

# Are Businesses Fleeing the State?

## Interstate Business Relocation and Employment Change in California

By David Neumark, Junfu Zhang, and Brandon Wall

### SUMMARY

A commonly heard theme in recent public debates about California's economic problems is that the state's economy is hostile to the needs of business. As evidence, it is frequently asserted that businesses are fleeing California in droves, relocating to more welcoming, "business-friendly" states with lower taxes and a less onerous regulatory environment. Californians therefore suffer because their jobs are being siphoned off to benefit residents of other states.

In reality, little is actually known about the trend of out-of-state business relocation and, in turn, almost nothing has been done to measure how this relocation may be affecting employment change in California.

In this issue of *California Economic Policy*, we examine the phenomenon in a more complete context: the business dynamics that drive employment change in California and extend beyond relocation to include the formation of new businesses and the expansion, contraction, and closure of existing business establishments.<sup>1</sup>

We find that

- California does in fact lose businesses and jobs because of relocation, but the effect on employment is negligible. In any year from 1993 to 2002, the net job loss from business relocation was never higher than one-tenth of 1 percent of the total number of jobs. At this rate, it would take more than 10 years for California to lose 1 percent of its employment. Moreover, California was a net importer of jobs from certain states.
- Employment change is primarily driven not by interstate relocation but by the expansion and contraction of existing businesses and by the births of new businesses and the deaths of existing ones. On average, 71.4 percent of job destruction in the state from 1992 to 2002 stemmed from the death of business establishments, 26.9 percent from existing business establishments shrinking, and only 1.6 percent from relocations out of state.
- When they do move, businesses are much more likely to move locally than across state boundaries. Out-of-state relocations account for less than 4 percent of all the moves captured in our database.

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*California Economic Policy is a quarterly series analyzing and discussing policy issues affecting the California economy.*

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Given our finding that the role of interstate business relocation in employment change is negligible, arguments about a hostile business climate based on anecdotal evidence of businesses leaving California should be treated with caution. There may be merit in claims that the business climate in California is inimical to overall job growth. As our results emphasize, births and deaths and expansions and contractions of existing business establishments play a hugely important role in employment change. If public policies or other factors deter those births and expansions, or promote deaths and contractions, then there could be legitimate grounds for criticism of the state's business climate. But policies that focus solely on preventing business relocation are unlikely to contribute significantly to job growth. The evidence suggests that if there is a role for public policy in creating job growth, efforts to foster the formation of new businesses and to help existing businesses survive and grow would be better placed. This research points to the need for a broader and more informed examination of California's business climate and how it can be affected—for good or for bad—by public policy.

## Introduction

Arguments that California has created an economic environment antagonistic to the needs of business seem to be heard more frequently during times of economic uncertainty in the state. In the early 1990s, California experienced an economic downturn, attributable in part to federal defense cutbacks triggered by the end of the Cold War. Both politicians and business leaders blamed the recession on an allegedly poor business climate.<sup>2</sup> To make matters worse, headhunters, consultants, and policymakers in other western states, including Nevada, Arizona, Washington, Utah, Texas, and New Mexico, sensed an opportunity to lure businesses from California.<sup>3</sup> Nevada legislators budgeted \$400,000 to recruit discontented businesses from California, and in Arizona, a special legislative session was convened to approve economic incentives to attract aerospace firms.<sup>4</sup>

These efforts, coupled with the actual recession-caused job losses, combined to create an impression that a large number of businesses were in fact fleeing California and taking Californians' jobs with them. Governor Pete Wilson designated two blue ribbon commissions to investigate California's supposedly deteriorating business climate.<sup>5</sup> One, the Council on California Competitiveness, issued a long report in 1992 filled with recommendations for improving the business climate.<sup>6</sup> These included reforms to reduce the costs of the workers' compensation program, to pare back environmental regulations, and to improve the education system, as well as tax reforms that would promote entrepreneurship and business investment.

With the economic boom of the late 1990s, little more was heard about the state's hostile business climate. But in the economic downturn that followed the dot-com bust of 2000–2001, policymakers and others began again to wonder publicly whether California was a good place to do business. Representative Duncan Hunter (R–El Cajon) told a conference he organized on the subject in April 2003 that regulations, fees, taxes, high energy

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costs, and rising salaries and compensation were making California less attractive than neighboring states—and that many firms had left California for just those reasons.<sup>7</sup> Later that year, during the campaign to recall Governor Gray Davis, the public was inundated with criticism of California’s business environment. Candidates to succeed Davis routinely referred to the state’s “onerous business regulations and over taxation”<sup>8</sup> that were driving businesses away. In response, Davis requested that the California Employment Development Department (EDD) study the trend and effects of business relocation, but the EDD kept no data on relocation.

The public relations battle over the issue has continued since Governor Arnold Schwarzenegger replaced Davis. Billboards in other states display the governor’s image and the message, “Arnold Says: ‘California wants your business.’” The governor has also promised to lend a moving truck belonging to “Arnold’s Moving Co.” to any business owner who wants to move to California. Other states have fought back with their own billboards and newspaper ads, including Massachusetts (“Smaller muscles, but lower taxes!”) and Nevada (“Will your business be terminated?”).<sup>9</sup>

### The Case for a Business Exodus

Those who have argued that California’s business climate has pushed businesses out of California have rarely relied on empirical evidence of relocation behavior but rather on surveys that elicited subjective assessments from employers. In 1991, a statewide survey by the California Business Roundtable showed that close to one-quarter of the 1,462 responding companies had plans to leave California.<sup>10</sup> A July 2003 survey by the California Chamber of Commerce and the California Business Roundtable asked 400 California business executives about relocating. Nearly one-fifth of the respondents said that they were planning to expand and/or relocate outside the state. Fifteen percent said that they had been approached by recruiters from other states, and of these, 51 percent

had been offered monetary or other relocation incentives.<sup>11</sup> The following year, a survey by the California Business Roundtable and Bain & Company (2004) painted an even grimmer picture, reporting that close to 40 percent of company executives surveyed had a plan to relocate businesses and jobs away from California and that most of them planned to move to other western states.

Bules & Associates (1992) is the only study we have come across that tries to measure actual relocation activity. Commissioned by the Los Angeles Department of Water and Power and other utilities, it reported that California lost 1,035 industrial facilities to other states, to Mexico, or to Puerto Rico between 1980 and 1992. This figure included industrial plants that moved out of California and those that were set up outside California by California companies, although it is not clear whether the latter group should be counted among the losses. Using the multiplier effect, they estimated a loss of job opportunities of between 168,000 and 224,000 for that 12-year period.

### Business Relocation in Context

However, a critical limitation of even this study—and a missing element in all of the discussions about relocation that we have cited—is that business relocation is almost always discussed in the context of businesses leaving California, as if traffic moves in only one direction. The Bules & Associates survey focused exclusively on businesses leaving the state and ignored firms moving to California or setting up new California branches of existing businesses. One could argue that when companies such as Gateway (in 1998), Iomega (in 2001), and Sony Electronics (in 2004) moved their headquarters from other states to California, this

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was a positive development that mitigated the negative effects of out-of-state relocations.

Another serious flaw in the debate up until now is that it is often framed as if relocation were the key determinant of employment change in California, ignoring other dynamic processes such as the natural ebb and flow of employment change at existing businesses and establishment births and deaths. It is misleading to focus on only one of these—especially without good evidence.

The focus on relocation also typically ignores subtleties in these dynamics that might point to positive news of job creation. It is possible, for instance, that some business establishments are moving away because they are crowded out by more efficient ones. Other researchers theorize that the California economy is one that for some industries—such as high-tech—acts as an incubator for innovation, because of its good universities, strong venture-capital network, and highly educated workforce. However, this comparative advantage does not extend to the routine production of goods well past the innovation stage.<sup>12</sup> This scenario suggests that it is natural for business establishments to be born in California but then to migrate to take advantage of lower production costs elsewhere. Indeed, as reported below, we see evidence broadly consistent with this pattern of out-migration. In such cases, relocation should not be taken as a sign of bad business climate. If anything, it is an indicator of a good business climate that favors the formation of new businesses.

Employment change is ultimately the net effect of six dynamic processes—three that create jobs and three that destroy jobs, as shown in this equation:

$$\begin{aligned} \text{Employment growth} &= (\text{job growth at expanding establishments} \\ &\quad - \text{job decline at contracting establishments}) \\ &\quad + (\text{jobs at new establishments} \\ &\quad - \text{jobs at establishments that closed}) \\ &\quad + (\text{jobs at establishments that moved in} \\ &\quad - \text{jobs at establishments that moved out}) \end{aligned}$$

To characterize employment change in an economy, we need to understand all six of these

dynamic processes, not just to describe employment change accurately but also to identify the job creation and destruction processes on which it might be most productive for policymakers to focus in encouraging employment growth.

This equation also helps make the important distinction between *gross* job flows, such as all jobs created because of establishment births, and *net* job flows, the difference between jobs created by births and jobs destroyed by deaths. Moderate overall changes in employment over time may mask large and volatile gross job flows. Conversely, relatively small changes in any of the gross flows can lead to sharp changes in net job growth. Policies that encourage births or discourage deaths could have a large effect on employment growth if the gross flows associated with births and deaths are large, even if the net job flow from births minus deaths is relatively small.

### The National Establishment Time Series Database

Although the importance of understanding the job creation-destruction process has long been widely recognized, systematic empirical research on this topic did not start until quite recently as researchers began to develop appropriate data sources.<sup>13</sup> The data sources used in previous research have imposed significant limitations because they do not capture business relocation and hence cannot be used to estimate the contribution of relocation to employment change.

For this article, we used a new data source—the National Establishment Time Series (NETS). It is the first dataset to permit a full breakdown—or decomposition—of the sources of employment change and, thus, a study of business relocation in relation to other business dynamics. The NETS database is a new longitudinal file on business establishments, a long-term project of Walls & Associates in conjunction with Dun & Bradstreet. A significant part of our research focused on assessing the validity of this new data source. We found that

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it gives reliable measurements of these dynamics and, thus, provides reliable data about the sources of employment change and growth in California.<sup>14</sup> Details on the NETS database and its construction are given in the data box.

One highly desirable feature of the NETS database is that it covers essentially all establishments. This reflects the fact that it is designed to capture the universe rather than a sample of establishments. For each year of the sample period 1989–2002, the database includes information on between 1.2 and 1.8 million business establishments in California that provide about 15 million to 18 million jobs. A busi-

ness establishment is included in our NETS data file if it was ever located in California during 1989–2002 or is the parent headquarters of such an establishment. In total, more than 3.5 million establishments are covered in our NETS database extract.

An establishment relocation in the NETS data is identified by street address and zip code changes from one year to another. Establishments that moved either into or out of California are included in the database, so interstate relocation can be tracked.

However, there are some limits to what this form of relocation data can tell us about the dynamics of employment change, because other types of

### The NETS Database

The NETS database collects information at the establishment level but also includes a unique Data Universal Numbering System (DUNS) to indicate the relationships among establishments in multiestablishment firms.

The NETS database begins with 14 cross-sectional files of the full DUNS Marketing Information (DMI) file for each year from 1990 through 2003, each of which covers the previous year. From here on, we refer to the year covered by the data, i.e., 1989–2002 for the full sample period. The primary purpose of Dun & Bradstreet’s data collection effort is to provide information on businesses to the business community, to enhance their decisionmaking by constructing a set of “predictive indicators” (e.g., the Dun & Bradstreet Rating and PayDex scores). The DMI file for each year is constructed from an ongoing effort to capture each business establishment in the United States in each year (including nonprofits and the public sector).

Dun & Bradstreet strives to identify all business establishments, and to assemble information on them, through a massive data collection effort, involving over 100 million telephone calls from four calling centers each year, as well as obtaining information from legal and court filings, newspapers and electronic news services, public utilities, all U.S. Secretaries of State, government registries and licensing data, payment and collections information, company filings and news reports, and the U.S. Postal Service. Particular efforts are devoted to identifying the births and deaths of establishments.

For every establishment identified, Dun & Bradstreet assigns a DUNS number as a means of tracking the establishment. It should be pointed out that since around 1990, the DUNS has increasingly become the standard means of tracking businesses, having been adopted by many government agencies in the United States and internationally.

Although the goal of Dun & Bradstreet is not to collect and organize data for scholarly research, it does have an incentive to ensure the accuracy of its data, because inaccuracies would hurt Dun & Bradstreet’s business and might even result in lawsuits. Dun & Bradstreet has established a sophisticated quality control system and engages in extensive quality and consistency checks. Thus, the data in each cross-section should provide high quality “snapshots” of business establishments.

Walls and Associates entered into a collaboration with Dun & Bradstreet with a very different purpose in mind—namely, to provide a dynamic view of the U.S. economy using the data from the Dun & Bradstreet archives (Walls and Associates, 2003). Essentially, this required linking the Dun & Bradstreet cross-sections into a longitudinal file that tracks every establishment from its birth, through any physical moves it may make, capturing any changes of ownership, and recording the establishment’s death if it occurs.

See Neumark, Zhang, and Wall (2005) for more information.



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changes in employment might be viewed as sharing features of business establishment relocation or reflecting the same forces that drive relocation. If a California company sets up an establishment in another state, that establishment does not show up in our dataset. That is, we can study establishments that move out but not those that branch out (of state). Although many discussions in the popular media confuse these two types of activities, branching out should not be regarded as equivalent to moving out because the former does not necessarily occur at the cost of—that is, instead of—creating an additional business establishment within the state.<sup>15</sup> Second, the NETS database tracks only physical establishment relocation. For example, it does not allow us to determine when specific jobs are shifted between two establishments of the same firm while both establishments remain open. This type of relocation, which also constitutes a relocation of jobs between establishments, will be observed in our dataset as employment expansion or contraction.<sup>16</sup>

### Findings on Relocation and Employment Dynamics in California

*California is a net exporter of businesses, but job loss attributable to business relocation is negligible.*

In every year during the 1993–2002 sample period, as shown in Table 1, some establishments left California, taking jobs away. At the same time, others moved into California, bringing jobs to the state. Measured by either the number of business establishments or the number of jobs, California experienced a net loss because of business relocation in every year. The fact that there was never a net gain in any of these 10 years is indeed quite striking.

However, in the context of its overall economy, California’s net loss from relocation is negligible. Even during each of the two worst years, 1993 and

1994, California experienced a net loss of about 750 business establishments to other states, which amounted to 0.05 percent of the total number of business establishments in California. At this rate, it would take about 20 years for California to lose 1 percent of its business establishments. The job numbers tell a similar story. In terms of job loss from relocation, 1994 and 1997 represent the worst years. In these years, business relocation cost 0.1 percent of California jobs.<sup>17</sup> At this rate, it would take about 10 years to eliminate 1 percent of California’s jobs.

Comparing these relocation numbers to ongoing employment changes also shows their relative insignificance. For example, from July 1990 to May 1993, California lost 4.1 percent of all jobs, whereas from December 1997 to December 2000, the number of jobs in California grew by 10.3 percent.<sup>18</sup> These comparisons suggest that whether during an upturn or a downturn, business relocation simply does not play much of a role in employment change.

*Employment change is primarily driven by business expansion, contraction, births, and deaths.*

Table 2 shows a breakdown of California’s employment change in three-year increments from 1992 to 2002. For each period, in the top panel we show California employment in the starting year, in the ending year, and the resulting net change. The number of jobs created or eliminated by each employment dynamic follows. The bottom panel shows the components of the employment change for the relevant period.<sup>19</sup>

In every three-year period, the expansion of existing business establishments creates more jobs than are lost through contraction.<sup>20</sup> This is perhaps not surprising, because at any time we expect that existing business establishments tend to be those that are growing rather than shrinking. The net effects of births and deaths of establishments on overall employment change are positive in some years and negative in others.<sup>21</sup> This tends to reflect aggregate economic conditions. Although other factors are at

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**Table 1. Business Relocation and Its Effect on Employment in California, 1993–2002**

	Moved In	Moved Out	Net Effect	Total Number of Establishments or Jobs	Net Loss as % of Total
<b>By Number of Establishments</b>					
1993	612	1,364	-752	1,532,256	0.049%
1994	534	1,285	-751	1,515,142	0.050%
1995	519	1,104	-585	1,497,623	0.039%
1996	489	835	-346	1,521,247	0.023%
1997	504	763	-259	1,518,940	0.017%
1998	545	676	-131	1,492,105	0.009%
1999	582	669	-87	1,461,135	0.006%
2000	802	828	-26	1,519,325	0.002%
2001	752	1,032	-280	1,644,230	0.017%
2002	731	999	-268	1,814,938	0.015%
<b>By Number of Jobs</b>					
1993	13,853	27,094	-13,241	16,266,713	0.081%
1994	8,977	25,452	-16,475	16,371,012	0.101%
1995	14,136	28,224	-14,088	16,241,156	0.087%
1996	13,158	18,352	-5,194	16,314,659	0.032%
1997	11,073	28,209	-17,136	16,546,553	0.104%
1998	15,098	16,709	-1,611	16,512,479	0.010%
1999	18,893	23,437	-4,544	16,864,781	0.027%
2000	15,589	16,994	-1,405	17,666,262	0.008%
2001	18,586	23,916	-5,330	18,149,748	0.029%
2002	12,656	16,551	-3,895	17,527,918	0.022%

Note: The left-hand column denotes the year the move is observed. For example, “1993” means that the move occurred between 1992 and 1993.

play, when economic conditions are good, we expect more business establishments to be created and fewer to go out of business, resulting in more jobs being created by births than jobs being eliminated by business closures. Conversely, during slower economic times, we expect business formation to be lower and more businesses to close, resulting in a net loss of jobs because new business job growth is insufficient to cover the loss of those that die. Roughly speaking, this is reflected in the table.

For example, in the earlier periods covered by the dataset, when unemployment was very high (above 9% in 1992 and 1993, and still above 6% as of 1998), jobs destroyed by establishment deaths outweighed jobs created by establishment births. But during the later periods, beginning with the three-year period 1997–2000 (when unemployment fell as low as 4.7%), jobs created by establishment births exceeded jobs destroyed by establishment deaths.<sup>22</sup>

**Table 2. Decomposition of Employment Change in California**

	1992–1995	1993–1996	1994–1997	1995–1998	1996–1999	1997–2000	1998–2001	1999–2002
<b>Employment change</b>								
Starting employment	16,394,151	16,266,713	16,371,012	16,241,156	16,314,659	16,546,553	16,512,479	16,864,781
Ending employment	16,241,156	16,314,659	16,546,553	16,512,479	16,864,781	17,666,262	18,149,748	17,527,918
Change	-152,995	47,946	175,541	271,323	550,122	1,119,709	1,637,269	663,137
<b>Job creation</b>								
Expansion	1,134,603	1,220,681	1,480,284	1,742,557	1,874,193	1,933,519	1,934,525	1,862,952
Birth	2,641,169	2,915,369	2,716,969	2,456,024	2,317,230	2,776,719	3,488,940	3,092,281
Move in	34,327	37,993	41,994	37,355	46,076	49,515	45,268	42,277
<b>Job destruction</b>								
Contraction	1,102,839	965,717	1,030,221	994,987	973,018	901,333	1,134,032	1,410,608
Death	2,781,915	3,086,093	2,965,193	2,909,694	2,648,325	2,682,980	2,640,929	2,870,695
Move out	78,340	74,287	68,292	59,932	66,034	55,731	56,503	53,070
<b>Employment change decomposition</b>								
Employment change =	-152,995	47,946	175,541	271,323	550,122	1,119,709	1,637,269	663,137
(expansion – contraction)	31,764	254,964	450,063	747,570	901,175	1,032,186	800,493	452,344
+ (birth – death)	-140,746	-170,724	-248,224	-453,670	-331,095	93,739	848,011	221,586
+ (move in – move out)	-44,013	-36,294	-26,298	-22,577	-19,958	-6,216	-11,235	-10,793

Table 2 also shows just how small the role of business relocation is. As the last row shows, the employment loss from relocation ranges from about 6,000 in 1997–2000 to 44,000 in 1992–1995, averaging around 20,000 for each three-year period. But the employment changes from the expansion-contraction processes and the birth-death processes for the same three-year periods are much greater, often by a factor of 20 or more. In other words, employment changes in California are primarily driven by expansion-contraction and birth-death processes rather than by relocation.<sup>23</sup>

Figure 1 supports this point more graphically: The net effect of interstate relocation is relatively flat and contributes almost nothing to the massive

swing in net employment change over time. Similarly, the top panel in Figure 2 shows that without exception in each three-year period, job creation came primarily from the formation of new business establishments and the expansion of existing ones rather than from relocation. On average, 62.4 percent of job creation came from new establishments, 36.7 percent from the growth of existing establishments, and only 0.9 percent from establishments moving to California. The bottom panel in Figure 2 shows that the death of business establishments is the major factor in job destruction. Contraction of existing establishments is also substantial but less important. Again, business relocation out of California contributes only minimally



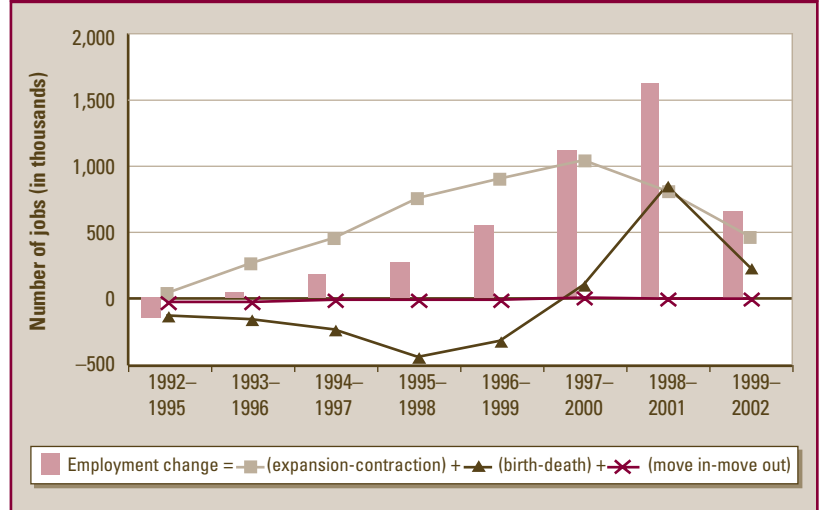
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to job destruction. On average, 71.4 percent of job destruction stemmed from business establishment deaths, 26.9 percent from contraction, and only 1.6 percent from interstate relocation.

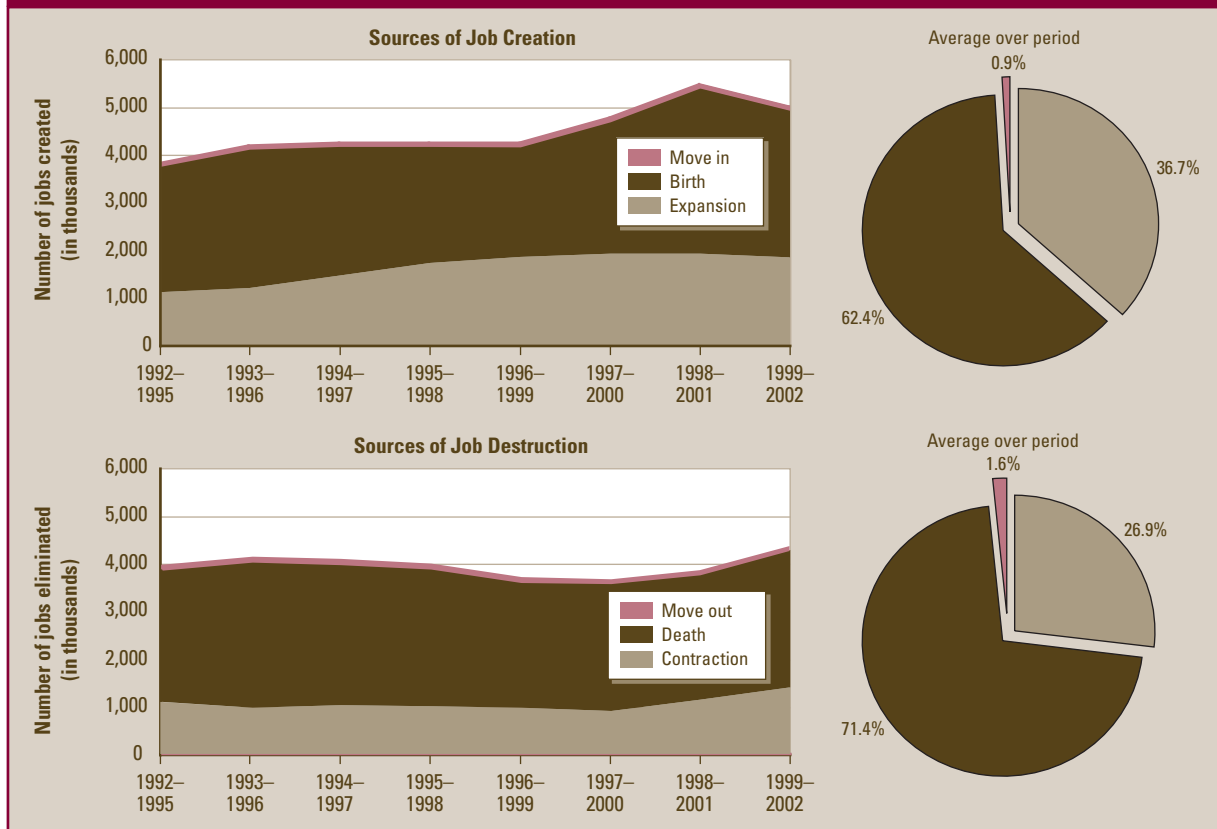
The decomposition of the sources of employment change is sensitive to the interval over which the change is measured. In particular, the longer the interval chosen, the greater the contribution of births and deaths to gross job flows. To see this most simply, note that as the interval gets longer, more establishments that have been shrinking will actually die, and more growth will be attributed to births.<sup>24</sup> Because of this sensitivity of the answer to the length of the interval, we tried looking at different intervals. However, we found that no matter what interval is used, the contribution of business establishment relocation is always negligible.

The employment change analysis in Table 2 gives some indications of the potential for each of

**Figure 1. Net Employment Changes Resulting from Different Business Dynamics**



**Figure 2. Job Creation and Destruction**



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the underlying processes to lead to more dramatic variation in employment. Given that births and deaths contribute large gross flows into and out of employment, a modest change in the balance between births and deaths could lead to large shifts in net employment growth. In contrast, a change in the shares of establishments moving into or out of California seems unlikely to ever have much of an effect. The very low gross job flows associated with relocation imply that even if the rate of movement out of the state doubled, and establishments completely ceased to move into the state, there would be very little effect on net employment change. In contrast, a much smaller relative change in the birth or death rate of business establishments could lead to more drastic employment changes.

*Establishments are much more likely to move locally than across state boundaries.*

Establishment moves are much more common within the state. Out of 255,838 establishment relocations originating in California during 1993–2002, 246,283 (or 96.3%) were moves within

California. Despite all the publicity, relocations to other states are very much the exception, not the rule. In fact, 35.4 percent of all moves in California occurred within a city and 78.5 percent of the moves occurred within a county.<sup>25</sup> Because there are fewer establishments moving in than moving out of state, intrastate relocations represent a slightly higher proportion of all relocations to a California destination.

One result is that the effect of relocation on employment at the local level, although still modest, is more pronounced than at the state level. In 1993, for example,

although less than 0.1 percent of all business establishments moved out of California, 0.4 percent of

establishments moved outside their own county, and 1.2 percent moved beyond their own city. The employment changes associated with these moves represented 0.2 percent, 0.5 percent, and 1.4 percent of total California employment, respectively.

*Interstate moves are most likely to occur between California and other western states.*

When business establishments do move across state boundaries, distance still seems to play a role. Table 3 shows that when business establishments moved out of California, they were likely to go to other western states. In particular, Nevada, Arizona, Texas, Oregon, Washington, and Colorado top the list of destination states. Nevada is far ahead of any other state, attracting 57 percent more establishments from California than number-two Arizona. When we look at the number of jobs eliminated by out-migration, rather than simply the number of businesses that move, the western states still stand out, although North Carolina and New York move closer to the top of the list.

As for business establishments that relocated to California from 1993 to 2002, New York tops the list of states of origin, but western states still ranked high: Nevada, Texas, Arizona, Washington, Colorado, and Oregon are all among the top 10. In terms of jobs moved to California, relocations from New York, New Jersey, Texas, and Illinois greatly outnumbered relocations from other states. Given the small size of the Nevada, Arizona, and Oregon economies, the larger number of establishments moving between them and California is clearly related to their proximity. The exceptions to the job- and establishment-exporting pattern are worth noting. Among the top 20 destination and origin states, more business establishments came to California from New York, New Jersey, Illinois, and Massachusetts than relocated in the opposite direction, as Table 3 shows.

California was also a net importer of jobs from New Jersey, Illinois, and Massachusetts; more jobs having been created from establishments relocat-

**When business establishments moved out of California, they were likely to go to Nevada, Arizona, Texas, Oregon, Washington, and Colorado. Nevada is far ahead of any other state, attracting 57 percent more establishments from California than number-two Arizona.**

**Table 3. Top Destination and Origin States of Establishments that Crossed State Boundaries, 1993–2002**

Top Destination States of Establishments That Moved Out of California			Top Origin States of Establishments That Moved Into California		
	Number of Establishments	Number of Jobs		Number of Establishments	Number of Jobs
Nevada	1,305	14,086	New York	613	16,304
Arizona	830	16,544	Nevada	438	5,189
Texas	815	34,819	Texas	437	9,713
Oregon	645	6,103	Arizona	416	6,095
Washington	566	7,986	Washington	385	5,902
Colorado	551	11,546	New Jersey	349	9,794
Florida	507	10,209	Illinois	291	9,014
New York	466	16,387	Colorado	280	4,566
Illinois	269	8,700	Florida	272	4,341
Utah	253	3,345	Oregon	257	2,417
Georgia	227	5,799	Massachusetts	215	6,441
Idaho	222	3,045	Pennsylvania	146	3,795
New Jersey	196	5,546	Virginia	137	3,859
North Carolina	182	19,162	Ohio	136	4,980
Massachusetts	180	5,162	Michigan	134	2,663
Virginia	175	4,851	Utah	126	2,118
Pennsylvania	166	7,172	Georgia	125	4,195
Ohio	157	7,887	Maryland	104	4,258
Tennessee	140	3,610	Hawaii	97	1,297
New Mexico	135	974	Connecticut	96	5,148

Note: Rankings are based on the number of establishments moving.

ing from these states than were destroyed because of relocations to those states.

## Conclusions

Given that these findings indicate no sign of a substantial business exodus from California, what are their implications for the broader debate about the business climate in California?

First, it is important to be wary of anecdotal evidence of businesses fleeing the state to support arguments that California has an economic climate hostile to business. At any point in time, there will be businesses leaving California (as well as businesses relocating to California). But the availability of anecdotal evidence of businesses leaving the state does nothing to establish a change in behavior, let alone the existence of a hostile business climate. As far as we can tell, there has been

**As far as we can tell, there has been no substantial business exodus from California and there has been little if any change in the rate at which businesses are leaving California or avoiding California.**

no substantial business exodus from California and there has been little if any change in the rate at which businesses are leaving California or avoiding California.<sup>26</sup>

Second, the negligible role of business relocation in employment change also indicates that any public policy focus on business relocation would be badly misdirected. Such an effort, even if successful at attracting new

businesses and retaining old ones, would be unlikely to contribute significantly to job growth—unless for some reason business relocation is inordinately responsive to policy levers. To the extent that policy has a role to play in improving the business climate, the evidence suggests that efforts to foster the formation of new businesses and to help existing businesses survive and grow would be better placed than efforts to attract businesses from other states or to discourage businesses from leaving the state.<sup>27</sup> (However, it is important to point out that the high-profile debate about business relocation has been more about arguing that the state’s business climate is hostile than it has been about specific policy initiatives to reduce out-migration and encourage in-migration of businesses.<sup>28</sup>)

A thorough assessment of California’s business climate is a complicated undertaking well beyond the scope of this article. Nonetheless, examination of employment trends since the mid-1990s suggests that California has been more or less in line with the rest of the nation and other western states in terms of job growth and unemployment and specifically indicates no particular deterioration of net job growth over the long term or in recent years.<sup>29</sup> ❖

## Notes

<sup>1</sup> In this article, we frequently use the term “establishment,” defined as a business or industrial unit at a single physical location that produces or distributes goods or performs services—for example, a single store or factory. Many companies own or control more than one establishment, and those establishments may be located in different geographic areas and may be engaged in different industries. We sometimes refer to an establishment as a “business,” reserving the word “firm” to refer to what may be collections of many establishments with a single owner.

<sup>2</sup> See Groves (1992); Howe (1993); and Weikel (1992).

<sup>3</sup> See Howe (1993).

<sup>4</sup> See Weikel (1992).

<sup>5</sup> See Schrag (1998).

<sup>6</sup> See Council on California Competitiveness (1992).

<sup>7</sup> See Freeman (2003).

<sup>8</sup> See Roberts (2003).

<sup>9</sup> See Tamaki (2004).

<sup>10</sup> See Weikel (1992).

<sup>11</sup> The survey results are available at <http://www.calchamber.com/index.cfm?navid=463>, viewed on August 1, 2005.

<sup>12</sup> This conjecture and some supporting evidence are discussed in Haveman and Shatz (2005).

<sup>13</sup> For this recent empirical literature, see, for example, Birch (1987); Davis, Haltiwanger, and Schuh (1996); Dunne, Roberts, and Samuelson (1989); Foote (1998); Hardiman and Holden (2003); and Spletzer (2000).

<sup>14</sup> Our major findings regarding the quality of the NETS data include the following: First, employment levels calculated from the NETS are highly correlated with those calculated from alternative data sources, but the NETS tends to give higher employment levels, primarily because it provides better coverage of small-size establishments and more accurate counting of proprietors of small establishments. Second, because some employment data in the NETS—especially for new establishments—are imputed, and because employment reported in the database tends to be rounded (to multiples of 10, 50, and 100), employment appears to change less frequently than is actually the case. This implies that employment changes in the NETS are more reliable over a longer term than over a short period. Third, checks against newspaper stories about business relocation suggest that the NETS detects most business relocations reported elsewhere, especially the cross-state relocations on which we focus. And, finally, the NETS does a good job of capturing new business establishments and accurately measuring the dates when businesses were founded. (For a more detailed discussion of the NETS database and our assessment of its reliability, see Neumark, Zhang, and Wall, 2005.)

## Are Businesses Fleeing the State?

<sup>15</sup> Whether California firms have increasingly chosen to set up branches in other states is an interesting question. As an empirical matter, it could be answered using the complete NETS database covering the entire nation, whereas we have only the California file. (The full database was prohibitively expensive to purchase.) However, it would be very difficult to interpret evidence of branching out into other states, for a few reasons. First, many California companies set up branches in other states to serve local markets. In such cases, it makes no sense to count those activities as a loss to California. Second, if one treats a branch-out of a California company as a loss to California, one should probably also consider a new branch of a Massachusetts company just opened in, say, Nevada as a loss to California. After all, it could have been opened here in California. This implies that changes in branching out are more appropriately captured through changes in births or deaths; if, on average, both California firms and firms in other states are opening fewer branches in California (or closing more of them), this would be detected as fewer births (or more deaths).

<sup>16</sup> Also, relocations that involve the consolidation of activities originally at two or more locations into a single location will often be missed and will be reflected in our data as one establishment growing and another closing. Thus, the relocation information in the NETS database tells us about simple, direct relocations of businesses from one location to another and the role that these relocations play in employment change, and can be used to study the potential effects of policies that target these relocations (although the latter goal is beyond the scope of this article). The NETS will detect other activities related to the relocation of business activities but will not necessarily classify these as business relocations per se. We maintain that this classification is correct but recognize that this classification of businesses that relocate is narrower than one that might fully describe the movement of economic activity across geographic boundaries.

<sup>17</sup> The number of jobs eliminated by an establishment that moved out of California is measured by its last employment record in California. The number of jobs added by an establishment that moved to California is measured by its first employment record in California. Both are employment levels within a year from the move. If establishments planning a relocation tend to reduce employment in the years before the move, and similarly ramp up employment after the move, then there is a sense in which we understate the employment change that results from relocation. However, if this occurs, we understate not only the number of jobs eliminated by establishments that moved out of California but also the number of jobs created by establishments that moved into the state, and hence the potential biases are to some extent offsetting in terms of the net effect of relocation on employment.

<sup>18</sup> These figures come from the Current Employment Statistics survey.

<sup>19</sup> In principle, we could decompose annual employment changes in the same way. But as noted above, year-to-year

employment changes are not as reliable in the NETS data because of rounding and imputation; the problem should be much less serious for employment changes over longer periods such as three years, as demonstrated in Neumark, Zhang, and Wall (2005).

<sup>20</sup> Note that we do not capture simultaneous job creation and destruction at the same establishment, as, for example, changes are made in the types of workers employed.

<sup>21</sup> It is worth emphasizing that not all the births of establishments represent the creation of new firms because some of the establishments are branches of existing firms. During 1992–2002, 88 percent of the new establishments were new firms. In Table 2, stand-alone new firms account for 60 to 68 percent of the jobs created by births.

<sup>22</sup> These are seasonally adjusted unemployment rates for the calendar year from the California Employment Development Department (<http://www.labormarketinfo.edd.ca.gov>). The discussion assumes that the NETS data apply to the first day of the year, so that for the 1997–2000 period, for example, it refers to unemployment rates in 1997, 1998, and 1999.

<sup>23</sup> There are particular periods when relocation appears to loom somewhat larger because expansion and birth are almost exactly canceled by contraction and death. For example, for the 1992–1995 period, the net effect of relocation is of the same order of magnitude as the net effects of expansion minus contraction and births minus deaths.

<sup>24</sup> See Neumark, Zhang, and Wall (2005) for a detailed discussion of this issue.

<sup>25</sup> And within-city moves may be undercounted in the NETS because relocation is defined as “significant moves,” which require both a street address change and a zip code change (and a couple of other minor conditions).

<sup>26</sup> There is a potential caveat to this conclusion. Our data at present extend only through 2002. Therefore, we cannot rule out the possibility that the anecdotal evidence that has most recently been raised regarding business relocation captures an abrupt change that has occurred since then. However, if this change turned out to be empirically significant with respect to overall job growth, it would have to represent a break from past behavior that differs by an order of magnitude, at least—a break that we regard as extremely unlikely.

<sup>27</sup> In many cases, policies to foster business formation and to help businesses survive and grow would necessarily also serve the purpose of attracting businesses.

<sup>28</sup> Explicit policies focus more on general incentives for businesses than targeting potential in-migrants or out-migrants (e.g., Labor & Workforce Development Agency, 2005). However, Governor Schwarzenegger did pitch his recently formed California Commission for Jobs and Economic Growth as part of his efforts to “travel the nation and the world to find the employers that will provide jobs to put Californians back to work and add revenue to the state budget” (Krikorian, 2004).



## Are Businesses Fleeing the State?

<sup>29</sup> According to the Current Employment Statistics data, from March 1995 to March 2005, the California nonfarm payroll grew by 1.8 percent annually, whereas the growth rate for the rest of the United States was 1.3 percent. Since March 2001, employment growth in California was almost identical to that in the rest of the United States. The Current Population Survey data show that during the last decade, the California unemployment rate steadily converged to the national level: In March 1995, the California unemployment rate was 2.4 percentage points higher than the national unemployment rate; by March 2005, it was only 0.2 percentage point higher. Similar results were found by comparing California with other western states including Arizona, Colorado, Nevada, New Mexico, Oregon, Texas, Utah, and Washington. Thus, at least from the employment data, we found no indicator of a bad business climate in California relative to that in the rest of the nation.

## References

- Birch, David L., *Job Creation in America: How Our Smallest Companies Put the Most People to Work*, Free Press, New York, 1987.
- Bules & Associates, *California Industry Migration Study*, prepared for Los Angeles Department of Water and Power, PG&E, San Diego Gas and Electric Company, Southern California Edison Company, and Southern California Gas Company, San Francisco, California, October 1992.
- California Business Roundtable and Bain & Company, *California Competitiveness Project*, Sacramento, California, February 2004.
- Council on California Competitiveness, *California's Jobs and Future*, Sacramento, California, April 1992.
- Davis, Steven J., John C. Haltiwanger, and Scott Schuh, *Job Creation and Destruction*, The MIT Press, Cambridge, Massachusetts, 1996.
- Dunne, Timothy, Mark Roberts, and Larry Samuelson, "Plant Turnover and Gross Employment Flows in the U.S. Manufacturing Sector," *Journal of Labor Economics*, Vol. 7, 1989, pp. 48–71.
- Foote, Christopher L., "Trend Employment Growth and the Bunching of Job Creation and Destruction," *Quarterly Journal of Economics*, Vol. 113, 1998, pp. 809–834.
- Freeman, Mike, "Summit Looks At Why Firms Leaving State," *San Diego Union-Tribune*, April 29, 2003.
- Groves, Martha, "Firms' Gripes about State Stir Backlash," *Los Angeles Times*, March 8, 1992.
- Hardiman, Philip A., and Richard Holden, "Dynamic Job Gains and Losses in California: Underlying Economic Change," working paper #2003-01, Labor Market Information Division, Employment Development Department, Sacramento, California, 2003.
- Haveman, Jon D., and Howard J. Shatz, "Recent Trends in Exports of California's Information Technology Products," *California Economic Policy*, Vol. 1, No. 2, 2005.
- Howe, Kenneth, "Battle Rages for California Firms," *San Francisco Chronicle*, June 14, 1993.
- Krikorian, John, "California 'Open for Business!' Jobs and Economic Growth," *Business Life Magazine*, Vol. 12, April/May 2004, available at [http://www.businesslife.com/newsstand/bl\\_pastissues/2004/april\\_may04/cover.html](http://www.businesslife.com/newsstand/bl_pastissues/2004/april_may04/cover.html), viewed on July 2005.
- Labor & Workforce Development Agency, *California Investment Guide*, Sacramento, California, 2005.
- Neumark, David, Junfu Zhang, and Brandon Wall, "Employment Dynamics and Business Relocation: New Evidence from the National Establishment Time Series," working paper #2005.11, Public Policy Institute of California, San Francisco, California, 2005.
- Roberts, Timothy, "Execs' Ad to Politicos: Enough," *Silicon Valley/San Jose Business Journal*, September 26, 2003.
- Schrag, Peter, *Paradise Lost: California's Experience, America's Future*, University of California Press, Berkeley, California, 1998.
- Spletzer, James R., "The Contribution of Establishment Births and Deaths to Employment Growth," *Journal of Business and Economic Statistics*, Vol. 18, 2000, pp. 113–126.
- Tamaki, Julie, "Battle of the State Billboards," *Los Angeles Times*, October 11, 2004.
- Walls & Associates and Dun & Bradstreet, *NETS: National Establishment Time-Series Database*, Oakland, California, 2003.
- Weikel, Dan, "Companies Lured from Tarnished Golden State," *Los Angeles Times* (Orange County Edition), August 9, 1992.



### About the Authors

David Neumark is a senior fellow at the Public Policy Institute of California. Junfu Zhang is a research fellow at the Public Policy Institute of California. Brandon Wall is a research associate at the Public Policy Institute of California.

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