More than 8 million Americans lost their jobs in the Great Recession, exacerbating a steady 30-year decline in middle-skill jobs and an increase in higher-skill and lower-skill jobs. The result? A dysfunctional mismatch of occupational opportunities.

Workers who saw their middle-skill occupations replaced by technology or shipped overseas sought lower-skill jobs, pushing out other qualified candidates and first-time workers. Although the number of high-skill jobs increased, the number of applicants exceeded openings, pushing many jobseekers into the few available middle-skill and lower-skill jobs. Employers who were hiring during the recovery had their pick of candidates as dozens if not hundreds of people applied for one opening.

This environment compelled some workers to drop out of the labor force, creating what economists describe as a shadow labor force—unemployed workers who neither sought new employment nor collected unemployment benefits, and economists remain unsure when or if these workers will return to the labor force full time.

The segment of the labor force ages 16 to 25 was most affected by the recession. Economists measured this segment as having the highest unemployment rate in the labor force, and nearly half of all recent college graduates were unemployed or underemployed.

Recent research, however, shows the labor market is changing course.

**Improvement in the jobs market**

Federal Reserve Bank of Kansas City economists Didem Tüzemen and Jonathan Willis say the job market is showing signs of significant improvement, especially within the last year.

Twelve million jobs have been added to private payrolls since the Great Recession and the unemployment rate has fallen from 10 percent to 5.5 percent for May. The first part of the recovery, 2010-11, saw an increase in middle-skill jobs, while high-skill and low-skill jobs growth remained below pre-recession levels. Then, as the recovery continued, 2012-15, there was strong growth in high-skill level jobs and moderate growth in middle-skill jobs. Low-skill-level jobs have yet to reach pre-recession levels.

**THE RIGHT MATCH**

Workers are finding jobs that equal their education and training

LANDA WILLIAMS, founder and recruiter for LandaJob Marketing & Creative Talent in Kansas City.
Tüzemen and Willis used micro-level data from the Current Population Survey, also known as the household survey, to examine what types of jobs have been added during the recovery. They found “demand in the labor market over the last three years has been strongest for highly educated workers.” Employment for workers with a bachelor’s degree or higher has grown faster than workers with less education.

Still, overall employment is improving. Tüzemen and Willis found that over the past year “employment growth edged higher for workers with less than high school education and workers with some college education.” There are also signs of improvement in workers finding employment aligned with their training and education.

“I would agree with that assessment,” said Landa Williams, founder and recruiter for Landajob Marketing & Creative Talent.

Williams founded Status Pro, a Kansas City recruitment firm for the advertising industry, in 1985, and formed Landajob, a division of Status Pro, in 1992. Williams manages recruiting and business development for ad agencies, public relations firms, interactive and marketing-communications corporations.

When the recession took hold, companies cut back on training, marketing, advertising and communication campaigns. There was a lack of business confidence, similar to consumer confidence, Williams said.

“A lot of people got out of the industry. Some were lucky and had enough to retire on, but younger people went in different directions,” she said.

In the past couple of years, business confidence has been on the upswing.

“Companies are opening up and hiring,” Williams said. “Sometimes it’s been two steps forward and two steps back, but it’s definitely happening.”

The upswing, however, has created a conundrum within the marketing-communication industry.

“Now when clients come to us they want people with three to five years of experience.”

**AVERAGE MONTHLY EMPLOYMENT CHANGE**

in thousands

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than high school</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High school</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some college</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor’s or more</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sources: Current Population Survey; Didem Tüzemen and Jonathan Willis
Williams said. “Because they weren’t hiring and young people went elsewhere, we don’t have anyone in that range. We have a lot of beginners and one-year people, and people with lots of experience, but not three to five.”

The biggest improvement in the last year has been compensation.

“Compensation wasn’t moving for the longest time, at all. It wouldn’t budge,” Williams said. “We are now seeing salaries ticking up because there is some real competition to hire the rock stars.”

Many of the rock stars are recent college graduates.

“The millennials are something else,” she said. “They work hard and they’re serious, a lot more serious than our generation.”

Williams says the younger generation’s drive to succeed is a result of the recession and the amount of college debt students have when they enter the workforce full time. The latter part is a partial result of a 30-year labor market trend—many jobs in the market require a college degree.

Before the Great Recession

Tüzemen and Willis say the U.S. labor force in the past three decades has shifted away from middle-skill occupations. Technological advancements and the use of computers in the workplace have led to an increase in high-skill occupations. Similarly, the labor market has been affected by a shift toward low-skill occupations associated with growth in the service industry.

They call this shift “job polarization.”

Tüzemen and Willis used data from 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, unlike job classifications in the 1960s and 1970s.

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 easily replace humans, but the work doesn’t require a high level of education. These include food preparation, cleaning and other physical labor.

The economists say occupational shifts within each industry, not just one industry, caused job polarization. Reasons for the occupational shifts included a decline in labor unions and growth in the global marketplace. These influences and others increased trade flows and the shipment of middle-skill jobs 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 explain.

Despite job polarization, the U.S. labor market has grown nearly 50 percent in the last 30 years.
Recession temporarily halts shift

The Great Recession caused many companies to either downsize or close. Others merged or sent operations overseas to weather the crisis. With fewer jobs available, many workers found themselves on the wrong side of the labor trend.

Today’s workers tend to be more educated than in previous years. During the recession, there was an increased demand for older workers with higher levels of education. The demand prompted many baby boomers—the largest age segment of the labor force—to delay retirement and remain in their jobs longer. This delay reduced alternatives for younger workers and pushed them either into low-skill jobs or back in the classroom to obtain more education. Many experienced middle-skill workers were similarly affected—they lacked the qualifications to compete in the modern marketplace, causing them either to seek more training and education or accept jobs below their experience.

Another interesting trend emerged early in the recovery. Despite gains in the number of middle-skill jobs—the sector hit hardest in the recession—many workers found the labor market so unwelcoming that they remained unemployed and received extended unemployment benefits beyond normal cycles. Some older workers facing the prospect of unemployment took early retirement. Workers with full-time jobs stayed put and some even took pay cuts or moved into lower-paying positions within their companies to avoid being laid off and losing their company-provided benefits.

As the recovery continued, high-skill jobs began to show the most gains and the unemployment rate dropped. Low-skill occupations, however, remain stagnant and still struggle to reach pre-recession levels.

TAWANA FREESE was fortunate to stay with the same company throughout the financial crisis and recovery. She knew, however, that if she wanted to reach her career goals in today’s jobs market, she would need a college degree. She graduated this June.
Preparing for the future

Tawana Freese, 43, saw the writing on the wall more than five years ago. Her data management group was being eliminated and she had limited job alternatives.

“I just started knocking on every door I could to stay within that company,” she said.

Freese obtained a position as a project administrator for the company, which entailed more administrative duties than project management.

“I think I got the job because I was an internal candidate,” she said. “I had on-the-job experience and it was probably more cost-effective to hire someone from within than train someone new, but the position did require a college degree, and I didn’t have one.”

The position gave Freese security and the time to evaluate her future. She knew if she wanted to advance further into today’s labor environment and reach her goals, she would have to attend college.

“My biggest fear was I hadn’t been back to school in so many years,” she said.

She’s also a single mother—meaning her family would have to make sacrifices. Although her older son helped take care of their Olathe, Kan., household, she still felt the toll it took on the family.

“It’s tough being a single parent, working full time and trying to maintain a GPA,” she said.

Freese reprioritized over the last year—making more time for family and letting her GPA fall slightly—but everything paid off. She graduated in June from the University of Phoenix with a bachelor’s degree in psychology.

“It’s sad because there are a lot of talented people who can do the work, but they aren’t given the chance because they don’t have the degree,” she said. “With a college degree, I’m hoping my prospects are good.”

After working 11 years for her current employer, Freese plans to seek a position as a psychology assistant. And she doesn’t plan to stop there. She wants to earn a master’s degree in industrial organizational psychology and eventually move into counseling.

“But I’m going to wait until my daughter graduates high school before getting my master’s,” she said.

“I hope at my age I’m able to find something and build a decent nest egg,” she added.

Fortunately for Freese, the jobs market is much better than when she entered college.

According to Tüzemen and Willis, “employers continued to hire those with the greatest education levels for high-skill jobs;” however, workers with lower levels of education also have found opportunities in high-skill occupations.

Tüzemen and Willis’s research also found that workers with a bachelor’s degree no longer dominated growth in middle-skill jobs.

“In fact, workers with less than a high school education experienced the strongest growth in middle-skill jobs. Workers with a high school education shifted notably away from low-skill jobs toward middle- and high-skill jobs.”

KEVIN WRIGHT, EDITOR

FURTHER RESOURCES

“Opportunity Knocks: Improved Matching of Jobs and Workers”
By Didem Tüzemen and Jonathan Willis
www.KansasCityFed.org/publications/research/mb

COMMENTS/QUESTIONS are welcome and should be sent to teneditors@kc.frb.org.