



## CALIFORNIA HAS MAINTAINED ITS COMPETITIVE EDGE

**R**ecent employment data show that California has maintained its competitive edge in key industries. The following assesses the competitiveness of seven principal high-tech and bio-tech industries, as well as the motion picture industry, by comparing their performance in California and the rest of the US.<sup>1</sup>

### K E Y F A C T S

- **California's information and manufacturing sectors – which include most high-tech and bio-tech industries and the motion picture industry – performed as well as or better than those of the rest of the US.**
- **Four of California's high-tech and bio-tech industries gained jobs and increased their scores on the competitiveness indicator.**
- **Two high-tech industries and the motion picture industry expanded in California, despite losing some ground on the competitiveness indicator.**

This paper uses two measures – job growth and a competitiveness indicator, which reflects the concentration of an industry's jobs in California – to gauge industry performance in the state. California's information sector performed well on both measures. Between 1995 and 2005, the state's information sector added jobs at more than twice the rate of the rest of the nation – 14.2 percent compared to 6.8 percent. In addition, the state's information sector scored well on the competitiveness indicator, as indicated by a score greater than 1.0 in both 1995 and 2005.<sup>2</sup>

Although California's manufacturing sector lost jobs between 1995 and 2005, the state's job losses were less severe than those of the rest of the nation. The number of manufacturing jobs in California declined by 12.1 percent between 1995 and 2005, compared to an 18.0 percent decline in the rest of the US. Moreover, despite job losses, the state's manufacturing sector scored similarly on the competitiveness indicator in 1995 and 2005. In both years, the state's manufacturing sector scored close to 1.0, suggesting that California's sector is nearly as competitive as that of the nation.

For example, the number of California jobs in the Internet service providers (ISP), search portals, and data processing industry increased by 76.1 percent between 1995 and 2005 – more than three times the gain in the rest of the US. California's ISP industry also increased its score on the competitiveness indicator over this 10-year period from 0.92 to 1.18. Three other industries also experienced a disproportionate gain in jobs relative to the rest of the US and scored higher on the competitiveness indicator in 2005 than 10 years earlier.

For example, the number of jobs in computer systems design and related services increased by 76.5 percent between 1995 and 2005, although this industry scored lower on the competitiveness indicator in 2005 than in 1995. In addition, the number of jobs in the motion pictures and sound recording industry increased by 10.9 percent, in spite of a lower score on the competitiveness indicator in 2005. Nevertheless, the motion picture industry's competitiveness score was 3.71 in 2005, suggesting California maintains a substantial competitive advantage.

**California's Information and Manufacturing Sectors Performed as Well as or Better Than Those of the Rest of the Nation**

Sector	Percent Change in the Number of Jobs, 1995 to 2005		California's Competitiveness Indicator	
	California	Rest of the US	1995	2005
Information	14.2%	6.8%	1.38	1.40
Manufacturing	-12.1%	-18.0%	0.94	0.96

Source: CBP analysis of Employment Development Department data

- **One high-tech manufacturing industry retained a high competitiveness score, despite losing jobs.**

California's computer and electronic products manufacturing industry scored well above 1.0 in 1995 and 2005, in spite of job losses over this period. Moreover, the state's job losses in this industry were less severe than those of the rest of the US.

**High-Tech and Bio-Tech Industries and the Motion Picture Industry Performed Better in California Than in the Rest of the Nation**

Four Industries Gained Jobs and Increased Their Scores on the Competitiveness Indicator in 2005

Industry	Percent Change in the Number of Jobs, 1995 to 2005		California's Competitiveness Indicator	
	California	Rest of the US	1995	2005
ISP, Search Portals, and Data Processing	76.1%	24.4%	0.92	1.18
Pharmaceuticals and Medicines	44.0%	24.1%	1.21	1.27
Scientific Research and Development Services	31.3%	19.3%	1.48	1.53
Medical Equipment and Supplies	16.3%	2.2%	1.32	1.39

Three Industries Expanded, Despite Losing Ground on the Competitiveness Indicator

Industry	Percent Change in the Number of Jobs, 1995 to 2005		California's Competitiveness Indicator	
	California	Rest of the US	1995	2005
Computer Systems Design and Related Services	76.5%	98.1%	1.52	1.31
Motion Pictures and Sound Recording	10.9%	30.8%	4.11	3.71
Telecommunications	0.9%	2.6%	1.11	1.04

One Industry Retained a High Competitiveness Score, Despite Losing Jobs

Industry	Percent Change in the Number of Jobs, 1995 to 2005		California's Competitiveness Indicator	
	California	Rest of the US	1995	2005
Computer and Electronic Products	-17.9%	-23.0%	2.19	2.20

Source: CBP analysis of Employment Development Department data

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## ENDNOTES

- <sup>1</sup> The North American Industrial Classification System (NAICS), which is the standard system used in the US to categorize sectors of the economy, identifies 12 major sectors and hundreds of smaller industries within sectors. This paper examines seven high-tech and bio-tech industries, the motion picture industry, and the larger manufacturing and information sectors. The high-tech and bio-tech industries analyzed in this paper were selected based on definitions used in two reports: US Department of Commerce, Economics and Statistics Administration, *Digital Economy 2003* (December 2003), p. 34 and Employment Development Department, Labor Market Information Division, *Under the Microscope: Biotechnology Jobs in California* (June 2004), p. 122. These industries are classified within either the information, manufacturing, or professional and business services sectors. The motion picture industry is part of the information sector.
- <sup>2</sup> The competitiveness indicator used in this report is the share of California jobs in a particular industry or sector divided by the share of US jobs in that industry or sector. For example, in 2005, 3.2 percent of California's jobs were in the information sector compared to 2.3 percent of the nation's jobs. Therefore, the share of California jobs in the information sector divided by that of the nation was 1.4. A score greater than 1.0 suggests that an industry or sector has a competitive advantage in California. The higher the score, the greater the likely advantage. However, this indicator is only one measure of an industry or sector's competitiveness.