



College-Educated Workers Now Produce More Than Half of the Nation's Annual Economic Value, According to New Georgetown University study

The findings contradict the fear that good manufacturing jobs of the past are being replaced with low-paid, dead-end service jobs

(Washington, D.C., April 13, 2015) – College-educated workers make up only 32 percent of the workforce but now produce more than 50 percent of the nation's economic output, up from 13 percent in 1967, according to a detailed historical analysis of industry data by the Georgetown University Center on Education and the Workforce.

The dramatic increase in the economic value generated by college-educated workers is directly linked to the rise of a college-educated service economy.

The Georgetown study finds that the mass production of standardized goods and services has been replaced by more complex consumer demands that include quality, variety, customization, convenience, production speed, innovation, and novelty. College-educated workers and flexible technologies have allowed the United States to achieve this rich mix of economic value at reasonable prices.

The study also provides an explanation for the collapse of high-wage manufacturing jobs that once offered opportunity to high school graduates and the rise of an even greater number of high-wage service jobs that require college degrees.

Since the end of World War II, the share of goods-producing jobs plummeted from 50 percent to less than 20 percent of all jobs while the overall economy added more than 80 million new jobs—meaning that the entire growth was due to new jobs in high-wage high-skill service industries such as finance, insurance, advertising, consulting, computers, education, and healthcare.

This transition from a goods-producing to a service-oriented economy would not have been possible without tremendous increases in manufacturing productivity. Output per person in manufacturing almost tripled from \$100,000 to \$300,000 in real terms, while manufacturing employment decreased from 40 percent to 10 percent of all jobs. In turn, manufacturing's productivity was driven by its better-educated workforce: the proportion of college-educated manufacturing workers grew from 20 percent to more than 50 percent.

While the share of jobs in goods-producing industries declined overall since 1967 in the U.S. workforce, the share of workers with a four-year college degree or more increased from 13 percent to 32 percent. Over 60 percent of the workforce now has at least some college education, up from just one-quarter of adults.

High-wage jobs for workers with no more than a high school education disappeared with the decline of manufacturing. During the same period the share of college jobs more than doubled and the college wage premium – the average salary of a college graduate compared to a high school graduate – went from 40 percent to 80 percent.

“We set out to solve an economic puzzle: How does this data showing a surge in high-skill, high-wage service jobs fit in with the popular perception of a declining manufacturing economy stricken with low-skill dead-end McJobs?” said Anthony P. Carnevale, the director of the Center and the report’s lead author. “The answer is the shift to the service economy is actually producing high-skill, high-wage employment.”

The study shows two main drivers in the shift to a high-wage service economy. First, we have shifted consumption from goods to services:

- In 1947, the basic necessities of food, drink, clothing and transportation accounted for 56 percent of consumer spending. By 2007, spending on these basic necessities dropped to just 27 percent of all consumers’ spending.
- Since 1947, service industries with a high concentration of college-educated workers – including finance and business services, travel and recreation, healthcare, and education – increased from 26 percent of consumption to 54 percent of consumption.

Second, we have changed how we produce what we consume:

- The value-added networks that produce basic commodities like food are a case in point: today, farmers account for only 5 percent of the value added in food production. Almost 20 percent of the value added in the food network comes from the bankers, insurance firms, advertisers, and other business services involved in bringing final food output to the table.

Furthermore, there has been a remarkable reversal in fortunes. “Manufacturing has been displaced by college-intensive business services as a source of economic value added,” said Stephen J. Rose, the report’s co-author.

- College-intensive business services have replaced manufacturing as the U.S. economy’s largest industry cluster. Business services include a wide variety of professional functions such as consulting, accounting, management, and legal services as well as clerical services and finance.
- In 1967, manufacturing was responsible for 31 percent of all value added in the economy and the business services sector accounted for just 12 percent; by 2007, manufacturing declined to 16 percent of all value added and business services jumped to 26 percent – the percentage decline in manufacturing almost exactly equaled the percentage rise in business services.

The executive summary and full report of *The Economy Goes to College: The Hidden Promise of Higher Education in the Postindustrial Service Economy* is available at <http://cew.georgetown.edu/report/economygoestocollege>

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