

Payroll employment in 2005: recovery and expansion

Employment grew by more than 2 million in 2005, reaching and then surpassing its prerecession peak; a strong housing market spurred hiring in construction and in finance and retail trade, while increased manufacturing production translated into more jobs in trucking, warehousing, and wholesale trade

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Nonfarm payroll employment, as measured by the Current Employment Statistics (CES) survey, continued to grow at a modest pace in 2005, increasing by nearly 2.0 million.¹ With this growth, employment recovered to its prerecession peak by February and then entered a period of expansion. (See chart 1.)

Employment growth was widespread, with most industries adding jobs. (See table 1.) A sustained period of historically low interest rates continued to boost demand for housing and remodeling throughout 2005 and supported ongoing hiring in construction and housing-dependent industries within financial activities and retail trade. Similarly, improved consumer confidence through most of the year helped spur employment growth in retail trade, as well as in leisure and hospitality industries. The effects of surging energy prices proved to be twofold, with mining experiencing unusually strong job gains, but many other industries seeing dampened hiring. Despite rising output, manufacturing was one of the three major industries not to add jobs in 2005. (The other two were information and other services.) The increased output, however, did help boost hiring in other industries, such as wholesale trade and trucking. Steady growth in State and local govern-

ment revenues helped lift employment in the public sector.

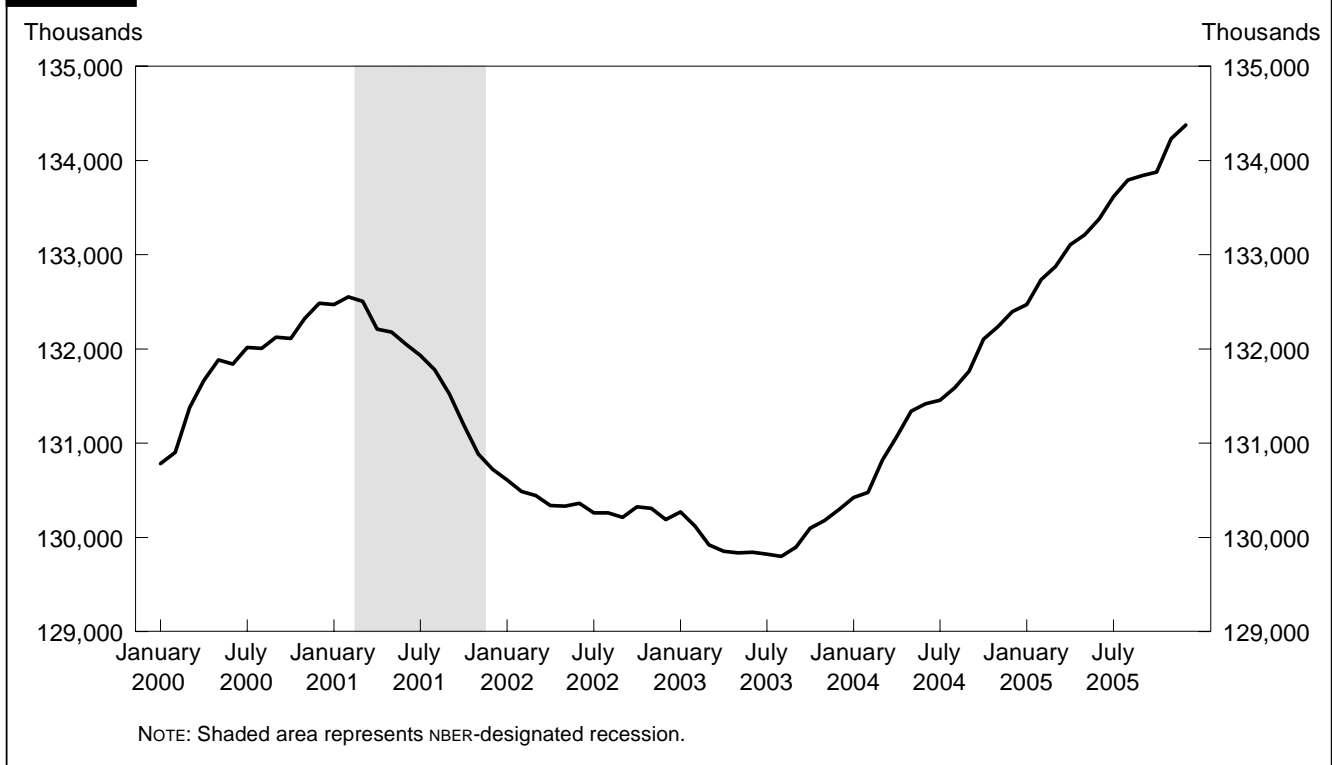
The job openings rate, as measured by the Job Openings and Labor Turnover Survey (JOLTS),² began to climb in June, continuing the general upward trend started in September 2003, but still remained slightly below its prerecessionary peak. (See chart 2.) CES payroll employment measures net employment changes from month to month, whereas the hires and separations measures capture the underlying monthly employment movements. The hires and separations rates, also measured by JOLTS, remained relatively flat throughout 2005.

Interest-rate-sensitive industries

Long-term interest rates, though inching upward in 2005, remained at historically low levels. (See chart 3.) The low levels helped spur job growth in components of construction, financial activities, and retail trade. Although anecdotal evidence suggested a weakening in the housing market late in the year, hiring held steady in construction and financial activities, while retail employment remained relatively flat after July.³

Construction added 295,000 jobs over the year, despite some worries of housing price bubbles in certain regions of the country.⁴ Nationally, home prices increased by 13.0 percent from the fourth

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Chart 1. Total nonfarm employment, seasonally adjusted, 2000-05

quarter of 2004 through the fourth quarter of 2005.⁵ This fast-paced growth was likely strengthened by low mortgage rates and by an apparent increase in speculative home buying in regions of the country that had seen the most rapid housing appreciation.⁶ The Mountain, Pacific, and South Atlantic regions saw housing appreciate more than 17 percent between the fourth quarter of 2004 and the fourth quarter of 2005, while housing in certain metropolitan statistical areas within these regions appreciated more than 30 percent during the same period. In spite of worries about inflation, construction indicators remained fairly strong in 2005, with the number of privately owned housing units authorized by building permits remaining above 2004 levels throughout most of the year. In addition, the ratio of housing starts to completions remained above 1.0 in most of 2005, indicating that new home starts continued to outpace completions and thus increased demand for construction workers.⁷

Specialty trade contracting was the main source of strength in construction, accounting for 62.5 percent of jobs added in 2005. Specialty trade contractors are involved in specific activities related to construction projects, but are not responsible for the project as a whole. Building foundation and exterior contractors, such as framing, masonry, or roofing contractors; building equipment contractors, such as electrical, plumbing, and heating, ventilation, and air-conditioning contractors; and building

finishing contractors, such as drywall, insulation, and flooring contractors, are all classified into this industry. Much of the work done by specialty trade contractors is contracted through builders and performed at the construction site. Following a relatively mild downturn in 2001–02, the specialty trades industry has seen consistent, solid growth.

The continued low long-term interest rates and healthy housing market led to job gains in other industries also. The credit intermediation industry, which is involved with lending funds or facilitating lending, hired more workers as demand for lending increased. Both depository and nondepository credit intermediation saw growth in 2005. Within depository credit intermediation, commercial banking added 21,300 jobs, while real estate credit accounted for much of the hiring strength in nondepository credit intermediation. The real estate industry also benefited as the increasing volume of new and existing home sales helped spark a gain of 50,400 jobs.⁸

Building material and garden supply stores have benefited doubly from the healthy housing market. These stores supply not only the increasing ranks of homeowners, but many building and specialty trade contractors as well. Furthermore, much mortgage activity has been in the refinancing area, with cash-outs that often help consumers afford home improvements. As a result, building material and garden supply stores

Table 1. Employees on nonfarm payrolls, by industry, seasonally adjusted, 2000–05

[Numbers in thousands]

Industry	December 2000	December 2003	December 2004	December 2005	Average change, December to December					
					2000–03		2003–04		2004–05	
					Thousands	Percent	Thousands	Percent	Thousands	Percent
Total nonfarm	132,484	130,298	132,395	134,376	-729	-0.6	2,097	1.6	1,981	1.5
Total private	111,680	108,743	110,679	112,498	-979	-.9	1,936	1.8	1,819	1.6
Goods-producing	24,575	21,682	22,016	22,282	-964	-4.1	334	1.5	266	1.2
Natural resources and mining	602	575	601	644	-9	-1.5	26	4.5	43	7.2
Logging	75.3	68.4	66.9	62.0	-2.3	-3.2	-1.5	-2.2	-4.9	-7.3
Mining	526.3	506.5	534.0	582.1	-6.6	-1.3	27.5	5.4	48.1	9.0
Oil and gas extraction	122.9	118.2	124.7	128.7	-1.6	-1.3	6.5	5.5	4.0	3.2
Mining, except oil and gas	220.7	202.3	206.4	214.3	-6.1	-2.9	4.1	2.0	7.9	3.8
Coal mining	70.9	68.8	71.0	75.4	-.7	-1.0	2.2	3.2	4.4	6.2
Support activities for mining	182.7	186.0	202.9	239.1	1.1	.6	16.9	9.1	36.2	17.8
Construction	6,792	6,811	7,121	7,416	6	.1	310	4.6	295	4.1
Construction of buildings	1,604.3	1,584.7	1,669.7	1,727.2	-6.5	-.4	85.0	5.4	57.5	3.4
Residential building	797.2	862.7	928.1	966.8	21.8	2.7	65.4	7.6	38.7	4.2
Nonresidential building	807.1	722.0	741.6	760.4	-28.4	-3.6	19.6	2.7	18.8	2.5
Heavy and civil engineering construction	943.7	902.7	921.2	974.8	-13.7	-1.5	18.5	2.0	53.6	5.8
Specialty trade contractors	4,243.7	4,323.3	4,529.8	4,714.3	26.5	.6	206.5	4.8	184.5	4.1
Residential specialty trade contractors	-	2,031.5	2,190.5	2,347.3	-	-	159.0	7.8	156.8	7.2
Nonresidential specialty trade contractors	-	2,291.8	2,339.3	2,367.0	-	-	47.5	2.1	27.7	1.2
Manufacturing	17,181	14,296	14,294	14,222	-962	-5.9	-2	.0	-72	-5
Durable goods	10,860	8,854	8,956	8,970	-669	-6.6	102	1.2	14	.2
Wood products	593.9	540.6	557.2	558.9	-17.8	-3.1	16.6	3.1	1.7	.3
Nonmetallic mineral products	553.8	491.9	507.7	500.7	-20.6	-3.9	15.8	3.2	-7.0	-1.4
Primary metals	611.1	465.9	467.1	469.4	-48.4	-8.6	1.2	.3	2.3	.5
Fabricated metal products	1,761.9	1,472.5	1,511.3	1,526.7	96.5	-5.8	38.8	2.6	15.4	1.0
Machinery	1,453.3	1,131.6	1,149.7	1,166.9	-107.2	-8.0	18.1	1.6	17.2	1.5
Computer and electronic products	1,864.4	1,319.8	1,316.8	1,322.2	-181.5	-10.9	-3.0	-.2	5.4	.4
Computer and peripheral equipment	303.1	214.0	205.1	205.7	-29.7	-11.0	-8.9	-4.2	.6	.3
Communications equipment	255.7	148.3	148.2	149.2	-35.8	-16.6	-.1	-.1	1.0	.7
Semiconductors and electronic components	710.4	449.5	451.2	451.0	-87.0	-14.1	1.7	.4	-.2	.0
Electronic instruments	480.0	426.5	434.8	441.7	-17.8	-3.9	8.3	1.9	6.9	1.6
Electrical equipment and appliances	587.4	450.1	441.8	434.4	-45.8	-8.5	-8.3	-1.8	-7.4	-1.7
Transportation equipment	2,022.2	1,759.5	1,776.3	1,776.7	-87.6	-4.5	16.8	1.0	.4	.0
Motor vehicles and parts	1,286.1	1,116.2	1,111.7	1,092.1	-56.6	-4.6	-4.5	-.4	-19.6	-1.8
Furniture and related products	676.8	568.7	572.5	558.0	-36.0	-5.6	3.8	.7	-14.5	-2.5
Miscellaneous manufacturing	734.9	653.3	655.3	655.8	-27.2	-3.8	2.0	.3	.5	.1
Nondurable goods	6,321	5,442	5,338	5,252	-293	-4.9	-104	-1.9	-86	-1.6
Food manufacturing	1,554.0	1,506.9	1,486.6	1,466.0	-15.7	-1.0	-20.3	-1.3	-20.6	-1.4
Beverages and tobacco products	209.1	196.1	193.3	192.3	-4.3	-2.1	-2.8	-1.4	-1.0	-.5
Textile mills	367.5	243.6	229.5	209.0	-41.3	-12.8	-14.1	-5.8	-20.5	-8.9
Textile product mills	215.0	173.7	173.0	173.9	-13.8	-6.9	-.7	-.4	.9	.5
Apparel	472.6	296.5	273.5	253.5	-58.7	-14.4	-23.0	-7.8	-20.0	-7.3
Leather and allied products	64.5	42.6	40.4	39.7	-7.3	-12.9	-2.2	-5.2	-.7	-1.7
Paper and paper products	599.8	504.1	489.7	478.1	-31.9	-5.6	-14.4	-2.9	-11.6	-2.4
Printing and related support activities	801.2	671.3	655.0	644.0	-43.3	-5.7	-16.3	-2.4	-11.0	-1.7
Petroleum and coal products	121.9	111.5	111.4	112.3	-3.5	-2.9	-.1	-.1	.9	.8
Chemicals	975.3	891.2	881.1	884.0	-28.0	-3.0	-10.1	-1.1	2.9	.3
Plastics and rubber products	940.2	804.9	804.6	798.9	-45.1	-5.0	-.3	.0	-5.7	-.7

Industry	December 2000	December 2003	December 2004	December 2005	Average change, December to December					
					2000–03		2003–04		2004–05	
					Thousands	Percent	Thousands	Percent	Thousands	Percent
Service-providing	107,909	108,616	110,379	112,094	236	.2	1,763	1.6	1,715	1.6
Private service-providing	87,105	87,061	88,663	90,216	-15	.0	1,602	1.8	1,553	1.8
Trade, transportation, and utilities	26,339	25,295	25,695	26,015	-348	-1.3	400	1.6	320	1.2
Wholesale trade	5,883.8	5,605.9	5,702.5	5,783.8	-92.6	-1.6	96.6	1.7	81.3	1.4
Durable goods	3,213.8	2,926.0	2,966.6	3,017.6	-95.9	-3.1	40.6	1.4	51.0	1.7
Nondurable goods	2,057.7	1,999.1	2,018.4	2,023.9	-19.5	-1.0	19.3	1.0	5.5	.3
Electronic markets and agents and brokers	612.3	680.8	717.5	742.3	22.8	3.6	36.7	5.4	24.8	3.5
Retail trade	15,379.9	14,930.0	15,139.1	15,300.3	-150.0	-1.0	209.1	1.4	161.2	1.1
Motor vehicle and parts dealers	1,856.6	1,892.9	1,906.0	1,914.7	12.1	.6	13.1	.7	8.7	.5
Automobile dealers	1,222.0	1,258.4	1,254.7	1,252.4	12.1	1.0	-3.7	-3	-2.3	-2
Furniture and home furnishings stores	546.3	557.4	570.0	583.0	3.7	.7	12.6	2.3	13.0	2.3
Electronics and appliance stores	564.3	510.6	520.5	540.5	-17.9	-3.3	9.9	1.9	20.0	3.8
Building material and garden supply stores	1,146.8	1,198.9	1,249.6	1,290.9	17.4	1.5	50.7	4.2	41.3	3.3
Food and beverage stores	2,979.1	2,814.3	2,810.4	2,805.9	-54.9	-1.9	-3.9	-.1	-4.5	-2
Health and personal care stores	947.2	940.7	945.4	966.1	-2.2	-.2	4.7	.5	20.7	2.2
Gasoline stations	929.8	878.0	868.1	869.6	-17.3	-1.9	-9.9	-1.1	1.5	.2
Clothing and clothing accessories stores	1,328.0	1,321.8	1,386.1	1,448.1	-2.1	-.2	64.3	4.9	62.0	4.5
Sporting goods, hobby, book, and music stores	711.8	637.5	641.7	640.0	-24.8	-3.6	4.2	.7	-1.7	-.3
General merchandise stores	2,864.1	2,836.7	2,903.4	2,906.9	-9.1	-.3	66.7	2.4	3.5	.1
Department stores	1,771.5	1,611.4	1,605.6	1,595.6	-53.4	-3.1	-5.8	-.4	-10.0	-.6
Miscellaneous store retailers	1,010.7	917.6	907.1	899.0	-31.0	-3.2	-10.5	-1.1	-8.1	-.9
Nonstore retailers	495.2	423.6	430.8	435.6	-23.9	-5.1	7.2	1.7	4.8	1.1
Transportation and warehousing	4,473.9	4,187.9	4,298.3	4,371.6	-95.3	-2.2	110.4	2.6	73.3	1.7
Air transportation	628.3	517.7	511.0	486.9	-36.9	-6.3	-6.7	-1.3	-24.1	-4.7
Rail transportation	230.2	221.4	227.6	227.3	-2.9	-1.3	6.2	2.8	-.3	-.1
Water transportation	55.7	55.4	56.8	63.7	-.1	-.2	1.4	2.5	6.9	12.1
Truck transportation	1,405.6	1,334.4	1,368.9	1,404.0	-23.7	-1.7	34.5	2.6	35.1	2.6
Transit and ground passenger transportation	373.0	386.4	389.0	392.2	4.5	1.2	2.6	.7	3.2	.8
Pipeline transportation	46.1	39.1	37.1	37.0	-2.3	-5.3	-2.0	-5.1	-.1	-.3
Scenic and sightseeing transportation	28.9	25.7	28.0	31.1	-1.1	-3.8	2.3	8.9	3.1	11.1
Support activities for transportation	546.3	521.7	546.3	556.2	-8.2	-1.5	24.6	4.7	9.9	1.8
Couriers and messengers	635.1	553.8	561.2	579.7	-27.1	-4.5	7.4	1.3	18.5	3.3
Warehousing and storage	524.7	532.3	572.4	593.5	2.5	.5	40.1	7.5	21.1	3.7
Utilities	601.3	570.7	555.1	559.7	-10.2	-1.7	-15.6	-2.7	4.6	.8
Information	3,706	3,152	3,080	3,066	-185	-5.3	-72	-2.3	-14	-.5
Publishing industries, except Internet	1,044.7	914.3	903.8	902.5	-43.5	-4.3	-10.5	-1.1	-1.3	-.1
Motion picture and sound recording industries	378.2	385.9	376.5	387.7	2.6	.7	-9.4	-2.4	11.2	3.0
Broadcasting, except Internet	345.1	321.9	326.4	325.1	-7.7	-2.3	4.5	1.4	-1.3	-.4
Internet publishing and broadcasting	51.1	28.4	30.7	30.4	-7.6	-17.8	2.3	8.1	-.3	-1.0
Telecommunications	1,325.5	1,061.2	1,011.9	993.3	-88.1	-7.1	-49.3	-4.6	-18.6	-1.8
ISPs, search portals, and data processing	514.5	390.1	379.8	377.8	-41.5	-8.8	-10.3	-2.6	-2.0	-.5
Other information services	46.9	49.9	50.5	49.6	1.0	2.1	.6	1.2	-.9	-1.8
Financial activities	7,742	7,982	8,076	8,223	80	1.0	94	1.2	147	1.8
Finance and insurance	5,713.5	5,918.6	5,973.1	6,068.2	68.4	1.2	54.5	.9	95.1	1.6
Monetary authorities—central bank	22.8	22.4	20.9	21.0	-.1	-.6	-1.5	-6.7	.1	.5
Credit intermediation and related activities	2,545.9	2,800.7	2,834.4	2,894.2	84.9	3.2	33.7	1.2	59.8	2.1

Table 1. Continued—Employees on nonfarm payrolls, by industry, seasonally adjusted, 2000–05

[Numbers in thousands]

Industry	December 2000	December 2003	December 2004	December 2005	Average change, December to December					
					2000–03		2003–04		2004–05	
					Thousands	Percent	Thousands	Percent	Thousands	Percent
Depository credit intermediation	1,678.0	1,748.9	1,754.0	1,793.2	23.6	1.4	5.1	.3	39.2	2.2
Commercial banking	1,241.6	1,276.5	1,284.7	1,306.0	11.6	.9	8.2	.6	21.3	1.7
Securities, commodity contracts, investments	837.1	754.7	777.7	790.4	-27.5	-3.4	23.0	3.0	12.7	1.6
Insurance carriers and related activities	2,221.6	2,254.6	2,254.4	2,274.8	11.0	.5	-2	.0	20.4	.9
Funds, trusts, and other financial vehicles	86.1	86.2	85.7	87.8	.0	.0	-5	-6	2.1	2.5
Real estate and rental and leasing	2,028.7	2,063.6	2,102.6	2,154.5	11.6	.6	39.0	1.9	51.9	2.5
Real estate	1,328.3	1,393.0	1,431.2	1,481.6	21.6	1.6	38.2	2.7	50.4	3.5
Rental and leasing services	671.7	643.5	645.6	645.0	-9.4	-1.4	2.1	0.3	-6	-1
Lessors of nonfinancial intangible assets	28.7	27.1	25.8	27.9	-5	-1.9	-1.3	-4.8	2.1	8.1
Professional and business services	16,833	16,146	16,630	17,121	-229	-1.4	484	3.0	491	3.0
Professional and technical services	6,903.0	6,667.0	6,902.2	7,118.9	-78.7	-1.2	235.2	3.5	216.7	3.1
Legal services	1,071.3	1,154.0	1,167.9	1,160.8	27.6	2.5	13.9	1.2	-7.1	-6
Accounting and bookkeeping services	879.7	808.3	821.8	859.0	-23.8	-2.8	13.5	1.7	37.2	4.5
Architectural and engineering services	1,265.3	1,231.9	1,281.3	1,335.6	-11.1	-9	49.4	4.0	54.3	4.2
Computer systems design and related services	1,315.8	1,122.0	1,177.2	1,212.1	-64.6	-5.2	55.2	4.9	34.9	3.0
Management and technical consulting services	740.7	761.6	816.5	865.4	7.0	.9	54.9	7.2	48.9	6.0
Management of companies and enterprises	1,809.2	1,701.4	1,741.7	1,756.7	-35.9	-2.0	40.3	2.4	15.0	.9
Administrative and waste services	8,120.7	7,777.2	7,986.4	8,245.1	-114.5	-1.4	209.2	2.7	258.7	3.2
Administrative and support services	7,805.2	7,453.8	7,652.7	7,911.0	-117.1	-1.5	198.9	2.7	258.3	3.4
Employment services	3,775.2	3,378.2	3,484.0	3,671.0	-132.3	-3.6	105.8	3.1	187.0	5.4
Temporary help services	2,587.8	2,311.0	2,461.1	2,628.1	-92.3	-3.7	150.1	6.5	167.0	6.8
Business support services	785.3	753.3	765.8	751.8	-10.7	-1.4	12.5	1.7	-14.0	-1.8
Services to buildings and dwellings	1,584.0	1,655.0	1,703.0	1,751.1	23.7	1.5	48.0	2.9	48.1	2.8
Waste management and remediation services	315.5	323.4	333.7	334.1	2.6	.8	10.3	3.2	.4	.1
Education and health services	15,313	16,749	17,141	17,507	479	3.0	392	2.3	366	2.1
Educational services	2,440.1	2,738.4	2,800.5	2,827.5	99.4	3.9	62.1	2.3	27.0	1.0
Healthcare and social assistance	12,872.7	14,010.4	14,340.3	14,679.6	379.2	2.9	329.9	2.4	339.3	2.4
Healthcare	10,976.0	11,919.0	12,169.3	12,435.8	314.3	2.8	250.3	2.1	266.5	2.2
Ambulatory healthcare services	4,370.9	4,853.4	5,031.1	5,181.4	160.8	3.6	177.7	3.7	150.3	3.0
Offices of physicians	1,870.3	2,024.7	2,069.1	2,135.8	51.5	2.7	44.4	2.2	66.7	3.2
Outpatient care centers	391.8	433.6	460.2	484.1	13.9	3.4	26.6	6.1	23.9	5.2
Home healthcare services	626.5	753.0	800.1	822.1	42.2	6.3	47.1	6.3	22.0	2.7
Hospitals	3,986.4	4,266.7	4,302.3	4,382.5	93.4	2.3	35.6	.8	80.2	1.9
Nursing and residential care facilities	2,618.7	2,798.9	2,835.9	2,871.9	60.1	2.2	37.0	1.3	36.0	1.3
Nursing care facilities	1,524.9	1,575.8	1,578.2	1,582.5	17.0	1.1	2.4	.2	4.3	.3
Social assistance	1,896.7	2,091.4	2,171.0	2,243.8	64.9	3.3	79.6	3.8	72.8	3.4
Child daycare services	701.4	754.2	774.1	793.3	17.6	2.4	19.9	2.6	19.2	2.5
Leisure and hospitality	11,976	12,335	12,643	12,898	120	1.0	308	2.5	255	2.0
Arts, entertainment, and recreation	1,790.4	1,831.4	1,856.2	1,905.9	13.7	.8	24.8	1.4	49.7	2.7

Table 1. Continued—Employees on nonfarm payrolls, by industry, seasonally adjusted, 2000–05

[Numbers in thousands]

Industry	December 2000	December 2003	December 2004	December 2005	Average change, December to December					
					2000–03		2003–04		2004–05	
					Thousands	Percent	Thousands	Percent	Thousands	Percent
Performing arts and spectator sports	373.7	371.4	366.8	362.1	-.8	-.2	-4.6	-1.2	-4.7	-1.3
Museums, historical sites, zoos, and parks	112.9	115.2	118.2	121.6	.8	.7	3.0	2.6	3.4	2.9
Amusements, gambling, and recreation	1,303.8	1,344.8	1,371.2	1,422.2	13.7	1.0	26.4	2.0	51.0	3.7
Accommodations and food services	10,185.7	10,503.8	10,786.9	10,992.3	106.0	1.0	283.1	2.7	205.4	1.9
Accommodations	1,902.5	1,786.9	1,809.8	1,809.2	-38.5	-2.1	22.9	1.3	-6	.0
Food services and drinking places	8,283.2	8,716.9	8,977.1	9,183.1	144.6	1.7	260.2	3.0	206.0	2.3
Other services	5,196	5,402	5,398	5,386	69	1.3	-4	-.1	-12	-.2
Repair and maintenance	1,251.1	1,224.9	1,233.7	1,241.4	-8.7	-.7	8.8	.7	7.7	.6
Personal and laundry services	1,257.6	1,266.2	1,275.0	1,270.3	2.9	.2	8.8	.7	-4.7	-.4
Membership associations and organizations	2,687.1	2,910.7	2,888.8	2,874.5	74.5	2.7	-21.9	-.8	-14.3	-.5
Government	20,804	21,555	21,716	21,878	250	1.2	161	.7	162	.7
Federal	2,745	2,734	2,726	2,713	-4	-.1	-8	-.3	-13	-.5
Federal, except U.S. Postal Service	1,866.0	1,941.3	1,949.0	1,941.2	25.1	1.3	7.7	.4	-7.8	-.4
U.S. Postal Service	878.6	792.7	776.6	772.1	-28.6	-3.4	-16.1	-2.0	-4.5	-.6
State government	4,814	4,984	5,010	5,036	57	1.2	26	.5	26	.5
State government education	2,039.5	2,252.4	2,248.2	2,258.1	71.0	3.4	-4.2	-.2	9.9	.4
State government, excluding education	2,774.3	2,731.7	2,761.4	2,777.4	-14.2	-.5	29.7	1.1	16.0	.6
Local government	13,245	13,837	13,980	14,129	197	1.5	143	1.0	149	1.1
Local government education	7,359.7	7,712.4	7,812.9	7,906.9	117.6	1.6	100.5	1.3	94.0	1.2
Local government, excluding education	5,885.0	6,124.8	6,166.9	6,222.2	79.9	1.3	42.1	.7	55.3	.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. Dash indicates data not available.

added 41,300 jobs in 2005.

Improved consumer confidence

After rallying in 2004, consumer confidence continued to inch up throughout most of 2005. This pattern was broken temporarily in the aftermath of Hurricane Katrina (see box, this page): “Coupled with soaring gasoline prices and a less optimistic job outlook, Hurricane Katrina pushed consumer confidence to its lowest level [85.2 in October 2005] in nearly two years, creating a degree of uncertainty and concern about the short-term future”;⁹ however, by the end of 2005, consumer confidence had recovered from this shock and had returned to its prehurricane level of 103.8 percent in December.¹⁰

Increasing consumer confidence led to more spending¹¹ and helped retail trade add 161,200 jobs to payrolls in 2005. Although this increase is about 20 percent less than the 209,100 jobs gained in 2004, it represents a marked improvement over the 3-year period between 2001 and 2003, which saw retail trade shed an average of 150,000 jobs annually.

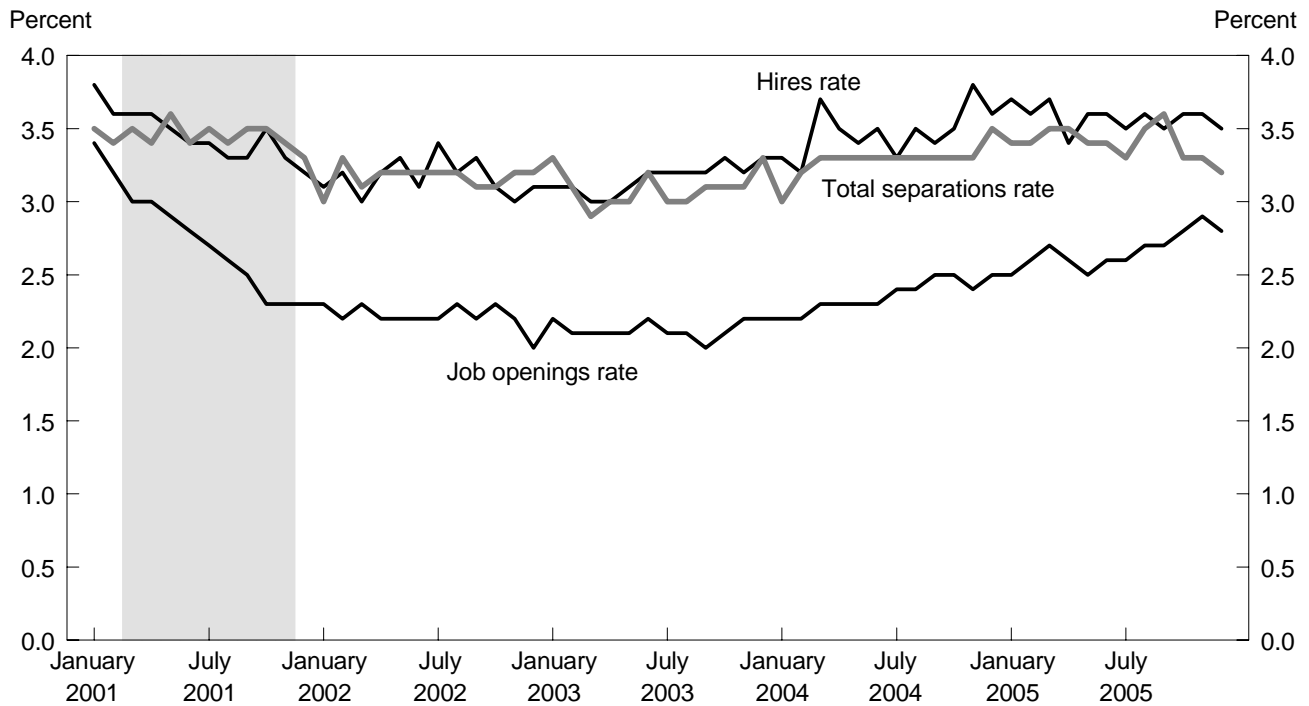
Within retail trade, electronics and appliance stores had

one of the fastest job growth rates, expanding by 3.8 percent. This component also saw the most improvement from 2004, when employment rose 1.9 percent. A shift toward higher cost consumer electronics helped increase sales for many electronics retailers in 2005.¹² Also adding jobs in 2005 were clothing and clothing accessories stores, in which employ-

Katrina

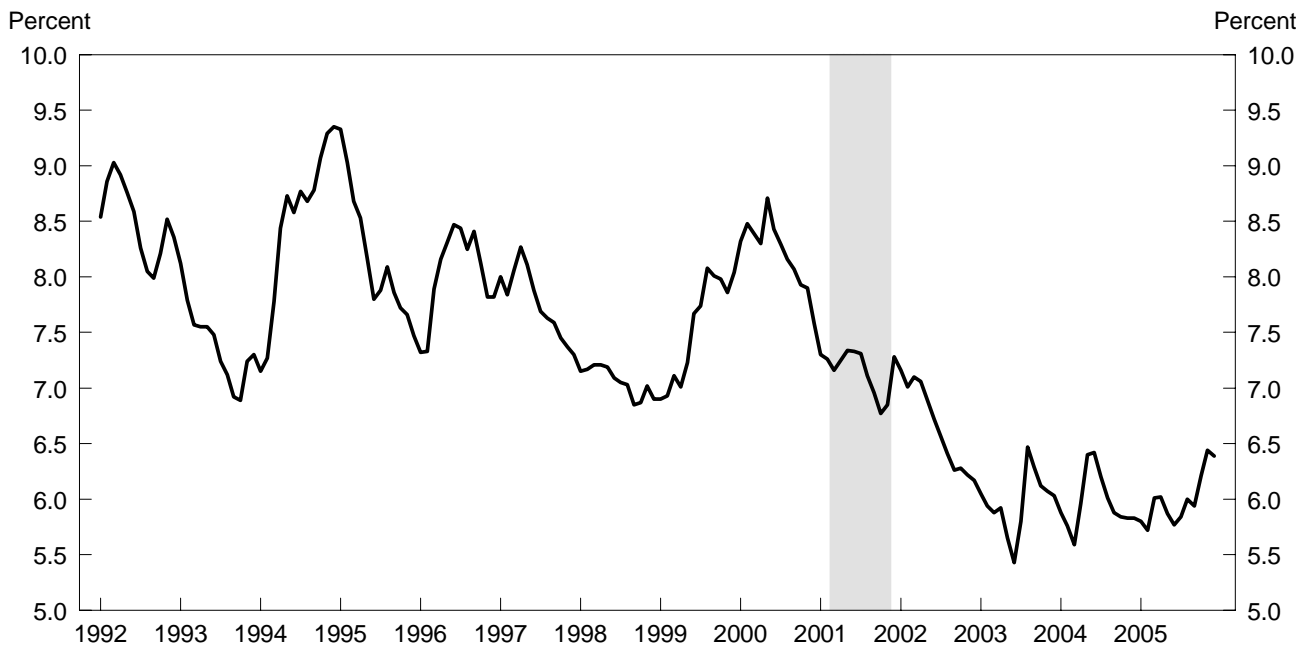
Hurricane Katrina made landfall on the Gulf Coast on August 29, 2005, and damaged parts of coastal Louisiana, Mississippi, and Alabama heavily. All possible efforts were made to contact survey respondents in the hurricane-affected areas. Because of the large-scale, long-term evacuations of New Orleans and surrounding areas, the Current Employment Statistics program modified its estimation methodology to measure employment more accurately in the affected areas in September and October. (The modifications were detailed in *The Employment Situation* press releases for those months and in a fact sheet posted on the program’s homepage, <http://www.bls.gov/katrina/cpscesquestions.htm>.) In November, the program returned to its standard methodology. For the Job Openings and Labor Turnover Survey, special estimation procedures were used for select nonresponding sample units in August. (These procedures were detailed in the *Job Openings and Labor Turnover* news release for August 2005.)

Chart 2. Total nonfarm job openings, hires, and total separations rates, seasonally adjusted, 2001–05



NOTE: Shaded area represents NBER-designated recession.

Chart 3. Thirty-year fixed-rate mortgage, 1992–2005



SOURCE: HSH Associates, financial publishers.

NOTE: Shaded area represents NBER-designated recession.

ment increased by 62,000. The 2005 gain is only slightly less than the 64,300 jobs added in 2004 and is still much improved over the relative flatness experienced throughout the early 2000s.

Not all of retail trade experienced large gains, however. General merchandise stores saw employment change little in 2005, with most of the weakness occurring within traditional department stores. This industry, whose establishments are distinguished from discount department stores largely by the latter's centralized customer checkout and cash register facilities, has seen steady job declines since employment reached a high point in 2001. Offsetting the weakness in traditional department stores were discount stores, warehouse clubs, and supercenters, which continued to add jobs in 2005.

Employment in automobile dealerships edged downward in 2005 as employee price discount programs and other dealership sales tactics failed to translate into permanent hiring. Although these tactics boosted sales significantly through the first half of the year, by the end of 2005 sales at automobile and other motor vehicle dealers had fallen back to near 2004 levels.¹³ Similarly, dealerships saw employment trend upward during the first half of the year, but by year's end those gains had been erased.

Also benefiting from the strengthened consumer confidence and spending was the leisure and hospitality industry, which added 255,000 jobs to payrolls in 2005. After edging up in 2004, the arts, entertainment, and recreation industry added 49,700 jobs to payrolls in 2005. Most of this increase came from the amusement, gambling, and recreation components. Food services and drinking places, which make up the majority of employment within leisure and hospitality, grew at a somewhat slower pace compared with the previous year's growth, but still managed to add 206,000 jobs in 2005. Both full-service restaurants and limited-service eating places experienced solid job growth as sales continued to climb.¹⁴

Rising oil and gas prices

Oil and gas prices jumped in 2005, spurred on by increasing worldwide demand¹⁵ and shortages worsened by an active hurricane season in the Gulf of Mexico. Despite retreating from hurricane-induced record highs late in the year, prices remained well above 2004 levels. (See chart 4.) Many industries likely saw their 2005 growth dampened as high energy prices increased operating costs and cut into consumers' budgets. Wal-Mart, for example, blamed soaring gasoline prices for weaker-than-expected (though still substantial) sales.¹⁶ These indirect effects of high fuel prices on employment, while likely, are difficult to gauge.

Airlines have been struggling with a variety of market forces since 2001. Air transportation was hit hard by the high

fuel prices. (See chart 5.) In 2005, jet fuel prices increased about 50 percent, while employment declined by about 5 percent. Carriers have been unable to pass the high and still rising jet fuel costs onto their passengers because of intense competition.¹⁷ As a result, airlines have lowered their labor costs, another major expense, by downsizing. After a brief period of relative stability in 2004, employment in air transportation once again began declining in 2005. Over the year, the industry shed 24,100 jobs, making it one of the few industries within transportation and warehousing to lose jobs in 2005.

While some industries were hurt by the sustained high oil and gas prices, others benefited from them. One of the latter was mining, whose employment grew at an annual rate of 9.0 percent, the industry's fastest rate of growth since 1981. Mining added 48,100 jobs to payrolls in 2005, swelling its ranks to more than 580,000 workers, a level last seen by the industry in March 1994.

Much of the growth within mining came from support activities for oil and gas operations, which provide services on a contract or fee basis. Support activities for oil and gas accounted for 39.5 percent of the job growth within mining. A 14.1-percent employment growth rate made support activities one of the fastest-growing industries in the Nation during 2005.

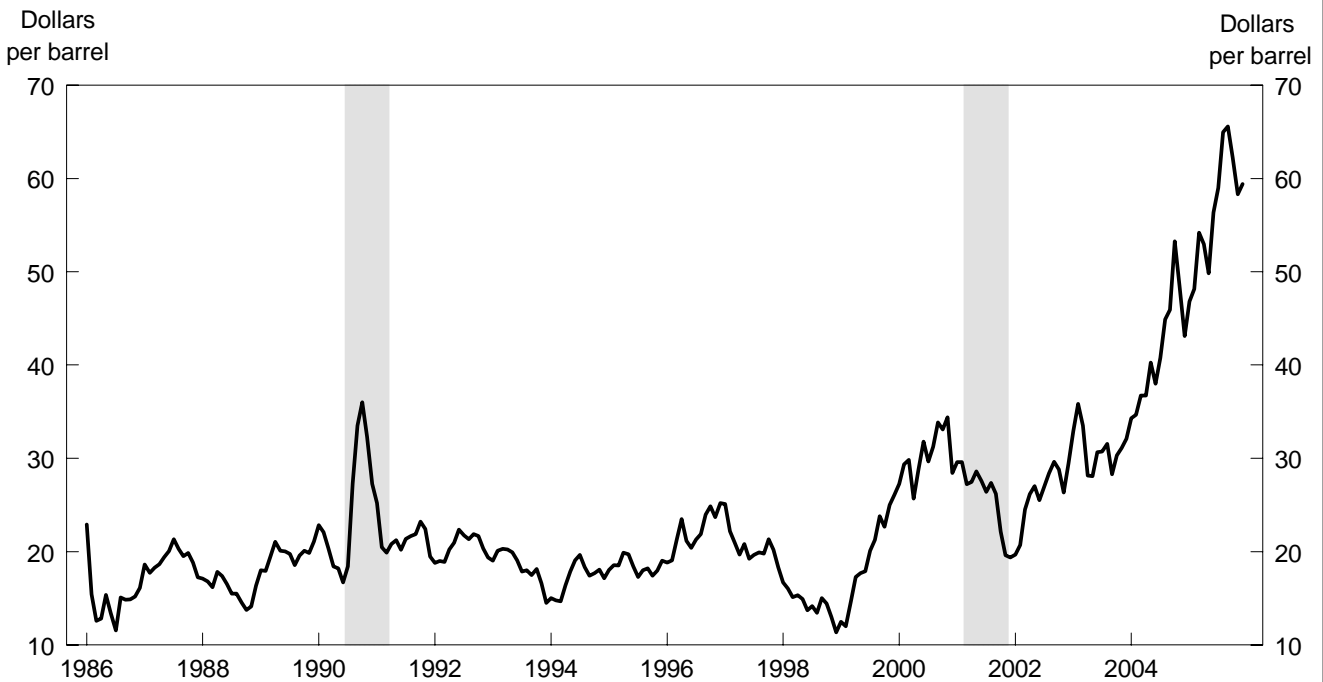
Hiring in heavy and civil engineering construction also may have resulted in part from high oil prices and recovery from an active hurricane season. More generally, the increased hiring is attributable to expansion of the U.S. energy and communication infrastructure. Heavy construction, which had experienced little employment growth since the 1990s, saw a marked improvement in 2005. The industry added 53,600 jobs, a 5.8-percent increase over the previous year, and fully recovered to its prerecessionary employment level. (See chart 6.) Oil and gas pipeline construction accounted for 6,600 additional jobs, while power and communication systems accounted for 18,500.

Also benefiting from high oil and gas prices in 2005 was petroleum and coal products manufacturing, an industry dominated by petroleum refining. The industry saw employment creep up slightly in 2005, in contrast to the 86,000 jobs lost in nondurable goods manufacturing as a whole. Corresponding to these employment gains has been a steady increase in petroleum manufacturing's productive capacity since 2004. Again, this trend contrasts with that exhibited by the rest of nondurable goods manufacturing, which has seen its productive capacity decline in recent years.¹⁸

Manufacturing output and employment

Manufacturing is the stereotypical cyclical industry, with output expanding and contracting in concert with the busi-

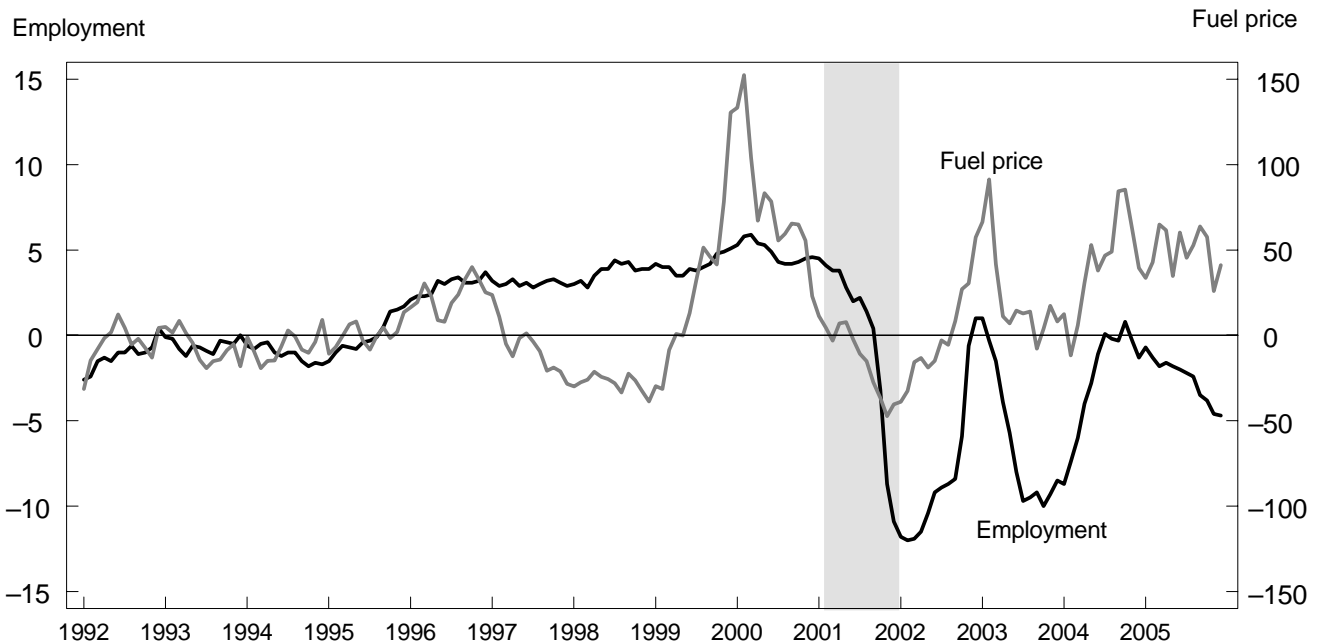
Chart 4. West Texas intermediate crude oil, spot prices, 1986–2005



SOURCE: Energy Information Administration.

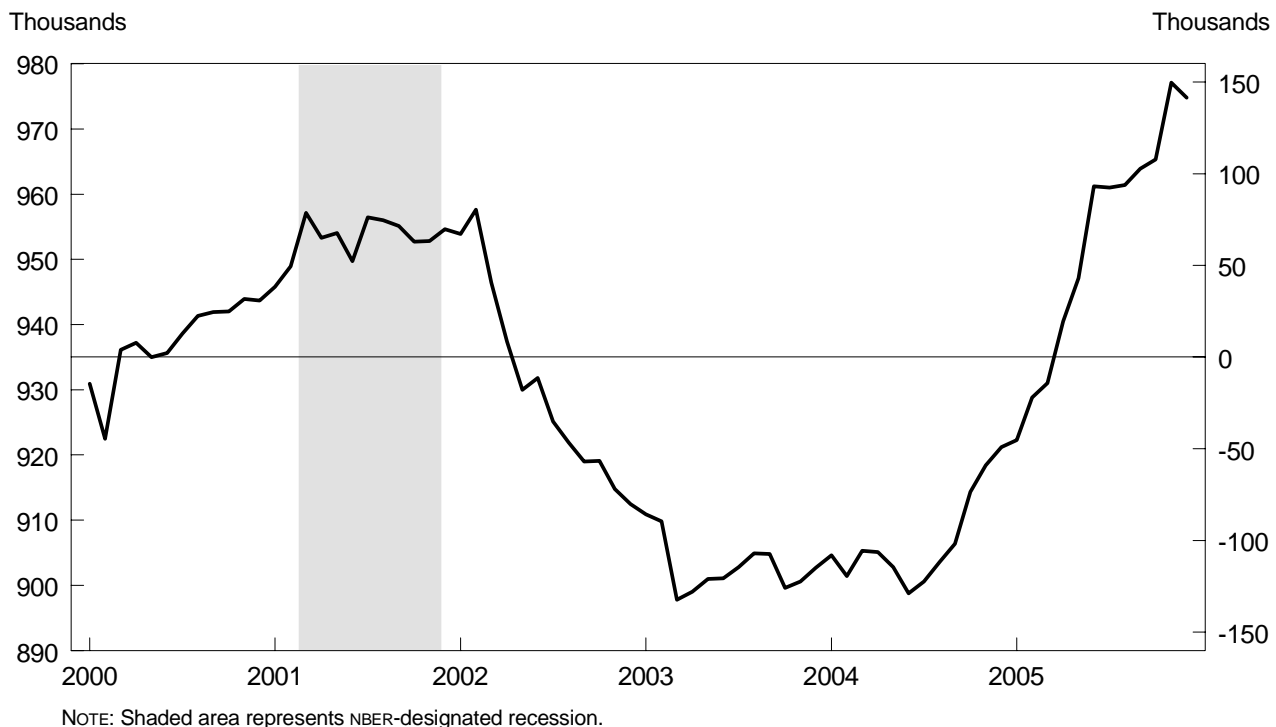
NOTE: Shaded areas represent NBER-designated recessions.

Chart 5. Over-the-year percent change in air transportation employment, seasonally adjusted, and in U.S. Gulf Coast kerosene-type jet fuel spot prices, 1992–2005



SOURCE: Bureau of Labor Statistics and Energy Information Administration.

NOTE: Shaded area represents NBER-designated recession.

Chart 6. Heavy and civil engineering construction employment, seasonally adjusted, 2000–05

ness cycle. Since the end of the 2001 recession, U.S. factories have ratcheted up production by nearly 12 percent.¹⁹ Employment, however, has proven to be less resilient (see chart 7), with periods of rapid contraction followed by periods that only loosely can be considered recoveries. After the 2001 recession, manufacturing payrolls continued shrinking until entering a nominal recovery during part of 2004. The recovery faltered in 2005 as 72,000 jobs fell from factory payrolls.

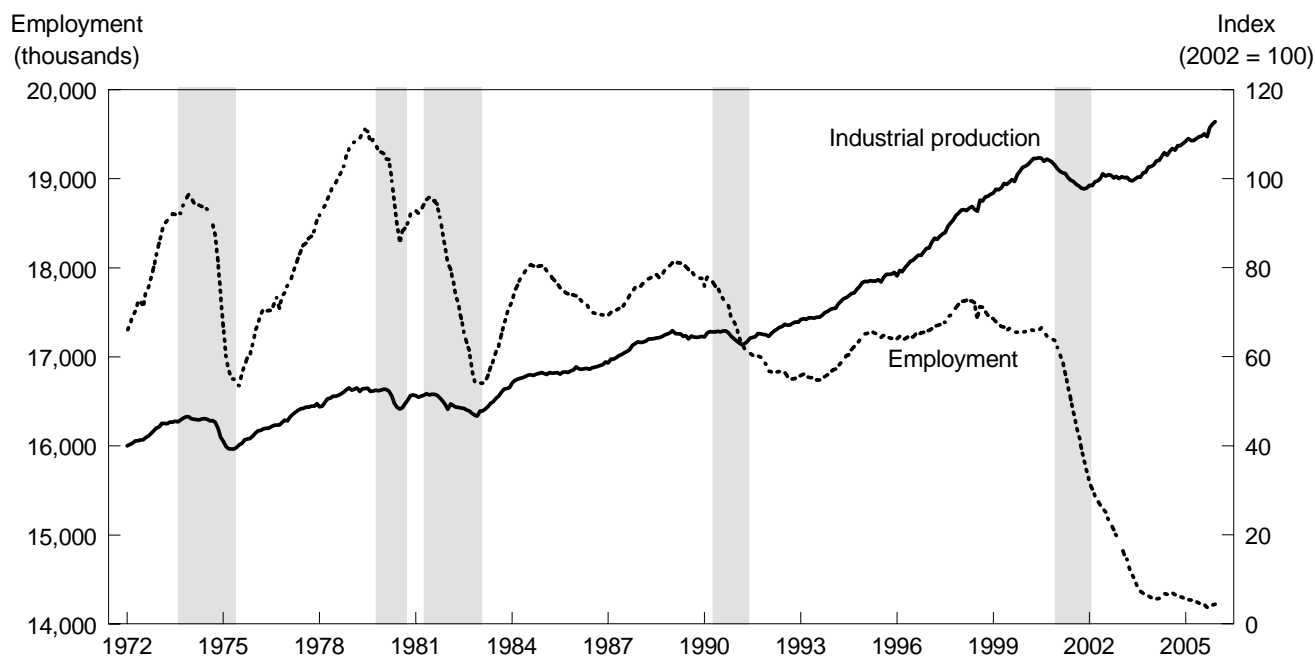
With an employment decline of 86,000, nondurable goods more than accounted for the manufacturing job losses in 2005. Employment in the industry has been falling precipitously since 1994, after remaining flat over the previous three decades. Nonetheless, nondurable goods industries continued expanding their productive capacity throughout the 1990s.²⁰ In recent years, that expansion has ended, and some of those industries have reduced their productive capacity. Textile mills have shed 22 percent of their productive capacity from a 1999 peak. During the same period, apparel makers have cut about half of their capacity. Employment in these industries shrank by 40,500 in 2005 alone. Paper and printing industries also have decreased their capacity and jobs, with net layoffs totaling 22,600 in 2005. The textile product mills industry presents an interesting exception: although its productive capacity edged down for the sixth consecutive

year, both output and employment edged up in 2005. Factories in the industry transform purchased textiles into goods such as curtains, sheets, and carpets (that is, into nonapparel textile products).

Durable goods manufacturers had a more even mix of positives and negatives. The aforementioned expansion in mining and construction translated into hiring in machinery manufacturing. The industry hired 17,200 workers in 2005, building upon the 18,100 positions added in 2004. In electronic instruments, a mounting backlog of orders sparked a second consecutive year of hiring.²¹ In contrast, an increased backlog of orders failed to boost employment in electronic equipment and appliances, which steadily shed jobs for the fifth consecutive year. Since 2000, employment has fallen by more than 25 percent, and the industry's productive capacity has slipped as well. The electronic equipment and appliances component was one of the few durable goods manufacturing industries to reduce capacity in 2005.

Similar contrasts marked transportation equipment manufacturing. Employment climbed slowly in the aerospace industry, but stalled in motor vehicles. Motor vehicle sales were strong through the summer as "employee discount" incentive programs helped the "Big 3" move vehicles off lots.²² These rather drastic programs, however, were a symptom of

Chart 7. Manufacturing employment and index of industrial production, seasonally adjusted, 1972–2005



SOURCE: Bureau of Labor Statistics and Federal Reserve.

NOTE: Shaded areas represent NBER-designated recessions.

the automakers' difficult financial situation. Still, the situation did not result in net job losses in U.S. assembly plants. Most likely, two factors have retarded layoffs: union contracts covering workers on Big 3 payrolls and foreign automakers' expanding their manufacturing presence in the United States.²³ By contrast, financial strains have translated into considerable job losses for suppliers,²⁴ who cut 19,600 jobs in 2005, continuing a 5-year slide that has brought employment down nearly 20 percent.

Unfilled orders for nondefense aircraft and parts began to rise in mid-2004, with aerospace employment in tow. The industry brought on about 1,500 workers a month in 2005. Demand for defense aerospace products is unlikely to have contributed to the growth, because orders for defense aircraft and parts have declined.²⁵

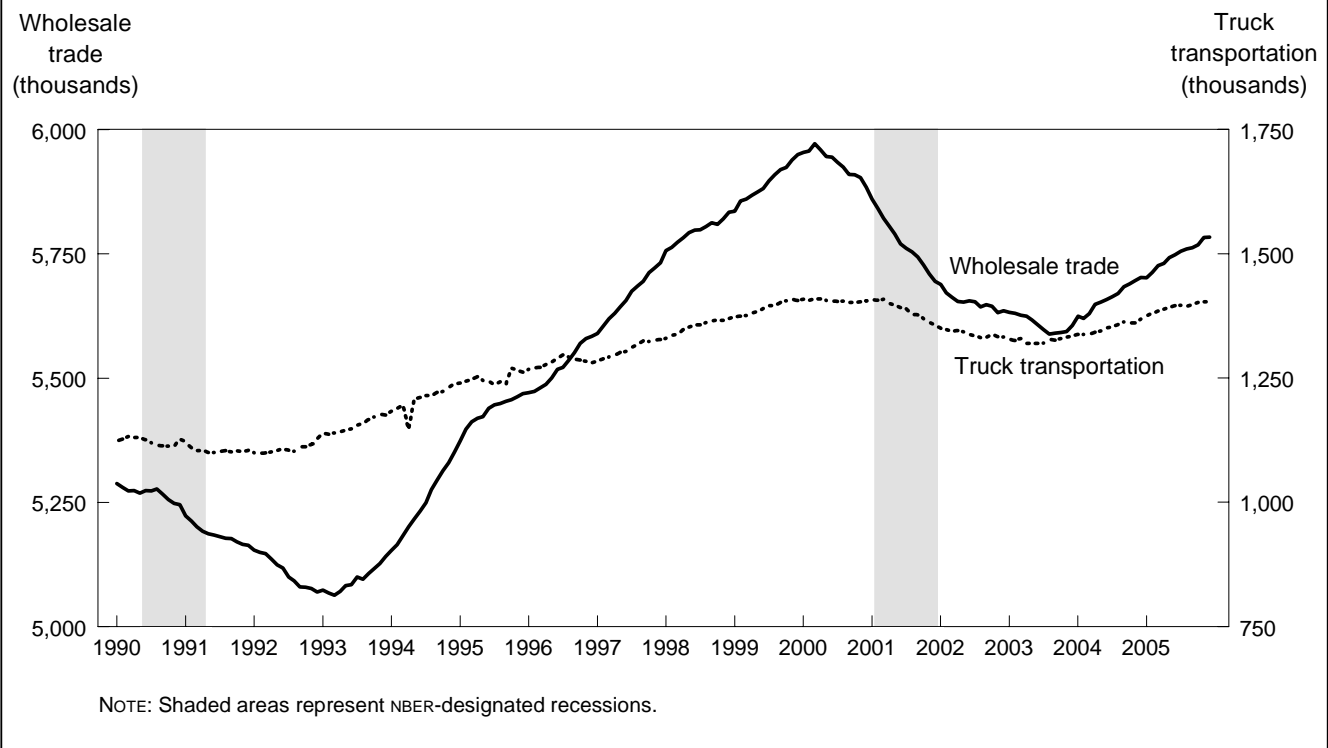
Manufacturing output and hiring

Factory production has ratcheted up steadily since the 2001 recession, but it has not led to an employment recovery in manufacturing. Increased production has, however, led to hiring in a number of other industries, particularly transportation, warehousing, and distribution. (See chart 8.) Hiring in truck transportation geared up in 2003 and has held steady

since. In 2005, the industry added 35,100 jobs. The spike in fuel prices may have dampened hiring somewhat, but demand, not fuel prices, is what chiefly determines hiring in the industry.²⁶ Warehousing, which depends on manufacturing to a similar extent, saw similar employment gains.²⁷ Since a November 2001 trough, employment has rebounded by more than 90,000, with 21,100 jobs added in 2005 alone.

Wholesale trade did not reach an employment trough until the second half of 2003, but within a year it had established a hiring pace of about 7,000 positions a month, and it has since maintained that rate. Like the category's manufacturing counterpart, nondurable goods distributors made up the weakest portion of wholesale trade, with essentially no employment growth in 2005. Durable goods distributors, in contrast, added 51,000 jobs, with an expansion in machinery, construction supplies, and electrical goods paralleling job growth in durable goods manufacturing. Unlike the category's manufacturing counterpart, the weaker durable goods wholesalers did not shed jobs, but merely held payrolls steady. Also part of wholesale trade is the category of electronic markets, agents, and brokers, which increased its ranks by 3.5 percent, or 24,800 jobs, over the year.²⁸ Steady growth has lifted employment in the industry by 20 percent since 2001.

Chart 8. Employment in wholesale trade and in truck transportation, seasonally adjusted, 1990–2005



Industries with cyclical growth

Increasing business activity translated into hiring at corporate headquarters, which make up much of the “management of companies and enterprises” portion of professional and business services. Headquarters employment rose 15,000 in 2005. Still, despite nearly 3 years of growth, employment ended the year somewhat short of its prerecession peak. The same was the case with temporary help services.

Demand for temporary help services often leads business cycles, because, through such services, firms can adjust their workforces quickly to react to changes in demand that may be only short lived. Temporary help services are a type of just-in-time labor. Employment in the industry did indeed begin falling 10 months prior to the 2001 recession. The industry’s recovery, however, did not begin until May 2003, well after the end of the recession and only 3 months before total nonfarm employment began to rise. Temporary help services added 167,000 workers in 2005, up somewhat from the 150,100 increase the previous year.

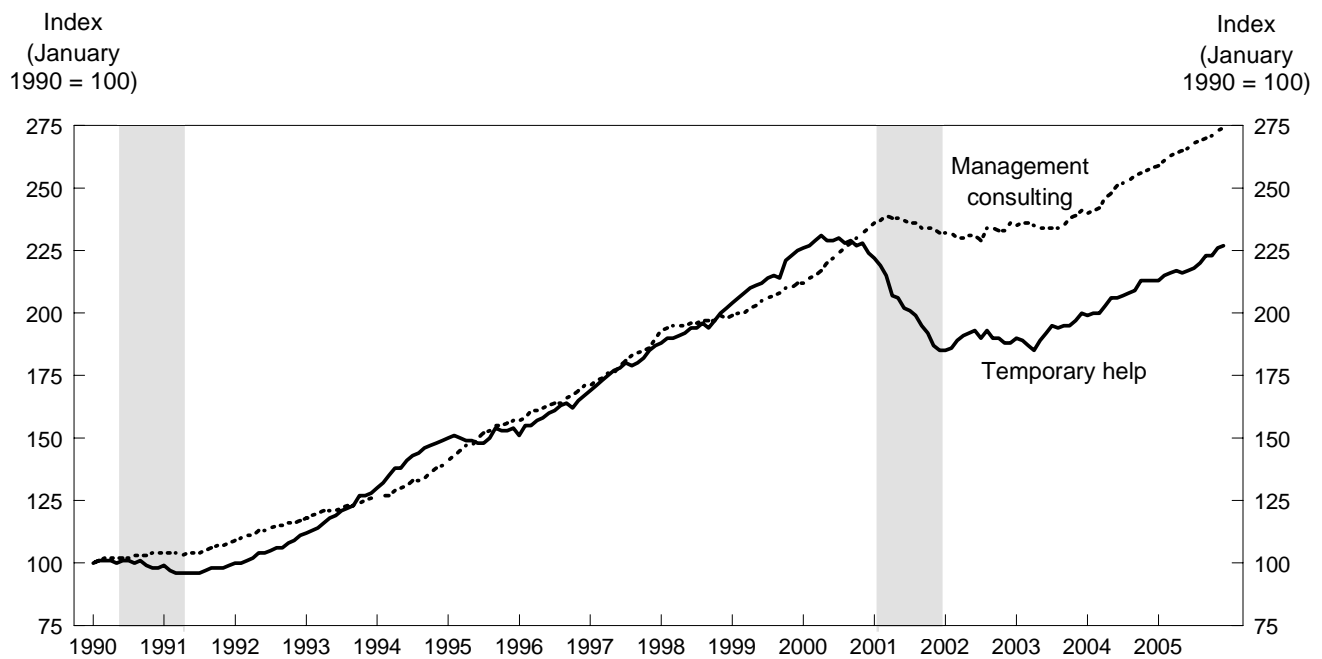
Recovery came to management consulting firms earlier than it did to temporary help agencies. (See chart 9.) Employment in management and technical consulting services turned upward in the second half of 2002. By the end of 2003,

the job losses due to the recession were erased and employment expanded steadily. In 2005, employment in the industry rose by about 48,900, or 6.0 percent.

Architectural and engineering services weathered a more prolonged downturn than did management consulting, but it also has built a robust job recovery. Between July 2001 and June 2003, the industry cut about 61,000 jobs. The subsequent turnaround made up for those job losses by the end of 2004, and in 2005 payrolls climbed an additional 4.2 percent, or 54,300 jobs. The downturn in computer systems design and related services was even more dramatic and the recovery, through 2005, only partial. The industry shed nearly 250,000 jobs between March 2001 and August 2003, and it has recovered slightly more than 100,000 jobs since that time. In 2005, computer systems design added 34,900 jobs.

Cyclical gains branched into construction as nonresidential construction employment expanded, although at a pace reduced from that seen in 2004. Following the 2001 recession, this industry was slower to turn the corner than its residential counterpart, and it continued to lose jobs in 2002 and 2003. Nonresidential building construction added 18,800 jobs to payroll in 2005, while nonresidential specialty contractors added 27,700. Despite 2005’s job growth, at years’ end neither of these two industries had recovered to its pre-

Chart 9. Indexed employment in temporary help services and in management and technical consulting services, seasonally adjusted, 1990–2005



NOTE: Shaded areas represent NBER-designated recessions.

recessionary level.

Rising business activity creates demand not only for additional buildings, but also for additional work for the building services industry. This industry, which provides janitorial, landscaping, and pest control services, added 48,100 jobs in 2005. Since early 2002, employment in the industry has climbed by more than 150,000, an expansion that contrasts with the stagnant employment trend in the waste remediation industry, which exhibited essentially no growth in 2005.

Finally, rising business activity coincided with rising corporate profits.²⁹ Yet, the stock markets, like payroll employment, lagged in reflecting the recovery. Although corporate profits began to rise as the 2001 recession ended, Standard and Poor's (the S&P) 500 did not turn the corner until the first half of 2003. Employment gains in the securities industry followed not far behind.³⁰ Renewed hiring resulted in net job growth of 23,000 in 2004 and 12,700 in 2005.

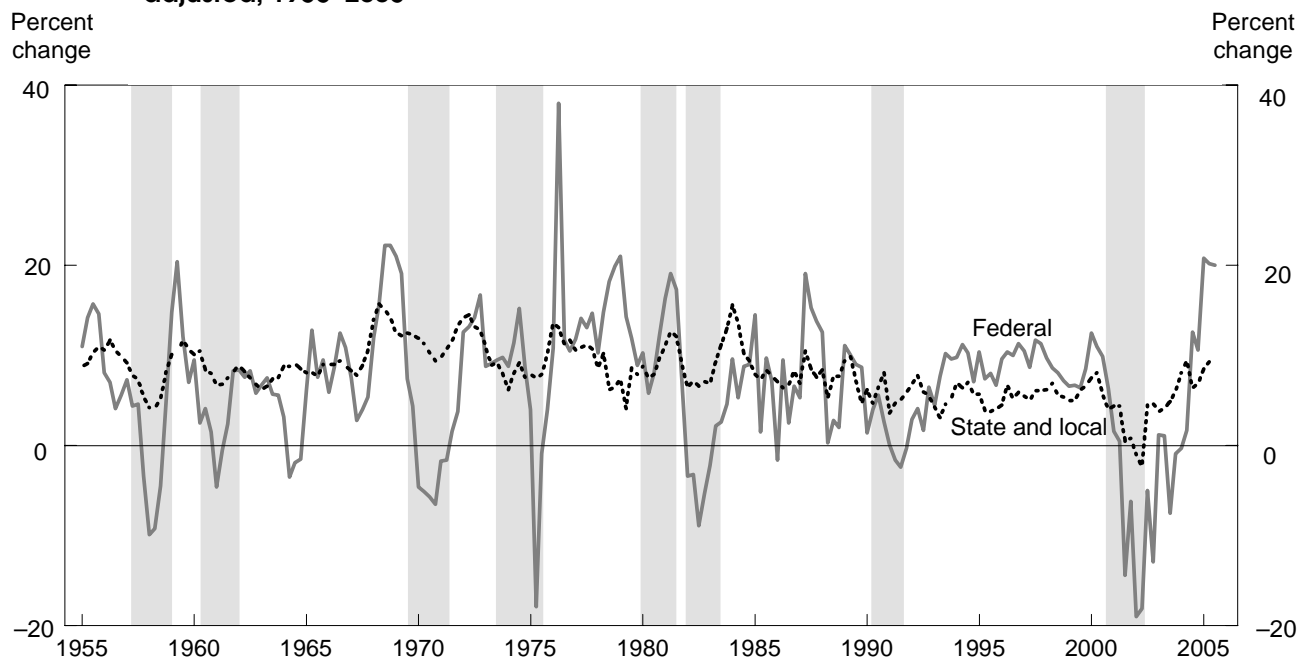
Rising tax revenues and employment

The 2001 recession was not extraordinary in terms of gross domestic product. If anything, the downturn stands out for its shallowness. Government tax revenues, however, paint a different picture, one of an unusually deep downturn follow-

ing the recession.³¹ (See chart 10.) Since 1947, no other recession resulted in a year-to-year decline in nominal State and local tax revenues. Also, the dip in Federal revenues was somewhat greater and more prolonged than in previous recessions. A strong recovery followed, particularly since 2004, with growth in Federal, State, and local tax revenues returning to, or even exceeding, the rates seen prior to the recession.

Federal employment did not rebound with revenues, but remained essentially unchanged in 2005. Federal payrolls are down 67,000 jobs since 2002. Employment in State and local governments more clearly reflected the impact on revenues. Following the dip in tax receipts, States shed workers in 2003, while local government employment was flat. In 2004 and 2005, State and local hiring picked up, driven by State government (excluding education) and by local education. As a whole, State and local governments added 175,000 jobs in 2005. It is worth noting, however, that rising educational employment may be a more general trend—that is, one not entirely tied to tax revenues: in 2005, private educational services expanded at a rate similar to that of public education, with 1.0-percent employment growth translating into 27,000 jobs in private education.

In the private healthcare industry, public expenditures on Medicare and Medicaid, as opposed to tax revenues, help

Chart 10. Over-the-year percent change in Federal and in State and local tax receipts, seasonally adjusted, 1955–2005

SOURCE: Bureau of Economic Analysis.

NOTE: Shaded areas represent NBER-designated recessions.

explain employment trends.³² Multiple other factors, especially demographics, also have propelled hiring in the health-care industry.³³ In 2005, the industry added nearly 270,000 jobs to payrolls. Private hospitals accounted for 80,200 jobs and doctors' offices for another 66,700. The fastest growth came at outpatient care centers, with a 5.2-percent rate of growth, or 23,900 additional jobs. In contrast, job growth in home healthcare slowed notably as 22,000 workers entered its ranks, down from 47,100 in 2004.

General population growth and a longer life expectancy help explain the continued expansion of healthcare employment. These same factors could be expected to boost hiring in nursing care facilities; however, since 2002, employment in the industry has remained essentially flat. By contrast, community care facilities for the elderly (that is, assisted-living facilities) have seen steady employment gains, with staffing having risen by 19,500 in 2005 and 76,600, or 14.1 percent, since 2002. Falling at the other end of the age spectrum, the child daycare services industry also has continued to sprout new jobs: hiring totaled 19,200 in 2005 and fell in line with the trend for recent years.

Job openings and labor turnover

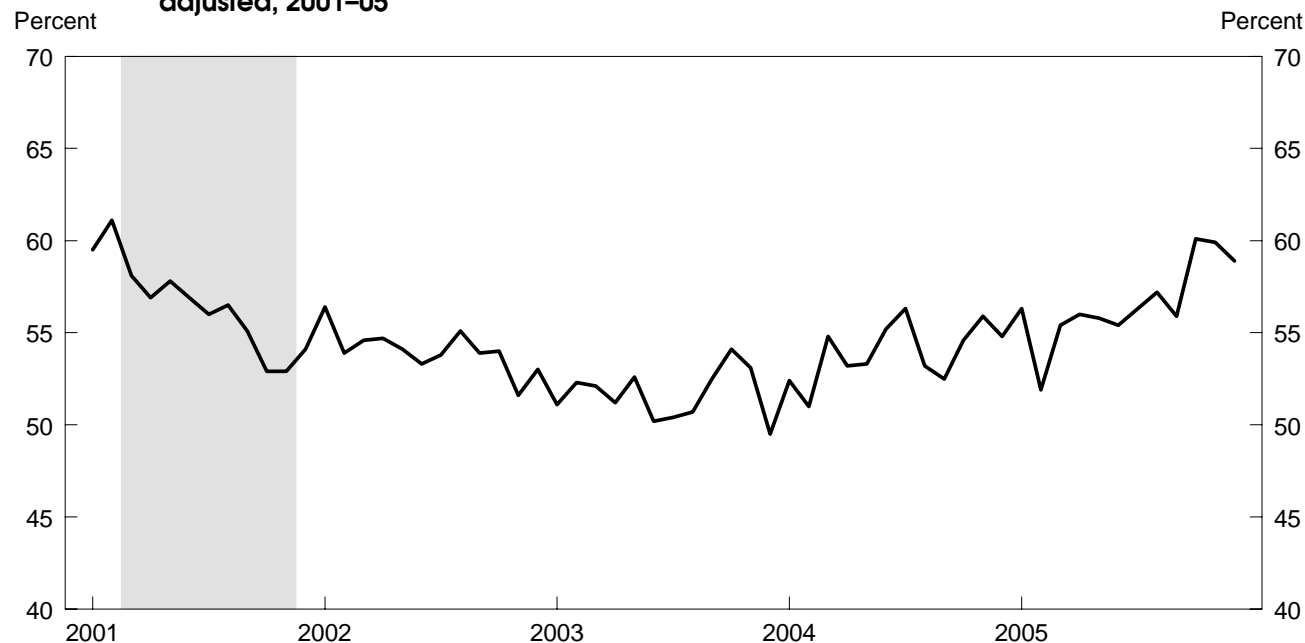
JOLTS measures the monthly demand for labor—the job open-

ings rate—and the dynamic flows—hires and separations—of the U.S. labor market. The 16,000-establishment survey measures the number of job openings as of the last business day of the month—a stock measure—and the number of hires and separations occurring within the entire month—a flow measure. Separations are further broken down into quits (voluntary separations), layoffs and discharges (involuntary separations), and other separations.

The demand for labor continued to grow in 2005, with an additional 536,000 job openings measured on the last business day of the year, compared with the end of 2004. The amount of churning—measured by the number of hires and separations—grew to 57.4 million hires and 54.5 million separations for the year. Quits as a percentage of total separations continued the category's steady climb upward, reaching 58.9 percent by year's end. (See chart 11.) The ratio of quits to total separations helps gauge the health of the labor market by indicating employees' confidence in their ability to change jobs.

Job openings. The job openings rate³⁴ climbed from 2.5 percent in August to 2.8 percent in December, still below the prerecessionary peak of 3.4 percent in January 2001. The job openings rate increased for the majority of industries over the year, most noticeably for leisure and hospitality and for

Chart 11. Quits as a percentage of total separations in total nonfarm employment, seasonally adjusted, 2001–05



NOTE: Shaded area represents NBER-designated recession.

manufacturing. The remaining industries had little or no change. Three regions—the Northeast, West, and South—showed marked improvement over the year (although the West retreated from a peak in November), while the Midwest exhibited little, if any, change.

Hires and separations. The hires and total separations rates showed no real trend throughout 2005. The hires rate was static, ranging between 3.4 percent and 3.7 percent. The total separations rate was not much different, varying from 3.2 percent to 3.6 percent. Nor did the two rates show a consistent trend in any industry over the year. The Northeast region did exhibit a steady, though slight, decline in both the hires and the total separations rates from April through December. The West’s hires rate increased steadily over the year, and the total separations rate followed the same pattern until it began to decline in September.

Even though the hires and separations rates did not show a distinct trend, the economy still exhibited a significant amount of churning. There was an average of 4.8 million hires and 4.5 million separations per month, compared with monthly averages of 4.6 million and 4.3 million, respectively, the previous year.

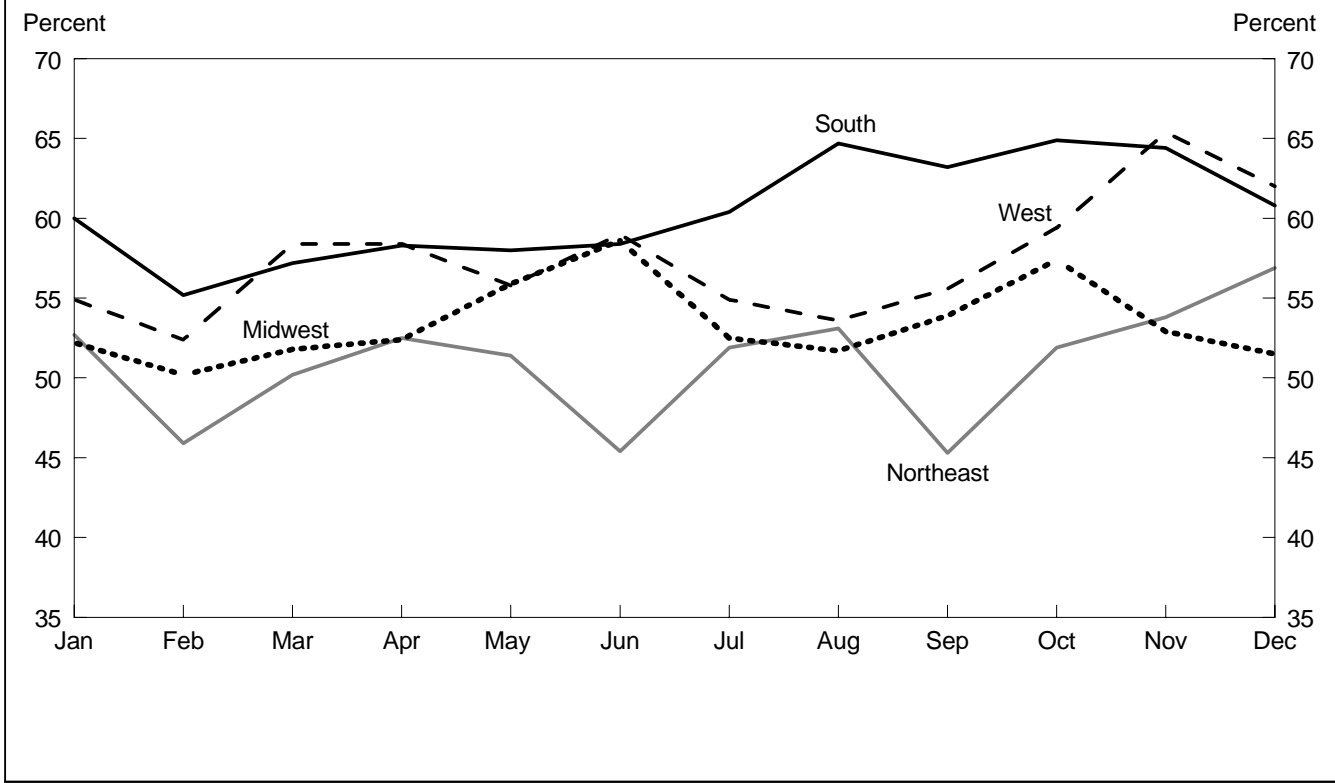
Quits continued to compose a majority of all separations at the industry level. The construction industry and the arts,

entertainment, and recreation industry were the exceptions, each having more layoffs and discharges than quits over the year. Transportation, warehousing, and utilities had roughly equal percentages of quits, layoffs, and discharges to total separations. “Other separations” is a residual category that includes retirements, transfers between establishments, and those separating because they became disabled on the job. The natural resources and mining industry, the durable goods manufacturing industry, and the finance and insurance industry regularly had higher rates of other separations to total separations than the other industries had.

Quits as a percentage of total separations. The South, which, at 60.4 percent, had averaged the highest percentage of quits to total separations in 2005, was overtaken by the West in November. Also in November, the Northeast, which regularly had the lowest percentage of quits to total separations since October of 2002, surpassed the Midwest. (See chart 12.)

Unmet labor demand. Because hires are collected for the entire month and job openings are collected as those openings which are still available on the last business day of the month, the hires rate is usually greater than the job openings rate. However, a few industries have shown the reverse rela-

Chart 12. Quits as a percentage of total separations, by region, seasonally adjusted, 2005



relationship. Industries in which the job openings rate is consistently higher than the hires rate may reflect employers' troubles filling open positions. As was the case the previous year, two industries had job openings rates consistently higher than their hires rates in 2005: finance and insurance, reflecting continued employment opportunities due to historically low interest rates and the strong housing market; and health care and social assistance, reflecting the continued need for healthcare workers. (See chart 13.) The Federal Government, State and local government, and the information industry also had difficulty filling open positions, but not to the same degree as the finance and insurance industry and the healthcare and social assistance industry.

Annual hires and turnover rates. The 2005 annual total separations, or turnover,³⁵ rate increased by 1.5 percentage points, to 40.9 percent. The annual rate is still below the 2001 rate of 41.4 percent. The turnover rate is equal to the number of total separations for the year, divided by CES average employment for the year. The 2005 annual hires rate increased by 1.4 percentage point, to 43.0 percent, the highest on record for JOLTS.³⁶

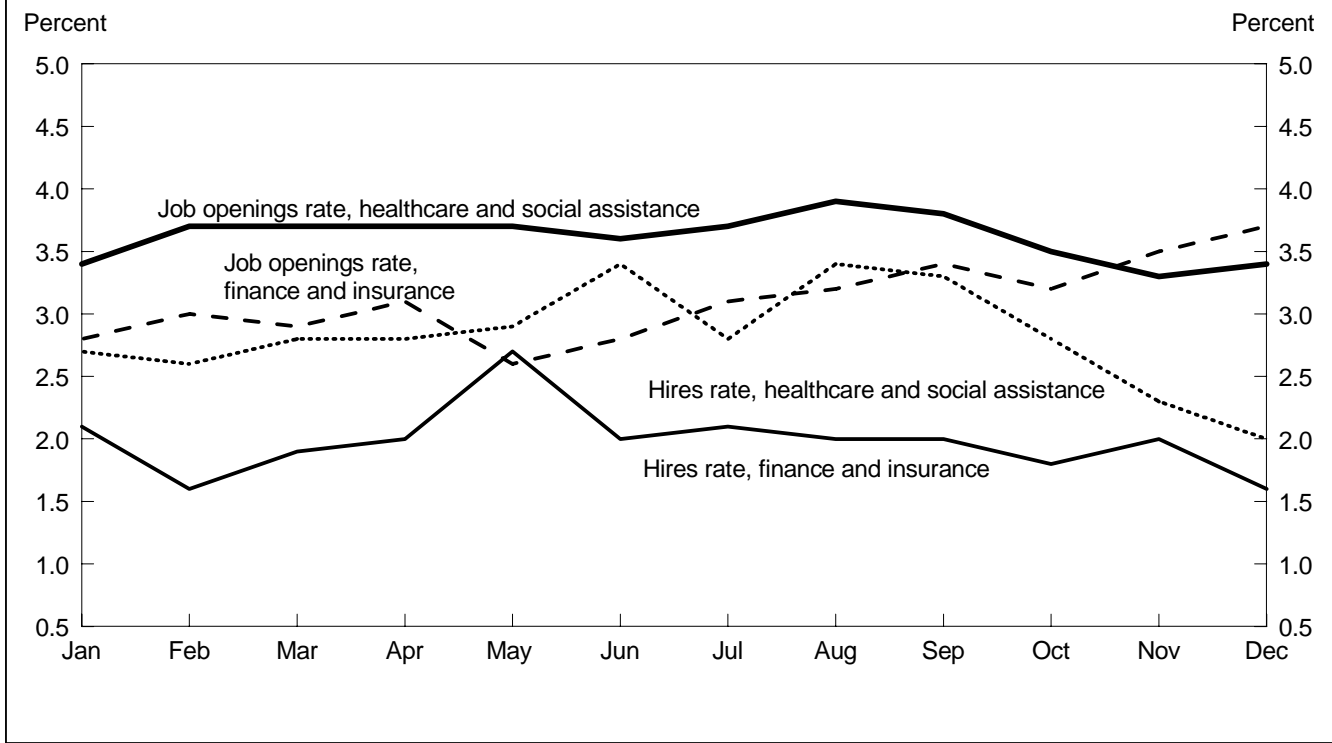
Industries known to have strong seasonal employment patterns (accommodations and food service; arts, enter-

tainment, and recreation; construction; professional and business services; and retail trade) consistently have annual hires and turnover rates greater than 50.0 percent. In contrast, the public sector and the finance and insurance industry consistently have annual hires and turnover rates less than 25.0 percent.

The annual hires rate exceeded the turnover rate by 2.1 percentage points in 2005, approximately equal to the gap between the two measures in 2004. The annual hires rate has exceeded the turnover rate for the past 3 years. Manufacturing was the only industry whose turnover rate outpaced the hires rate. Natural resources and mining had the highest annual hires-to-turnover difference, 8.8 percentage points, followed by real estate and rental and leasing and by professional and business services.

GAINS ACROSS MOST INDUSTRIES LED TO A 2.0 MILLION INCREASE in total nonfarm payroll employment in 2005. Sustained growth in the housing market accounted for much of the hiring in construction and in some industries in financial activities and retail trade. In addition to spurring home purchases, rising consumer confidence played a role in the job gains in the leisure industries and retail trade. Although increased manufacturing production did not translate into an overall increase in manufacturing employment, it does help explain hiring in other in-

Chart 13. Job openings and hires rates in finance and insurance and in healthcare and social assistance, not seasonally adjusted, 2005



dustries, most notably trucking, warehousing, and wholesale trade. Finally, rising energy costs played a dual, contradictory role. As an added burden on consumers and businesses, it held back spending and, indirectly, employment growth, but that effect is difficult to quantify. More obvious was its positive impact on the employment growth rate in

mining, which easily outpaced growth rates in most other industries in 2005.

The JOLTS job openings rate remained flat in 2005 until the end of the second quarter, when it began to edge upwards. Meanwhile, the hires and separations rate remained flat throughout the year. □

Notes

¹ The Current Employment Statistics (CES) program is a monthly survey of more than 160,000 nonfarm businesses representing about 400,000 establishments. For more information on the program's concepts and methodology, see *BLS Handbook of Methods* (Bureau of Labor Statistics, 1997); on the Internet at <http://www.bls.gov/opub/hom/>. CES data are available on the Internet at <http://www.bls.gov/ces/>. The CES data used in this article are seasonally adjusted unless otherwise noted.

² The Bureau of Labor Statistics collects and compiles data for the Job Openings and Labor Turnover Survey (JOLTS) on a monthly basis from a sample of business establishments. JOLTS data are available on the Internet at <http://www.bls.gov/jlt/>.

³ Sandra Fleishman, "Data Show a Home-Building Skid," *The Washington Post*, Nov. 18, 2005, p. D2.

⁴ David Leonhardt, "2005: In a Word," *The New York Times*, Dec. 25, 2005, p. 4.3.

⁵ Data on housing appreciation come from the Office of Federal Housing Enterprise Oversight's House Price Index, on the Internet at <http://www.ofheo.gov/HPL.asp>.

⁶ "Builders Take Steps to Curb Speculation in Housing Markets," news release (Washington, DC, National Association of Home Builders, June 20, 2005), on the Internet at http://www.nahb.org/news_details.aspx?newsID=1527.

⁷ Data on new residential construction come from the U.S. Census Bureau, on the Internet at <http://www.census.gov/const/www/newresconstindex.html>.

⁸ Data on new home sales are available from the U.S. Census Bureau, on the Internet at <http://www.census.gov/const/www/newresalesindex.html>. Data on existing home sales are available from the National Association of Realtors, on the Internet at <http://www.realtor.org/Research.nsf/Pages/EHSdata>.

⁹ "The Conference Board Consumer Confidence Index Falls To Lowest Level In Nearly Two Years," *The Conference Board, Economic News Archive*, Sept. 27, 2005, on the Internet at <http://www.conference-board.org/economics/ecoPress.cfm>.

¹⁰ "The Conference Board Consumer Confidence Index Rises Again," *The Conference Board, Economic News Archive*, Jan. 31, 2006, on the

Internet at <http://www.conference-board.org/economics/ecopress.cfm>.

¹¹ Data on consumer spending are available from the Bureau of Economic Analysis (BEA); see “Table 2.3.6. Real Personal Consumption Expenditures by Major Type of Product, Chained Dollars,” on the Internet at <http://www.bea.gov/bea/dn/nipaweb/SelectTable.asp?Selected=Y>.

¹² Spencer Chin, “Sales up, but consumer confidence wanes, says CEA,” *EE Times*, Nov. 15, 2005, on the Internet at <http://www.eetimes.com/news/latest/business/showArticle.jhtml?articleID=173603228>.

¹³ U.S. Census Bureau, listings of advance monthly sales for retail and food services and for autos and other motor vehicles, on the Internet at <http://www.census.gov/svsd/www/adseries.html>.

¹⁴ *Ibid.*, listings of advance monthly sales for retail and food services and for food service and drinking places.

¹⁵ Energy Information Administration, “International Energy Outlook 2005,” on the Internet at <http://www.eia.doe.gov/oiaf/ieo/world.html>.

¹⁶ “Wal-Mart Reports Record Sales and Earnings for 2nd Quarter 2006,” press release, Aug. 16, 2005, on the Internet at <http://walmartstores.com/GlobalWMStoresWeb/navigate.do?catg=48&contId=4975>.

¹⁷ For further information on this trend, see Air Transport Association, *Energy Matters: Combating the Fuel-Related Challenges Facing U.S. Airlines*, on the Internet at <http://www.airlines.org/news/d.aspx?nid=9194>.

¹⁸ Federal Reserve, “Industrial Production and Capacity Utilization,” on the Internet at <http://www.federalreserve.gov/releases/G17/>.

¹⁹ *Ibid.*

²⁰ *Ibid.*

²¹ U.S. Census Bureau, “Manufacturers’ Shipments, Inventories and Orders (M3),” *Manufacturing, Mining, and Construction Statistics*, on the Internet at <http://www.census.gov/indicator/www/m3/index.html>. The electronic instruments employment series corresponds to the unfilled-orders series for nondefense search and navigation equipment, defense search and navigation equipment, and electromedical, measuring, and control instrument manufacturing.

²² See, for example, “A Tale of Two Industries,” *The Wall Street Journal*, Nov. 22, 2005, p. A14; and “A Down Detroit Dials for Discounts, Again,” *Brandweek*, Nov. 21, 2005, p. 4.

²³ See, for example, “The Good News about America’s Auto Industry,” *Business Week*, Feb. 13, 2006, p. 32.

²⁴ See, for example, “Tier Ones take a tumble,” *Professional Engineering*, Oct. 19, 2005, pp. 30–31; and “Car Makers, Parts Supplier Head for Price Showdown,” *The Wall Street Journal*, Sept. 14, 2005, p. A6.

²⁵ U.S. Census Bureau, “Manufacturers’ Shipments.”

²⁶ For the period 1990–2005, this article uses (1) the Federal Reserve’s industrial production series for manufacturing excluding computers, communications equipment, and semiconductors and (2) the Producer Price

Index commodity data on no. 2 diesel fuel to model monthly trucking employment. A double-logarithmic model fit the data very well for various lagged values of industrial production, with R-square values of at least 0.95. Although both industrial production and diesel prices were statistically significant, there was only a weak negative relationship between fuel prices and employment. Industrial production, however, had a strong positive relationship to employment. Fuel may not play much of a role because trucking companies often pass on some added fuel costs by way of surcharges. Strong demand for trucking services would facilitate the collection of such surcharges. (See, for example, “Running on Empty,” *Traffic World*, Sept. 19, 2005, p. 1.)

²⁷ About 30 percent of truck transportation services and approximately 37 percent of warehousing services are purchased by manufacturers, as reflected in the 2003 BEA input-output tables, on the Internet at http://www.bea.gov/bea/industry/iotables/prod/table_list.cfm?anon=348.

²⁸ Firms in this industry “arrange for the sale of goods owned by others, generally on a fee or commission basis,” acting “on behalf of buyers and sellers of goods.” This arrangement contrasts with that used by merchant wholesalers, who take title of the goods they distribute and make up durable and nondurable goods wholesale trade. (See Teresa L. Morisi, “Recent changes in the national Current Employment Statistics survey,” *Monthly Labor Review*, June 2003, pp. 3–13; or the Census Bureau NAICS Web site at <http://www.census.gov/epcd/www/naics.html>.)

²⁹ Bureau of Economic Analysis, “Corporate profits,” *National Economic Accounts*, on the Internet at <http://www.bea.gov/bea/dn/home/corporateprof.htm>.

³⁰ Michael H. Stropole, “Bears, bulls, and brokers: employment trends in the securities industry,” *Monthly Labor Review*, December 2005, pp. 16–22.

³¹ Data on government tax revenues are available in the BEA National Income and Product Accounts Tables 3.2 and 3.3, on the Internet at <http://www.bea.gov/bea/dn/nipaweb/index.asp>.

³² Data on Medicare and Medicaid expenditures are available in the BEA National Income and Product Accounts Table 3.12, on the Internet at <http://www.bea.gov/bea/dn/nipaweb/index.asp>. The rates of growth of employment in general medical and surgical hospitals and nominal expenditures on Medicare and Medicaid exhibit some correlation, with a correlation coefficient of 0.51 between 1980 and 2004.

³³ See William C. Goodman’s forthcoming *Monthly Labor Review* article on employment in hospitals.

³⁴ The job openings rate is the number of job openings on the last business day, as a percentage of total employment plus job openings. All other rates (hires, quits, layoffs and discharges, other separations, and total separations) are expressed as a percentage of employment.

³⁵ In the context of annual turnover rates, the terms *total separations* and *turnover* are interchangeable.

³⁶ JOLTS annual estimates are available from 2001 to the present. In response to public interest, the Bureau of Labor Statistics began publishing annual levels and rates of hires and separations in 2006.