

Job Quality Calculation

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We measure the quality of net new jobs by comparing the average hourly wages in sectors that are expanding as a share of employment with those that are contracting.

For the calculation in our report on employment, we begin by averaging data for July, August, and September 2006 and those same months in the prior year. First, we calculate shares of employment of each industry as a fraction of total private employment for both periods (we exclude the government sector since the BLS does not provide the necessary wage data for this sector). Next, we difference these shares between the two time periods. Those industries that have increased their share of the total are called growing industries and those that have lost share, contracting industries.

We then sum these shares separately for expanders and contractors, and normalize both to 1, dividing each share change by the appropriate sum. Finally, we multiplied the base-period industry wage by the normalized share changes separately for expanding and contracting industries. Summing these values gives us the average hourly wage of these two groups. For example, the table shows this series of steps for the 23.8% differential given in our report:

Deriving Wage Differences between Expanding and Contracting Industries, 2005Q3 compared to 2006Q3

Expanding Sectors	Employment Shares		Change in Share	Normalized Share	Wages 2005-Q3	Wage times Normalized Share
	2005-Q3	2006-Q3				
Mining	0.529%	0.537%	0.008	4.7%	19.10	0.89
Construction of buildings	1.591%	1.598%	0.007	3.9%	19.18	0.75
Durable goods	2.810%	2.811%	0.002	0.9%	18.94	0.16
Transit and ground passenger transportation	0.363%	0.365%	0.002	1.2%	13.24	0.16
Insurance carriers and related activities	2.113%	2.118%	0.005	3.0%	20.66	0.63
Real estate	1.373%	1.380%	0.006	3.5%	14.60	0.52
Accounting and bookkeeping services	0.793%	0.795%	0.002	1.1%	18.11	0.20
Management and technical consulting services	0.798%	0.802%	0.004	2.3%	23.85	0.54
Administrative and support services	7.322%	7.356%	0.035	19.4%	12.88	2.50
Ambulatory health care services	4.816%	4.827%	0.010	5.9%	17.86	1.05
Hospitals	4.090%	4.092%	0.003	1.5%	21.44	0.33
Sum (including industries not shown)	50.335%	50.513%	0.002	100.0%		17.83
Contracting Sectors						
Food manufacturing	1.377%	1.368%	-0.009	24.4%	13.02	3.17
Semiconductors and electronic components	0.424%	0.422%	-0.001	3.9%	17.14	0.67
Textile mills	0.203%	0.199%	-0.003	9.2%	12.42	1.14
Petroleum and coal products	0.106%	0.106%	-0.001	1.9%	24.37	0.45
Nondurable goods	1.897%	1.895%	-0.003	7.5%	16.12	1.21
Telecommunications	0.933%	0.930%	-0.003	9.2%	22.26	2.05
Legal services	1.092%	1.085%	-0.007	18.9%	23.91	4.52
Food services and drinking places	8.560%	8.551%	-0.009	24.4%	7.99	1.95
Utilities	0.524%	0.524%	0.000	0.7%	26.89	0.19
Sum (including industries not shown)	49.665%	49.487%	-0.002	100.0%		14.41
Percent difference, expanders over contractors:						23.8%

Source: EPI Analysis of BLS Establishment data.

The expanding sectors are given in the top panel and contracting sectors in the bottom. To go through one example of the calculation, food services was 8.560% of total employment in the base period, while it shrunk to 8.551% in the current period, for a change of -0.009%. Normalized, this sector gets a weight of 24.4%.

In the last column, we multiply this weight by the average wage from the base period in food services (\$7.99), and get the food services' contribution to the sum for contracting sectors. When these changes are summed over all contracting industries, we derive an average wage for contracting industries of \$14.41. Doing the same exercise for each of the expanding industries (those with gains in share), we find the average wage over these industries to be \$17.83, 23.8% higher than the wage of the contracting industries.