

Employment in business services: a year of unprecedented decline

Falling employment in personnel services contributed to the greatest decline in employment in business services in the last 43 years; slowing of growth in computer services and job losses in miscellaneous business services played a smaller role

Rachel Krantz

After nearly a decade of unparalleled growth, the number of jobs in business services peaked in September 2000 and then began the steepest job loss in the 43-year history of the industry. In the 12 months between September 2000 and September 2001, employment in business services fell by 384,000, or 4 percent.¹

The industries within business services were affected to varying degrees by the recent economic downturn, which was officially declared a recession halfway through the 12-month period covered in this article.² Thus, the employment decline in business services led the beginning of the recession by 6 months. Chart 1 shows the difference between the rate of change in employment from September 2000 to September 2001 and the average annual rate of change in employment from September 1995 to September 2000. With the exception of *miscellaneous equipment rental and leasing*, which showed almost no difference, all component industries were notably weak relative to their recent performance history. (For more industry details and data, see table 1.)

Two components of business services account for 59 percent of its employment: *personnel supply services* and *computer and data-processing services*. (See chart 2.) Since September 2000, these industries and (to a lesser extent) *advertising* were the weakest industries within business services. Another large industry, *miscellaneous*

business services, also was weak relative to its recent past. (See chart 3.) This article examines employment trends over the last several years in these four industries and offers reasons for the varying degree of their vulnerability in the recent economic climate.

Personnel supply services

As both the largest employer and the weakest component, personnel supply services has driven the recent job decline in business services. Employment in personnel supply services posted its largest annual decline in absolute terms, down 459,000, or 12 percent, between September 2000 and September 2001. Job losses were concentrated in *help supply services*, an industry that primarily provides temporary workers to other businesses. *Employment agencies*—the other component of personnel supply services, which includes intermediaries that match employers with employees—also showed job losses, but to a lesser degree. To better understand the concentration of job losses in personnel supply services, it is necessary to first understand industry employment trends in help supply services during the last few years.

The recent growth in temporary employment is best understood in the context of a competitive business environment: competition has forced

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Chart 1. Difference in rates of change of employment in business services, September 2000–September 2001 and September 1995–September 2000

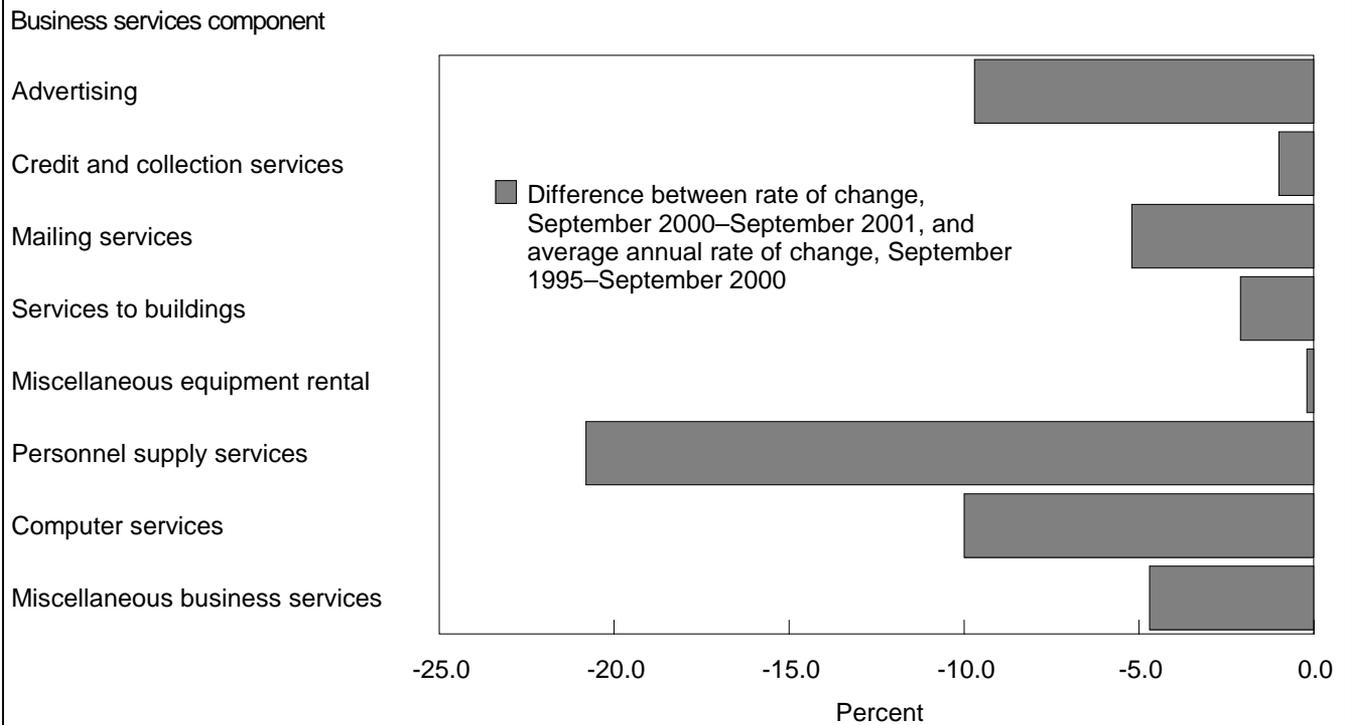


Table 1. Employment in business services and annual rates of change, selected years, seasonally adjusted

Industry	September 1995	September 2000	September 2001	Change, September 2000 to September 2001	Annual percent change		
					September 1995 to September 2000	September 2000 to September 2001	Difference
Total business services	6,957	9,965	9,581	-384	7.5	-3.9	-11.4
Advertising	235	305	292	-13	5.4	-4.3	-9.7
Credit reporting and collection services	123	160	167	7	5.4	4.4	-1.0
Mailing, reproduction, and stenographic services	281	328	321	-7	3.1	-2.1	-5.2
Services to buildings	888	995	997	2	2.3	.2	-2.1
Miscellaneous equipment rental and leasing	231	282	293	11	4.1	3.9	-.2
Personnel supply services	2,544	3,947	3,488	-459	9.2	-11.6	-20.8
Employment agencies	294	409	387	-22	6.8	-5.4	-12.2
Help supply services	2,248	3,547	3,106	-441	9.6	-12.4	-22.0
Computer and data-processing services ¹	1,122	2,124	2,200	76	13.6	3.6	-10.0
Computer-programming services	254	526	534	8	15.7	1.5	-14.2
Prepackaged software	187	308	322	14	10.5	4.5	-6.0
Computer integrated systems design	134	226	238	12	11.0	5.3	-5.7
Data processing and preparation	225	286	303	17	4.9	5.9	1.0
Information retrieval services and computer-related services, n.e.c. ²	237	678	701	23	23.4	3.4	-20.0
Miscellaneous business services ¹	1,534	1,837	1,818	-19	3.7	-1.0	-4.7
Detective, guard, and armored car services	537	599	618	19	2.2	3.2	1.0
Security systems services	50	80	69	-11	9.9	-13.8	-23.7
Business services, n.e.c. ²	860	1,068	1,041	-27	4.4	-2.5	-6.9

¹Includes other industries not shown separately.

²n.e.c. = not elsewhere classified.

businesses to respond quickly and efficiently to their changing labor needs. Through the 1990s, businesses did this by contracting for more temporary workers and moving toward just-in-time labor practices. Businesses thereby created buffers of temporary employees, whose numbers they contracted and expanded to meet their labor demands while insulating permanent employees from economic fluctuations.³

The temporary-staffing industry rode this trend, growing at an annual rate of 12 percent in the period from just after the recession to September 2000. (See chart 4.) The expansionary trend was prominent in manufacturing, as well as in other industries. A study by Marcelo Estevão and Saul Lach estimates that temporary workers accounted for about 4 percent of the manufacturing sector's workforce in 1997, compared with only 1 percent in 1992.⁴ Demand for professional staffing services also grew during this period, and firms increasingly specialized in providing temporary managerial, financial, and technical professionals to meet the demand.⁵ By September 2000, when employment in help supply services was at its peak, temporary workers had become a regular fixture in many businesses.

Temporary employment began to fall in October 2000. Logically, temporary workers would be the first to lose their jobs during times of economic hardship, as well as the first hired during times of renewed, but uncertain, economic strength. Evidence supports this idea: Lewis M. Segal and Daniel G. Sullivan showed that, over the course of a business cycle, temporary help employment acts as a leading indicator in determining the movement of aggregate employment.⁶ Thus, temporary job losses signaled economic weakness and raised the following questions: How well are the recent temporary job losses distributed across the economy? and To what extent do they reflect general economic weakness, as opposed to weakness in the manufacturing sector alone?

These questions are not easily answered. While today's temporary staff work across the economy, the percentage of temporary workers providing services to each sector is unknown. However, data from surveys taken in 1995 and 1997 indicate that about one-third of agency temporaries worked in the manufacturing sector.⁷ The percentage of recent job losses of workers placed in the manufacturing sector by help supply services was of particular interest in early 2001, given that the sector experienced a severe downturn that affected the health of the national economy.

Employment in employment agencies, the other component of personnel supply services, peaked in November 2000 and fell 7 percent between then and September 2001. This decline reflected firms' diminished hiring activity, as well as a reduced demand for employee-employer matching intermediaries relative to the demand in the recent past, when unemployment rates across the Nation reached record lows. Not surprisingly, a decline in the help-wanted advertising index

accompanied the drop in employment agencies' employment.⁸

Computer and data-processing services

Relative to their previous 5-year trends, the recent weakness in computer and data-processing services falls second to that of personnel supply services. (See chart 1.) Employment in computer and data-processing services continued to grow between September 2000 and September 2001, although at a greatly reduced rate compared with that of the previous few years. This industry accounts for 23 percent of employment in business services. Its recent slowing of growth, coupled with its size, identifies computer services as an important factor in business services' overall weakness. However, the weakness in computer services is misleading without knowledge of industry trends in the 1990s.

Beginning in the mid-1990s, expansion of the Internet fueled demand for computer services as companies scrambled to develop Web sites and network their computers. As the year 2000 approached, concerns about Y2K intensified demand for computer services. Employment in computer and data-processing services reflects this heightened demand: in 1994 through 1996, employment grew at an average annual rate of 13 percent; in 1997 through 1999, the average annual growth rate increased to 15 percent. Perhaps because of the extensive preparations, the year 2000 arrived without the accompanying computer glitches many had feared, and employment growth slowed to 8 percent for the year. The industry slowdown continued in 2001, as business investment receded. Employment in computer services declined to a 2 percent annual growth rate during the first 9 months of 2001.

The computer and data-processing services industry is subdivided into nine more specific industries. Several are worth noting because of their contribution to the change in trend. Between September 2000 and September 2001, information retrieval services and computer-related services, not elsewhere classified, together formed one of computer services' weakest components.⁹ Computer-programming services and prepackaged software also were weak. (See chart 5.)

The combined industries of *information retrieval services* and *computer-related services, not elsewhere classified*, were the 1990s' growth engine in computer services. Employment in these industries grew at an annual rate of 25 percent in 1996 through 1999, slowed to 11 percent in 2000, and slowed further, to an annual rate of 2 percent in the first 9 months of 2001. Late 1990s employment growth in the two industries clearly reflects both expansion of the Internet and concerns regarding Y2K. As the popularity of the Internet exploded, companies offering access to various kinds of information and database sources harnessed the Internet's potential as a natural

Chart 2. Distribution of employment in business services, September 2001

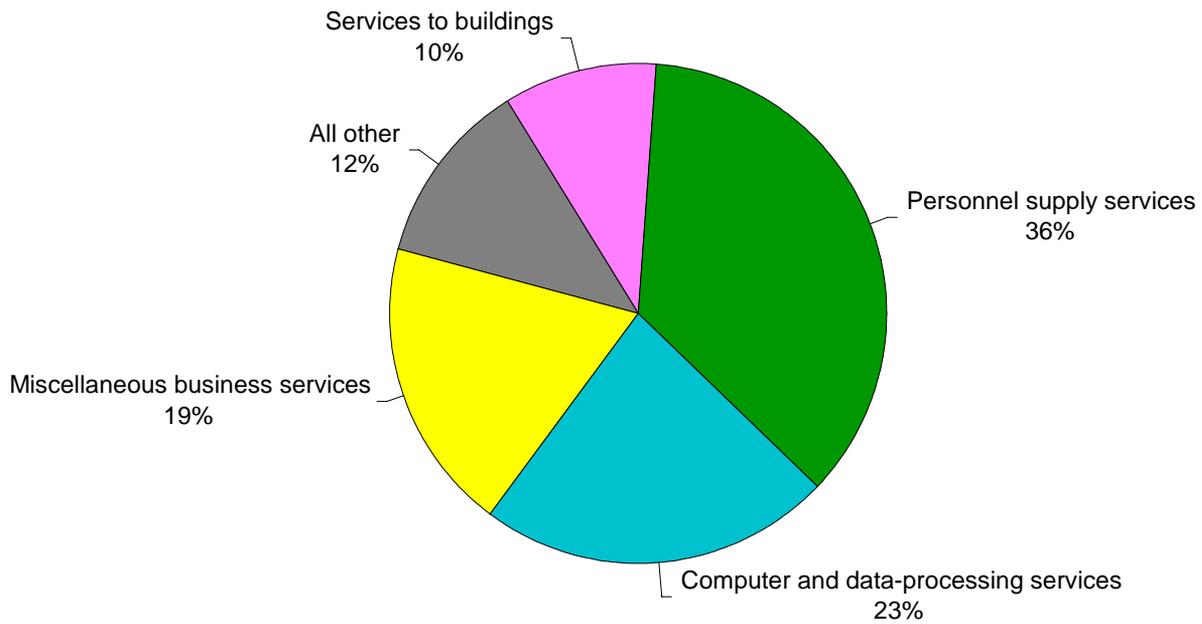


Chart 3. Employment in selected business services industries, 1988–2001

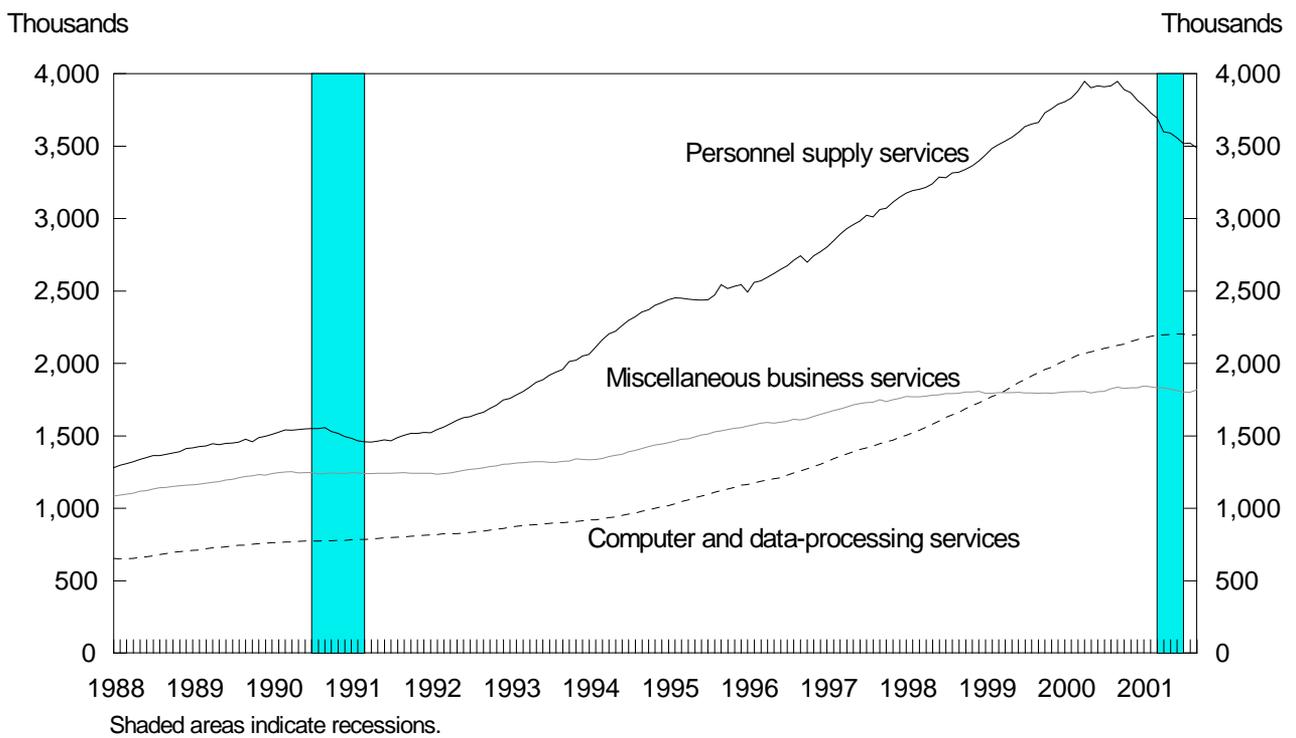


Chart 4. Employment in help supply services, 1988–2001

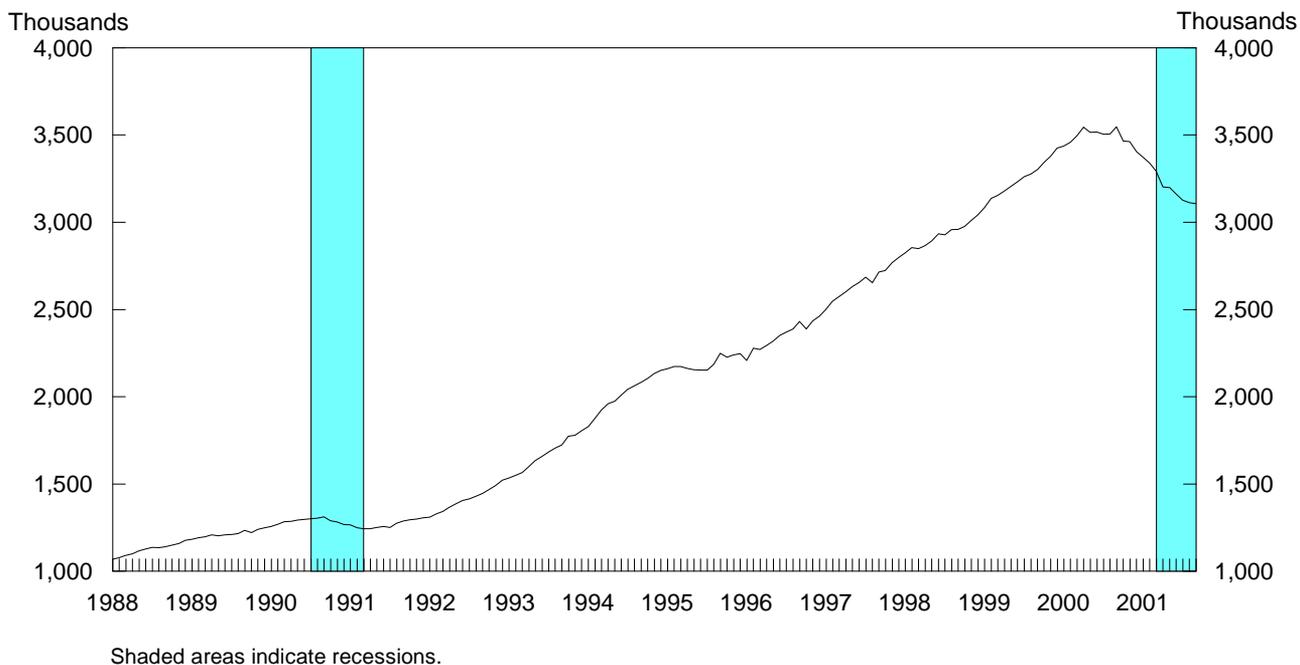
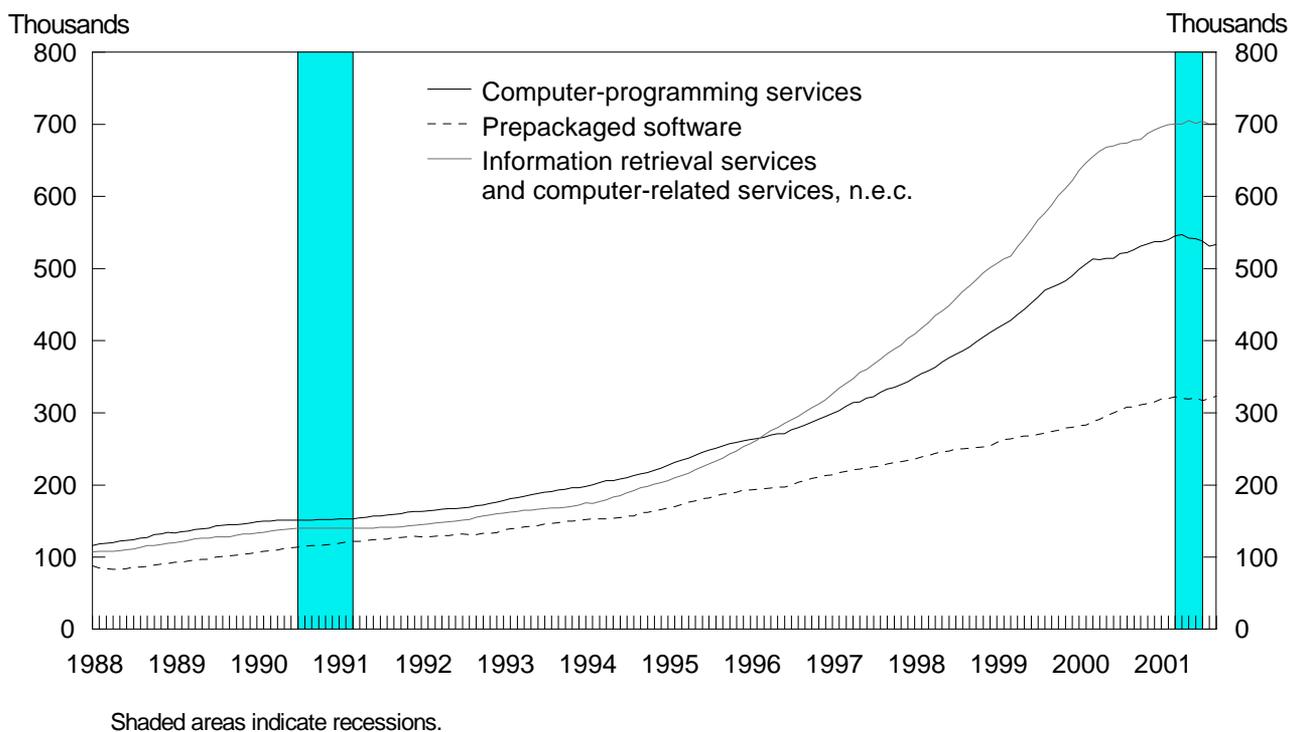


Chart 5. Employment in selected computer and data-processing services, 1988–2001



vehicle of information exchange and market expansion. Accomplishing this feat required consultants or in-house experts capable of integrating Internet portal systems with businesses' existing systems. Similarly, Y2K concerns generated additional demand for the services of computer consultants (which are a part of computer services, not elsewhere classified). The successful passing of the Y2K event and the beginning of the economic downturn both contributed to the stark slowdown in demand for computer consultants and Internet services.

On average, *computer-programming services* experienced double-digit rates of employment growth from 1993 to 2000, reaching a high of 20 percent in 1998. The industry continued to expand through April 2001, and then, between April and September 2001, it contracted at a 6 percent annual rate. The approach of the new millennium generated unprecedented demand for computer-programming services, as companies hurried to adapt their software to prevent dating problems associated with the year 2000. Since the arrival of the new millennium and the slowing of the economy, demand for computer-programming services has waned relative to its recent record levels.

Employment growth in *prepackaged software* slowed from an annual rate of 12 percent in the 12 months ending September 2000 to 5 percent in the 12 months ending September 2001. The slowdown is undoubtedly linked to businesses' cutbacks in spending on technology in light of their large Y2K technology investments and a weakening economy. Household purchases, too, played an important role in reduced demand for software. As computer technology improved markedly during the 1990s and prices fell, personal-computer markets expanded steadily. Whereas only 22 percent of households had personal computers in 1990, 58 percent had them by 2000.¹⁰ Increasing demand for new software accompanied this growth in computer sales, until demand for both products slowed in late 2000. The slowing economy certainly deterred some households from purchasing a personal computer; however, it is also likely that most households which wanted and could afford a computer had already purchased one.

Despite the slowdown in computer services, it was not until July 2001 that the industry lost jobs. The losses continued, and computer services recorded a net employment decline for the third quarter. This contraction followed decelerating growth in the first and second quarters and contrasts with industry growth over more than a decade, a period that includes the recession of the early 1990s. At that time, employment growth in computer services slowed, but did not contract.

Miscellaneous business services

As the third-largest component within business services, and one that has shown recent weakness, miscellaneous busi-

ness services experienced job losses that were an important factor in the broader industry's recent decline. Chart 6 shows miscellaneous business services' major components and their relative sizes.

The diverse industry category *business services, not elsewhere classified*, the majority employer within miscellaneous business services and one that has shown recent weakness, accounted for most of the job losses in the broader series. This industry includes establishments such as telemarketing firms, convention bureaus and decorators, and inventorying services firms. It is difficult to know which of the various types of businesses in the industry drove job losses, although the recession and associated cutbacks in business travel would have slowed demand for many services.

Security systems services showed the greatest relative weakening within miscellaneous business services during the year ended September 2001. However, this industry, which monitors and maintains fire and burglar alarms, accounts for less than 4 percent of employment in miscellaneous business services.

In stark contrast to all other components of miscellaneous business services, *detective, guard, and armored car services* continued to add jobs throughout the September 2000–01 period. Growth accelerated sharply in the fourth quarter of 2001, as businesses responded to the September 11 terrorist attacks with expanded security measures.

Advertising

Although advertising accounts for only 3 percent of business services employment, its recent slowing of growth and contraction rank it among the industry's weakest components. (See chart 1.) Internet, print, radio, and television advertising were all affected as businesses across the economy slashed their advertising budgets. Recent cutbacks in print advertising contrast with 2000, when dot-coms, technology companies, and financial companies spent freely on advertising.¹¹ While employment in advertising grew at an average annual rate of 3.2 percent between the 1990–91 recession and the industry's September 2000 peak, it shrank at an annual rate of 2.6 percent in the first half of 2001. (See chart 7.) During that 6-month period, spending on advertising fell 6 percent below its 2000 level.¹² Reduced employment in advertising parallels job losses in printing and publishing, as well as in paper and allied products manufacturing.

WHILE THE MAJORITY OF BUSINESS SERVICES' JOB LOSSES between September 2000 and September 2001 are traceable to falling employment in personnel supply services, three other components also contributed to the industry's weakness during that period. Miscellaneous business services and advertising each lost jobs, and computer and data-processing services

Chart 6. Employment in miscellaneous business services industries, 1988–2001

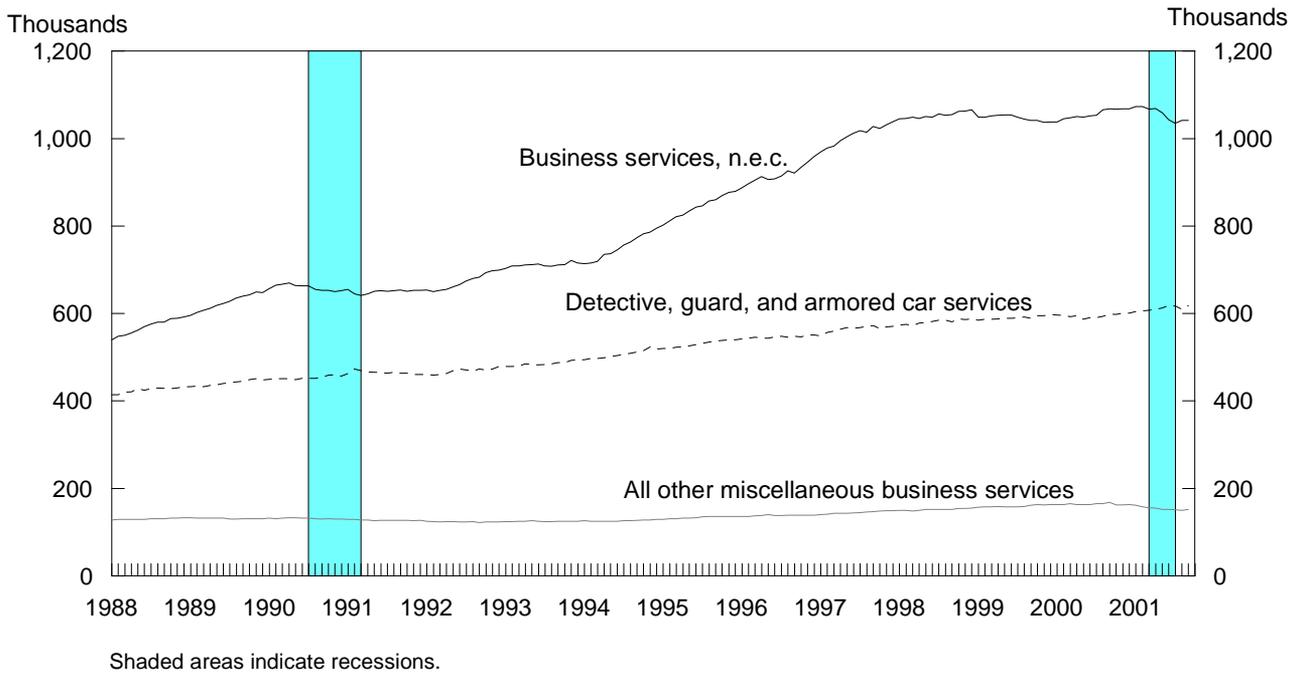
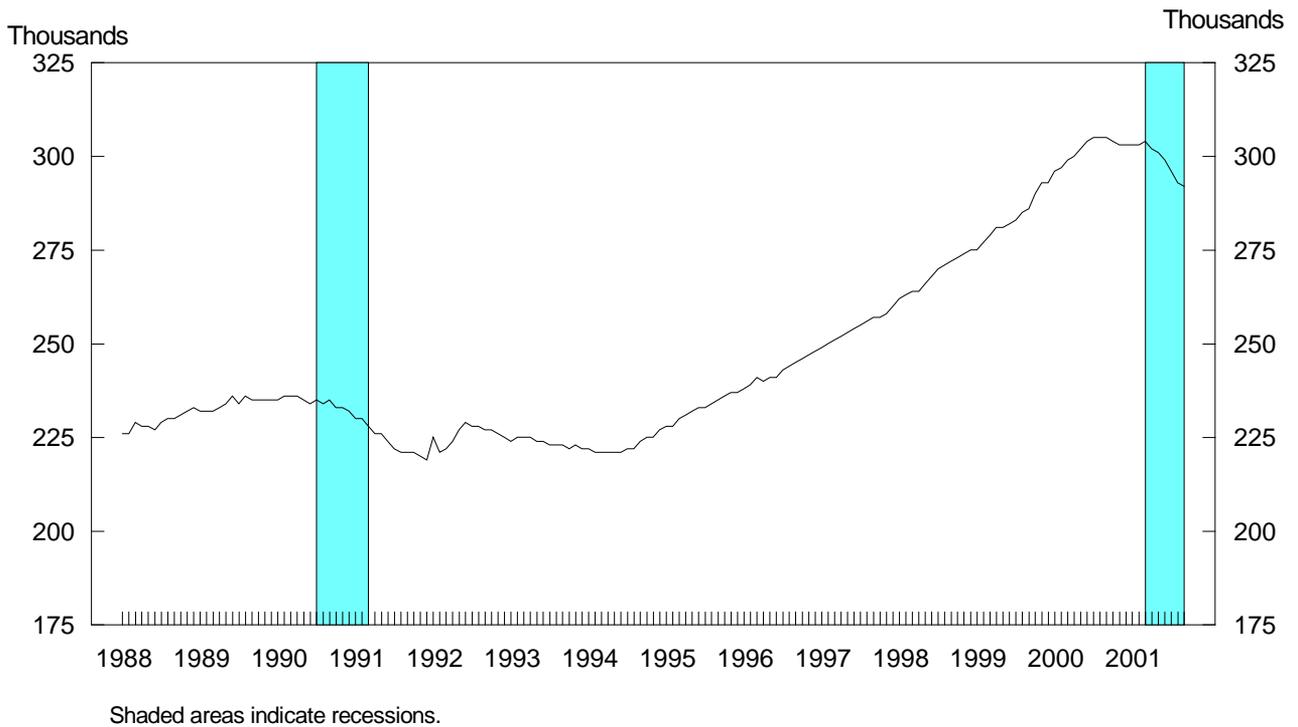


Chart 7. Employment in advertising, 1988–2001



showed sharply slower job growth. Employment trends in these industries reflect the weakening business environment, which led businesses to trim their temporary staffs, cut advertising expenses, and curtail investments in information technology.

The 1990s brought growth in the employment of temporary workers, as well as a technology boom and preparations related to Y2K fears. The first of these factors, coupled with the difficulty of measuring job losses among temporary work-

ers by economic sector, means that it is difficult to know how many job losses in help supply services are directly related to the manufacturing sector's decline and how many are due to general economic weakness. In addition, although employment growth in computer and data-processing services has slowed recently, this is not surprising, considering the late 1990s' unprecedented demand for computer services generated by Y2K preparations and a rapid expansion of the Internet.

NOTES

¹ The figures are from the Current Employment Statistics (CES) program of the Bureau of Labor Statistics. The program produces estimates of all employees on nonfarm payrolls, except in private households, based on a monthly survey of about 300,000 worksites. Data from the survey appear in the Bureau's monthly periodical *Employment and Earnings*. CES data in this article are seasonally adjusted unless otherwise indicated.

² In November 2001, the National Bureau of Economic Research (NBER) announced that the recession had begun in March 2001. (See NBER report, on the Internet at <http://www.nber.org/cycles/recessions.html> (visited Jan. 3, 2002).

³ See Katherine Abraham, "The Role of Flexible Staffing Arrangements in Short Term Workforce Adjustment Strategies," in Robert Hart, ed., *Employment, Unemployment and Hours of Work* (London: George Allen and Unwin, 1998); and *Report on the American Workforce* (U.S. Department of Labor, 1999), pp. 18–24.

⁴ Marcelo Estevão and Saul Lach, "The Evolution of the Demand for Temporary Help Supply Employment in the United States," NBER working paper no. w7427, December 1999.

⁵ Rick Melchionno, "The changing temporary work force: Managerial, professional, and technical workers in the personnel supply services industry," *Occupational Outlook Quarterly*, Spring 1999, pp. 24–32.

⁶ Lewis M. Segal and Daniel G. Sullivan, "The temporary labor force," *Economic Perspectives*, March 1, 1995, pp. 2–19.

⁷ Anne Polivka, "Tables: An Examination of cps Data on Flexible Staffing Arrangements," paper presented at the National Labor Market Information Conference, Missoula, Montana, May 2000.

⁸ See "Help-Wanted Index Drops 5 Points," *The Business Knowledge Network* (The Conference Board, Sept. 27, 2001); on the Internet at <http://www.conference-board.org/search/dpress.cfm?pressid=4663> (visited Oct. 4, 2001).

⁹ For the purposes of this analysis, and due to the 1999 reclassification of many establishments from *computer-related services, not elsewhere classified*, to *information retrieval systems*, it makes sense to sum these employment series.

¹⁰ Greg Ip, "Sated, Will Consumers Hurt the Economy?" *The Wall Street Journal*, June 11, 2001.

¹¹ Lucia Moses, "Danger signs popping up across the country," *Editor & Publisher*, March 12, 2001, pp. 7–8.

¹² "Sucked into quicksand," *The Economist*, Oct. 27, 2001, pp. 59–60.