

Payroll employment in 2007: job growth slows

Employment grew by just 0.8 percent in 2007, the lowest rate in 4 years; construction, manufacturing, retail trade, and transportation and warehousing were among the industries suffering losses, while health care, professional and technical services, food services and drinking places, and local government expanded

Robyn J. Richards

Nonfarm payroll employment, as measured by the Current Employment Statistics (CES) survey, increased by slightly more than 1 million in 2007, to a level of 138.1 million.¹ Job growth slowed from 1.6 percent in 2006 to 0.8 percent in 2007, the lowest annual growth rate since 2003. (See chart 1.)

Employment trends varied by industry. (See table 1.) Deceleration in the housing market and problems with subprime mortgages had a negative effect on employment in construction and other housing-related industries. Manufacturing continued its long-term contraction, while health care, professional and technical services, food services and drinking places, and local government continued to expand. Employment services, which had hit a high point in August 2006, lost jobs throughout most of 2007. Increased prices for crude oil and related commodities spurred growth in oil and gas extraction. However, high fuel prices and weakened consumer confidence were reflected in constrained job growth in retail trade and in transportation and warehousing.

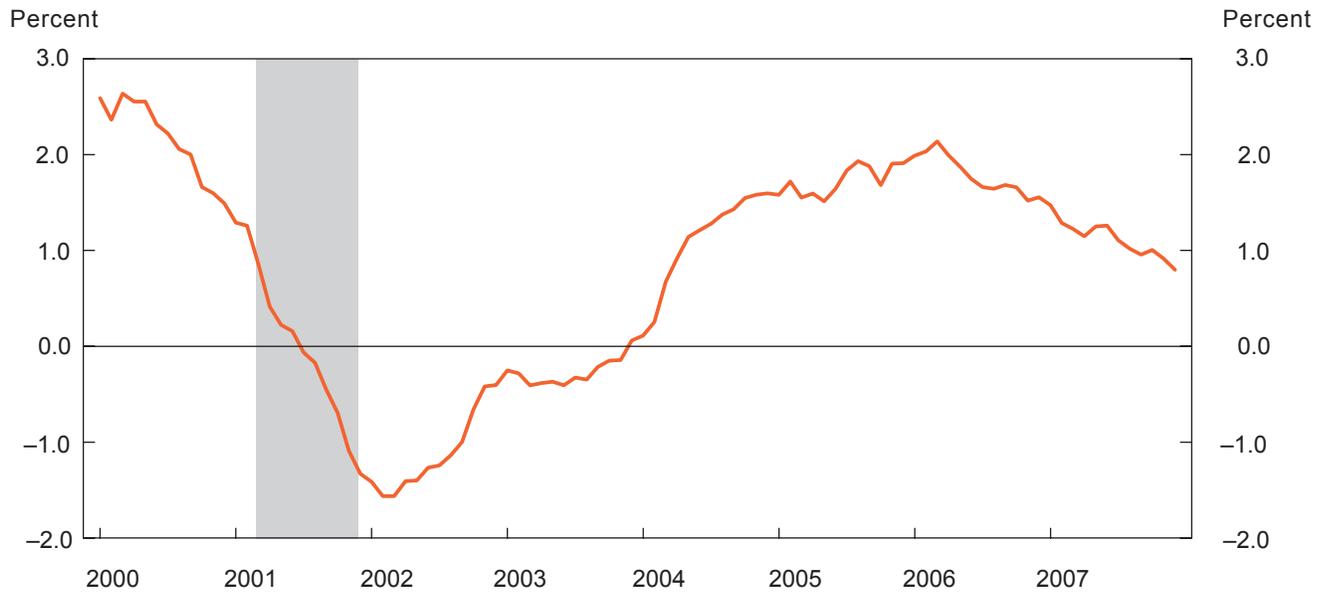
Signs of a sluggish economy

Many economic indicators pointed to a sluggish economy in 2007. (See table 2.) The 1-month diffusion index for total private

employment fell below 50 for the first time since 2003. This index is based on the number of industries adding or subtracting jobs. An index value above 50 indicates that more industries are adding than losing jobs, whereas a value below 50 indicates that more industries are losing than adding jobs. The Conference Board's leading index, which ticked down in the first half of 2007, saw declines accelerate in the fourth quarter.² The leading index is composed of 10 economic indicators, including CES average weekly hours in manufacturing, that usually peak or bottom ahead of the business cycle. The factory workweek was unchanged over the year, and overtime hours edged down. The Conference Board's coincident index, which includes four indicators that tend to move with the business cycle, registered minimal gains in 2007.³ Average weekly hours for private industries have remained essentially flat since the end of 2001, and the rate of growth for the index of private aggregate weekly hours slowed in 2007 to less than half that of the previous 3 years. The index of aggregate weekly payrolls rose at the slowest rate since 2003, while real average hourly earnings declined almost a full percentage point over the year.⁴

Declines in several industries accounted for much of the slowing in overall employment growth. Over the year, employment services lost 131,000 jobs and ended 2007

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Chart 1. Total nonfarm employment, 12-month percent change, seasonally adjusted, 2000–07

NOTE: Shaded area denotes NBER-designated recession.

almost 4 percent below its most recent peak of 3.7 million employees. (See chart 2.) Temporary help services, which gained 16,000 employees in 2006, cut employment by 79,000, or 3.0 percent of its workforce, in 2007.

Shedding more than one-quarter million jobs in 2007, manufacturing experienced its steepest decline since 2003. None of the diffusion indexes (1-, 3-, 6-, and 12-month) for manufacturing were able to climb above 50 in 2007. The 1-month diffusion index hit a 43-month low of 29.8 in April and ended the year 7.6 percent lower than in December 2006. Reducing employment by 79,000, motor vehicles and parts posted its largest annual loss since 2001, almost 8 percent of the industry's workforce. Machinery employment, which had been a bright spot for manufacturing, was essentially flat over the year. Computer and electronic products trimmed its workforce in 2007 by 40,000, or almost 2 times the previous 3 years' losses combined.

Crude oil and gasoline prices reached all-time highs in 2007. Petroleum and coal products manufacturing employment contracted by 3,000 employees, and gasoline stations lost 12,000. Prices for crude oil, nearing \$100 per barrel, ended 2007 more than 50 percent higher than at the end of 2006. At \$3.05 per gallon, average gasoline prices across

the Nation were more than 70 cents higher at the end of 2007 than at the end of 2006.⁵ Consumers worried about rising fuel costs and shopped less.⁶ Average monthly employment gains in clothing and clothing accessories stores dropped from 5,000 in 2006 to less than 2,000 in 2007. The transportation and warehousing industry, which benefits from increases in retail and manufacturing, expanded by almost 3 percent in 2006, but was virtually flat in 2007. Truck transportation, which accounts for almost one-third of employment in transportation and warehousing, lost 27,000 payroll jobs in 2007. Employment growth in mining slowed in 2007, to slightly more than half that of 2006. This slowdown was largely in support activities for mining, in which employment had expanded by 16.9 percent in 2006, but grew by only 6.1 percent in 2007. Growth in this sector has been constrained by infrastructure, with the number of operable oil refineries in the United States declining since 1982 and stagnant since 2003.⁷

Constituting more than two-thirds of the gross domestic product (GDP), consumer spending (personal consumption expenditures) was the primary force in the expansion of the U.S. economy in 2007.⁸ Real consumer spending grew by 2.9 percent, the slowest rate since 2003; and GDP excluding consumer spending barely moved, at

Table 1. Employees on nonfarm payrolls, by industry, seasonally adjusted, 2004–07

Industry	Dec. 2004	Dec. 2005	Dec. 2006	Dec. 2007	Employment change, December to December					
					2004–05		2005–06		2006–07	
					Level (thousands)	Percent	Level (thousands)	Percent	Level (thousands)	Percent
Total nonfarm.....	132,351	134,883	136,982	138,078	2,532	1.9	2,099	1.6	1,096	.8
Total private.....	110,637	112,996	114,899	115,745	2,359	2.1	1,903	1.7	846	.7
Goods-producing.....	22,014	22,402	22,436	21,976	388	1.8	34	.2	-460	-2.1
Natural resources and mining ...	602	652	706	739	50	8.3	54	8.3	33	4.7
Logging.....	67.1	64.8	62.4	60.6	-2.3	-3.4	-2.4	-3.7	-1.8	-2.9
Mining.....	534.5	586.7	643.3	677.9	52.2	9.8	56.6	9.6	34.6	5.4
Oil and gas extraction.....	124.9	128.4	139.8	153.1	3.5	2.8	11.4	8.9	13.3	9.5
Mining, except oil and gas....	207.0	216.7	221.0	225.2	9.7	4.7	4.3	2.0	4.2	1.9
Coal mining.....	71.2	75.9	77.9	78.3	4.7	6.6	2.0	2.6	.4	.5
Support activities for mining ..	202.6	241.6	282.5	299.6	39.0	19.2	40.9	16.9	17.1	6.1
Construction.....	7,125	7,545	7,697	7,465	420	5.9	152	2.0	-232	-3.0
Construction of buildings.....	1,672.0	1,772.3	1,798.1	1,702.4	100.3	6.0	25.8	1.5	-95.7	-5.3
Residential building.....	928.0	995.8	993.9	902.0	67.8	7.3	-1.9	-.2	-91.9	-9.2
Nonresidential building.....	744.0	776.5	804.2	800.4	32.5	4.4	27.7	3.6	-3.8	-.5
Heavy and civil engineering construction.....	917.7	961.9	1,001.6	993.8	44.2	4.8	39.7	4.1	-7.8	-.8
Specialty trade contractors ...	4,535.6	4,811.0	4,896.9	4,768.4	275.4	6.1	85.9	1.8	-128.5	-2.6
Residential specialty trade contractors.....	2,199.6	2,405.8	2,348.1	2,201.1	206.2	9.4	-57.7	-2.4	-147.0	-6.3
Nonresidential specialty trade contractors.....	2,336.0	2,405.2	2,548.8	2,567.3	69.2	3.0	143.6	6.0	18.5	.7
Manufacturing.....	14,287	14,205	14,033	13,772	-82	-.6	-172	-1.2	-261	-1.9
Durable goods.....	8,954	8,973	8,925	8,739	19	.2	-48	-.5	-186	-2.1
Wood products.....	555.6	568.9	536.5	507.2	13.3	2.4	-32.4	-5.7	-29.3	-5.5
Nonmetallic mineral products.	509.3	506.3	508.2	496.4	-3.0	-.6	1.9	.4	-11.8	-2.3
Primary metals.....	468.3	463.8	459.4	452.2	-4.5	-1.0	-4.4	-.9	-7.2	-1.6
Fabricated metal products....	1,510.8	1,533.5	1,562.9	1,562.7	22.7	1.5	29.4	1.9	-.2	.0
Machinery.....	1,150.6	1,172.5	1,187.2	1,191.0	21.9	1.9	14.7	1.3	3.8	.3
Computer and electronic products.....	1,315.5	1,311.1	1,297.6	1,257.6	-4.4	-.3	-13.5	-1.0	-40.0	-3.1
Computer and peripheral equipment.....	204.1	201.6	193.7	185.4	-2.5	-1.2	-7.9	-3.9	-8.3	-4.3
Communications equipment .	142.2	140.6	131.1	129.0	-1.6	-1.1	-9.5	-6.8	-2.1	-1.6
Semiconductors and electronic components.....	451.2	453.0	453.8	434.9	1.8	.4	.8	.2	-18.9	-4.2
Electronic instruments.....	440.9	440.9	447.2	443.7	.0	.0	6.3	1.4	-3.5	-.8
Electrical equipment and appliances.....	442.2	430.0	430.9	423.8	-12.2	-2.8	.9	.2	-7.1	-1.6
Transportation equipment....	1,775.9	1,774.4	1,749.3	1,684.7	-1.5	-.1	-25.1	-1.4	-64.6	-3.7
Motor vehicles and parts....	1,111.0	1,087.9	1,041.9	962.6	-23.1	-2.1	-46.0	-4.2	-79.3	-7.6
Furniture and related products.....	576.3	567.3	546.3	523.8	-9.0	-1.6	-21.0	-3.7	-22.5	-4.1
Miscellaneous manufacturing	649.7	645.4	646.4	639.9	-4.3	-.7	1.0	.2	-6.5	-1.0
Nondurable goods.....	5,333	5,232	5,108	5,033	-101	-1.9	-124	-2.4	-75	-1.5
Food manufacturing.....	1,482.8	1,479.3	1,473.4	1,486.3	-3.5	-.2	-5.9	-.4	12.9	.9
Beverages and tobacco products.....	193.8	192.5	194.7	192.0	-1.3	-.7	2.2	1.1	-2.7	-1.4
Textile mills.....	230.1	207.8	183.8	163.0	-22.3	-9.7	-24.0	-11.5	-20.8	-11.3
Textile product mills.....	179.6	173.6	162.1	155.7	-6.0	-3.3	-11.5	-6.6	-6.4	-3.9
Apparel.....	266.5	240.0	224.9	204.8	-26.5	-9.9	-15.1	-6.3	-20.1	-8.9
Leather and allied products....	40.0	39.8	34.9	33.7	-.2	-.5	-4.9	-12.3	-1.2	-3.4
Paper and paper products....	489.9	476.6	465.1	460.3	-13.3	-2.7	-11.5	-2.4	-4.8	-1.0
Printing and related support activities.....	655.0	639.0	633.5	619.5	-16.0	-2.4	-5.5	-.9	-14.0	-2.2
Petroleum and coal products .	111.7	111.0	114.4	111.7	-.7	-.6	3.4	3.1	-2.7	-2.4
Chemicals.....	880.7	867.3	864.8	862.0	-13.4	-1.5	-2.5	-.3	-2.8	-.3
Plastics and rubber products..	802.7	805.0	756.6	744.2	2.3	.3	-48.4	-6.0	-12.4	-1.6

See footnote at end of table.

Table 1. Continued—Employees on nonfarm payrolls, by industry, seasonally adjusted, 2004–07

Industry	Dec. 2004	Dec. 2005	Dec. 2006	Dec. 2007	Employment change, December to December					
					2004–05		2005–06		2006–07	
					Level (thousands)	Percent	Level (thousands)	Percent	Level (thousands)	Percent
Service-providing.....	110,337	112,481	114,546	116,102	2,144	1.9	2,065	1.8	1,556	1.4
Private service-providing .	88,623	90,594	92,463	93,769	1,971	2.2	1,869	2.1	1,306	1.4
Trade, transportation, and utilities	25,687	26,129	26,456	26,658	442	1.7	327	1.3	202	.8
Wholesale trade.....	5,708.6	5,821.2	5,969.2	6,072.9	112.6	2.0	148.0	2.5	103.7	1.7
Durable goods.....	2,968.1	3,035.9	3,098.9	3,145.0	67.8	2.3	63.0	2.1	46.1	1.5
Nondurable goods.....	2,020.4	2,024.4	2,057.1	2,089.3	4.0	.2	32.7	1.6	32.2	1.6
Electronic markets and agents and brokers.....	720.1	760.9	813.2	838.6	40.8	5.7	52.3	6.9	25.4	3.1
Retail trade	15,125.4	15,356.9	15,412.8	15,487.8	231.5	1.5	55.9	.4	75.0	.5
Motor vehicle and parts dealers	1,908.1	1,914.2	1,912.7	1,909.3	6.1	.3	-1.5	-.1	-3.4	-.2
Automobile dealers	1,256.2	1,254.4	1,244.7	1,244.6	-1.8	-.1	-9.7	-.8	-.1	.0
Furniture and home furnishings stores	572.1	579.2	587.1	584.5	7.1	1.2	7.9	1.4	-2.6	-.4
Electronics and appliance stores	519.9	549.5	536.6	540.4	29.6	5.7	-12.9	-2.3	3.8	.7
Building material and garden supply stores.....	1,251.4	1,301.4	1,317.5	1,271.6	50.0	4.0	16.1	1.2	-45.9	-3.5
Food and beverage stores	2,808.7	2,817.1	2,827.4	2,871.9	8.4	.3	10.3	.4	44.5	1.6
Health and personal care stores	942.0	963.3	974.0	999.9	21.3	2.3	10.7	1.1	25.9	2.7
Gasoline stations	869.6	869.6	862.2	850.5	.0	.0	-7.4	-.9	-11.7	-1.4
Clothing and clothing accessories stores	1,369.2	1,435.5	1,490.6	1,508.6	66.3	4.8	55.1	3.8	18.0	1.2
Sporting goods, hobby, book, and music stores.....	640.8	649.4	648.5	661.6	8.6	1.3	-.9	-.1	13.1	2.0
General merchandise stores..	2,908.5	2,951.4	2,942.0	2,976.7	42.9	1.5	-9.4	-.3	34.7	1.2
Department stores	1,609.5	1,583.7	1,553.6	1,568.4	-25.8	-1.6	-30.1	-1.9	14.8	1.0
Miscellaneous store retailers .	907.2	891.9	872.0	866.3	-15.3	-1.7	-19.9	-2.2	-5.7	-.7
Nonstore retailers	427.9	434.4	442.2	446.5	6.5	1.5	7.8	1.8	4.3	1.0
Transportation and warehousing	4,297.4	4,399.7	4,525.0	4,539.9	102.3	2.4	125.3	2.8	14.9	.3
Air transportation.....	510.4	484.7	490.5	502.1	-25.7	-5.0	5.8	1.2	11.6	2.4
Rail transportation.....	227.9	226.3	232.0	232.5	-1.6	-.7	5.7	2.5	.5	.2
Water transportation.....	56.4	63.4	64.4	64.4	7.0	12.4	1.0	1.6	.0	.0
Truck transportation	1,369.1	1,414.2	1,449.7	1,423.1	45.1	3.3	35.5	2.5	-26.6	-1.8
Transit and ground passenger transportation.....	389.2	394.2	401.1	411.8	5.0	1.3	6.9	1.8	10.7	2.7
Pipeline transportation	37.8	37.9	39.0	40.8	.1	.3	1.1	2.9	1.8	4.6
Scenic and sightseeing transportation.....	27.7	26.9	26.8	31.3	-.8	-2.9	-.1	-.4	4.5	16.8
Support activities for transportation.....	547.4	560.4	575.3	587.1	13.0	2.4	14.9	2.7	11.8	2.1
Couriers and messengers.....	559.9	576.5	590.3	588.1	16.6	3.0	13.8	2.4	-2.2	-.4
Warehousing and storage	571.6	615.2	655.9	658.7	43.6	7.6	40.7	6.6	2.8	.4
Utilities	555.7	550.9	549.1	557.1	-4.8	-.9	-1.8	-.3	8.0	1.5
Information	3,080	3,054	3,033	3,018	-26	-.8	-21	-.7	-15	-.5
Publishing industries, except Internet.....	903.8	903.3	902.2	889.7	-.5	-.1	-1.1	-.1	-12.5	-1.4
Motion picture and sound recording industries	375.9	383.5	375.0	376.3	7.6	2.0	-8.5	-2.2	1.3	.3
Broadcasting, except Internet.....	327.2	327.9	328.1	321.9	.7	.2	.2	.1	-6.2	-1.9
Telecommunications	1,090.5	1,056.8	1,041.6	1,026.8	-33.7	-3.1	-15.2	-1.4	-14.8	-1.4
Data processing, hosting and related services.....	265.1	262.6	264.4	273.5	-2.5	-.9	1.8	.7	9.1	3.4
Other information services	117.0	120.3	121.4	129.3	3.3	2.8	1.1	.9	7.9	6.5

See footnote at end of table.

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Industry	Dec. 2004	Dec. 2005	Dec. 2006	Dec. 2007	Employment change, December to December					
					2004–05		2005–06		2006–07	
					Level (thousands)	Percent	Level (thousands)	Percent	Level (thousands)	Percent
Financial activities	8,084	8,250	8,356	8,252	166	2.1	106	1.3	-104	-1.2
Finance and insurance	5,974.8	6,091.0	6,180.7	6,111.2	116.2	1.9	89.7	1.5	-69.5	-1.1
Monetary authorities—										
central bank	21.0	20.9	21.3	20.7	-.1	-.5	.4	1.9	-.6	-2.8
Credit intermediation and										
related activities	2,835.8	2,901.8	2,931.5	2,829.2	66.0	2.3	29.7	1.0	-102.3	-3.5
Depository credit										
intermediation	1,754.1	1,780.0	1,820.7	1,824.6	25.9	1.5	40.7	2.3	3.9	.2
Commercial banking	1,285.7	1,301.9	1,344.7	1,345.9	16.2	1.3	42.8	3.3	1.2	.1
Securities, commodity										
contracts, investments	778.8	797.3	834.5	856.7	18.5	2.4	37.2	4.7	22.2	2.7
Insurance carriers and related										
activities	2,257.5	2,285.3	2,305.1	2,316.8	27.8	1.2	19.8	.9	11.7	.5
Funds, trusts, and other										
financial vehicles	81.7	85.7	88.3	87.8	4.0	4.9	2.6	3.0	-.5	-.6
Real estate and rental										
and leasing	2,108.9	2,159.1	2,175.3	2,140.6	50.2	2.4	16.2	.8	-34.7	-1.6
Real estate	1,437.9	1,488.7	1,501.2	1,476.4	50.8	3.5	12.5	.8	-24.8	-1.7
Rental and leasing services	645.3	642.7	645.4	633.6	-2.6	-.4	2.7	.4	-11.8	-1.8
Lessors of nonfinancial										
intangible assets	25.7	27.7	28.7	30.6	2.0	7.8	1.0	3.6	1.9	6.6
Professional and business										
services	16,600	17,277	17,824	18,131	677	4.1	547	3.2	307	1.7
Professional and technical										
services	6,869.7	7,180.7	7,498.9	7,820.5	311.0	4.5	318.2	4.4	321.6	4.3
Legal services	1,167.5	1,169.2	1,177.4	1,173.9	1.7	.1	8.2	.7	-3.5	-.3
Accounting and bookkeeping										
services	813.0	875.8	917.3	993.3	62.8	7.7	41.5	4.7	76.0	8.3
Architectural and engineering										
services	1,282.2	1,344.9	1,410.5	1,460.4	62.7	4.9	65.6	4.9	49.9	3.5
Computer systems design										
and related services	1,182.5	1,229.0	1,319.2	1,391.4	46.5	3.9	90.2	7.3	72.2	5.5
Management and technical										
consulting services	786.6	854.9	914.7	994.3	68.3	8.7	59.8	7.0	79.6	8.7
Management of companies										
and enterprises	1,744.9	1,774.2	1,829.6	1,847.8	29.3	1.7	55.4	3.1	18.2	1.0
Administrative and waste										
services	7,985.1	8,321.9	8,495.0	8,462.8	336.8	4.2	173.1	2.1	-32.2	-.4
Administrative and support										
services	7,651.7	7,979.8	8,144.1	8,099.3	328.1	4.3	164.3	2.1	-44.8	-.6
Employment services	3,488.9	3,701.1	3,697.8	3,566.9	212.2	6.1	-3.3	-.1	-130.9	-3.5
Temporary help services	2,434.2	2,641.4	2,657.1	2,578.5	207.2	8.5	15.7	.6	-78.6	-3.0
Business support services	767.0	766.8	812.3	803.7	-.2	.0	45.5	5.9	-8.6	-1.1
Services to buildings and										
dwellings	1,703.1	1,768.9	1,824.8	1,872.0	65.8	3.9	55.9	3.2	47.2	2.6
Waste management and										
remediation services	333.4	342.1	350.9	363.5	8.7	2.6	8.8	2.6	12.6	3.6
Education and health services ..	17,144	17,573	18,040	18,568	429	2.5	467	2.7	528	2.9
Educational services	2,802.3	2,862.8	2,910.2	2,984.5	60.5	2.2	47.4	1.7	74.3	2.6
Health care and social										
assistance	14,341.3	14,709.7	15,130.1	15,583.2	368.4	2.6	420.4	2.9	453.1	3.0
Health care	12,170.1	12,436.1	12,757.7	13,109.6	266.0	2.2	321.6	2.6	351.9	2.8
Ambulatory health care										
services	5,031.7	5,187.6	5,374.8	5,566.0	155.9	3.1	187.2	3.6	191.2	3.6
Offices of physicians	2,068.2	2,117.5	2,172.1	2,235.6	49.3	2.4	54.6	2.6	63.5	2.9
Outpatient care centers	460.1	483.1	500.8	513.0	23.0	5.0	17.7	3.7	12.2	2.4
Home health care services ..	801.7	839.2	885.7	930.9	37.5	4.7	46.5	5.5	45.2	5.1
Hospitals	4,301.5	4,379.1	4,460.8	4,572.4	77.6	1.8	81.7	1.9	111.6	2.5

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					2004–05		2005–06		2006–07	
					Level (thousands)	Percent	Level (thousands)	Percent	Level (thousands)	Percent
Nursing and residential care facilities.....	2,836.9	2,869.4	2,922.1	2,971.2	32.5	1.1	52.7	1.8	49.1	1.7
Nursing care facilities	1,578.0	1,578.9	1,590.0	1,608.2	.9	.1	11.1	.7	18.2	1.1
Social assistance	2,171.2	2,273.6	2,372.4	2,473.6	102.4	4.7	98.8	4.3	101.2	4.3
Child day care services	774.9	805.8	833.4	857.1	30.9	4.0	27.6	3.4	23.7	2.8
Leisure and hospitality	12,632	12,907	13,288	13,635	275	2.2	381	3.0	347	2.6
Arts, entertainment, and recreation	1,853.1	1,903.5	1,958.0	2,010.3	50.4	2.7	54.5	2.9	52.3	2.7
Performing arts and spectator sports	367.7	379.6	403.7	429.9	11.9	3.2	24.1	6.3	26.2	6.5
Museums, historical sites, zoos, and parks	118.6	121.1	126.3	131.5	2.5	2.1	5.2	4.3	5.2	4.1
Amusements, gambling, and recreation	1,366.8	1,402.8	1,428.0	1,448.9	36.0	2.6	25.2	1.8	20.9	1.5
Accommodation and food services	10,778.5	11,003.5	11,330.0	11,624.7	225.0	2.1	326.5	3.0	294.7	2.6
Accommodation	1,805.2	1,820.3	1,859.0	1,858.1	15.1	.8	38.7	2.1	–.9	.0
Food services and drinking places	8,973.3	9,183.2	9,471.0	9,766.6	209.9	2.3	287.8	3.1	295.6	3.1
Other services	5,396	5,404	5,466	5,507	8	.1	62	1.1	41	.8
Repair and maintenance.....	1,229.5	1,239.8	1,253.3	1,255.5	10.3	.8	13.5	1.1	2.2	.2
Personal and laundry services.....	1,276.2	1,277.8	1,299.0	1,306.9	1.6	.1	21.2	1.7	7.9	.6
Membership associations and organizations	2,889.9	2,886.3	2,913.5	2,944.4	–3.6	–.1	27.2	.9	30.9	1.1
Government	21,714	21,887	22,083	22,333	173	.8	196	.9	250	1.1
Federal	2,729	2,732	2,725	2,735	3	.1	–7	–.3	10	.4
Federal, except U.S. Postal Service.....	1,952.4	1,958.3	1,957.9	1,972.3	5.9	.3	–4	.0	14.4	.7
U.S. Postal Service	776.2	774.1	766.8	763.1	–2.1	–.3	–7.3	–.9	–3.7	–.5
State government	5,012	5,071	5,098	5,153	59	1.2	27	.5	55	1.1
State government education..	2,252.0	2,292.4	2,307.8	2,332.5	40.4	1.8	15.4	.7	24.7	1.1
State government, excluding education	2,760.4	2,778.9	2,790.2	2,820.9	18.5	.7	11.3	.4	30.7	1.1
Local government	13,973	14,084	14,260	14,445	111	.8	176	1.2	185	1.3
Local government education..	7,809.1	7,884.2	7,953.1	8,016.5	75.1	1.0	68.9	.9	63.4	.8
Local government, excluding education	6,164.0	6,199.9	6,307.1	6,428.2	35.9	.6	107.2	1.7	121.1	1.9

NOTE: Consistent with other CES publications, employment data are rounded to thousands for supersectors and selected aggregate industries and to hundreds for more detailed industries.

0.5 percent in 2007.⁹ Between 2003 and 2006, when total nonfarm employment growth was stronger, GDP excluding consumer spending growth was stronger, averaging 2.7 percent. Both consumer spending and GDP excluding consumer spending exhibit similar patterns that coincide with previous periods of weak employment growth. (For the movement of GDP, see chart 3.)

As interest rates rose, adjustable-rate loan payments increased and discretionary income decreased.¹⁰ Consumer sentiment, often seen as a proxy for future spending, was

depressed and ended the year at its lowest level since October 2005. (See table 2.)

Americans curbed their appetites for spending by dining out less and eating at home more. (See chart 4.) Employment in food manufacturing grew for the first time since 1999. Compared with 2006 figures, food and beverage stores' average monthly job growth quadrupled in 2007, with 4,000 jobs added per month. Food services and drinking places added 25,000 jobs per month in 2007, but the rate of growth was unchanged from 2006.

Table 2. Economic indicators, 2003–07

Indicator	Dec. 2003	Dec. 2004	Dec. 2005	Dec. 2006	Dec. 2007	December to December			
						Average annual change, 2003–06		Annual change, 2006–07	
						Level	Percent	Level	Percent
The Conference Board									
Leading index.....	114.5	136.9	138.5	138.4	136.0	8.0	6.9	-2.4	-1.7
Coincident index.....	115.8	120.3	121.6	123.4	125.1	2.5	2.1	1.7	1.4
Consumer confidence index.....	94.8	102.7	103.8	110.0	90.6	5.1	5.1	-19.4	-17.6
Reuters—University of Michigan									
Consumer sentiment index	92.6	97.1	91.5	91.7	75.5	-3	-2	-16.2	-17.7
Bureau of Labor Statistics (CES)									
Employment diffusion index, 1-month span									
Total private.....	52.9	51.8	54.7	56.0	48.5	1.0	2.0	-7.5	-13.4
Manufacturing	41.7	39.9	47.0	39.3	36.3	-8	-1.0	-3.0	-7.6
Average weekly hours of production workers									
Total private.....	33.6	33.8	33.8	33.9	33.8	.1	.3	-.1	-.3
Manufacturing	40.7	40.6	40.8	41.1	41.1	.1	.3	.0	.0
Manufacturing, including overtime	45.2	45.1	45.4	45.3	45.1	.0	.1	-.2	-.4
Index of aggregate weekly hours (2002 = 100)									
Total private production workers ..	98.6	101.5	104.2	106.7	107.8	2.7	2.7	1.1	1.0
Index of aggregate weekly payrolls (2002 = 100)									
Total private production workers ..	102.0	107.7	114.0	121.7	127.5	6.6	6.1	5.8	4.8
Average hourly earnings of production workers									
Total private current dollars.....	15.48	15.87	16.37	17.07	17.70	.53	3.32	.63	3.69
Total private constant (1982) dollars ¹	8.29	8.21	8.18	8.33	8.27	.01	.17	-.06	-.72

¹ The Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) is used to deflate this series.

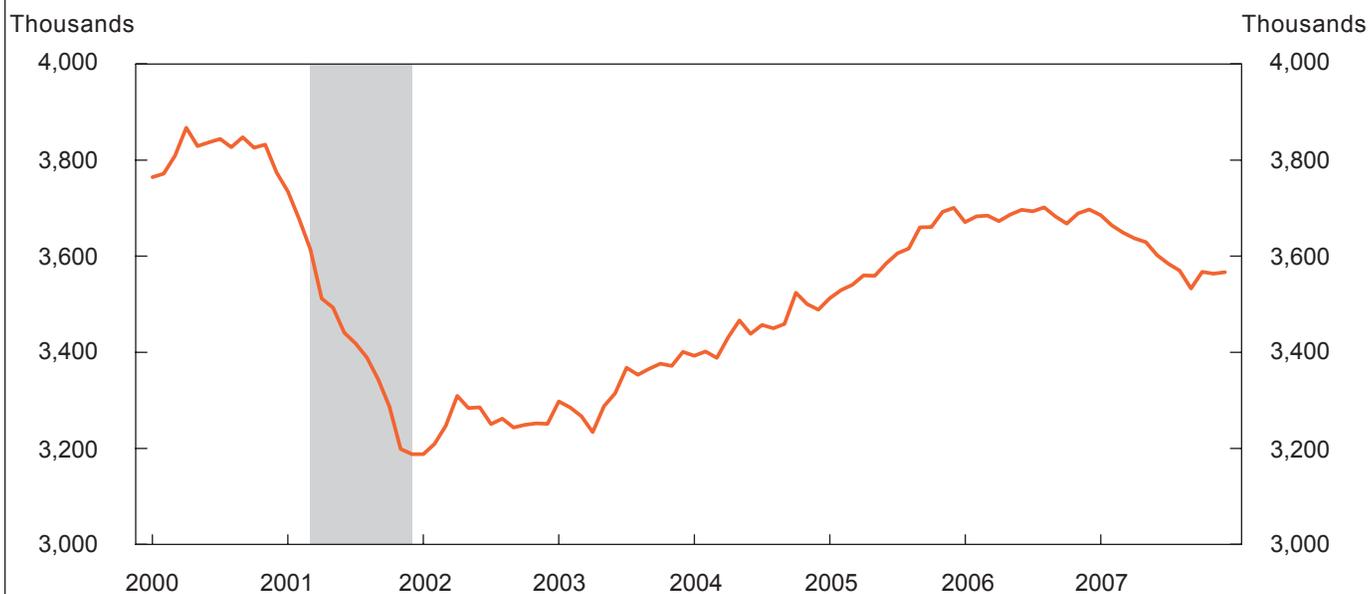
Spending on personal care services also declined with the decrease in discretionary income.¹¹ The decreased spending led to lower employment growth in personal and laundry services, which had gained more than 21,000 employees in 2006, but added less than 8,000 in 2007. In contrast, employment in health and personal care stores more than doubled its rate of growth, from 1.1 percent in 2006 to 2.7 percent in 2007.

Employment in construction and housing

The housing bubble started to burst in 2006 and worsened throughout 2007. Investment in residential construction was reduced. The average number of new housing units started per month declined, annual sales of new homes

fell for the first time since 2001, and vacancy rates rose to their highest level ever.¹² Homes began to depreciate, and mortgage interest rates hit a 4-year high.¹³

Residential construction employment peaked at nearly 3.5 million in April 2006, after which the industry lost 342,000 jobs by December 2007. Housing starts suffered a 44.8-percent reduction, and residential construction expenditures decreased more than 30 percent. During previous downturns in residential construction employment, nonresidential construction was able to mitigate the decline. However, nonresidential construction employment, which grew at more than 5 percent in 2006, was essentially flat in 2007, culminating in an overall loss of 232,000 jobs for the construction industry in the latter year. The only

Chart 2. Employment services, seasonally adjusted, 2000–07

NOTE: Shaded area denotes NBER-designated recession.

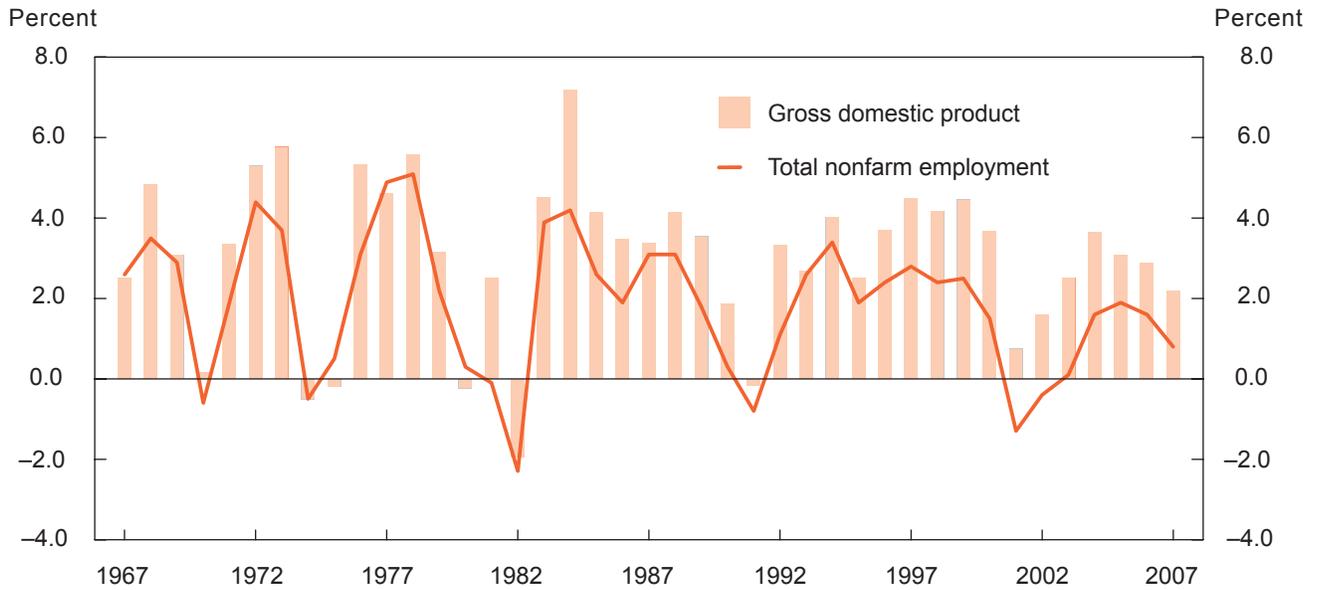
component in construction that posted a gain in 2007 was nonresidential specialty trade contractors, which added 19,000 employees to the payrolls; however, even its rate of growth diminished from 6.0 in 2006 to 0.7 in 2007.

Homeowners began to feel the crunch as interest rates rose in 2007. The subprime lending market, which was especially vulnerable to an increase in interest rates and payment structures, began to founder. Subprime mortgages accounted for more than half of all new foreclosures in 2007.¹⁴ Delinquency rates were at their highest level since 1985.¹⁵ The rate of foreclosure starts and the percentage of loans in the process of foreclosure were at their highest levels ever. Even though delinquency rates on prime mortgages (3.2 percent) remained low compared with those on subprime mortgages (17.3 percent), lenders became risk averse and worked with Federal financial regulatory agencies to implement stricter lending practices.¹⁶ The Federal financial regulatory agencies issued a “Statement on Subprime Mortgage Lending” to address issues that might cause payment shock in relation to certain adjustable-rate mortgage products, and the resulting policies prevented large numbers of people from qualifying for mortgages.¹⁷ The year 2007 proved to be difficult for employment in construction and housing-related industries.

Seventy percent of housing-related employment is composed of nonconstruction industries, which also suffered cutbacks as a result of the declining housing market.¹⁸ (See table 3 and chart 5.) Manufacturers of building materials such as wood products and nonmetallic mineral products cut 42,000 jobs. Building-related wood products include cut lumber, plywood, and wood trusses; and nonmetallic mineral products include clay, cement, and brick products.¹⁹ Retail home centers, which include building materials and home improvement centers, reduced employment by 28,000. Manufacturers of furniture and related products, including cabinetry, shed 23,000 jobs from the payrolls. Logging and the wholesale trade of lumber and construction products cut a total of 12,000 employees, and employment in furniture stores was virtually flat over the year.

Financial activities lost 149,000 jobs in 2007. More than three-quarters of the loss was attributable to the credit intermediation and related activities component, which includes real estate credit and mortgage loan brokers. The National Association of Realtors stated that 2007 sales of existing homes were at “the lowest pace since [the organization] began tracking the combined series in 1999.”²⁰ Other financial industries that bore the consequences of

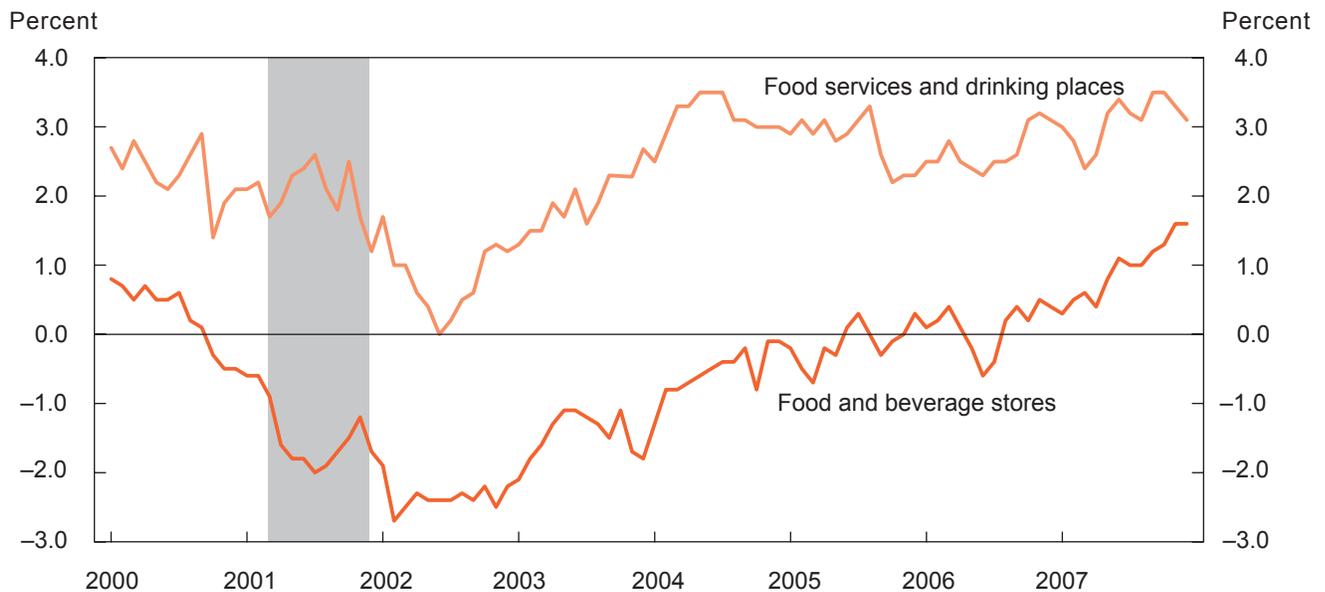
Chart 3. Annual growth rates, gross domestic product and total nonfarm employment, 1967–2007



SOURCE: U.S. Bureau of Economic Analysis.

NOTE: Gross domestic product is in billions of chained 2000 dollars. Total nonfarm employment is seasonally adjusted.

Chart 4. Food and beverage stores and food services and drinking places, 12-month percent change in employment, seasonally adjusted, 2000–07



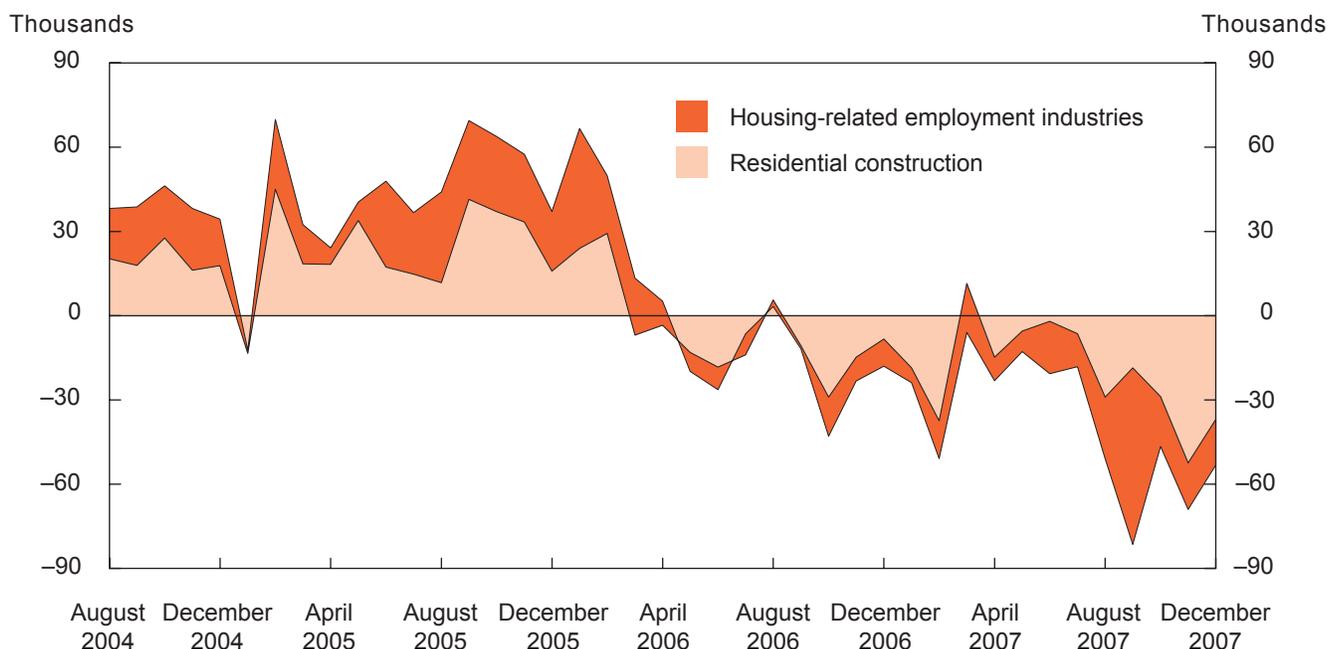
NOTE: Shaded area denotes NBER-designated recession.

Table 3. Employees in housing-related industries, not seasonally adjusted, August 2004–December 2007

Industry	Net change in employment ¹					
	December 2006 to December 2007		April 2006 to December 2007		August 2004 to April 2006	
	Level (thousands)	Percent	Level (thousands)	Percent	Level (thousands)	Percent
Total housing-related industries	-451.2	-4.2	-570.7	-5.2	508.5	4.9
Seasonally adjusted	-457.0	-4.2	-602.6	-5.5	804.6	7.9
Natural resources and mining:						
Logging.....	-1.7	-2.7	.5	.8	-9.7	-13.8
Nonmetallic mineral mining and quarrying	-2.2	-2.1	-4.9	-4.5	-3.6	-3.2
Construction:						
Residential building construction	-88.5	-9.0	-101.8	-10.2	70.9	7.6
Residential specialty trades	-146.9	-6.4	-215.3	-9.1	142.1	6.4
Manufacturing:						
Sawmills and wood preservation	-5.0	-4.4	-9.1	-7.7	-2.6	-2.2
Plywood and engineered wood products	-9.7	-8.8	-23.0	-18.7	2.0	1.7
Other wood products	-13.6	-4.4	-26.8	-8.3	3.1	1.0
Clay products and refractories	-4.1	-6.9	-5.0	-8.3	-5.0	-7.7
Cement and concrete products	-12.4	-5.1	-18.6	-7.4	5.5	2.2
Lime, gypsum, and other nonmetallic mineral products	2.8	2.8	5.6	5.8	.8	.8
HVAC and commercial refrigeration equipment	-5.0	-3.2	-5.6	-3.6	1.2	.8
Electric lighting equipment	-2.2	-3.7	-1.8	-3.0	-5.2	-8.0
Household and institutional furniture	-23.1	-6.4	-43.1	-11.3	-8.2	-2.1
Paints, coatings, and adhesives.....	.8	1.3	-2.6	-3.9	-.6	-.9
Wholesale trade:						
Furniture and furnishings.....	-3.1	-2.6	-.8	-.7	5.4	4.9
Lumber and construction supplies	-10.3	-3.9	-12.2	-4.6	19.0	7.7
Hardware and plumbing	5.6	2.2	7.0	2.8	15.0	6.3
Retail trade:						
Furniture and home furnishing stores4	.1	27.9	4.8	22.1	3.9
Home centers	-28.3	-4.3	-72.8	-10.5	96.2	16.0
Paint and wallpaper stores	1.0	2.4	.9	2.1	.4	1.0
Hardware stores.....	.3	.2	.8	.5	-9.5	-5.6
Financial activities:						
Real estate credit	-89.5	-26.1	-98.9	-28.1	9.2	2.7
Mortgage and nonmortgage loan brokers	-25.3	-17.9	-32.4	-21.9	18.8	14.5
Direct title insurance and other direct insurance carriers.....	-14.1	-13.8	-19.8	-18.4	-1.3	-1.2
Real estate	-24.7	-1.6	-17.4	-1.2	46.8	3.2
Machinery and equipment rental and leasing	4.8	3.8	14.6	12.6	10.5	10.0
Professional and business services:						
Title abstract and settlement offices	-8.2	-10.8	-11.0	-14.0	5.6	7.7
Architectural and engineering services	51.0	3.6	94.9	7.0	79.6	6.2

¹ Housing-related employment peaked in April 2006. For comparative purposes, similar time spans were used prior to and after the peak.

Chart 5. Housing-related industries, over-the-month change in employment, seasonally adjusted, August 2004–December 2007



NOTE: See table 3 for a list of included industries.

the housing slump included direct title insurance and other direct insurance carriers, as well as real estate, rental, and leasing.

Slower employment growth extended to other housing-related industries as well. Title abstract and settlement offices, which showed little change in 2006, reduced employment by 10.8 percent in 2007. This industry includes establishments engaged primarily in (1) preparing documents necessary for the transfer of the title of a domicile and for the financing and settlement of housing loans; (2) conducting final real estate settlements and closings; and (3) filing legal and other documents relating to the sale of real estate.²¹ Employment in architectural and engineering services, including landscape architecture, posted an average gain of 4.6 percent for the previous 3 years, but slowed to a 3.6-percent increase in 2007. Employment notched down 2.6 percent in 2007 in the wholesale of furniture and furnishings after expanding over the previous 2 years.

Industry growth

Despite the challenging economic conditions, certain industries maintained or even increased their employment

growth rates in 2007. Health care and social assistance posted a 3.0-percent gain, the highest growth rate in the industry since December 2001. This higher rate of growth was due mainly to hospitals, which averaged an increase of more than 9,000 jobs per month in 2007, compared with fewer than 7,000 per month in 2006. With 453,000 new jobs in 2007, health care and social assistance accounted for more than half of all net job growth in the private sector during the same period.

Professional and technical services added 322,000 jobs in 2007. Management and technical consulting services augmented its payrolls by 8.7 percent over the year, bringing the total to nearly 1 million employees, almost one-third higher than the last peak in March 2001. Computer systems design and related services added 72,000 employees in 2007. Accounting and bookkeeping employment, benefiting from increasingly complex reporting requirements and an overload of new standards and rules, rose by 8.3 percent in 2007, compared with 4.7 percent in 2006.²²

Within wholesale trade in 2007, the electronic markets and agents and brokers industry continued its expansion, adding 25,000 more employees, and nondurable goods

maintained its strongest growth rate in 10 years.

Both private and public education continued to supplement their staffs in 2007. Private education added 2.6 percent to its workforce, bringing the total number of employees to nearly 3 million. Despite a slower rate of growth, local education added 63,000 jobs in 2007. Federal Government employment was unchanged over the year, but employment growth rates for State and local government, excluding education, were both more than a full percentage point higher than their average growth rates over the previous 5 years.

Americans continued to invest in new technology. As wireless telecommunications began to replace wired telecommunications, employment shifted, resulting in an expansion in the wireless industry since 2003 and a contraction in the wired industry since 2000. These trends continued in 2007. Employment in electronics and appliance stores declined in 2006, but grew in 2007. Persistent job loss has characterized the utilities industry since 1991; however, 8,000 employees joined the workforce in 2007.

Overall, growth in nonfarm payroll employment slowed to its lowest rate in 4 years in 2007: 0.8 percent. Industries affected by the declining housing market and the subprime credit quandary lost nearly one-half million jobs. Market factors such as higher fuel costs and higher interest rates drew from discretionary income and led to a decrease in spending on luxury and nonessential items.²³ Employment growth decelerated in the leisure and hospitality, clothing stores, and personal and laundry services industries. However, consumers increased their spending on basic items such as food and medicine, which resulted in accelerated employment growth rates in food and beverage stores and in health and personal care stores. The population continued to age, increasing the demand for health care and social services, and as the population expanded, the need for educators and government employees increased.²⁴ The result was employment increases in education and health services and in government, which together accounted for three-quarter million jobs, or more than two-thirds of total net nonfarm employment growth, in 2007. □

Notes

¹ The Current Employment Statistics (CES) program is a monthly survey of about 150,000 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*," on the Internet at www.bls.gov/web/empsit.supp.toc.htm#technote (visited Mar. 12, 2008). CES data are available on the Internet at www.bls.gov/ces/ (visited Mar. 12, 2008). The CES data used in this article are seasonally adjusted unless otherwise noted.

² Leading and coincident indexes are available on the Internet at www.conference-board.org/economics/bci/pressRelease_output.cfm?cid=1 (visited Mar. 12, 2008).

³ *Ibid.*

⁴ Real earnings are calculated by adjusting earnings in current dollars for changes in the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W).

⁵ Crude oil quotes represent W&T Offshore, Inc. (WTI), daily spot pricing. Gasoline prices are for all grades and all formulations, weekly retail, in the United States. Data are available from the Energy Information Administration on the Internet at www.eia.doe.gov (visited Mar. 12, 2008).

⁶ Moira Herbst, "Consumer Spending Could Be Out of Gas," on the Internet at www.businessweek.com/bwdaily/dnflash/content/may2007/db20070517_636305.htm, last updated May 17, 2007 (visited Mar. 12, 2008).

⁷ Data on the number of operable oil refineries in the United States are available from the Energy Information Administration on the Internet at www.eia.doe.gov/ (visited Mar. 12, 2008).

⁸ The GDP measure is produced by the U.S. Bureau of Economic Analysis and can be found on the Internet at www.bea.gov (visited Mar. 12, 2008).

⁹ Real GDP and consumer spending (personal consumer expenditures) are in billions of chained 2000 dollars, as calculated by the U.S. Bureau of Economic Analysis.

¹⁰ For a discussion of the relationship between adjustable interest rates and discretionary income, see Gordon H. Sellon, Jr., "The Changing U.S. Financial System: Some Implications for the Monetary Transmission Mechanism," *Economic Review*, first quarter, 2002, pp. 5-35.

¹¹ For a discussion about changes to household expenditures during the business cycle, see Kerwin Kofi Charles and Melvin Stephens, Jr., "The Level and Composition of Consumption over the Business Cycle: The Role of 'Quasi-Fixed' Expenditures," NBER *Working Paper Series* (July 2006), Working Paper 12388.

¹² Data on residential construction investment, housing starts, home sales, and vacancy rates are available from the U.S. Census Bureau and can be found on the Internet at www.census.gov/cgi-bin/briefroom/BriefRm (visited Mar. 12, 2008).

¹³ Data on home values are available from S&P's Case-Shiller® Home Price Indices, on the Internet at www2.standardandpoors.com/portal/site/sp/en/us/page.topic/indices_csmahp/0,0,0,0,0,0,0,0,1,1,0,0,0,0,0.html (visited Mar. 12, 2008). Mortgage interest rates are based on 30-year fixed-rate mortgages posted during the week of the 12th of the month from HSH Associate Financial Publishers and are available on the Internet at www.hsh.com (visited Mar. 12, 2008).

¹⁴ Data on subprime mortgage foreclosure starts were derived from the Mortgage Bankers Association National Delinquency Survey, on the Internet at www.mortgagebankers.org/ResearchandForecasts/ProductsandSurveys (visited Mar. 12, 2008), and from testimony from Federal Reserve Board Chairman Ben S. Bernanke on September 20, 2007, on the Internet at www.federalreserve.gov/newsevents/testimony/bernanke20070920a.htm (visited Mar. 12, 2008).

¹⁵ Data on delinquency rates, foreclosure starts, and the percent-

age of loans in the process of foreclosure are available from the Mortgage Bankers Association and can be found on the Internet at www.mortgagebankers.org/ResearchandForecasts/ProductsandSurveys (visited Mar. 12, 2008).

¹⁶ “Stricter lending seen barring 1 million U.S. home buyers,” Reuters, March 9, 2007, on the Internet at www.reuters.com/article/companyNewsAndPR/idUSN0924059020070309 (visited Mar. 12, 2008).

¹⁷ Federal financial regulatory agencies are composed of the Office of the Comptroller of the Currency, the Board of Governors of the Federal Reserve System, the Federal Deposit Insurance Corporation, the Office of Thrift Supervision, and the National Credit Union Administration. The proposed “Statement on Subprime Mortgage Lending” was issued in the *Federal Register* on March 8, 2007. Comments were requested and incorporated. The final statement was issued on June 29, 2007, and is reported on the Internet at www.federalreserve.gov/newsevents/press/bcreg/20070629a.htm (visited Mar. 12, 2008).

¹⁸ Housing-related industry details are based on data that are not seasonally adjusted.

¹⁹ Descriptions of the manufacturing industries that produce

wood products or nonmetallic mineral products are available from the U.S. Census Bureau and can be found on the Internet at www.census.gov/naics/2007/index.html (visited Mar. 12, 2008).

²⁰ Wannasiri Chompoopet, “Existing Home Sales,” *Housing & Economic Indicators*, November 2007; National Association of Realtors, Dec. 20, 2007, on the Internet at www.realtor.org/research.nsf/pages/EcoIndicator?OpenDocument (visited Mar. 12, 2008).

²¹ Descriptions of title abstract companies and settlement offices are available from the U.S. Census Bureau and can be found on the Internet at www.census.gov/naics/2007/index.html (visited Mar. 12, 2008).

²² Ken Crutchfield, “Challenges for Your Clients; Opportunities for Your Practice,” *Accounting Technology: SMALL BUSINESS SERVICES*, 8–9 (December 2007). Retrieved Mar. 10, 2008, from ABI/INFORM Research database (Document ID: 1402269361).

²³ Charles and Stephens, “Consumption over the Business Cycle.”

²⁴ Population data come from the Current Population Survey (CPS) and can be found on the Internet at www.bls.gov/cps/home.htm (visited Mar. 12, 2008).

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