# Substantial job losses in 2008: weakness broadens and deepens across industries

Employment losses in 2008 accelerated by year's end as continued weakness in construction, manufacturing, and professional and business services spread into consumer-driven industries

Laura A. Kelter

s measured by the Current Employment Statistics (CES) survey, total nonfarm employment peaked at 138.2 million in December 2007, coinciding with the official start of the current recession. This turning point marked the end of a nearly 3-year employment expansion totaling almost 5.4 million jobs. (See chart 1.) Job growth had slowed during 2007, and then employment fell by 3.1 million (or 2.2 percent) during 2008, with declines in most industry sectors. Furthermore, the job losses were more widespread and severe than during the previous two employment contractions.

Manufacturing, construction, financial activities, and professional and business services had begun seeing job losses or weakened employment growth in 2007, after which they experienced a worsening employment picture during 2008. Consumer-driven industries, such as retail trade and leisure and hospitality, started to cut workers in 2008, and employment declines accelerated during the last several months of the year. Only health care, mining, and government industries continued to add jobs.

Several economic issues that faced the Nation in 2008 contributed to the employment loss. Among such issues were continued housing market troubles, record-high oil and gas prices, rising costs of food, a financial crisis brought on by mortgage defaults,

tightened credit, and weak retail sales.

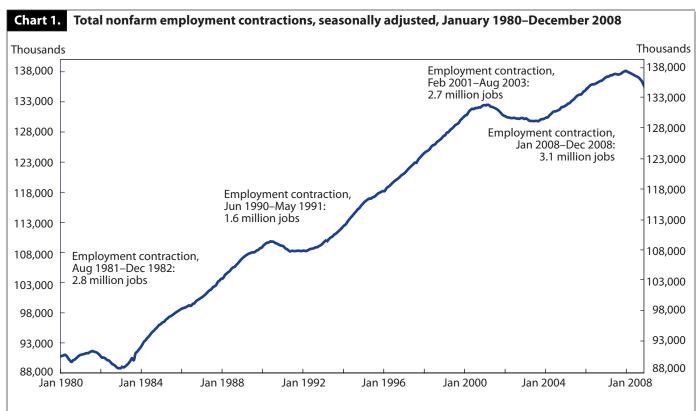
# Nonfarm job loss in perspective

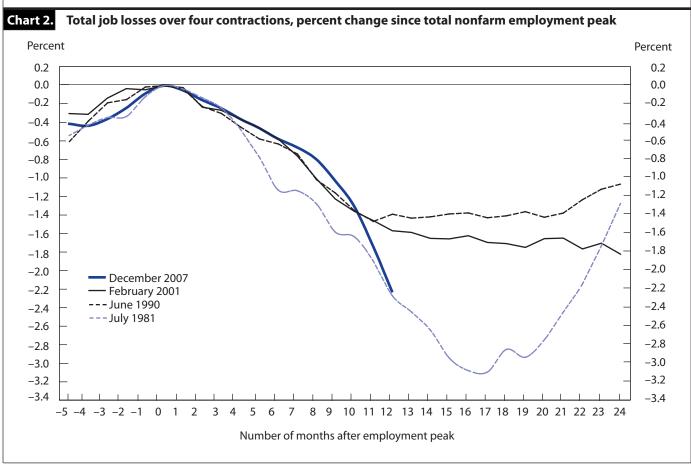
Over the past three decades, the United States experienced three employment contractions. <sup>2</sup> Following a peak in August 1981, total nonfarm employment fell by 2.8 million through December 1982. Next, nonfarm employment fell by 1.6 million (or 1.5 percent) during the 11 months of the 1990–91 contraction. Finally, nonfarm employment reached a peak in February 2001 and then fell by 2.7 million over the next 30 months.

The current employment contraction ran through 2008 and has continued into 2009. Compared with the previous contractions, job losses in 2008 accelerated more rapidly. During the first 8 months of the year, job losses were relatively mild, averaging 137,000 per month; then, in September and October, losses accelerated to an average of 351,000 per month. A further acceleration took place during November and December, to an average of 639,000 jobs lost per month.

In 2008, the employment contraction, in terms of total nonfarm job loss, appears most similar to the employment contraction that started in July 1981. (See chart 2.) In both the 1990 and 2001 contractions, employment flattened out 10 months after its peak. In relative terms, both the 2008 contraction and the 1980 contraction saw

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employment fall by about 2.2 percent 12 months after the peak.

### When was the last time...?

At the same time that several industries observed employment losses which had not been experienced in decades, a number of other industries set record job losses in 2008. (See table 1.) Nonfarm employment fell by more than 3.0 million, the largest 12-month loss, in absolute terms, since October 1944–October 1945. During that period, losses were attributed primarily to the contraction of defenserelated industries following the end of World War II. In percentage terms, the last time employment fell by more than 2.2 percent over the year occurred in 1982. Furthermore, job losses in November and December 2008 totaled 1.3 million—the largest 2-month loss of this magnitude since September and October 1945, when the Nation lost 1.9 million jobs.

Total private employment declined by 3.2 million over the 12 months ending in December 2008, the largest net loss in the history of the series, which began in 1939. The 1-month diffusion index for private nonfarm industries indicates that the scope of job loss widened in 2008. (See chart 3.) In December, the 1-month diffusion index fell to 20.5—the lowest level in the series history (beginning in 1991)—from a peak of 64.9 in January 2006. This index measures the dispersion of employment change by industry. A value below 50 indicates that more private-sector industries are shedding jobs than adding them over a 1month span. The manufacturing 1-month diffusion index also reached its lowest level, 10.2, since December 2001.

Several other CES data series showed a labor market in deep contraction. Average weekly hours for production and nonsupervisory workers on private payrolls fell by one-half hour in 2008, to its lowest level, 33.3 hours. Although the long-run trend of the average workweek has been declining since the series began in 1964, the decrease in 2008 was significant. Both manufacturing average weekly hours and overtime hours of production workers also fell to record lows. Weekly hours fell below 40.0 for the first time since January 1996, and overtime hours fell to 2.9—the lowest level since May 1983. The factory workweek often is cited as a leading indicator of economic activity.

The index of aggregate weekly hours—the product of average weekly hours of production workers and average weekly hours of nonsupervisory workers—is a coincident index<sup>3</sup> that peaked in December 2007 and fell by 4.3 percent over 2008, with accelerating declines during the last 4 months of the year. The last time the aggregate hours

index fell by more than 4.3 percent occurred in the 12 months ending November 1982. The index of aggregate weekly payrolls—the product of aggregate weekly hours and average hourly earnings—reached a high in August 2008 and then declined through December.

# **Economy in crisis**

Employment growth slowed in 2007 as housing troubles and problems with subprime mortgages struck construction and related manufacturing industries, while consumer-driven industries continued to expand payroll employment.<sup>4</sup> During 2008, poor economic news swept the Nation as each additional economic weakness proliferated and permeated into the broader economy. Across the board, economic indicators continued to plunge during the year. (See table 2.)

The housing crisis broadened into commercial and heavy construction, deepening employment losses in construction and manufacturing and moving into housing-related wholesale and retail industries. Furniture and home furnishings, as well as building material and garden supply stores, were particularly hard hit.

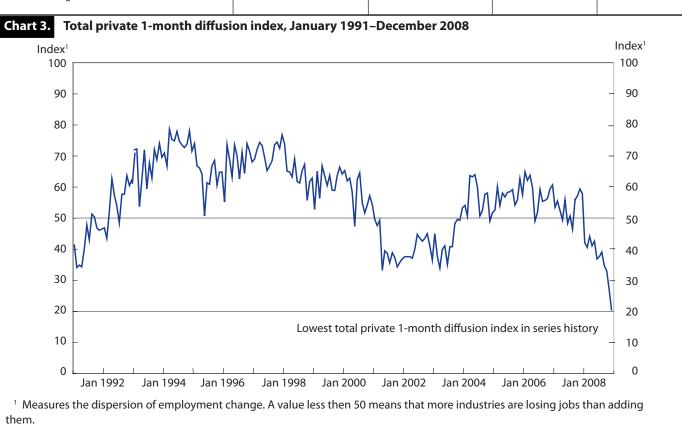
Defaults on mortgages surged, especially for subprime loans. According to one source, "Much of the housing market's problems were concentrated in the subprime, adjustable-rate market, where homeowners with weak financial backgrounds got loans they ultimately couldn't afford." 5 As a result, the mortgage crisis became so severe during 2008 that lenders tightened credit considerably and some banks failed. About 65 percent of domestic banks indicated that they had tightened their lending standards for commercial and industrial loans to small firms.<sup>6</sup> To help reduce foreclosure rates and to encourage lending, the Federal Reserve lowered the Federal funds rate to almost zero.<sup>7</sup> The mid-2008 financial crisis put downward pressure on employment in the financial activities industry, in housing- and construction-related industries, and in industries that rely on consumer credit for large purchases of durable goods, such as appliances and automobiles.

Record-high oil and gas prices permeated nearly every industry during 2008 and affected consumers and companies alike, resulting in cash flow problems. Many companies tried to absorb rising shipping costs in order to retain sales; in turn, this cost-minimization strategy led to jobs cuts. Still, weak sales entering the holiday season pushed many retailers into further layoffs and even bankruptcy. According to the Wall Street Journal, "Companies are increasingly hitting their fixed cost wall, as many retailers are at minimum staffing levels in stores and rent is fixed."8

Industry	Over-the-year change, December 2007 to December	When was the last change in employ larger in the same	Current Employment Statistics series		
	2008 (thousands)	Period	Change (thousands)	inception	
Total nonfarm employment	-3,078	Oct 1944–Oct 1945	-3,110	1939	
Total private	-3,241	Never	 –717	1939	
Construction	-682 -875	Mar 1943–Mar 1944	-717 -912	1939	
Manufacturing		Oct 2001–Oct 2002		1939	
Wholesale trade	-194 	Never		1939	
Retail trade	-530	Never	•••	1939	
Transportation and warehousing	-166	Jun 2001–Jun 2002	-177	1972	
Information	-85	Mar 2003–Mar 2004	-87	1939	
Financial activities	-233	Never	•••	1939	
Professional and business services	-753	Feb 2001–Feb 2002	-812	1939	
Leisure and hospitality	-247	Never		1939	
Other services	-40	Mar 1991–Mar 1992	-55	1939	
Industry	Over-the-year percent change, December	When was the last time the percent change in employment was larger in the same direction?		Current Employment Statistics	
	2007 to December 2008	Period	Change	series inception	
Total nonfarm employment	-2.2	Dec 1981–Dec 1982	-2.3	1939	
Total private	-2.8	Nov 1981-Nov 1982	-3.1	1939	
Construction	-9.1	Aug 1990-Aug 1991	-9.6	1939	
Manufacturing	-6.4	Aug 2001–Aug 2002	-6.5	1939	
Wholesale trade	-3.2	Nov 2000–Nov 2001	-3.3	1939	
Retail trade	-3.4	Dec 1941–Dec 1942	-3.5	1939	
Transportation and warehousing	-3. <del>4</del> -3.6	Jun 2001–Jun 2002	-4.0	1972	
Information	-3.0 -2.8		-4.0 -2.9		
		Feb 2003–Feb 2004		1939	
Financial activities	-2.8	Mar 1942–Mar 1943	-3.5	1939	
Professional and business services	-4.2	Mar 2001–Mar 2002	-4.5	1939	
Leisure and hospitality	-1.8	Apr 1960–Apr 1961	-1.9	1939	
Other services	<b>7</b>	Apr 1991–Apr 1992	8	1939	
Industry	2-month change from October 2008 to December	When was the last time the change in employment was larger in the same direction?		Current Employment Statistics	
	2008 (thousands)	Period	Change (thousands)	series inception	
Total nonfarm employment	-1,278	Aug 1945–Oct 1945	-1,868	1939	
Total private	-1,271	Aug 1945–Oct 1945	-1,587	1939	
Construction	-225	Never		1939	
	-301	Sep 1982–Nov 1982	-352	1939	
		Never	-552	1939	
Manufacturing	-69	INCVCI	1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Manufacturing Wholesale trade	–69 –179	Nover		1030	
Manufacturing Wholesale trade Retail trade	-179	Never		1939	
Manufacturing Wholesale trade Retail trade Transportation and warehousing	–179 –67	Sep 2001–Nov 2001	-81	1972	
Manufacturing	–179 –67 -42	Sep 2001–Nov 2001 Jan 2003–Mar 2003	-81 -43	1972 1939	
Manufacturing	–179 –67 -42 –78	Sep 2001–Nov 2001 Jan 2003–Mar 2003 Never	-81 -43 	1972 1939 1939	
Manufacturing	–179 –67 -42 –78 –256	Sep 2001–Nov 2001 Jan 2003–Mar 2003 Never Never	-81 -43 	1972 1939 1939 1939	
Manufacturing	–179 –67 -42 –78	Sep 2001–Nov 2001 Jan 2003–Mar 2003 Never	-81 -43 	1972 1939 1939	

Table 1. Continued—Comparisons by industry, selected data	among recent and historical cha series	nges and percent chan	ges in employmen	t,
Data series	Level, December 2008	When was the last time the series December 2008 was lower than its current level?		Ser
		Month and year	Level	incep

Data series	Level, December 2006 was lower than its current level:			Series	
		Month and year	Level	inception	
Total private average weekly hours					
of production workers	33.3	Never		1964	
Manufacturing average weekly hours of production workers	39.9	Jan 1996	39.7	1939	
Manufacturing overtime hours					
of production workers	2.9	May 1983	2.8	1956	
Total private 1-month diffusion index	20.5	Never		1991	
Manufacturing 1-month diffusion index	10.2	Dec 2001	9.6	1991	
				1	



At the same time, consumer confidence reached record lows as consumers, with already limited credit and recent problems filling their vehicles with gas, in turn cut spending on other products and services: "As prices near—or in some places top—\$4 a gallon, most Americans say they are cutting back on other household spending, seriously considering buying more fuel-efficient cars and consolidating their daily errands to save fuel." The automobile industry was particularly hard hit by high gasoline prices, rising input costs, and the credit crunch. U.S. vehicle manufacturers cut production throughout the year.

# **Accelerating job losses**

Following on the heels of several industries that already had been in decline in previous years, manufacturing, construction, financial activities, and temporary help services experienced a significant acceleration in job losses in 2008.

Manufacturing. U.S. manufacturing employment fell by 875,000, to 12.9 million, reflecting the largest 12-month job loss since 2002 and the lowest employment level since 1949. Monthly employment losses averaged 22,000 dur-

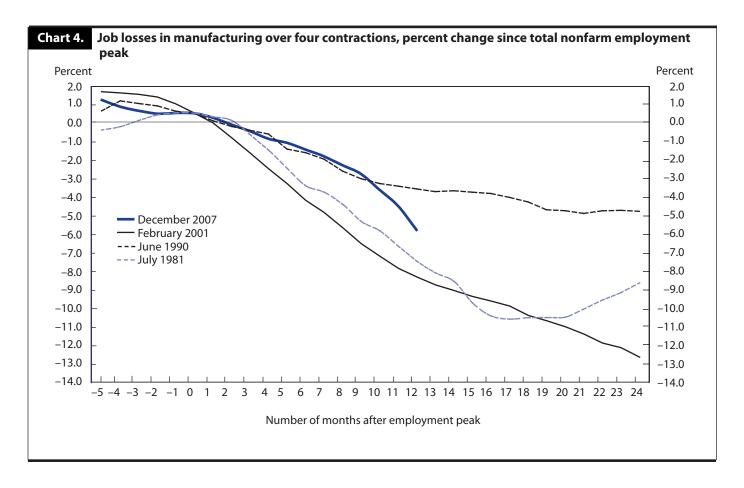
	2008 low point		When was the last time this indicator was lower?		
Indicators that reached a low point in 2008	Quarter or month	Level	Quarter or month, and year	onth, and Level	
Fross domestic product, annual growth rate					
(Bureau of Economic Analysis, percent)	Quarter IV	-6.2	Quarter I, 1982	-6.4	1947
urchasing Managers' Index (Institute for Supply					
Management)	December	32.9	Jun 1980	30.3	1948
Capacity utilization (Federal Reserve Board, percent)  Motor vehicle assemblies, in thousands, seasonally	December	73.31	Apr 1983	73.16	1967
adjusted annual rate (Federal Reserve Board)	December	6,614	Nov 1982	5,983	1967
auto sales, in thousands, seasonally adjusted annual rate					
(Bureau of Economic Analysis)	November	4,960	Never		1967
Consumer confidence (Conference Board)	December	38.6	Never		1967
lew-home sales, seasonally adjusted annual rate					
(U.S. Census Bureau)	December	344,000	Apr 1982	339,000	1963
lousing permits, seasonally adjusted annual rate					
(U.S. Census Bureau)	December	547,000	Never		1960
lousing starts, seasonally adjusted annual rate					
(U.S. Census Bureau)	December	560,000	Never		1959
Indicators that reached a high point in 2008	2008 high point		When was the last time this indicator was higher?		Series
mulcators that reached a mgn point in 2006	Month and year	Level	Month and year	Level	- inception
Notary rig counts (Paker Hughes)	Son 2009	2.031	Feb 1985	2,143	1949
otary rig counts (Baker Hughes) nventory-shipments ratio, durable goods	Sep 2008	2,031	Len 1302	2,143	1949
(U.S. Census Bureau)	Dec 2008	1.81	Dec 1992	1.83	1992
Gasoline price, regular, all formulations (Energy					1

ing 2007 and accelerated to an average of 73,000 in 2008. Job losses broadened across the manufacturing sector as employment in housing and construction-related industries (including furniture and related products, wood products, nonmetallic mineral products such as cement and concrete products, and fabricated metal products) worsened, export-related industries (including machinery and computer and electronic products) began to lose workers, and auto-related manufacturing job losses accelerated at year's end. The Institute for Supply Management offered corroborating evidence of widespread weakness in manufacturing when it reported that the index of national manufacturing activity fell to a nearly three-decade low of 32.9 in December 2008.10

Compared with the last three contractions in total employment, the current contraction produced manufacturing job losses most similar to those of the 1990 contraction, until accelerated job losses toward the end of 2008 pushed the industry in the direction of experiencing job losses similar to that of the weaker 1981 period. (See chart 4.)

Construction. Employment in construction grew by an average of 15,000 jobs per month in 2006 and fell by an average of 15,000 per month in 2007. Losses then accelerated to an average of 57,000 jobs per month in 2008. Construction-related employment losses also broadened into service-providing industries during the year, including wholesale and retail trade. Employment in lumber and construction supplies and in furniture and furnishings in wholesale trade fell in 2008 after reaching peaks during 2006 and 2007, respectively. Furniture and homefurnishing stores remained stable during 2006 and 2007, but lost an average of 5,000 jobs per month in 2008. Building material and garden supply stores started seeing job losses in 2007 that continued at the same rate in 2008.

Housing indicators set record lows in 2008. Both housing starts and new-home sales fell, by 81 percent and 75 percent, respectively, since peaking in 2006, and the monthly inventory of new homes for sale reached a record of a 12.2-months' supply. With the high inventories, home



values depreciated, further exacerbating job losses in construction and related industries. "American homeowners will collectively lose more than \$2 trillion in home value by the end of 2008," and home values dropped 8.4 percent year over year during the first 3 quarters of 2008, according to real estate Web site Zillow.com.11

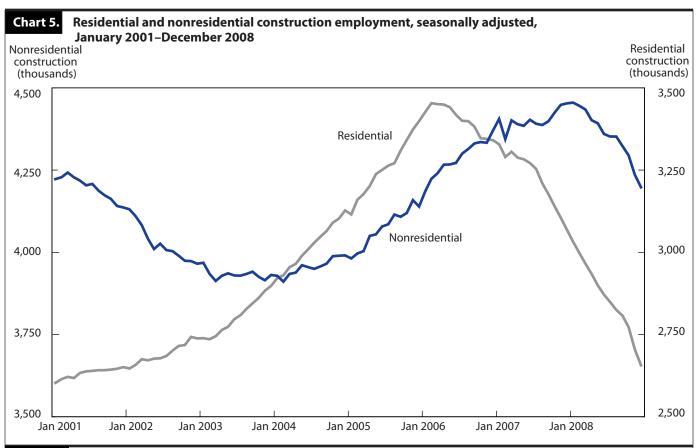
Over the year, employment in construction fell by more than 680,000, the worst 12-month net job loss since 1944. In percentage terms, employment fell by more than 9 percent—the largest 12-month decline since 1991. Employment losses in construction were concentrated on the residential side until 2008. Employment in residential construction has fallen by 800,000 since reaching a peak at the beginning of 2006.12 Not until February 2008 did construction employment losses broaden into nonresidential industries, including heavy and civil engineering. Employment losses in nonresidential construction totaled 270,000 during 2008 and contributed to accelerated losses in total construction. (See chart 5.)

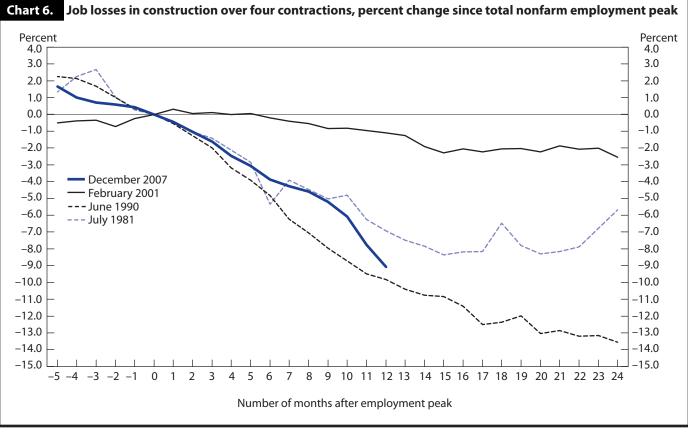
In comparison to earlier periods of contraction in total employment, the current contraction produced job losses in construction similar to those of the 1981 contraction, until the fourth quarter of 2008, when job loss in the industry accelerated. Total job losses in construction now resemble the losses seen in the 1990 contraction. Job losses during the 2001 recession were relatively mild. (See chart 6.)

Financial activities. Employment in construction and financial activities peaked at about the same time, coincident with the housing bubble. Subprime mortgage issues and the financial crisis eroded employment even more in the financial sector. The industry averaged 10,000 jobs lost per month through 2007 and 13,000 during the first 8 months of 2008; then losses accelerated to an average of 33,000 in each of the last 4 months of the year. Considering the job losses the financial activities industry experienced over the year, the loss of 233,000 jobs in 2008 was the largest in the history of the series and the largest percentage loss since the 12-month period from March 1942 to March 1943.

Compared with the last three contractions in total employment, the current contraction in financial activities rivals no other. In fact, employment in the sector grew during the 2001 and 1981 employment contractions and didn't fall until 5 months into the 1990 recession. (See chart 7.)

Temporary help services. Within the North American





Industry Classification System (NAICS), temporary help services is a detailed industry among several making up the professional and business services major industry. Employment growth in professional and business services slowed during 2007, to an average increase of 25,000 jobs per month from an average of 45,000 jobs per month during 2006. Employment in the industry peaked in December 2007—coinciding with the peak in total nonfarm employment—before falling by an average of 63,000 per month in 2008. Most of the slowdown can be traced to employment losses in temporary help services—what many see as a leading indicator of labor demand. Temporary help employment peaked a full year ahead of total nonfarm employment and had fallen by almost 620,000 by December 2008.

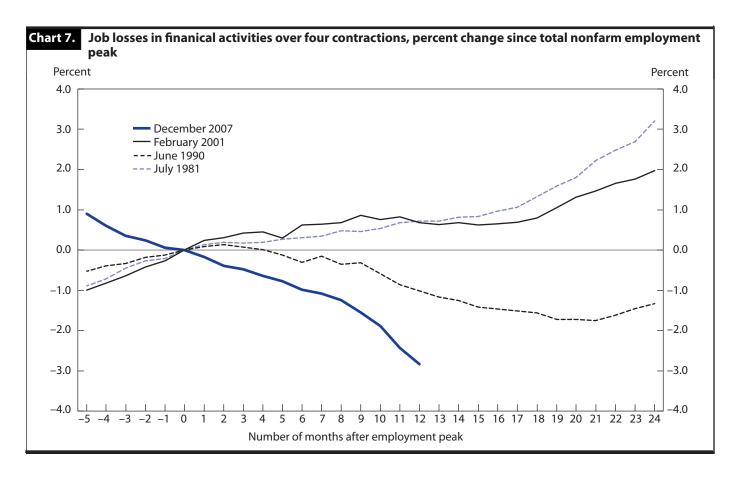
Job losses in temporary help services during the current contraction were similar to those seen in 2001 until about 10 months into the contraction, when job losses recovered slightly and employment in the industry stabilized. In 2008, the temporary help services industry continued to experience job losses at an accelerated pace. Employment losses in temporary help services during the 1990 contraction were relatively mild, and the industry recovered within 2 years. (See chart 8.)

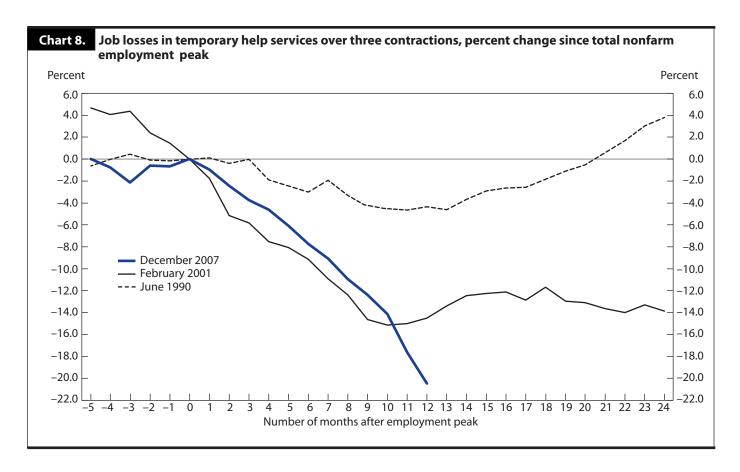
# **Consumer-driven job loss**

As job losses in manufacturing, construction, financial activities, and temporary help services accelerated through 2008, consumer-driven industries began to show losses as well, because of falling consumer confidence, tightened credit, and less consumption.

Retail trade. Retail employment peaked in November 2007, after which employment losses averaged almost 29,000 during the first 8 months of 2008 and then accelerated to more than 74,000 per month toward year's end. Declines in consumer spending and falling consumer confidence broadened retail job cuts: from a concentration in housing and construction-related industries, cuts spread to almost all retailers. Not only did retailers end up shedding jobs, but many had to close. Even discount department stores, which normally fare well during recessions, suffered job losses.

Job losses in retail trade during the current contraction are similar to those seen during both the 1990 and 2001





contractions, except that, during those timeframes, job losses had slowed about 10 months into the contraction, whereas losses in 2008 continued to accelerate. Job losses in retail trade during the 1981 contraction were mild, and the industry recovered just over 12 months after the start of the contraction. (See chart 9.)

Leisure and hospitality. Tightened spending also hurt the leisure and hospitality industry as consumers traveled less and ate at restaurants less often. Leisure and hospitality employment peaked in December 2007 and fell by a monthly average of 12,000 jobs during the first 8 months of 2008; job losses accelerated to an average of 38,000 in each of the last 4 months of the year. Food services and drinking places, which showed limited job loss during the 2001 employment contraction, were responsible for 42 percent of the job losses in leisure and hospitality in 2008.

Of the four contractions examined in this article, the current one seems to be the only one in which the leisure and hospitality industry has experienced consistent job loss. During the previous three such periods, industry job losses were mild, if they occurred at all, and recovery was within a year. (See chart 10.)

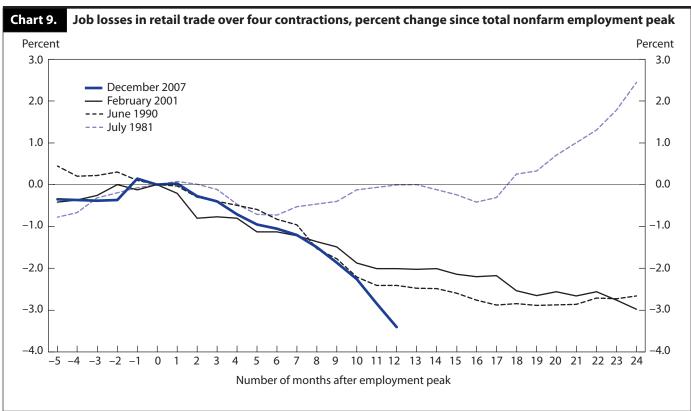
# A bit of job growth

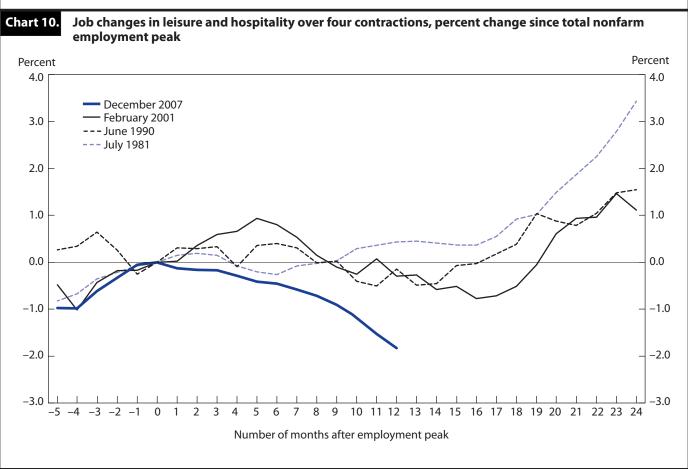
Despite job losses throughout most of the economy, a few industries were able to post job gains during 2008.

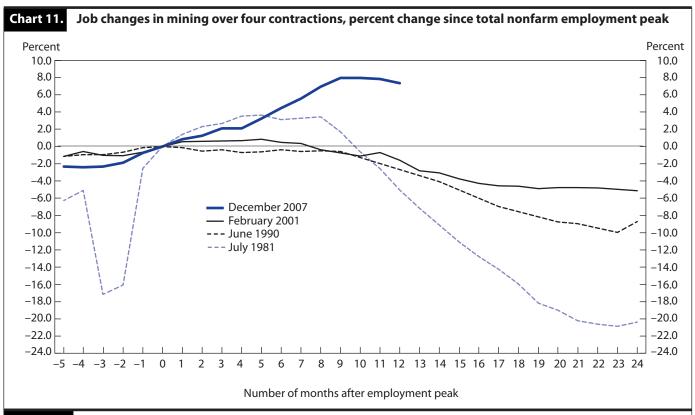
Soaring oil and gas prices, along with high Mining. prices for metals, helped push mining employment up, especially for oil and gas extraction and support activities. Previously, mining employment had reached a low point in April 2003; since then, it has risen by 235,000. However, a sharp drop in oil prices toward the end of the year stalled employment growth in mining.

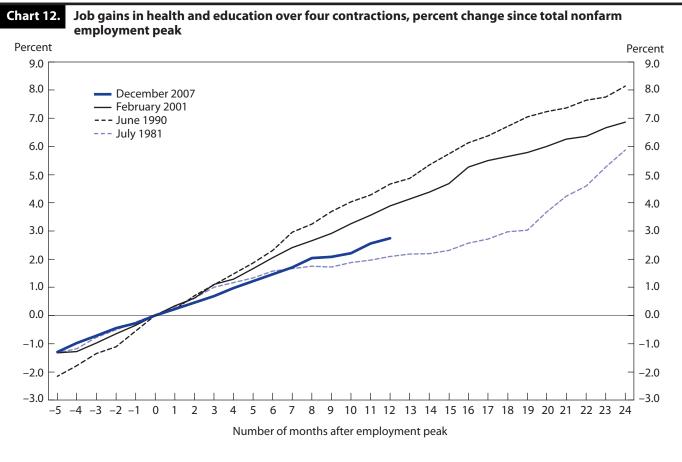
A comparison of the last three contractions in total employment reveals that the current job increases in mining rival those of the July 1981 contraction, although within 1 year the 1981 job gains had vanished. During the 1990 and 2001 periods, the industry experienced mild job losses within a year after the start of the contraction. (See chart 11.)

Health care. Employment in health care continued to expand despite employment losses in most other industries. In fact, on average, job growth in health care was slightly stronger in 2008 (30,000 jobs per month) and in 2007









	yment, selected industries, seasonally adjusted, 2006–08					
	Average monthly change in employment (thousands)					
Industry	2006	2007	2008	January 2008– August 2008	September 2008– December 2008	
Total nonfarm Total private	178 161	96 72	-257 -270	–137 –161	-495 -489	
Mining and logging	5	3	4	6	1	
Mining	5	3	4	6	1	
Construction	15	-16	-57	-43	-84	
Construction of buildings	2	-5	-14	-11	-19	
Residential building	0	-8	-11	-10	-12	
Nonresidential building	3	3	-3	-1	-7	
Heavy and civil engineering construction	3	0	-6 27	-5 27	-8	
Specialty trade contractors	9	-11	-37	-27	-57	
Residential specialty trade contractors Nonresidential specialty trade contractors	–5 14	-15 4	-24 -13	-21 -6	-31 -26	
Manufacturing	-14	-22	-73	-49	-121	
Durable goods	-4	-16	-54	-36	-89	
Wood products	-3	-3	-7	-6	-9	
Nonmetallic mineral products	0	-2	-4	-3	-6	
Primary metals	0 3	-1	-3 -8	-1 -4	-5 17	
Fabricated metal products Machinery	3 1	0	-o -3	0	-17 -9	
Electrical equipment and appliances	0	0	-3 -1	0	-9 -3	
Transportation equipment	-2	_5	-16	-13	-21	
Motor vehicles and parts	-2 -4		-15	-13	-19	
Furniture and related products	-2	-7	-6	-5		
Nondurable goods	-10	-5	-19	-13	-33	
Food manufacturing	-1	2	-1	-1	-1	
Textile mills	-2	-2	-2	-2	-3	
Textile product mills Apparel	–1 –1	-1 -1	-1 -2	-1 -1	-1 -4	
Paper and paper products	-1 -1	-1 -1	-2 -2	-1	-3	
Printing and related support activities	0	-2	-2 -4	-3	_5 _6	
Plastics and rubber products	-4	0	-5	-2	-10	
Wholesale trade	12	6	-16	-11	-26	
Retail trade	3	14	-44	-29	-74 22	
Motor vehicle and parts dealers Furniture and home furnishings stores	0 1	-1 -1	-13 -5	_9 _4	-22 -7	
Building material and garden supply stores	1	-3		_4 _4	-7 -5	
Transportation and warehousing	10	3	-14 -14	-4 -6	-29	
Utilities	0	1	1	0	1	
Information	-2	-1	-7	-4	-13	
Financial activities	9	-10	-19	-13	-33	
Credit intermediation and related activities	3	-12	-9	-9	-11	
Securities, commodity contracts, and investment . Real estate	3 1	2 0	-2 -3	0 -2	-5 -6	
Professional and business services	45	25	-63	-48	-93	
Professional and technical services	27	27	-2	2	-9	
Management of companies and enterprises	5	6	-3	-1	-6	
Administrative and waste services	14	-8	-58	-48	-78	
Temporary help services	2	-7	-44	-35	-61	
Education and health services	39	43	43	48	33	
Educational services	4	5	7	13	-5 20	
Health care	27 g	29	30	30	30	
Social assistanceLeisure and hospitality	8 33	21	-21	-12	-38	
Food services and drinking places	25	16	-21 -9	-12 -2	-38 -21	
Other services	25 5	4	-9 -3	2	-21 -13	
Government	17	24	14	23	-6	
	",	1		1		

(29,000 jobs per month) than during 2006 (27,000 jobs per month).

A comparison of job increases in health and educational services across all four contractions shows that growth currently is weaker than in 1990 and 2001, but slightly better than in 1981. (See chart 12.)

# Severe job losses during 2008

Not only were nonfarm employment losses in 2008 substantial enough to rival historic job losses, but the employment losses in construction, manufacturing, financial activities, and temporary help services that characterized 2007 broadened and accelerated toward the end of 2008. Employment in consumer-driven industries such as retail trade and leisure and hospitality began to fall during the year, and the losses accelerated during the final part of the year. Of the major industries, only mining, education, and health care saw employment grow throughout 2008. (See table 3.)

### **Notes**

- <sup>1</sup>The Current Employment Statistics (CES) survey is a monthly survey of about 150,000 nonfarm business and government agencies representing approximately 390,000 individual worksites. For more information on the program's concepts and methodology, see "Technical Notes to Establishment Data Published in Employment and Earnings," in Economic News Release: Employment Situation (Bureau of Labor Statistics, Feb. 6, 2009), on the Internet at www.bls.gov/web/empsit.supp.toc. htm#technote (visited Feb. 6, 2009). CES data are presented in Current Employment Statistics—CES (National) (Bureau of Labor Statistics, no date), on the Internet at www.bls.gov/ces (visited Feb. 6, 2009). The CES data used in this article are seasonally adjusted unless otherwise noted. The beginnings and endings of recessions are determined by the National Bureau of Economic Research (NBER). (See details at www. nber.org/cycles/dec2008.html (visited Jan. 30, 2009).)
- <sup>2</sup> Total nonfarm employment cycles can, but do not necessarily, match business cycle peaks and troughs as determined by the NBER.
  - <sup>3</sup> A coincident index is an index that, more often than not, correlates

directly with the state of the economy.

- <sup>4</sup> Robyn Richards, "Payroll employment in 2007: job growth slows," Monthly Labor Review, March 2008, pp. 19-31; on the Internet at www.bls.gov/opub/mlr/2008/03/art2full.pdf (visited Feb. 6, 2009).
- <sup>5</sup> Tami Lehby, "Foreclosures soar 76 percent to record 1.35 million," CNNMoney.com, Dec. 5, 2008, on the Internet at money. com/2008/12/05/news/economy/mortgage\_delinquencies/index. htm (visited Feb. 6, 2009). Others share this view.
- <sup>6</sup> See Emily Maltby, "Credit crunch hits small businesses," Senior Loan Officer Opinion Survey on Bank Lending Practices, July 2008; released by the Federal Reserve System in August 2008 and on the Internet at money.cnn.com/2008/09/15/smallbusiness/credit\_crunch\_hits\_ smallbiz.smb/index.htm (last updated Sept. 18, 2008, and visited Feb.
- <sup>7</sup> See Chris Isidore, "Fed slashes key rate to near zero," CNNMoney.com, Dec. 16, 2008, on the Internet at money.cnn.com/2008/12/16/news/ economy/fed\_decision/index.htm (visited Feb. 6, 2009).
- 8 Mary Ellen Lloyd, "Retail Insolvencies Expected to Rise in New Year," Wall Street Journal, Dec. 3, 2008; on the Internet at online.wsj. com/article/SB122827939719775387.html (visited Feb. 6, 2009).
- <sup>9</sup> Judy Keen and Paul Overberg, "Gas prices rattle Americans," USA Today, May 9, 2008, on the Internet at www.usatoday.com/ money/industries/energy/2008-05-08-gasprices\_N.htm (visited Feb. 6, 2009).
- <sup>10</sup> The Institute covers such indicators as new orders, production, employment, inventories, prices, and export and import orders. A reading below 50 indicates contraction in the manufacturing sector, and December marked the sector's 11th straight month of loss. (See the organization's Web site on the Internet at www.ism.ws.)
- <sup>11</sup> Les Cristie, "U.S. homes lose \$2 trillion in value in '08," CNNMoney, Dec. 16, 2008, on the Internet at money.cnn.com/2008/12/15/ real\_estate/underwater\_borrowers\_near\_12million/index.htm (visited Feb. 6, 2009).
- <sup>12</sup> Residential construction is the sum of residential building (NAICS 2361) and residential specialty trade contractors (NAICS 238001). Nonresidential construction is the sum of heavy and civil construction (NA-ICS 237), nonresidential building construction (NAICS 2362), and nonresidential specialty trade contractors (NAICS 238002).