

A Year of Unbalanced Growth: Industries, Wages, and the First 12 Months of Job Growth After the Great Recession

In this data brief, we draw on recent revisions to employment data released by the Bureau of Labor Statistics in order to assess job loss and job growth trends during and after the Great Recession, and compare those trends to the 2001 recession. We pay particular attention to the *distribution* of growth during the past year – that is, the types of industries that grew (and that didn't), and the wages they pay.

The backdrop to this report is an economy that is still facing a significant jobs deficit. During the Great Recession, the US lost more than 8.84 million private sector jobs, and to date has only managed to reduce that deficit by 1.26 million. Fully 13.9 million workers are still unemployed, nearly half of them for more than six months. Job creation, then, is still an urgent and immediate need for our economy.

At the same time, given that the last 12 months saw a net gain of more than a million jobs, it is important to begin to track the emerging recovery. We find the following:

In the private sector, there is a striking imbalance between where the recession's job losses occurred, and where the growth of the past 12 months was concentrated:

- ❑ Lower-wage industries constituted 23 percent of job loss, but fully 49 percent of recent growth
- ❑ Mid-wage industries constituted 36 percent of job loss, and 37 percent of recent growth
- ❑ Higher-wage industries constituted 40 percent of job loss, but only 14 percent of recent growth

The current recovery looks worse than the "jobless" recovery of the 2001 recession, on several fronts:

- ❑ After a year of positive job growth, the private sector after the 2001 recession had recovered almost half (47 percent) of the jobs it had lost. By contrast, to date the private sector has recovered only 14 percent of the jobs it lost during 2008 and 2009.
- ❑ The early job growth following the 2001 recession was more balanced than the early job growth following the 2008 recession, with significantly more growth in higher-wage industries.

Some of these trends are specific to the causes of the Great Recession (the collapse of the housing bubble and the financial crash). Others reflect long-standing shifts in the economy (such as the overall decline of manufacturing), as well as standard cyclical behavior (such as the surge in temporary jobs early in recoveries). A sustained analysis of the dynamics driving core sectors of the economy will be critical in the months and years ahead.

In short, it is too early to predict whether the pattern of unbalanced, bottom-heavy growth will continue. **But these findings do suggest that for unemployed workers, as well as for those seeking to move up in the labor market or entering it for the first time, the *current* distribution of job opportunities has deteriorated, compared to before the recession.**

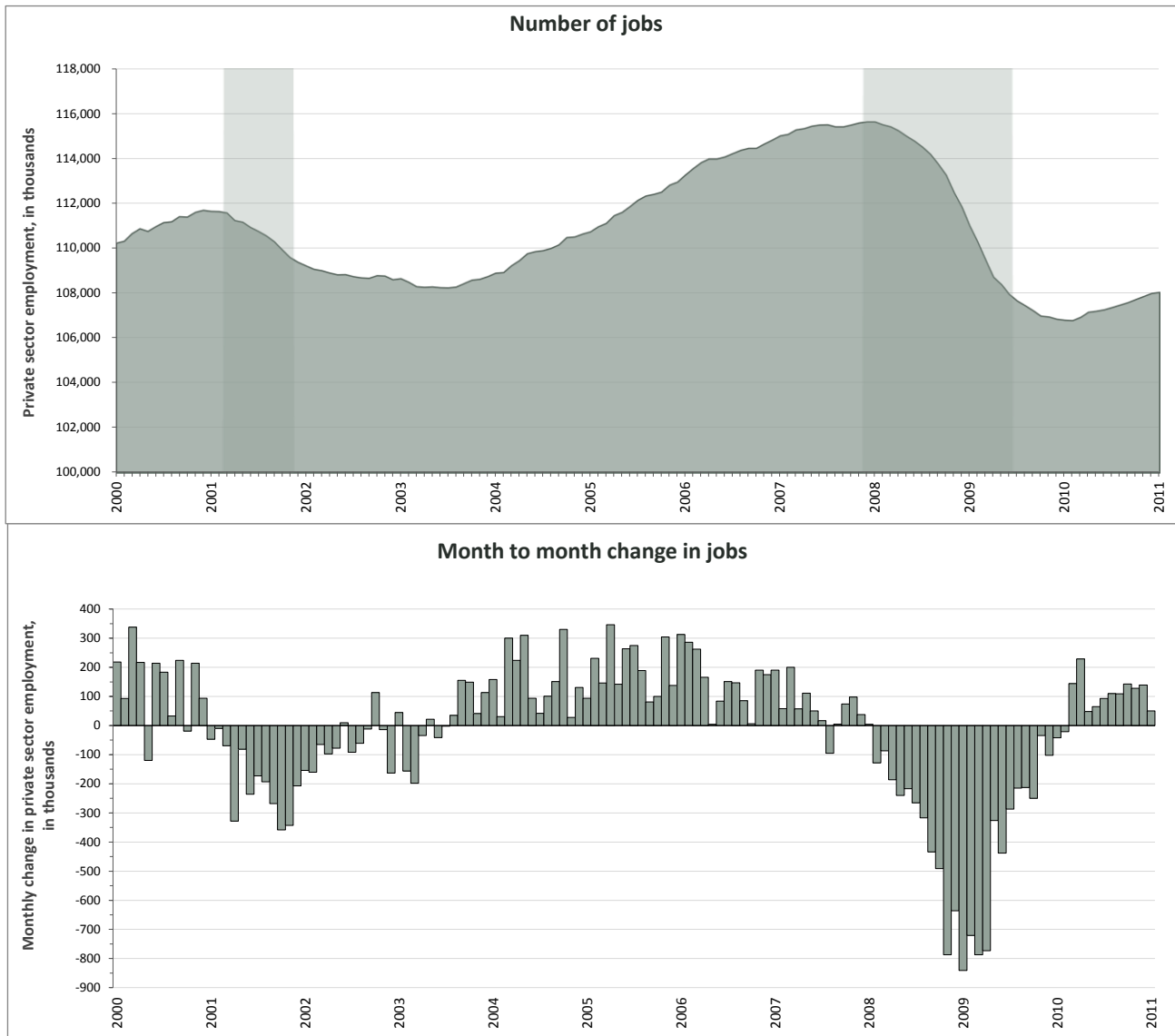
A Brief Review of the Great Recession

This report focuses on trends in the private sector, which during the past year has been the sole generator of net job growth, and in general is the engine of the US economy.

- ❑ Overall, the 2008 recession saw a net loss of 8.84 million jobs in the private sector (calculated from peak employment in January 2008 to the low of February 2010).
- ❑ During the last 12 months, the private sector saw a net gain of 1.26 million jobs (February 2010 through January 2011). Note that this was much better than the public sector, which lost almost a quarter of a million jobs during the past year due to cuts in state and especially local budgets.

But as Figure 1 below makes clear, this early growth has not been nearly enough. Current private sector job levels are still 6.6 percent below pre-recession levels – and the labor force has grown during this time period, with millions of new workers entering the job market, making the real jobs deficit even bigger.

Figure 1. Private Sector Employment, January 2000 to January 2011



Source: NELP analysis of Bureau of Labor Statistics data, see Appendix A for details. Shaded bars represent official recession dates.

A Closer Look at How the Last Year of Job Growth Was Distributed

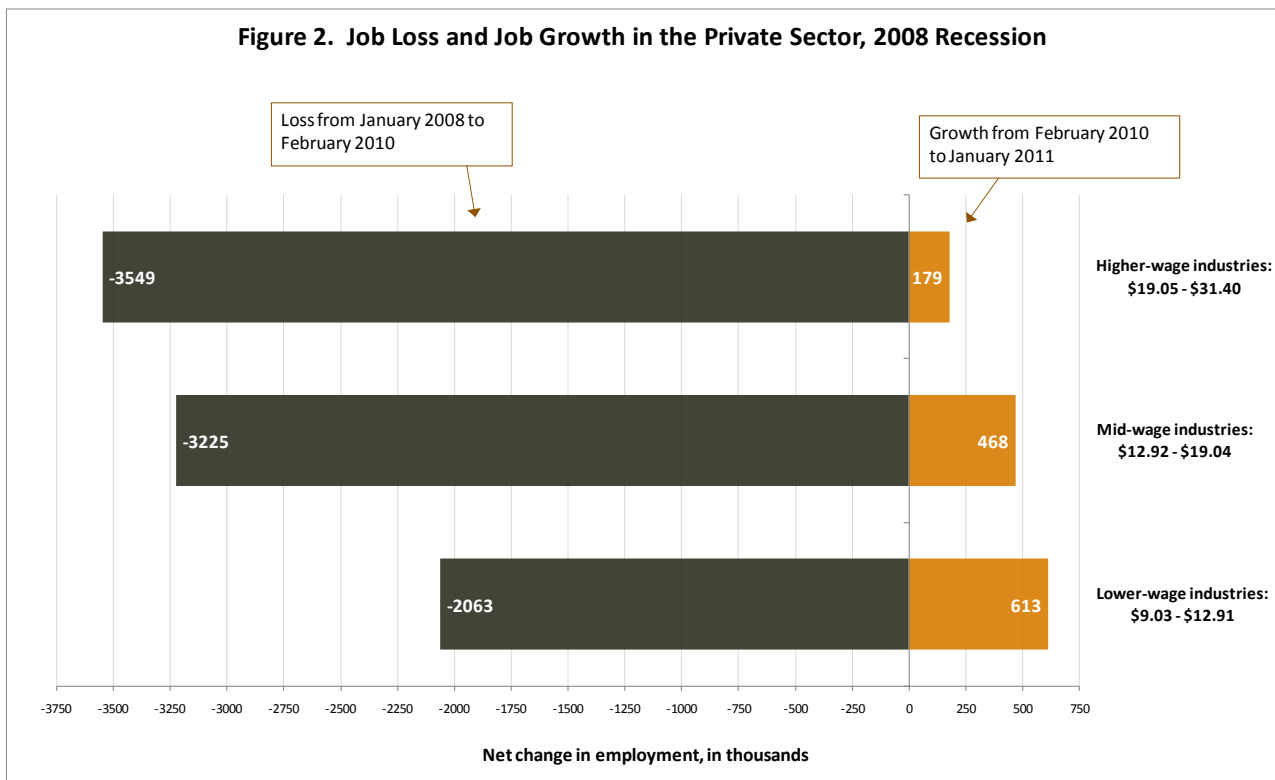
While our economy continues to face a significant jobs deficit, it is important to begin to track which industries are coming back – and the wages they pay. In order to answer this question, we analyzed 82 detailed industries and created three groups based on their median wages: lower-wage, mid-wage, and higher-wage industries. We then tracked the job losses and job growth of each group. (See Appendix A for details on the method and Appendix B for the list of 82 industries.)

Figure 2 shows a striking imbalance between where the recession’s job losses occurred, and where the growth of the past 12 months was concentrated. Job losses were skewed toward mid- and especially higher-wage industries, whereas during the past 12 months, job growth was skewed toward mid- and especially lower-wage industries. Specifically:

- ❑ Lower-wage industries constituted 23 percent of job loss, but fully 49 percent of recent growth
- ❑ Mid-wage industries constituted 36 percent of job loss, and 37 percent of recent growth
- ❑ Higher-wage industries constituted 40 percent of job loss, but only 14 percent of recent growth

This pattern of unbalanced growth was already apparent in an [earlier analysis](#) conducted by NELP in August 2010, although at the level of detailed industries, some trends have changed. For example, the professional, scientific and technical services sector was still losing jobs last August, but since then has plateaued and is slowly beginning to add jobs; on the other hand, the losses in construction now look even deeper than they did a half a year ago. (It should be noted, however, that direct comparisons to our previous report are made difficult by BLS’s annual benchmark revisions).

Clearly it is too early in the recovery to predict whether these trends will continue. But these findings do suggest that for unemployed workers, as well as for those seeking to move up in the labor market or entering it for the first time, the *current* distribution of job opportunities has deteriorated, compared to before the recession.



Source: NELP analysis of Bureau of Labor Statistics data, see Appendices A and B for details; wages are in 2010 dollars.

Comparing the 2008 Recession to the 2001 Recession

The period after the 2001 recession was dubbed a “jobless” recovery because of its lackluster growth – but the current recovery looks far worse, on several fronts.

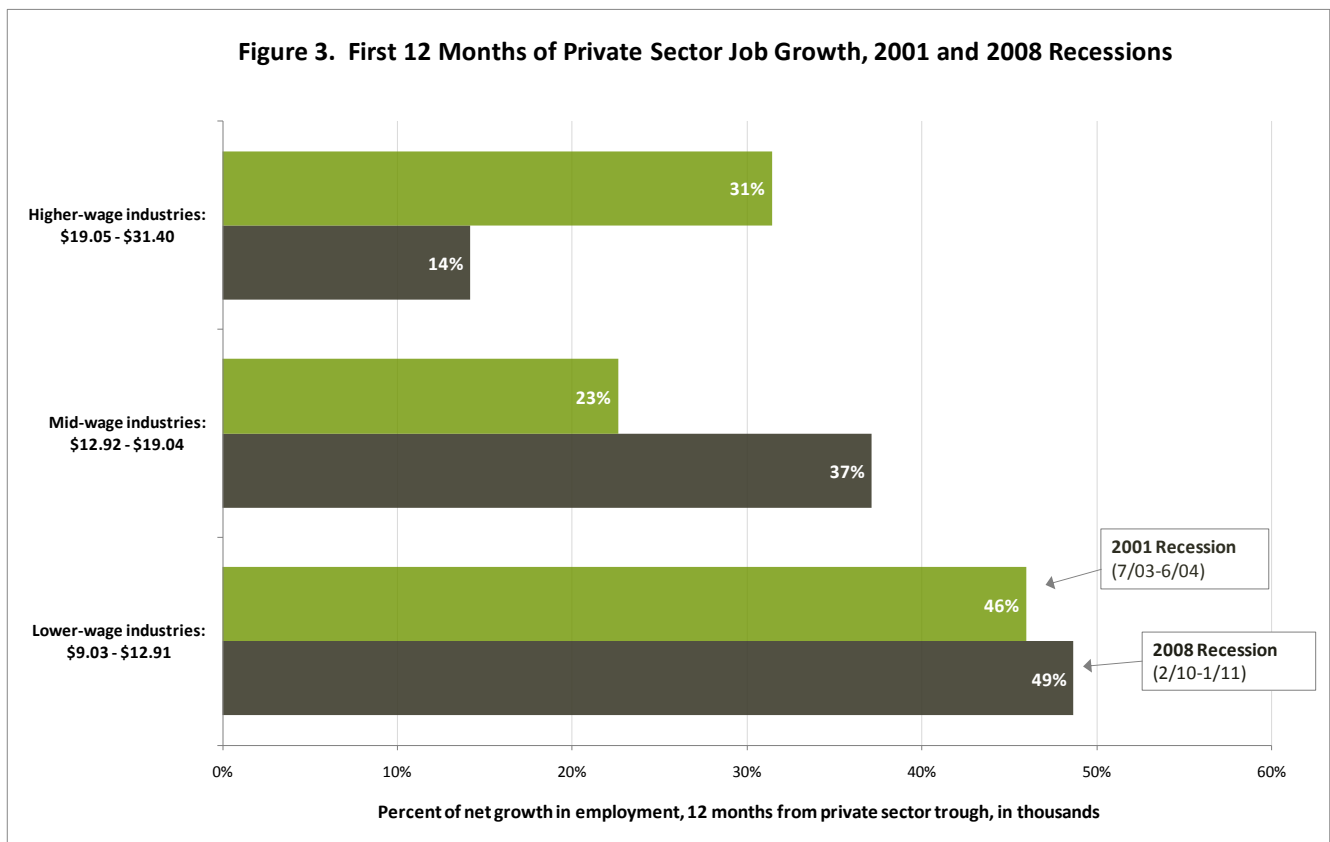
First, in terms of the rate of overall job growth:

- ❑ Following the 2001 recession, after a year’s worth of job growth, the private sector had recovered almost half (47 percent) of the jobs it had lost.
- ❑ By contrast, after a year’s worth of job growth, the private sector has to date recovered only 14 percent of the jobs that it lost during the 2008 recession.

Second, as shown below, the early job growth following the 2001 recession was more balanced than the early job growth following the 2008 recession.

- ❑ In the 2001 recession, higher-wage industries constituted almost a third (31 percent) of first year growth.
- ❑ In the 2008 recession, higher-wage industries constituted only 14 percent of first year growth.

Again, it is too early to judge whether the current recovery will continue to lag behind the 2001 recovery both in the rate and distribution of job growth. But the comparison does suggest that a sustained analysis of the dynamics driving core sectors of the economy will be important in the months and years ahead.



Source: NELP analysis of Bureau of Labor Statistics data, see Appendices A and B for details; wages are in 2010 dollars.

Understanding Unbalanced Growth: Industry Highlights

Some of the current growth shortfall in higher-wage industries is due to the specific drivers of the Great Recession – the collapse of the housing bubble and the financial crash. But we are also seeing the impact of long-term trends, such as the continued shrinking of manufacturing (both durable and nondurable) and telecommunications. On the growth front, some of the trends are typical of early recoveries (such as the high growth rate of temporary jobs), as well as cyclical industries coming back with the growth in demand (such as retail and restaurants), and steady gains in industries that are relatively immune from recessions (such as health care, education and social services).

What follows is a quick snapshot of major loss and growth industries; see Table 1 for more detail:

The Losers

- ❑ **Construction** constituted 38% of employment losses during the last year, largely in residential specialty trade contractors, and some in construction of buildings – clearly the impact of the collapse of the housing bubble, resulting in the sector being about three quarters of the size it was before the recession. Related is the continued decline of the **real estate and rental and leasing** industry, which constituted 14% of losses during the last year.
- ❑ **Finance and insurance** constituted 10% of losses during the last year, largely among insurance carriers and related activities. Other industries in this sector, such as securities, banks, and funds and trusts, were effectively at zero growth, or just barely added jobs. Currently, this sector is only back to 2000 employment levels - the Great Recession effectively erased a decade's worth of growth.
- ❑ **Non-durable manufacturing** constituted 19% of employment losses in the last year, reflecting a long-term shrinking of this sector, largely in printing and chemicals, and also petroleum and food manufacturing.
- ❑ **Information** constituted 16% of losses during the past year, reflecting a continued long-term decline in employment that pre-dates the recession and that has largely been driven by a shrinking of telecommunications (automation and the shift to wireless), and to some extent, data processing and hosting services.

The Gainers

- ❑ **Administrative and support and waste management and remediation services** constituted 21% of growth during the past year, almost all of which came from rapid hiring by the temp industry.
- ❑ **Durable manufacturing** constituted 13% of employment growth during the past year, largely in auto manufacturing, fabricated metal products, and machinery. Analysts credit this growth with companies ramping up again after extreme downsizing, and to the auto bailout. However, current employment is still 17% below its pre-recession peak.
- ❑ **Ambulatory health care services** constituted 10% of growth during the past year, driven largely by home health care services, doctor's offices and outpatient clinics. Other health-related sectors also saw steady growth, including nursing and residential care, social assistance, and hospitals – all of which are now already above pre-recession employment levels and are expected to maintain steady growth in the future.
- ❑ **Retail trade** constituted 6% of growth during the past year, and **food services and drinking places** constituted another 7% (largely restaurants and food services, especially fast food). Both are large, consumption-driven sectors that have seen a decent rebound during the past year, but that are still below pre-recession levels in employment.
- ❑ **Other services** constituted 7% of growth, much of which came from membership associations and organizations, and to a lesser degree, repair and maintenance services.

**Table 1. Net Employment Changes in Private Sector Industries, January 2008 – January 2011
(Ranked by Change in Last 12 Months)**

	Employment change 2/10-1/11 (in thousands)	Employment change 1/08-2/10 (in thousands)	Current employment (1/11) (in thousands)	Current employment, relative to peak (%)	Median industry hourly wage (2010 dollars)
<i>Net growth industries: February 2010 – January 2011</i>					
Administrative and support and waste management and remediation services	304	-1050	7583	-9.0	12.91
Durable manufacturing	195	-1703	7189	-17.3	19.76
Ambulatory health care services	149	337	6059	8.7	17.64
Other services	107	-203	5424	-1.7	13.50
Food services and drinking places	102	-356	9402	-2.6	9.03
Retail trade	88	-1189	14471	-7.1	10.94
Transportation and warehousing	86	-408	4229	-7.1	18.12
Social assistance	71	112	2664	7.4	11.69
Nursing and residential care facilities	61	111	3164	5.8	12.35
Mining and logging	60	-74	732	-1.9	21.29
Professional, scientific and technical services	60	-402	7474	-4.4	27.19
Educational services	53	134	3171	6.2	20.56
Wholesale trade	46	-591	5490	-9.0	18.65
Hospitals	34	103	4709	3.0	23.12
Accommodation	23	-153	1761	-6.9	10.68
Management of companies and enterprises	21	-50	1873	-1.5	26.79
Arts, entertainment and recreation	6	-99	1900	-4.7	11.52
<i>Net loss Industries: February 2010 – January 2011</i>					
Utilities	-6	-2	549	-1.3	29.15
Finance and insurance	-22	-358	5684	-6.3	20.79
Real estate and rental and leasing	-29	-203	1923	-10.8	15.25
Information	-33	-292	2698	-10.8	24.41
Non-durable manufacturing	-40	-563	4428	-12.0	16.57
Construction	-78	-1939	5455	-27.0	19.48
Total	1258	-8838	108030	-6.6	16.81

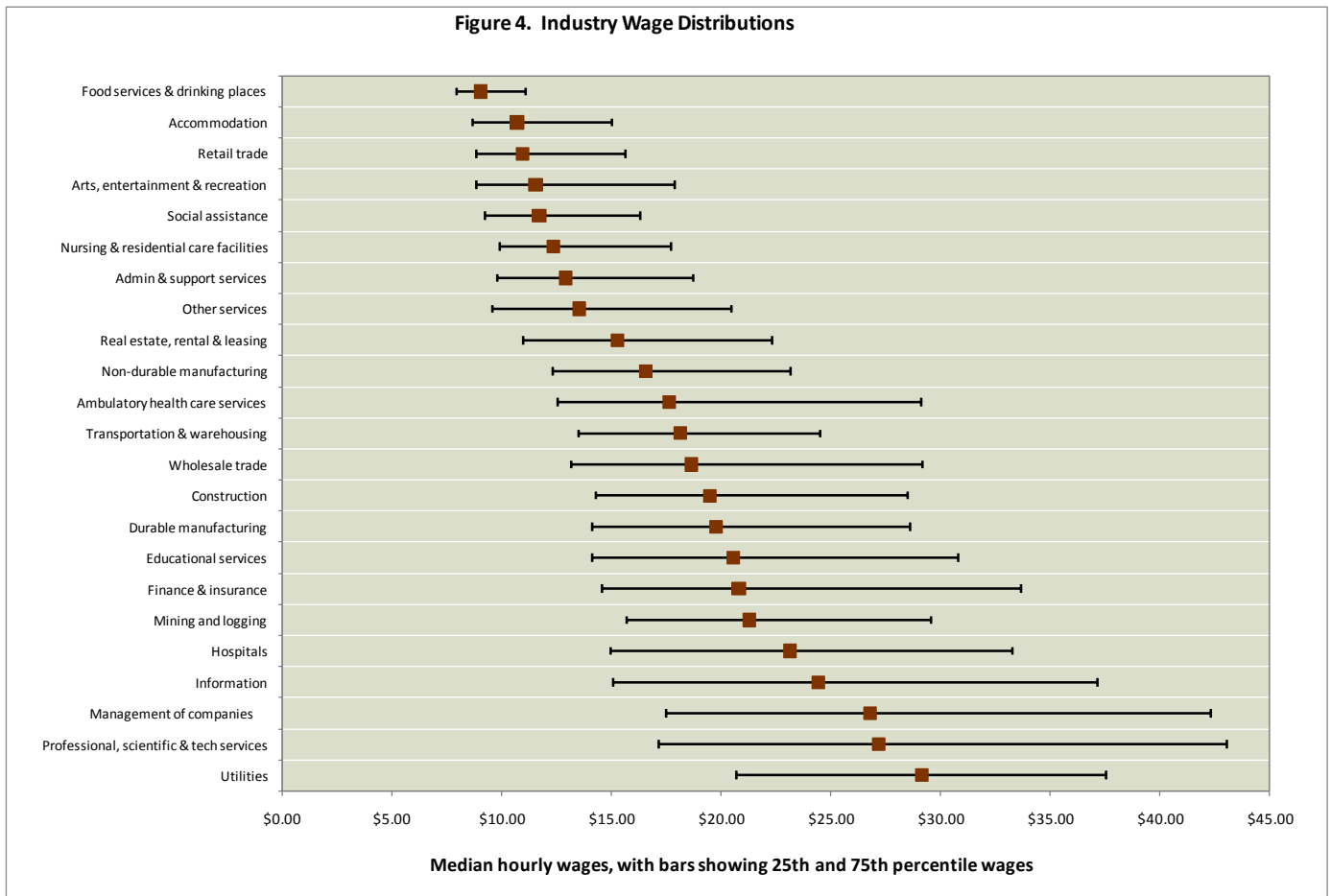
Source: National Employment Law Project analysis of Bureau of Labor Statistics data, see Appendix A for details.

What Can Industries Tell Us About Which Jobs Are Growing?

This report has analyzed job growth trends using industries as the unit of analysis, with particular attention to their median wages. Understanding industries is a critical task because they constitute the fundamental building blocks of our economy and determine its strength, long-term growth and international competitiveness.

Industries can also give us a rough window on the types of jobs being created in our economy – but it is important to understand that industries are not the same thing as occupations. Any given industry contains a wide range of occupations that can pay very different wages. For example, a high-wage industry such as banking employs both high-level managers earning hundreds of thousands a year as well as bank tellers earning just \$25,000 a year. On the other hand, a low-wage industry such as retail employs both cashiers making \$8.50 an hour as well as computer network administrators making a living wage. However, industries do not contain the same mix of occupations, in the same proportions, and as a result, their wage distributions differ significantly (for example, the majority of retail workers are front-line workers with mediocre wages).

To illustrate this point, Figure 4 gives a flavor of the wage distributions of the aggregate industries that we analyzed in Table 1. Specifically, we plot the 25th, 50th (the median), and 75th percentile wage for each industry, a commonly used set of measures. The figure makes clear that an industry’s median wage does give a rough indicator of the distribution of job opportunities available, and that it can be useful to analyze job growth trends for lower-, mid-, and higher-wage industries. (NELP plans to analyze more detailed occupation-based data later this year.)



Source: National Employment Law Project analysis of Bureau of Labor Statistics data, see Appendix A for details, wages in 2010 dollars.

This Data Brief was prepared by Annette Bernhardt and Christine Riordan. A special thanks to John Schmitt and Laura Dresser for their generous reviews and feedback, and to Rose Batt, Jeffrey Keefe, Dan Luria, Marc Scott, Eileen Appelbaum and our NELP colleagues for their advice on particular industries and analysis methods.

Appendix A: Data and Methods

The analyses presented in this Data Brief draw on two sources of Bureau of Labor Statistics data:

1. Seasonally-adjusted monthly payroll employment data for private sector industries from the [Current Employment Statistics \(CES\)](#) survey, at various levels of industry aggregation. We incorporate BLS's recently-released [annual benchmark revisions](#) to its establishment survey data.
2. Annual occupational wage and employment data at the NAICS industry level from the [Occupational Employment Statistics \(OES\)](#) survey, from 5/2009 (the most current data available; wages were inflated to 12/2010 dollars using the [CPI-U](#)).

The core of the analysis consists of linking the two series: that is, matching OES hourly wage data at various levels of NAICS industry codes with CES industry employment data. We use OES wage data rather than the average wage series in the CES survey for several reasons. OES data provide median wage estimates, which are preferable to average wages; the latter are often distorted by the presence of high-wage occupations in an industry, and, the extent of that distortion varies significantly by industry. Median wages provide a more consistent metric that can be reliably compared across industries. [OES wage estimates](#) are also more precise, because they are based on employers' reports of wages/earnings for specific occupations in their establishment, compared with [CES wage estimates](#), which are based on dividing total establishment payroll by total hours, a rougher measure.

There are several industries that required customized matching. For the educational services (NAICS 611) and hospitals (NAICS 622) industries, we used supplementary [OES data for privately-owned establishments](#) only, in order to match the CES definitions of those industries, which only include private-sector establishments. For the transportation and warehousing industry, we removed the sub-industry of postal service (NAICS 491) from the OES estimates in order to generate a private sector estimate for the industry. For five aggregate industries, OES median wages were not available; we imputed them with weighted averages of median wages from sub-industries: mining and logging; durable manufacturing; nondurable manufacturing; transportation and warehousing; and health care.

For the analyses in Table 1, we also disaggregate several major sectors whose size and diversity in sub-industries warrant more detail: health care (split into its three main subsectors), accommodation and food services (split into its two main subsectors), and manufacturing (split into its two main subsectors).

The analysis in Figure 2 was constructed as follows. Using 82 disaggregated industries for which seasonally-adjusted monthly employment data are available as the unit of analysis, we ordered industry median wages from lowest to highest, weighted by industry employment in 1/2008. The logic of this analysis is to form industry thirds at the peak employment month, and then to track employment changes in those thirds during the ensuing periods of net employment loss and net employment growth. The analysis in Figure 3 continues with this logic. Using the same categorization of detailed industries into thirds, we compute net job gains during the first 12 months of growth after the 2001 recession, and compare it to the 2008 recession; we present the job growth in percentage terms, in order to form a common metric across the two recessions.

Finally, we should note that the analyses in this data brief examine net employment changes, which for our purposes is the relevant metric; we want to understand which industries are showing absolute job growth or job losses in the economy. This is different than looking at the number of job openings at any given point in time, which is a related but separate measure. The number of job openings in an industry does not necessarily translate into net job growth because some portion of job openings is simply due to turnover in existing jobs.

Appendix B: Net Employment Changes and Wages, Detailed Industries, January 2008 – January 2011

		Median hourly wage, 2010 dollars	Net employment change 1/2008-2/2010	Net employment change 2/2010-1/2011	Current employment, as % of peak employment
Mining & logging	Logging	\$16.35	-10	-1	-18.7
	Mining	\$21.67	-64	61	-0.3
Construction	Construction of buildings	\$20.61	-488	-26	-29.8
	Heavy and civil engineering construction	\$19.75	-191	15	-17.6
	Specialty trade contractors	\$19.07	-1260	-66	-27.9
Durable Manufacturing	Wood products	\$14.23	-149	0	-30.4
	Nonmetallic mineral products	\$16.82	-115	-3	-24.1
	Primary metals	\$18.67	-100	19	-18.1
	Fabricated metal products	\$17.15	-302	72	-14.8
	Machinery	\$19.08	-211	42	-14.3
	Computer and electronic products	\$27.06	-165	22	-11.3
	Electrical equipment and appliances	\$17.62	-72	14	-13.5
	Transportation equipment	\$22.61	-366	33	-19.8
	Furniture and related products	\$14.81	-152	-8	-31.1
	Miscellaneous manufacturing	\$16.79	-71	5	-10.3
Nondurable Manufacturing	Food manufacturing	\$13.26	-44	-6	-3.3
	Beverages and tobacco products	\$17.45	-15	-2	-8.6
	Textile mills	\$13.68	-42	-1	-26.2
	Textile product mills	\$13.07	-32	-5	-23.9
	Apparel	\$11.03	-46	-2	-22.9
	Leather and allied products	\$12.61	-6	0	-18.5
	Paper and paper products	\$18.67	-55	-2	-12.5
	Printing and related support activities	\$16.80	-121	-20	-23.0
	Petroleum and coal products	\$27.42	-2	-6	-7.1
	Chemicals	\$22.69	-67	-14	-9.4
	Plastics and rubber products	\$15.53	-133	16	-15.6
Wholesale trade	Durable goods	\$19.04	-401	30	-11.9
	Nondurable goods	\$17.13	-144	9	-6.5
	Electronic markets and brokers	\$21.84	-46	8	-4.5
Retail trade	Motor vehicle and parts dealers	\$15.41	-289	37	-13.3
	Furniture and home furnishings stores	\$13.32	-126	-2	-22.8
	Electronics and appliance stores	\$13.56	-57	10	-8.7
	Building material and garden supply stores	\$13.17	-141	-19	-12.5
	Food and beverage stores	\$10.01	-63	5	-2.0
	Health and personal care stores	\$12.44	-33	-9	-4.1
	Gasoline stations	\$ 9.11	-39	0	-4.6
	Clothing and clothing accessories stores	\$ 9.89	-142	65	-5.1
	Sporting goods, book & music stores	\$ 9.91	-60	-5	-9.8
	General merchandise stores	\$ 9.84	-110	18	-3.0
	Miscellaneous store retailers	\$10.28	-98	-12	-12.8
Nonstore retailers	\$15.08	-30	0	-6.8	

Transportation and warehousing	Air transportation	\$21.68	-38	3	-6.9
	Rail transportation	\$24.86	-21	9	-5.1
	Water transportation	\$22.25	-6	3	-3.4
	Truck transportation	\$18.67	-181	24	-11.1
	Transit & ground passenger transportation	\$13.73	1	25	6.1
	Pipeline transportation	\$28.65	3	-1	5.2
	Scenic and sightseeing transportation	\$13.89	-2	0	-8.2
	Support activities for transportation	\$17.68	-54	9	-7.6
	Couriers and messengers	\$17.21	-63	7	-9.5
	Warehousing and storage	\$15.33	-49	7	-6.2
Utilities	Utilities	\$29.15	-2	-6	-1.3
Information	Publishing industries, except Internet	\$23.71	-133	-9	-15.8
	Motion picture & sound recording industries	\$17.88	-7	10	0.8
	Broadcasting, except Internet	\$21.07	-25	1	-7.5
	Telecommunications	\$26.62	-113	-40	-14.8
	Data processing, hosting & related services	\$26.73	-20	-6	-9.8
	Other information services	\$27.41	7	10	12.3
Finance and real estate	Monetary authorities - central bank	\$26.64	-1	0	-4.1
	Credit intermediation and related activities	\$17.63	-234	2	-8.4
	Securities, commodity contracts, investments	\$31.40	-62	7	-6.4
	Insurance carriers and related activities	\$22.39	-57	-31	-3.8
	Funds, trusts, and other financial vehicles	\$25.39	-3	0	-2.8
	Real estate	\$15.84	-84	-21	-7.1
	Rental and leasing services	\$13.49	-116	-8	-19.5
	Lessors of nonfinancial intangible assets	\$23.55	-3	0	-10.2
Professional and business services	Professional, scientific & technical services	\$27.19	-402	60	-4.4
	Management of companies & enterprises	\$26.79	-50	21	-1.5
	Administrative and support and waste management and remediation services	\$12.91	-1050	304	-9.0
Education and health services	Educational services	\$20.56	134	53	6.2
	Ambulatory health care services	\$17.64	337	149	8.7
	Hospitals	\$23.12	103	34	3.0
	Nursing and residential care facilities	\$12.35	111	61	5.8
	Social assistance	\$11.69	112	71	7.4
Leisure and hospitality	Performing arts and spectator sports	\$15.19	-15	15	0.0
	Museums, historical sites, and parks	\$13.96	-6	0	-4.2
	Amusements, gambling, and recreation	\$10.63	-78	-9	-6.0
	Accommodation	\$10.68	-153	23	-6.9
	Food services and drinking places	\$ 9.03	-356	102	-2.6
Other services	Repair and maintenance	\$15.43	-120	25	-7.6
	Personal and laundry services	\$10.95	-52	1	-3.9
	Membership associations & organizations	\$15.53	-32	82	1.7