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California Dreamin': A Rebound in Net Migration?

In recent years, widespread media attention and policy debate have surrounded the flight of population from California. In marked contrast to the longstanding norm of large annual inflows of population to California from elsewhere in the U.S., the state has experienced a sizable net out-migration of residents, most notably to neighboring states. Some observers link the reversal in California migration flows to cyclical downturn and structural evolution in the state economy during the early 1990s. Sizable cut-backs in defense and aerospace employment, for instance, adversely affected the job and income prospects of many Californians. Moreover, the relatively high price of housing in California has long been a concern of potential in-migrants, and many out-migrants from California are said to be attracted by lower house prices elsewhere. Finally, some analysts allege that there has been a deterioration in the California quality of life, due to such factors as increased congestion, diminished funding of public services and infrastructure, and heightened awareness of problems of public safety, such as earthquakes and crime.

This *Weekly Letter* reports on the findings of our recent study of the determinants of state-to-state migration flows (Gabriel, Mathey, and Wascher 1995). In particular, the research indicates the extent to which interstate migration varies in response to changes in state employment, income, house price, and amenity characteristics. We apply our empirical model to measure the proportion of the recent out-migration from California that may reflect economic fluctuations and the proportion that may reflect the alleged deterioration in the state's quality of life. In so doing, we estimate the effects on California net migration of a resurgence in the state's economic activity.

We conclude that a large portion of the unprecedented and sizable domestic outflow of population from California during the early 1990s has

been in response to weak economic conditions in the state. A baseline simulation of our migration model—predicated on a reversion in unemployment rate, wage, and house price differentials between California and other states to average levels observed in the 1981–1992 period—suggests a substantial slowing in the rate of net out-migration from California. A somewhat more bullish near-term scenario for the California economy—reflecting a strong resurgence in California labor demand coupled with no appreciable deterioration in California amenities—would result in slightly positive domestic net in-migration to California. However, neither scenario points to a return to the robust rates of net in-migration observed during the mid-1980s, suggesting that other factors, including some structural shift in the relative attractiveness of California, have served to damp net migration to the state.

California net domestic migration

According to estimates of interstate population moves obtained from the Internal Revenue Service, net domestic out-migration from California totaled approximately 687,000 people during the five-year period ending in fiscal year 1993–1994. The net exodus of population from California stood in marked contrast to the boom period of the 1980s, when net domestic arrivals to California averaged close to 90,000 people a year.

As described in a recent *Weekly Letter* (No. 94-43), the vast majority of out-migrants from California moved to neighboring states, such as Nevada, Oregon, and Washington, adding appreciably to population totals in those areas. On the plus side, migrants from California spurred job growth in neighboring states by augmenting the local labor force and by means of the multiplier effects of their spending. In addition, the financial and human capital brought by ex-Californians boosted destination area investment in housing and business sectors. On the other hand,

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the influx of Californians to adjacent areas generated some complaints as well, largely centered on rising house prices and increased congestion.

The sharp reversal in longstanding net domestic population flows to California largely coincided with the downturn during the early 1990s in the California economy. During the 1989–1992 period, the unemployment rate in California averaged 6.9 percent, more than a full percentage point higher than the average rate recorded for other states of the Federal Reserve's Twelfth District and well in excess of the U.S. national rate. Similarly, by the early 1990s, wage rates adjusted for housing expenses became relatively more attractive in other states, because house prices had risen much faster in California during much of the 1980s. The ratio of annual per capita wages and salaries to average new and existing home prices in California moved down to 5.8 percent in 1989–1992 from 6.4 percent in 1981–1983; in contrast, for the Twelfth District excluding California, the average ratio of nominal wages to house prices has held steady at 7.7 percent since the early 1980s.

The generalized economic downturn that plagued California residents during the early 1990s also resulted in state and local budgetary duress, reduced funding of education, health care, and other public services, and deterioration in public infrastructure. During that period, the state also experienced other natural and man-made calamities. Taken together, the variety of public service and public safety problems led some observers to conclude that the state had experienced some deterioration in its quality of life.

This so-called demise of the California Dream served both to reduce the attractiveness of California as a migrant destination and similarly prompted some Californians to seek alternative places of residence. An issue of debate has been the extent to which economic conditions and demographics versus other "quality of life" factors have influenced migration patterns.

The determinants of migration

Our study sheds some light on this debate through an analysis of state-to-state population flows between 1981 and 1992. In general, the statistical analysis considers the hypotheses that migration between two states varies directly with economic opportunity and location-specific amenities of the destination state and inversely with economic conditions and locational amenities in

the origin state. Also, regardless of locational amenities, people in the origin region are assumed to have different propensities to migrate, depending on, for example, the age structure of the state population and its position in the overall life-cycle. For instance, research shows that moves are especially common for individuals in their 20s and at times of change in employment or marital status. As individuals mature, have families of their own, and develop job, community, and social ties, mobility declines. Further, the migration between any particular pair of states should vary inversely with the distance between those areas, as do the transactions costs, informational costs, and psychic costs of moving.

Results of the statistical analysis confirm our expectation of migration to areas of higher expected economic returns. Estimation findings indicate, all things equal, that low unemployment rates or high wages in the destination state relative to the origin state serve to prompt migration between those areas. Accordingly, given the widespread fall-off in labor demand in California during the early 1990s, the model explains the recent rapid out-migration from the state relatively well. In terms of the relative importance of migration determinants, changes over time in unemployment differentials dominated the fit of the model for California net migration over the sample period. In contrast, movements in relative state wage or house price differentials had less of an estimated effect on California migration flows. As suspected, estimation findings indicate elevated migratory tendencies among younger households and between more proximate states; in those cases, the transactions costs of moving are relatively lower, serving to boost the discounted economic returns on migration over the remaining work years.

Having controlled for expected net economic returns to migration and population mobility characteristics, results of the analysis for the 1981–1992 period indicate a high level of attraction of California as a migrant destination. All things equal, the estimated "pull" of California among potential migrants was second only to that of Florida, indicating the strong and highly significant draw of the state as a place to live. In contrast, California placed in the middle of the range of all the states as a migrant origin. Model estimates for the more recent 1989–1992 period suggest only a modest reduction in the relative attractiveness of California as a migrant destination, all things equal. Accordingly, results of the

analysis fail to provide support for the hypothesis of perceived large-scale deterioration in California locational amenities as the dominant force behind the early-1990s reversal in California migration flows.

Model simulations and effects of a California recovery

Our model predicts an acceleration in net out-migration from California in 1993 and 1994, in the wake of continued divergence in economic opportunity between California and other states. Notably, unemployment rate differentials between California and other Twelfth District states widened further, from about 1 percentage point in 1989–1992 to about 2¾ percentage points, on average, in 1993 and 1994. Further, per capita wage and salary income grew faster in recent years in states with low unemployment rates—such as Idaho, Nevada, and Utah—than in California. Out-of-sample simulation of the migration model based on recent historical values of the economic variables suggests that net out-migration from California accelerated from almost 200,000 persons in fiscal years 1992–1993 to about 250,000 persons in 1993–1994 and 258,000 persons in 1994–1995. A variety of data sources confirm the acceleration in California out-migration during 1993–1994. Census Bureau estimates of the components of population change indicate that net domestic out-migration from California increased by about 45,000 persons in fiscal year 1993–1994. A similar estimated acceleration in California domestic net out-migration of about 40,000 persons for fiscal year 1993–1994 is derived from information on driver's license address changes from the California Department of Motor Vehicles. Recently released IRS data on interstate migration available through fiscal year 1993–1994 also indicate an acceleration in California net out-migration; the IRS estimates that net outflows of domestic population from California moved up to approximately 300,000 persons during that year.

Further simulation of the model suggests that domestic net out-migration from California will slow substantially in the presence of a moderate

rebound in the California economy. A baseline assumption of a reversion in state unemployment, wage, and house price differentials to average levels observed during the 1981–1992 estimation period yields a slowing in the estimated net outflow of domestic population from California to 78,000 persons from an estimated 258,000 persons in 1994–1995. That calculation suggests that a full 70 percent of the 1994–1995 estimated net population outflow was attributable to deviations during that year in labor and housing market conditions in California from typical levels observed during the 1981–1992 period. A variety of other factors, including some modest deterioration in the perceived quality of life in California, also help to explain the substantial estimated net out-migration from the state during that year.

A more bullish scenario for the California economy, based on a somewhat stronger resurgence in labor demand, yields a slightly positive rate of net in-migration to the state. In this case, the estimated reversal in California net-migration is driven by a further 1 percentage point narrowing in unemployment rate differentials between California and other states and an additional 5 percent increase in California wages (relative to the baseline scenario). According to figures just released by the California Department of Motor Vehicles, the number of domestic migrants to California moved up by about 60,000 persons during fiscal year 1994–1995. Assuming no further acceleration in population outflows from the state, some notable reduction in net out-migration from California may well be underway.

Stuart A. Gabriel
Visiting Scholar

Professor of Finance and Business Economics
University of Southern California

Reference

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