and training opportunities so that future workers can be more productive and better compensated. Job creation, job training, and job matching will have to go hand in hand to successfully combat rising inequality.

Chart 1 Percent Change in the Median Annual Earnings Between 1989 and 1999 of 20-64 Year Old Massachusetts Males Employed, Year-Round, Full-Time by Educational Attainment



1 See: Kevin M. Hollenbeck, Net Impact Estimates of the Workforce Development System in Washington State, W.E. Upjohn Institute for Employment Research, Kalamazoo, 2003.

2 See: The Center for the Study of Urban Poverty at UCLA, The Effectiveness of Employment and Training Programs on the Earnings Trajectories of Low Income Adults: Findings for Massachusetts JTPA Title I Programs, [Commonwealth Corporation, Boston, 2003].

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