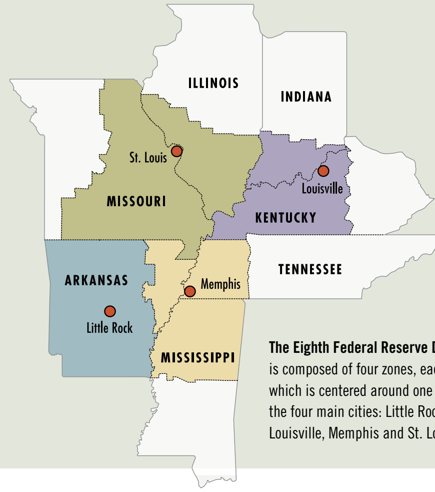

The Eighth Federal Reserve District is composed of four zones, each of which is centered around one of the four main cities: Little Rock, Louisville, Memphis and St. Louis.

As in the Nation, New Jobs in the District Are Concentrated in Low-Paying Industries

By Maximiliano Dvorkin and Hannah Shell

Millions of jobs were lost in the United States during the latest recession, and millions were created since its end. However, the majority of jobs added across the nation have been in low-paying industries. In a *Regional Economist* article earlier this year, authors Kevin Kliesen and Lowell Ricketts found that 61 percent of jobs added across the country between 2009 and late 2014 were in industries with a wage rate below the national median wage.[1]

For this essay, we investigated various employment trends in the Eighth District by low-paying and high-paying industry groups. We found that the total number of jobs added in the District was greater in low-paying industries than in high-paying industries, consistent with the previously mentioned study's findings about the nation. But, unlike in the national study, we found that jobs in low-paying industries in the District were growing at a faster *rate* than jobs in high-paying industries. Low-paying industries in the District also had higher rates of turnover and slower earnings growth than did high-paying industries in the District.

To tailor our data specifically to the District, we used county data from the Census Bureau's Quarterly Workforce Indicators and constructed various measures of earnings, employment and turnover for 20 industries from 2010 to 2013.[2] We then sorted each

Job and Earnings Growth Characteristics in the Eighth District, 2010-2013

	Employment Level 2010	Employment Change 2010-2013	Percent Change in Employment 2010-2013	Average Firm Job Growth	Average Turnover	YoY% Growth in Monthly Earnings	YoY% Growth in New Hires' Monthly Earnings
Frequency/Rate	*Level*	*3-Year Difference*	*3-Year % Change*	*Annual Average*	*Quarterly Average*	*Annual Average*	*Annual Average*
High-Paying Industries	**1,902,061**	**40,800**	**2.15%**	**1,056**	**7.41%**	**2.71%**	**2.39%**
Mining, Quarrying, and Oil and Gas Extraction	19,027	960	5.05	39	8.61	3.95	4.14
Utilities	37,646	286	0.76	18	2.99	2.17	2.03
Management of Companies and Enterprises	107,119	7,155	6.68	284	7.06	2.38	–0.73
Wholesale Trade	232,675	3,099	1.33	1,462	6.84	2.50	2.52
Professional, Scientific and Technical Services	201,309	9,983	4.96	2,006	9.20	4.06	4.71
Finance and Insurance	193,208	7,209	3.73	1,063	5.41	3.43	1.56
Manufacturing	556,834	11,353	2.04	2,528	5.68	2.91	1.76
Construction	226,783	(5,459)	–2.41	1,963	11.23	2.15	2.05
Transportation and Warehousing	243,002	10,494	4.32	1,797	9.70	2.23	2.32
Information	84,457	(4,281)	–5.07	(603)	7.34	1.26	3.50
Low-Paying Industries	**3,088,058**	**112,781**	**3.65%**	**2,054**	**11.00%**	**1.91%**	**2.33%**
Health Care and Social Assistance	761,860	32,835	4.31	4,005	8.40	1.46	1.28
Educational Services	453,265	9,167	2.02	(782)	5.78	1.03	2.44
Public Administration	212,308	(3,842)	–1.81	121	5.35	1.17	2.36
Agriculture, Forestry, Fishing and Hunting	22,929	1,029	4.49	281	11.56	2.73	3.23
Admin, Support, Waste Management/Remediation	299,212	39,542	13.22	6,276	17.97	1.39	2.71
Real Estate Rental and Leasing	65,857	1,972	2.99	381	9.68	3.03	3.86
Other Services	148,827	(4,266)	–2.87	1,181	9.89	2.42	2.40
Retail Trade	593,108	10,410	1.76	4,395	10.24	2.33	1.91
Arts, Entertainment and Recreation	77,421	3,221	4.16	983	14.69	1.74	1.32
Accommodation and Food Services	453,273	22,713	5.01	3,698	16.48	1.76	1.84

SOURCES: Authors' calculations and U.S. Census Bureau Quarterly Workforce Indicators. NOTES: The individual Industries in each of the two categories are listed from highest- to lowest-paying. Data are rounded.

industry into a "high-paying" group or "low-paying" group depending on whether the average monthly earnings of a worker in that industry were above or below the median earnings across all industries in the District. The table reports the average employment statistics for each group and for each individual industry.

Job Growth by Industry

Overall, employment in the District grew by about 150,000 jobs from 2010 to 2013; employment in the nation grew about 6.12 million over the same time period.[3] Similar to the nation, the number of jobs added in the District was more concentrated in low-paying industries than in high-paying industries. Almost 75 percent of jobs that were added in the District were in low-paying industries. The industries in the District that grew the most over the time period were administrative, support, and waste management and remediation services (ASWR); health care and social assistance; and accommodation and food services. These industries alone accounted for more than 90,000 of the jobs added in the District over the three-year period. (Kliesen and Ricketts found that national growth had been largely concentrated in similar industries, such as retail trade, education and health services, and leisure and hospitality.) The District's slowest-growing industries that still had positive growth rates were the mining, quarrying, oil and gas extraction (MQOG) and utilities industries. Combined, these industries added fewer than 1,300 jobs over the three years.

The rate of job growth in the District in low-paying industries also exceeded the rate of job growth in high-paying industries. Low-paying industries made up about 61 percent of total employment in the District in 2010. As Kliesen and Ricketts pointed out in their article, it makes sense that the absolute number of jobs added is greater in low-paying industries because those industries have a greater share of total employment. In the District, however, the rate of job growth in low-paying industries (3.65 percent) exceeded the rate in high-paying industries (2.15 percent).

High- and low-paying industries in the District not only differed in the number and rate of jobs they created, but also in the dynamics of job creation and destruction. The table shows that low-paying industries tended to have higher rates of turnover and firm job growth, in other words, higher rates of job creation and destruction. Turnover is defined as the number of new hires and separations as a percentage of average employment each quarter, and job growth is the number of jobs added at expanding firms in excess of the number of jobs lost at shrinking firms.

The average rate of turnover in low-paying industries was 11 percent of employment each quarter. In contrast, the rate of turnover in high-paying industries was only a bit more than 7 percent. This finding is consistent with the view that, all other things equal, workers find high-paying jobs more desirable and prefer not to leave them. The difference in jobs added between high-paying and low-paying industries is about 1,000 jobs per year, with the low-paying industries coming out on top.

Earnings Growth by Industry

Although low-paying industries created more jobs than high-paying industries, nominal earnings growth in high-paying industries exceeded earnings growth in low-paying industries. The average annual earnings growth of workers in high-paying industries was 2.71 percent over the period, while earnings in low-paying industries grew only 1.91 percent. The professional, scientific and technical services (PSTS) industry experienced the strongest earnings growth: 4.06 percent each year on average, nearly double the District's average of 2.11 percent. Employment in this industry grew by about 10,000 jobs over the three years (far below the 30,000-plus rates of several low-paying industries), and the rate of turnover remained below the low-paying industry average (9.2 percent vs. 11 percent). On net, firms in this industry added about 2,000 jobs each year.

Earnings growth was also strong in the MQOG and the finance and insurance industries, growing at average annual rates of 3.95 percent and 3.43 percent, respectively. Employment in MQOG grew by 960 jobs over the three years, and on average firms added about 39 jobs each year in excess of job destruction. The finance and insurance industry was growing at a pace closer to the PSTS industry, with employment growth at about 7,000 jobs and firm job growth at about 1,000 jobs. Turnover was again below the low-paying industry average, at about 9 percent of employment in MQOG and 5 percent in finance and insurance.

The difference in earnings growth between high-paying and low-paying industries was much smaller when only the earnings of new hires were considered. The average monthly earnings of newly hired employees in high-paying industries grew 2.39 percent per year over the period studied, only 0.06 percentage points above the growth rate in low-paying industries.[4] This relative equality in growth rates suggests that the disparity in earnings growth between high-paying and low-paying industries was largely driven by wage increases for existing workers, as opposed to higher starting wages.

In conclusion, the Eighth District recovery in employment since the end of the recession has been very heterogeneous, with employment growth more concentrated in low-paying industries than in high-paying industries. The discrepancy in growth rates in the District is different from the discrepancy in the nation, where Kliesen and Ricketts found that jobs in high-paying industries are growing at a faster rate than jobs in low-paying industries. Ω

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ENDNOTES

1 The authors of that earlier article noted that low-paying industries accounted for a greater share of total employment than did high-paying industries and that the percentage growth of jobs in high-paying industries actually exceeded that in low-paying industries. See Kliesen and Ricketts.
2 We chose this time period due to data limitations and to capture the progress of the indicators over the recovery from the 2007-09 recession.
3 National employment growth is calculated using average total nonfarm payrolls from the Bureau of Labor Statistics' Establishment Survey.
4 In this dataset, new hires are defined as workers who started a job that they had not held within the past year, and stayed for at least one quarter.

REFERENCE

Kliesen, Kevin L.; and Ricketts, Lowell R. "Faster Real GDP Growth during Recoveries Tends To Be Associated with Growth of Jobs in 'Low-Paying' Industries." The Federal Reserve Bank of St. Louis' *The Regional Economist,* January 2015, Vol. 23, No. 1. See www.stlouisfed.org/publications/regional-economist/january-2015/gdp-growth.