FRBSF Weekly Letter

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Economic Impacts of Military Base Closings and Realignments

On July 1, 1993, the Base Closure and Realignment Commission recommended changes that would result in a net loss of 62,400 military and civilian jobs nationwide. The Commission's recommendations have been approved by President Clinton, and Congress is not likely to challenge them. Under the Commission's plan, half of the nation's net job losses would be in the Twelfth Federal Reserve District, with most of those in California.

This *Weekly Letter* examines the impact of base closures and realignments on the western economy. While the changes are small relative to the District economy, they loom large for regions in which military bases provide a large proportion of the area's total jobs. The economic impact of the base closures over the longer term depends on the conversion process itself, and how the property ultimately is used.

The role of military bases in the Twelfth District economy

In December 1989, military bases in the nine Twelfth District states employed 210,000 civilian workers and 417,000 active-duty military personnel. Thus, military bases accounted for 3.2 percent of total employment in District, with significant variations within the District. California's dependence on military base employment was a little lower than average in 1989, at 2.8 percent. Four District states derived a greater percentage of their employment from military bases: Hawaii (14.5 percent), Alaska (11.3 percent), Washington (3.9 percent), and Utah (3.8 percent). In Oregon, military bases accounted for only 0.1 percent of total employment. Military bases provided a somewhat larger proportion of total jobs in Idaho (1.6 percent), Nevada (1.8 percent), and Arizona (2.3 percent).

Since bases are not distributed uniformly within these states, some communities are highly dependent on military bases for their livelihoods. For example, Fort Ord and the Monterey Presidio accounted for 19 percent of the Monterey (California) area's total employment in 1989. In San Diego, the overall economy is much larger, but there are so many large military installations that together they accounted for 10 percent of total employment. More typically, military installations provided between 1 and 5 percent of the jobs in western communities with large bases.

Base closures and realignments

The list submitted this summer was the third round of changes under the Base Closure and Realignment Act. The 1988 round cut 13,100 jobs at military bases in the Twelfth District, while the 1991 round cut a further 19,700. The cuts included in the 1993 list are much larger than either of the two earlier rounds, with a net loss of 31,300 jobs in the West. Further cuts will come in the 1995 and 1997 rounds called for by the Act.

Western cutbacks are concentrated in California. When the three rounds announced to date are completed, bases in California will have seen a net job decline of 78,500, or 22 percent. In Utah, employment will have fallen by 2,500, or 9 percent. The declines in Oregon and Arizona will be much smaller, while in Hawaii and Idaho gains from earlier rounds will be offset by subsequent cutbacks. There will be no changes in Alaska, and a very small net gain in Nevada. Washington, in contrast, will add a net 17,000 jobs at military bases, a gain of 20 percent.

Employment effects

The direct employment effects of base closures and realignments are quite small in the Twelfth

THE WESTERN ECONOMY *The Western Economy* is a quarterly review of economic conditions in the Twelfth Federal Reserve District. It is published in the *Weekly Letter* on the third Friday of February, May, August and November.

District, with the net job losses from all three rounds amounting to only 0.3 percent of total employment. However, the effects vary widely within the West. The Monterey and Vallejo metropolitan areas in California are most affected, with announced changes leading to the direct loss of 13 and 6 percent of jobs, respectively. Several other areas, all in California, will see more modest, but still significant, direct job losses of between 1 and 2 percent. These areas include Oakland, Riverside–San Bernardino, Sacramento, and San Francisco. In some metropolitan areas, certain communities would be hit much harder, such as Alameda in the Oakland area. In contrast, other areas stand to gain significantly. Personnel will be transferred to the San Diego, Puget Sound (Washington), and Fresno (California) areas.

In addition to the jobs lost (or gained) on bases, there would be "secondary effects" for communities in which changes occur. For example, at bases where jobs are cut, secondary effects would include lost business for firms whose customers are employed at the base and for firms that supply goods or services to the base, and lower property values. For communities that depend heavily on military bases, the economic impact of the changes will be large. A frequently used "rule of thumb" holds that each job lost (or gained) due to an exogenous change leads to one secondary job lost (or gained) in the affected community. For the District as a whole, however, the direct and secondary job losses are likely to be dwarfed by other economic factors, especially since most of the cutbacks are spread over several years.

Longer-term effects of base closures

When a military base is closed, the economic effects due to the initial job losses and their associated secondary effects can be mitigated if the base ultimately is converted to alternative uses. California bases that were closed in the 1970s currently are serving a wide variety of public and private sector uses. Most of these sites provide some jobs, though generally fewer than the military bases did. One exception is the former Benecia Arsenal (California), now an industrial park, which provides more than twice as many jobs. Planned or possible uses for military bases slated for closure include industrial parks, airports, prisons, parks, and local government facilities.

The amount of time from the decision to close a base to the successful conversion to civilian use varies greatly. The base closure itself usually takes place three to six years after the decision is made. All of the Twelfth District bases slated for closure on the 1988 and 1991 lists still had personnel on duty at the end of 1992.

The conversion process can be lengthy if the base has toxic contamination or unexploded ordnance, which must, by law, be cleaned up before the military can relinquish title to the land. At least two of the bases slated for closure on the 1993 list, El Toro Marine Air Corps Station and Mare Island Naval Shipyard (both in California), have such extensive contamination problems that the Environmental Protection Agency has designated them as Superfund sites. In these cases, the clean-up process itself could generate a significant number of jobs.

In some cases, the conversion process has been delayed by disagreements among local authorities regarding how the property should be used. For example, litigation among neighboring communities regarding control of George Air Force Base in San Bernardino County, California has delayed the conversion there. In contrast, the process is farthest along when local authorities agreed early on about how the property would be used, which jurisdiction would coordinate the process, and which public or private entity would ultimately hold title to the land. For example, the transitions have been relatively smooth at the Presidio of San Francisco, which will become part of the Golden Gate National Recreational Area, and at England Air Force base in Louisiana, which had a major tenant in place even before the base was closed.

Conclusion

The western economy is large enough that the changes called for by the Base Closure and Realignment Commission are unlikely to have significant effects on the area's overall economic health. However, some parts of the West will see large job losses and a few will see significant gains. Communities in which bases are closed can recoup some or all of those losses over the long term if the bases are put to job-creating civilian uses. While a few communities can complete the conversion relatively quickly, for most it will be a long process.

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Economist

DISTRICT INDICATORS
(Seasonally Adjusted)

	93Q2	93Q1	92Q4	92Q3	92Q2	92Q1	91Q4	91Q3	% Change From: 93Q1	% Change From: 92Q2
AGRICULTURE										
U S. crop prices, 1985=100	112.1	109.1	109.2	107.9	107.9	109.7	110.7	114.6	2.70	3.81
District crop prices, 1985=100	115.7	108.6	112.1	110.4	101.3	116.5	107.5	120.6	6.56	14.22
Farm cash receipts, million $	2,885.9	2,580.1	2,740.7	2,563.2	2,468.1	2,535.6	2,655.9	2,528.0	11.85	16.93
Cattle-on-feed, 1985=100	90.2	90.2	91.1	91.4	86.5	86.1	81.1	84.4	-0.01	4.22
Cattle prices, California, $/Cwt.	67.3	64.6	58.4	60.1	58.4	59.1	62.1	62.6	4.05	15.15
FORESTRY										
Lumber production, millions board feet	1,231.3	1,316.4	1,426.9	1,385.6	1,369.1	1,431.4	1,370.5	1,418.8	-6.46	-10.07
Northwest lumber inventory, millons board feet	2,072.1	2,016.3	2,088.8	2,198.1	2,267.8	2,203.8	2,314.1	2,395.4	2.77	-8.63
U.S. lumber prices, 1986=100	194.0	245.1	162.9	147.9	153.1	156.8	137.9	131.6	-20.85	26.71
ENERGY										
Spot price of oil, $/barrel	19.8	19.8	20.6	21.7	21.1	18.9	21.8	21.6	0.15	-6.11
U.S. rig count	865.9	861.0	860.1	861.6	868.9	863.7	877.9	891.6	0.57	-0.34
District rig count	50.9	50.2	63.9	60.8	65.9	54.6	63.2	74.5	1.50	-22.73
Fuel mining employment, 1985=100	60.3	60.6	67.4	68.2	70.2	70.6	70.1	72.6	-0.51	-14.20
U.S. seismic crew count	78.7	75.7	73.7	71.7	80.7	80.2	89.9	98.9	3.97	-2.55
MINING										
Mineral prices, 1986=100	98.9	99.5	99.2	105.3	107.0	105.9	104.1	104.5	-0.56	-7.58
Metal mining employment, 1985=100	171.7	176.3	177.5	179.0	180.1	182.5	180.6	184.1	-2.64	-4.69
CONSTRUCTION										
Nonresidential awards, 1985=100	96.4	98.8	97.2	94.6	102.4	111.0	103.2	94.5	-2.46	-5.92
Residential permits	19,600	18,624	21,147	19,538	18,922	19,564	19,749	18,488	5.24	3.58
Western housing starts, thousands	28.9	19.0	21.2	26.3	26.7	21.9	19.5	24.1	51.87	8.36
Construction employment, thousands	865.9	861.0	860.1	861.6	868.9	863.7	877.9	891.6	0.57	-0.34
MANUFACTURING										
Wages, California, $/hour	12.3	12.2	12.3	12.3	12.2	12.1	12.1	11.9	0.41	0.74
Employment, thousands	2,765.3	2,795.8	2,803.5	2,841.5	2,870.4	2,885.5	2,901.7	2,930.3	-1.09	-3.66
Durables, 1985=100	85.4	86.5	89.4	90.5	92.0	93.3	94.0	95.2	-1.18	-7.17
Construction durables, 1985=100	87.0	88.0	92.1	91.7	94.1	94.5	93.6	95.3	-1.13	-7.52
Aerospace, 1985=100	86.9	89.5	93.6	97.3	100.4	104.0	106.4	107.6	-2.94	-13.47
Electronics, 1985=100	80.7	81.0	85.3	85.7	86.8	87.6	88.8	90.4	-0.33	-7.05
Semiconductor orders, mil. $, not s.a.	2,107.2	2,048.9	1,931.0	1,713.5	1,544.4	1,437.5	1,377.4	1,273.7	2.85	36.44
Whls/retail trade employment, thousands	4,655.5	4,667.9	4,658.7	4,669.2	4,682.5	4,672.4	4,706.5	4,717.6	-0.26	-0.58
Retail sales, Pacific District, mil. $	N/A	26,419	26,482	26,167	26,105	26,412	25,513	25,822	N/A	N/A
Services employment, thousands	5,575.9	5,559.6	5,540.6	5,505.4	5,489.6	5,450.4	5,461.1	5,432.9	0.29	1.57
Health care, 1985=100	135.2	135.0	134.5	133.6	133.0	132.2	131.3	130.0	0.15	1.68
Business services, 1985=100	115.8	114.9	113.5	112.8	113.2	112.6	112.1	112.5	0.80	2.31
Hotel, 1985=100	128.8	129.6	132.1	130.3	132.0	132.5	133.4	131.2	-0.62	-2.45
Recreation, 1985=100	142.2	142.1	141.2	140.9	139.4	139.0	139.7	139.0	0.07	2.02
Finance, insurance, and real estate empl., thousands	1,220.6	1,223.2	1,223.7	1,223.7	1,227.0	1,223.2	1,223.0	1,223.6	-0.21	-0.52
GOVERNMENT EMPLOYMENT, THOUSANDS										
Federal government	588.8	603.2	610.2	610.8	609.4	616.4	618.1	616.8	-2.39	-3.38
State and local	2,944.1	2,931.7	2,927.8	2,946.0	2,920.5	2,915.3	2,900.1	2,901.8	0.42	0.81

Data are weighted aggregates of available 12th District data constructed by FRBSF staff from public and industry sources.

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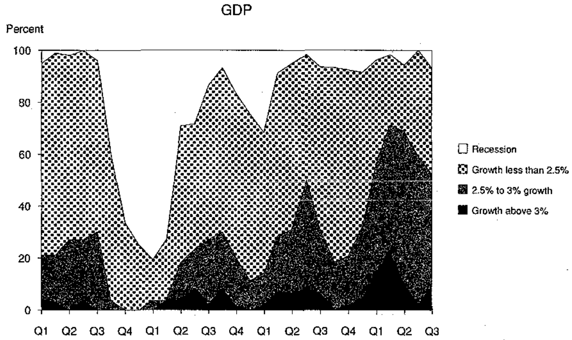
PERSONAL INCOME
Annualized Percent Growth Rates

	93Q1	92Q4	92Q3	92Q2	92Q1	Annual Growth 1993*	1992	1991
Alaska	5.2	9.9	1.1	1.0	17.6	5.2	7.2	4.1
Arizona	-6.5	14.0	3.6	6.4	7.6	-6.5	7.8	4.2
California	-5.6	7.1	4.7	4.7	4.4	-5.6	5.2	1.7
Hawaii	-1.2	45.2	-23.8	3.9	19.1	-1.2	8.2	2.3
Idaho	-3.8	21.2	3.8	8.9	0.8	-3.8	8.4	4.7
Nevada	-4.1	18.9	7.7	3.4	8.9	-4.1	9.6	4.3
Oregon	-2.4	9.6	7.5	4.5	9.5	-2.4	7.8	4.6
Utah	-5.6	13.7	7.7	5.3	9.5	-5.6	9.0	5.9
Washington	-7.0	17.5	5.1	4.9	10.9	-7.0	9.5	5.8
12th District	-5.3	10.3	4.1	4.8	6.2	-5.3	6.3	2.7
U.S.	-6.2	14.8	3.3	4.8	7.3	-6.2	7.5	3.5

* Year-to-date

Twelfth District Business Sentiment*
GDP



* Expectations for GDP growth during the next four quarters based on a survey of approximately 75 business leaders in the 12th Federal Reserve District.

NON-AGRICULTURAL EMPLOYMENT
Annualized Percent Growth Rates

	93Q2	93Q1	92Q4	92Q3	92Q2	Annual Growth 1993*	1992	1991
Alaska	-5.0	7.9	2.0	-0.7	-2.7	2.5	1.1	1.3
Arizona	1.0	1.4	0.4	5.0	4.3	2.3	2.4	0.6
California	-1.1	-1.5	-2.5	-1.4	0.0	-2.6	-1.9	-1.8
Hawaii	-0.2	-0.2	-2.8	-3.2	0.2	-0.4	-1.1	1.2
Idaho	0.5	4.9	2.7	3.7	4.2	5.5	4.1	3.8
Nevada	0.3	4.8	5.0	4.5	2.2	5.1	3.5	-0.2
Oregon	-0.4	4.0	2.0	0.1	2.8	3.6	1.6	0.1
Utah	4.4	6.4	3.1	3.8	2.8	11.1	3.4	2.3
Washington	-1.5	2.5	3.4	-0.2	0.7	1.0	1.7	1.2
12th District	-0.6	0.3	-0.7	-0.3	0.8	-0.3	-0.4	-0.7
U.S.	1.9	1.9	1.1	0.8	1.3	3.9	0.7	-0.9

* Year-to-date

UNEMPLOYMENT RATES
Average Quarterly Data

	93Q2	93Q1	92Q4	92Q3	92Q2	Annual Average 1993*	1992	1991
Alaska	8.1	8.0	8.9	9.3	9.2	8.0	9.2	8.6
Arizona	6.5	7.6	7.4	7.0	7.3	7.1	7.4	5.6
California	8.8	9.6	9.9	9.4	8.7	9.2	9.1	7.6
Hawaii	4.7	4.5	4.8	4.6	4.1	4.6	4.3	2.7
Idaho	6.8	6.6	6.5	6.4	6.2	6.7	6.3	6.1
Nevada	6.9	6.8	6.4	7.2	6.5	6.8	6.7	5.6
Oregon	7.5	7.1	7.3	7.7	7.5	7.3	7.5	6.0
Utah	4.1	4.1	5.4	5.0	4.6	4.1	4.9	4.9
Washington	7.7	7.6	8.0	7.5	7.2	7.6	7.5	6.3
12th District	8.1	8.6	8.9	8.5	8.0	8.3	8.3	6.9
U.S.	7.0	7.0	7.3	7.6	7.5	7.0	7.4	6.8

* Year-to-date