

Background on Business Services Outsourcing and the California Economy

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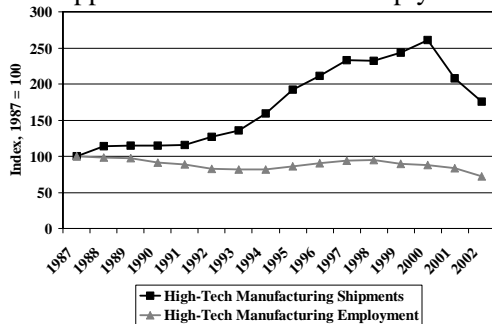
Testmony to the Joint Hearing of the Senate Business and Professions Committee and the Senate Select Committee on International Trade Policy and State Legislation Sacramento, March 9, 2004

Thank you for inviting me to speak before you today. I will briefly provide some background on outsourcing overseas and put it in perspective in terms of the larger economy.

Outsourcing is not a new phenomenon. For decades, jobs have migrated from California to other parts of the country as well as overseas. The recent wave of outsourcing, however, is different. It affects a different mix of jobs, at different wage levels. It is not confined to a small set of industries but cuts across industrial sectors. It is affecting new geographic areas, and it is happening very rapidly.

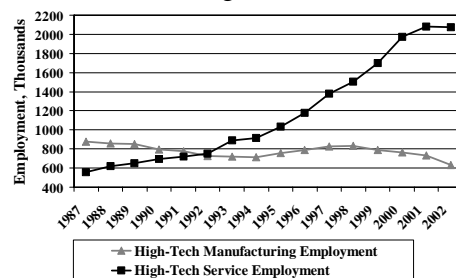
Outsourcing in the 1980s and 1990s primarily affected blue-collar jobs. This process often made the US companies and industries more competitive in the global market--US employment stayed steady or declined in industries where outsourcing was prevalent, while output increased. The process was not necessarily a net loss for the economy. In the computer industry, for example, sales rose sharply during the late 1980s and for much of the 1990s, in parallel with an increasing tendency to offshore the production of many inputs. (See Figure 1). The effects went beyond computer manufacturing. The availability of low-cost computer technology led to an explosion of demand for computer software and services jobs. Nationwide a quarter of a million high-tech related manufacturing jobs were lost over a decade and a half, but 1.5 million services jobs were added over the same period. Primarily, the more routine, lower paying jobs left, while growth was in higher paying services jobs. (See Figure 2).

Figure 1
High-Tech Manufacturing Employment
Dropped—But Sales Rose Sharply



High-Tech Sectors = Computers (NAIC 3341) + Semiconductors (NAIC 3444)
Source: Bardhan, Jaffee, and Kroll, *Globalization of a High-Tech Economy*, Kluwer, forthcoming

Figure 2
High-Tech Service Jobs Grew as
Manufacturing Jobs Declined



Source: Bardhan, Jaffee, and Kroll, *Globalization of a High-Tech Economy*, Kluwer, forthcoming

Outsourcing of manufacturing continues, but now white-collar jobs in many different industries are following. In the high-tech cluster, the very jobs that appeared to be the beneficiaries of the last wave of outsourcing are now the target of the new wave. The impact is felt not just on high-tech sectors, such as software programming, but in office support, legal professions, finance, and even medicine.

In addition, the pace of outsourcing has accelerated. Manufacturers made heavy capital investments abroad, seeking the advantages of low wages. Over time, specialized production centers built up in places like Singapore and Taiwan, increasing the attractiveness of overseas production. In the wave of white-collar outsourcing, firms are following low wages and already existing high levels of education and training, in places as diverse as India, China, Ireland, Israel and Russia. Those countries where English is a common language have added advantages, especially if they share a similar institutional structure with England and the US. The required capital investments are generally much lower than for manufacturing production. (See Figure 3).

Figure 3
Foreign Outsourcing Activity Then and Now

<u>EARLIER PERIOD</u>	<u>NEW WAVE</u>
<ul style="list-style-type: none"> • Primarily blue-collar jobs • Primarily in manufacturing • Wage driven • Production centers emerged • High capital investment required 	<ul style="list-style-type: none"> • Primarily white-collar jobs • Occurring across industries—services occupations • Driven by wages, English language, technical training • Internet enabled • Low capital requirements

Figure 4
When Can a Services Job Be Outsourced to Foreign Locations?

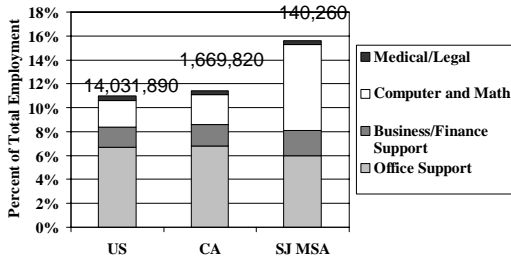
- No face-to-face customer service requirement
- Information the major component of the “product”
- Work via remote communications: telecommunications and Internet
- Low set-up barriers
- High wage differentials
- Low social networking requirement

The development of the Internet and of other communications improvements have made much of this possible. As indicated in Figure 4, services jobs can be outsourced if they are primarily back office jobs, requiring little customer interaction. This is particularly likely to occur in jobs where the major “product” is information. The ability to move the product over remote communications networks has also made it much easier to move these jobs abroad. The jobs most likely to go are those where the wage differential is high, and where the social interactions among workers in these occupations is not a key component of the industry’s success.

We have made some initial estimates of the number of jobs that are in occupational categories that fit the profile described in Figure 4. The 36 occupations we have identified are as diverse as computer programming, switchboard operators, financial analysts, and radiology technicians. Nationwide, we estimate that just over 14 million, or approximately 11 percent of the employed workforce, are employed in these at-risk occupations. In California, the proportions are similar, accounting for almost 1.7 million jobs or 11.5 percent of total employment. Many urban areas, however, appear much more vulnerable. The San Francisco and San Jose Metropolitan Statistical Areas, have among the highest shares of occupations “at-risk” to outsourcing, as shown in Figure 5.¹ Sacramento also has a relatively high share of workers employed in “at-risk” office occupations but

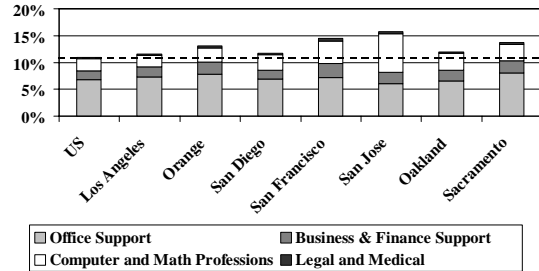
since many of these workers are in government jobs, they are less vulnerable than workers in similar private sector occupations. Even in these occupations within the private sector, these shares should be seen as an outer limit of the jobs at-risk.

Figure 5
Occupations At-Risk to Outsourcing
US, California, and San Jose MSA



Source: FCREUE from Bureau of Labor Statistics data, 2002 data.

Figure 6
Percent of Total Jobs in Occupations At-Risk for
Outsourcing: Selected California MSAs



Source: Authors from Bureau of Labor Statistics data, 2002 data.

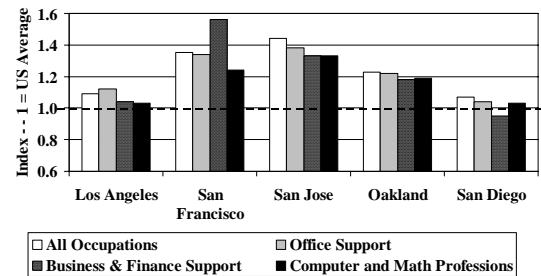
The savings to a company from shifting work overseas can be very large. As shown in Figure 7, wages in some occupations may be less than 1/10th the US wage, and the gap is even wider for firms located in Silicon Valley. Southern California wages remain closer to the US average. (See Figure 8). The Bay Area’s high share of at-risk occupations and relatively high wages suggest that this segment of California will be the most vulnerable to the impacts of outsourcing.

Figure 7
Salary Gap—US Compared to India
Hourly Wage

Occupation	US	CA	Sil. Val.	India
Telephone Operator	\$13.85	\$14.50	\$16.80	<\$1.00
Health Record Techs	\$11.50	\$13.20	\$15.00	\$1.50-\$2.00
Payroll Clerk	\$13.95	\$15.90	\$20.40	\$1.50-\$2.00
Legal Assistant	\$18.25	\$23.85	\$27.10	\$6.00-\$8.00
Accountant	\$22.60	\$25.30	\$28.30	\$6.00-\$15.00
Financial Analyst	\$27.50	\$30.85	\$34.60	\$6.00-\$15.00
Programmer	\$30.00	\$33.45	\$36.90	\$2.65-\$6.00

Source: FCREUE from US BLS, interviews and reviews of Want Ads.

Figure 8
Salaries in Occupations at Risk of Outsourcing
Relative to Average US Salaries in At-Risk Occupations
Selected California MSAs, 2001



Source: Authors from Bureau of Labor Statistics data.

The challenge to the Bay Area is magnified by the severity of the recent recession. Employment is down 18 percent in Santa Clara County since the start of the recession, and 12 percent in the San Francisco MSA. The job losses to date are largely due to the high-tech downturn and the dot-com collapse. However, the high-tech and dot-com boom and bust are related to the current outsourcing situation. Many of the firms that began outsourcing in the late 1990s were responding to “push” factors from California as well as “pull” factors from India and other locations. High labor costs and real estate costs combined with unemployment rates below 3% led firms to look for alternative

locations and labor sources to remain competitive. Firms that now have established employment networks overseas will be slower to add jobs in California as the recovery begins.

So far, this has been a one-dimensional look at outsourcing. The process has a positive side as well. California firms in high-tech and other sectors have used outsourcing for decades as one strategy for maintaining a presence in California while still growing competitively. (See Figure 9). Consumers have benefited from lower-cost and more varied products. Silicon Valley firms, as well as high-tech, multi-media, biotechnology, and other firms throughout the state in the past have used the resources freed up through offshore production to develop new products, new industries and new employment opportunities. The strength of Silicon Valley's recovery and expansion in the 1990s is in part an outcome of earlier outsourcing. California has the potential for capturing the benefits of this wave of outsourcing also. As the venture capital center of the world, Silicon Valley has the business infrastructure to bring new innovations into production, even if the innovations occur outside of California.

In responding to outsourcing at the state level, it will be important to consider the opportunities as well as problems raised by outsourcing. Attempts to stop outsourcing could well backfire, leading affected firms to move out of the state, and even out of the country. Nevertheless, even if this process leads to new opportunities, the current dislocations, when combined with those that already occurred from the recession, are severe. A multi-faceted strategy of providing services to displaced workers, support for new business development, and maintenance of a strong technical base in the higher education system will be needed in the course of recovery.

Figure 9
Advantages and Risks of Outsourcing

- Lowers costs for local firms, improved competitiveness
- Allows firms to remain where labor force tight and growing slowly
- Frees resources for new investments
- May generate demand for new industries, activities, new job growth
- Stabilizing factor overseas
- Displaced workers
- Downward pressure on wages, real estate prices
- Risk of downward spiral? (fewer jobs, lower demand...)
- Security risks—for the individual, the company
- Exporting of knowledge base and of potential for new innovation

Further research on this topic is summarized at the following web addresses:

<http://repositories.cdlib.org/iber/fcreue/reports/1103/>

http://www.berkeley.edu/news/media/releases/2004/02/11_trio.shtml

<http://staff.haas.berkeley.edu/kroll/pres.htm>

¹ A metropolitan statistical area (MSA or PMSA) is a census definition. The San Francisco PMSA includes San Francisco, Marin and San Mateo counties. The San Jose PMSA is Santa Clara County only. The Sacramento PMSA includes Sacramento, Placer and El Dorado counties.