Trends in Employment Rates by Educational Attainment

The employment to population ratio, also referred to as the employment rate, represents the proportion of the civilian population that is employed, and it is used as a measure of labor market conditions and the economy's ability to provide jobs for a growing population. In 2012, the employment rate was 69 percent for young adults (those ages 20–24) and 74 percent for 25- to 34-year-olds. Between 1990 and 2012, employment rates for adults with at least a bachelor's degree were higher than employment rates for adults without a bachelor's degree. This pattern was consistently observed for young adults, 25- to 64-year-olds, and 25- to 34-year-olds (a subset of 25- to 64-year-olds).

The employment to population ratio, also referred to as the employment rate, represents the proportion of the civilian population that is employed, and it is used as a measure of labor market conditions and the economy's ability to provide jobs for a growing population. In this indicator, employment to population ratio and employment rate are used interchangeably. The employment to population ratio and unemployment rate are related. Movements in the unemployment rate reflect net changes in the number of people who are looking for work but are unable to find it, while movements in the employment to population ratio reflect whether the economy is generating jobs fast enough to provide employment for a constant proportion of the population. Further, changes in the employment to population ratio for a particular subgroup (e.g., male high school dropouts) indicate the economy's performance in providing jobs for that particular group.

This spotlight examines employment rates between 1990 and 2012 for three age groups: young adults (those ages 20–24), 25- to 34-year-olds, and 25- to 64-year-olds. In 2012, the employment rate was 69 percent for young adults and 74 percent for 25- to 34-year-olds (see *Digest of Education Statistics 2012*, table 431). The employment rate for 25- to 64-year-olds overall (72 percent) was higher than the employment rate for 25- to 34-year-olds. This indicator also examines employment rates by *educational attainment*, which refers to the highest level of education achieved (i.e., less than high school completion, high school completion, some college, or a bachelor's degree or higher).

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Employment to population ratios, by age group and educational attainment: 2012

¹ Includes equivalency credentials, such as the General Educational Development (GED) credential.

² Includes persons with no college degree as well as those with an associate's degree.

NOTE: The employment to population ratio is defined as the proportion of the civilian population that is employed. Educational attainment refers to the highest level of education achieved (i.e., less than high school completion, high school completion, some college, or a bachelor's degree or higher). Data for 20- to 24-year-olds exclude persons enrolled in school.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Office of Employment and Unemployment Statistics, unpublished annual average data from the Current Population Survey (CPS), 2012. See Digest of Education Statistics 2012, table 431.

Between 1990 and 2012, employment rates for adults with at least a bachelor's degree were generally higher than employment rates for adults without a bachelor's degree. This pattern was consistently observed for young adults, 25- to 34-year-olds, and 25- to 64-year-olds. In 2012, for example, the employment rate for young adults was 87 percent for those with at least a bachelor's degree, compared with 75 percent for those whose educational attainment was some college, 64 percent for high school completers, and 48 percent for those who

did not complete high school. The employment rate for 25- to 34-year-olds was higher for those with at least a bachelor's degree (84 percent) than for those with some college education (73 percent), those who were high school completers (69 percent), and those who did not complete high school (56 percent). This pattern of higher employment rates corresponding with higher levels of educational attainment also generally held across males and females for each age group from 1990 to 2012 (see Digest of Education Statistics 2012, tables 432 and 433).



Figure 2. Employment to population ratios, by age group, educational attainment, and sex: 2012

¹ Includes equivalency credentials, such as the General Educational Development (GED) credential.

² Includes persons with no college degree as well as those with an associate's degree. NOTE: The employment to population ratio is defined as the proportion of the civilian population that is employed. Educational attainment refers to the

highest level of education achieved (i.e., less than high school completion, high school completion, some college, or a bacheved regree or higher). Data for 20- to 24-year-olds exclude persons enrolled in school.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Office of Employment and Unemployment Statistics, unpublished 2012 annual average data from the Current Population Survey (CPS). See *Digest of Education Statistics 2012*, tables 432 and 433.

Among young adults, males without a bachelor's degree generally had higher employment rates than their female counterparts between 1990 and 2012. In 2012, for example, the employment rate for young adults whose educational attainment was less than high school was 57 percent for males and 36 percent for females, and the employment rate for young adults whose educational attainment was high school completion was 68 percent for males and 59 percent for females. The employment rate for male young adults with some college education was 80 percent in 2012, while it was 71 percent for their female counterparts. In most years during the period, however, employment rates for female and male young adults who had at least a bachelor's degree were not measurably different. For 25- to 64-year-olds, as well as for its subset population of 25- to 34-year-olds, the employment rate for females was lower than that for males at each level of educational attainment between 1990 and 2012. For example, in 2012 the employment rate was 39 percent for female 25- to 34-year-olds who did not complete high school, compared with 70 percent for their male counterparts.

When there was a male-female gap in employment rates, it was generally wider for those who completed high school, as well as those who did not, than for those who attained at least a bachelor's degree. This pattern was observed for every age group examined between 1990 and 2012. For example, for 25- to 34-year-olds, the male-female gaps in 2012 were 31 percentage points for those who did not complete high school and 17 percentage points for high school completers, compared with a 9-percentage-point gap for those who had at least a bachelor's degree. For 25to 64-year-olds, the male-female gaps were 21 percentage points for those who did not complete high school and 13 percentage points for high school completers, while the gap was 10 percentage points for those who had at least a bachelor's degree.

During the most recent economic recession (as determined by the National Bureau of Economic Research to be the period beginning in December 2007 and continuing through June 2009, see <u>http://www.nber.org/cycles/</u> <u>sept2010.html</u>), employment rates generally declined across age groups and educational attainment levels. The magnitude of change in employment rates varied by sex and by educational attainment. In general, the recession had a less marked effect on the employment rate of males with at least a bachelor's degree than on the rate of males with less than a bachelor's. For females, the magnitude of change in the employment rate was not measurably different across educational levels. And although the

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economy was recovering in 2010, the employment rate for females, in general, did not change measurably from 2010 to 2012. Compared with the employment rate in 2008,

the employment rate in 2012 was either lower or not measurably different for both males and females across the age groups and educational achievement levels examined.





¹ Includes equivalency credentials, such as the General Educational Development (GED) credential

² Includes persons with no college degree as well as those with an associate's degree.

NOTE: The employment to population ratio is defined as the proportion of the civilian population that is employed. Educational attainment refers to the highest level of education achieved (i.e., less than high school completion, high school completion, some college, or a bachelor's degree or higher). Data for 20- to 24-year-olds exclude persons enrolled in school.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Office of Employment and Unemployment Statistics, unpublished 1990, 1995, 2000, and 2005 through 2012 annual average data from the Current Population Survey (CPS). See *Digest of Education Statistics 2012*, tables 432 and 433.

The employment rate for young adult male 20- to 24-yearolds was lower in 2010 than in 2008 at each level of educational attainment. However, from 2008 to 2010, the 6-percentage-point decrease (from 92 to 86 percent) for males who had at least a bachelor's degree was smaller than the 15-percentage-point decrease (from 68 to 53 percent) for males who did not complete high school. For female 20- to 24-year-olds, the employment rate declined from 2008 to 2010 for those with some college education (from 79 to 71 percent) and for high school completers (from 61 to 56 percent).

Though the economy was recovering from 2010 to 2012, the employment rate did not change measurably for either male or female 20- to 24-year-olds at any level of educational attainment except for the rate for males who had some college education (which increased from 75 percent in 2010 to 80 percent in 2012).

Over the entire 4-year period from 2008 to 2012, the employment rate decreased for male young adults who did not attain a bachelor's degree: For those who had some college education, the employment rate was 80 percent in 2012 vs. 85 percent in 2008; for high school completers, it was 68 percent in 2012 vs. 77 percent in 2008; and for those who did not complete high school, it was 57 percent in 2012 vs. 68 percent in 2008. The employment rate for young adult males with at least a bachelor's degree in 2012, however, was not measurably different from that in 2008. The 2012 employment rate for young adult females with some college education (71 percent) was lower than the corresponding 2008 employment rate (79 percent). However, employment rates in 2012 were not measurably different from those in 2008 for female young adults at any of the other three levels of educational attainment examined.

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Figure 4. Employment to population ratios of persons 25 to 64 years old, by sex and educational attainment: Selected years, 1990 through 2012

¹ Includes equivalency credentials, such as the General Educational Development (GED) credential.

² Includes persons with no college degree as well as those with an associate's degree.

NOTE: The employment to population ratio is defined as the proportion of the civilian population that is employed. Educational attainment refers to the highest level of education achieved (i.e., less than high school completion, high school completion, some college, or a bachelor's degree or higher). SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Office of Employment and Unemployment Statistics, unpublished 1990, 1995, 2000, and 2005 through 2012 annual average data from the Current Population Survey (CPS). See *Digest of Education Statistics 2012*, tables 432 and 433.

For 25- to 64-year-olds, male and female employment rates decreased from 2008 to 2010 at each level of educational attainment examined (see *Digest of Education Statistics 2012*, tables 432 and 433). In addition, the 3-percentage-point decrease (from 90 to 87 percent) for males with at least a bachelor's degree was smaller than the 6-percentage-point decrease (from 83 to 77 percent) for males with some college education and the 7-percentage-point decrease (from 78 percent to 72 percent) for male high school completers. Although the employment rate declined for females who did not complete high school (from 44 to 42 percent), female high school completers (from 65 to 62 percent), females with some college education (from 73 to 69 percent), and females with at least a bachelor's degree (from 79 to 77 percent) during this period, the magnitudes of decrease were not measurably different between these levels of educational attainment.

From 2010 to 2012, the employment rate did not change measurably, generally speaking, for either males or females at any of the levels of educational attainment examined, with the exception that the employment rate continued to decline for female high school completers (from 62 to 60 percent) and females with some college education (from 69 to 68 percent).

Over the entire 4-year period, employment rates for both male and female 25- to 64-year-olds were generally lower in 2012 than in 2008 at each level of educational attainment.

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¹ Includes equivalency credentials, such as the General Educational Development (GED) credential.

² Includes persons with no college degree as well as those with an associate's degree.

NOTE: The employment to population ratio is defined as the proportion of the civilian population that is employed. Educational attainment refers to the highest level of education achieved (i.e., less than high school completion, high school completion, some college, or a bachelor's degree or higher). SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Office of Employment and Unemployment Statistics, unpublished 1990, 1995, 2000, and 2005 through 2012 annual average data from the Current Population Survey (CPS). See *Digest of Education Statistics 2012*, tables 432 and 433.

Regarding the 25- to 34-year-old age group, male employment rates were lower in 2010 than in 2008 at each level of educational attainment. From 2008 to 2010, the employment rate decrease was 2 percentage points (from 92 to 89 percent) for males with at least a bachelor's degree, compared with 8 percentage points (from 86 to 79 percent) for males with some college education, 9 percentage points (from 82 to 73 percent) for male high school completers, and 7 percentage points (from 73 percent to 67 percent) for males who did not complete high school. The female employment rate in 2010 was lower than in 2008 for those with at least a bachelor's degree (80 vs. 83 percent) and for those whose educational attainment was some college (68 vs. 74 percent). Between

2010 and 2012, the employment rate did not measurably change for females at any level of educational attainment, and the employment rate only changed for males who were high school completers—their employment rate was higher in 2012 (76 percent) than in 2010 (73 percent). For both males and females, the 2012 employment rates remained lower than they were in 2008 at each level of educational attainment except for those who did not complete high school. For both males and females who did not complete high school, the seemingly lower employment rates in 2012 were not statistically different from the rates in 2008 due to relatively large sampling errors.

Reference tables: *Digest of Education Statistics 2012*, tables 431, 432, 433

Glossary: Bachelor's degree, Educational attainment, High school completer