Polarizing affect

Occupational shift changes America’s workforce
The Leeds district of Kansas City, Mo., once bustled with activity. General Motors’ automobile assembly plant, the hub of the district, employed thousands, and businesses either related to the plant or that catered to its workers thrived in the area.

GM opened the plant in 1929 as two separate divisions, with GM controlled Fisher Body on one side and Chevrolet on the other.

“I started working there in 1964 for Fisher Body,” said Jerry Malone, 70, of Grandview, Mo., who worked at the plant for almost 25 years.

Malone started on the assembly line and continued working at the plant after Fisher Body and Chevrolet merged to form General Motors Assembly Division. Although he once took a lead position, he never went into management. The United Autoworkers Union was strong at Leeds, and Malone remained in good standing with the union throughout his career.

“It was a very good job,” he said. “By the time I retired, much of the job had changed though. Well, it had started changing in the early 1980s with automation.”

At its height, Leeds employed more than 4,500 people and produced 60 vehicles an hour on two production shifts. In the 1980s, GM assembly operations were reconfigured into the Chevrolet-Pontiac-GM Canada division and the Buick-Olds-Cadillac division with Leeds being placed in the latter. Employment decreased at Leeds as robots and computers replaced assembly-line workers.

“What an actual person had done, such as painting and other work, was replaced by automation,” Malone said.

Some of the workers who faced layoffs received training and stayed on to maintain and operate automation equipment, while others looked for work at auto plants or considered different occupations within manufacturing, Malone said.

GM closed the plant in 1988 after
Leeds lost its bid to produce the Chevrolet S-10 pickup truck. GM said the plant was landlocked and no longer could be expanded for future production models.

Malone was just short of making his full retirement when the plant closed. After taking time off, he finished his tenure for GM at a plant in Wichita Falls, Texas, and received his full pension.

“Not everyone was as fortunate as me,” he said.

A shift in occupations

Kansas City Fed economists Didem Tüzemen and Jonathan Willis say the labor force in the United States has shifted away from middle-skill occupations over the past three decades.

“Technological advancements and the widespread use of computers led to a rise in the relative demand for workers to fill high-skill occupations,” Tüzemen and Willis wrote in their new research, “The Vanishing Middle: Job Polarization and Workers’ Response to the Decline in Middle-Skill Jobs.” In addition, there has also been a shift toward low-skill occupations associated with the increase in employment in the service sector.

Economists call this shift in the composition of jobs away from middle-skill occupations toward high- and low-skill occupations “job polarization.”

Tüzemen and Willis used data from the Current Population Survey, also known as the household survey, to study the labor force from 1983 to 2012. They chose this period because job classifications matched in all the years studied, whereas previous job classifications in the

Shift in the American workforce

The early 1980s marked the beginning of a shift in America’s workforce as technology and computers replaced people in middle-skill occupations and created more high-skill occupations that required workers to obtain education beyond high school. There also was a slight increase in industries that require low-skill occupations, such as the service industry.

Note: Data are restricted to workers between the ages of 16 and 64, who are not self-employed and are not employed in military and agricultural occupations.
1960s and 1970s do not match current ones. They classify middle-skill jobs as occupations that require workers to perform routine tasks and can be replaced or enhanced by technology, occupations such as production, sales, office and administrative. High-skill jobs include occupations that involve nonroutine tasks and a high level of education, such as medicine, engineering, education, management, finance and legal. Low-skill jobs include occupations where technology cannot as easily replace humans, but the work doesn’t require a high level of education. These include food preparation, cleaning, protective services and other physical labor.

The economists say, based on industry patterns, occupational shifts within each industry, not one industry affecting the occupational make-up of another, caused job polarization. Like at the Leeds plant, middle-skill jobs within certain industries were replaced by technology. This occurred to middle-skill jobs in all industries, even to middle-skill jobs in industries with a large share of high-skill jobs.

Another reason for the occupational shift was the decline in labor unions and growth in the global marketplace. These led to increased trade flows and middle-skill jobs being sent overseas where labor costs are cheaper.

“The large shift in employment away from manufacturing reduced the overall employment share of workers in middle-skill occupations, but this was partially offset as workers moved to middle-skill occupations in expanding industries such as education and health,” the economists wrote.

But even with job polarization, the U.S. labor market grew nearly 50 percent in the three decades they studied.

Discovering a niche

Annette Bonacker-Hess of Paola, Kan., began her career as a data entry clerk in the early 1980s. She spent eight hours a day entering information into large computers. “That job probably doesn’t even exist anymore with all the changes in technology,” she said.

Bonacker-Hess has an outgoing personality and likes working with people. The isolation and repetitive work of the data entry job made her want more for her career. An acquaintance asked her one day to consider selling real estate.

“They thought with my personality and intellect that I could succeed in sales,” she said.

She quit her data entry job and worked as a commission-only real estate agent, which involved long hours and weekends. She eventually tried other sales ventures like selling weight-loss programs, which was an emerging industry in the late 1980s and early 1990s. By then, she had married, divorced and was raising her son as a single-mother.

Bonacker-Hess found her sales niche in the 1990s when she answered an ad for a newspaper advertising representative. At first, the advertising manager was skeptical, because Bonacker-Hess had never worked in advertising or publishing. Bonacker-Hess, however, made one of her best sales pitches that day and got the job.

“I loved it. I loved doing it,” she said. “It really fit with everything I wanted to do with my career.”

Bonacker-Hess worked more than 15 years in newspaper and magazine advertising.

“Anyone with intelligence and a good selling personality could work hard and be successful in sales,” she said. “Some of the most successful sales people I know never went to college.”

But as the new millennium approached, the industry began to shift.

“Here I was with a two-year college degree and a successful career in sales, but the new, young sales people being hired in the industry had four-year degrees,” she said.

When the publishing industry, especially newspapers, declined rapidly during the recession and into the current recovery,
Bonacker-Hess found herself without a job and unable to meet employers’ basic job requirements.

“Some employers wouldn't even interview me because I didn’t have a four-year degree in marketing or business,” she said. “With other employers, I’d get to the second or third interview, and they would hire someone with a four-year degree.”

**Reacting to the shift**

Research shows Bonacker-Hess and others like her are on the wrong side of the trend. Today’s workers are more educated than in previous years, and there is an increased demand for older workers with higher levels of education. This demand, heightened by the recession and current recovery, has caused many baby boomers to stay longer in the workforce. It’s also prompted many younger workers to seek low-skill jobs and to seek more education before entering the workforce on a permanent basis.

Although most of the jobs in the last three decades went toward high-skill occupations—increasing from 26 to 37 percent—the jobs market for low-skill occupations also grew, increasing by 3 percentage points. This increase surprised Tüzemen and Willis given the labor market shift to high-skill occupations.

Part of the explanation for this increase, the economists say, is a growth in the industries that employ low-skill occupations, such as the service industry. Another explanation is how male and female workers reacted to the decline of middle-skill jobs.

“Women tended to seek more education and go toward high-skill level jobs, where men split between low-skill level and high-level jobs,” Tüzemen said during a presentation of their research in March.

Although the economists did not explore

The labor force in the United States has shifted from middle-skill occupations to high-skill occupations over the past three decades. Much of that shift has occurred in manufacturing, where computerized machines now perform the work of several laborers, similar to this computerized cutting and die machine at SOR, Inc., in Lenexa, Kan.
all the reasons behind the gender difference in their current research, Willis’ earlier research explored how men and women view the jobs market and how the difference was heightened in the recent recession and recovery.

Willis concluded that men, on average, appear to have a stronger attachment to the workplace. He continued by pointing out that when faced with unemployment and falling wages, men tend to be willing to accept less desirable employment opportunities. Women, however, tend to seek more education, hold out for equal or better job opportunities, or leave the workforce.

**Finding success among change**

Bonacker-Hess’ mother had a long career in clerical work for the state of Illinois, and her father was a “blue-collar” worker who drove delivery trucks. Their work ethic affected how she views the jobs market. She knew her job in sales, where hard work and experience play a key role in being successful, was something technology couldn’t replace.

“My parents were successful, but it was a different time then,” she said. “I didn’t have money to go to college after I graduated high school. I went to college later and got my associates degree, but today that isn’t good enough, and that’s with me having 20-plus years in sales. I found myself fighting to find a job.”

Going back to school wasn’t an option. Besides, to Bonacker-Hess, her experience was the equivalent of having a Ph.D. in sales. So, she kept searching for opportunities and selling her best asset: her experience. And after a year and half of searching, she landed a job as a regional sales rep for a cleaning and maintenance company in Kansas.

“During this time, I began to see employers change how they viewed the sales industry,” she said. “They saw that people with experience still had a lot to offer.”

Although Bonacker-Hess found her way back into the workforce, Malone plans on staying retired.

He still looks fondly upon his profession. Many families built entire careers in the auto industry or similar manufacturing occupations. None of Malone’s three sons has followed in his footsteps and that’s fine with him.

“Although it was a very good job, I let them choose for themselves,” he said. “And given how that industry and the entire economy has changed, I’m glad they sought their own paths.”

Two of his sons had successful careers in the Air Force and went into various business ventures after leaving the military. His youngest son graduated college with a double major and works for a pharmaceutical company.

“What opportunities there were for me coming out of the Air Force, and with my level of education, in the early ’60s are no longer there for a majority of people,” he said. “I was very fortunate to have a long career in one industry.”

**Further Resources**

“THE VANISHING MIDDLE: JOB POLARIZATION AND WORKERS’ RESPONSE TO THE DECLINE IN MIDDLE-SKILL JOBS”

By Didem Tüzemen and Jonathan Willis

KansasCityFed.org/publications

**Comments/Questions** are welcome and should be sent to teneditors@kc.frb.org.