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# Recession and Restructuring in the California Economy, 1990-1995

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**ABSTRACT**

This article begins by describing the effects on California of the recession which began in 1990. It examines the impacts on income, employment, and the housing market, and relates these short-run, cyclical changes to the long-run trends in manufacturing, international trade, and the development of high-technology manufacturing. The core idea of the paper is that the national recession which began in 1990 lasted three years longer in California than in the nation as a whole due to the greater restructuring of the state's economy. While painful, the restructuring put the state ahead of much of the rest of the nation in meeting the challenges of technological and international change. Several challenges remain for the state, however. These include the growth of inequality, fiscal instability in the state's finances, deteriorating infrastructure and a educational systems, and a rising level of intolerance towards new immigrants.

**RESUMEN**

Este trabajo comienza con describir los efectos que tuvo en el estado de California la contracción económica que empezó en 1990. Se examinan los impactos sobre ingresos, empleos y el mercado de bienes raíces, y estos cambios cíclicos de corto plazo se relacionan con las tendencias de largo plazo en manufactura, comercio internacional y desarrollo de manufacturas de alta tecnología. El concepto clave del artículo es que la contracción económica nacional que empezó en 1990 duró tres años más en California que en el resto del país, a causa de un proceso más profundo de reestructuración en la economía estatal. Aunque dolorosa, esta reestructuración puso al estado al frente de gran parte del resto del país en términos de poder responder a los retos que presentan los actuales cambios tecnológicos y internacionales. Sin embargo, aún le quedan al estado de California muchos retos que enfrentar. Éstos incluyen un alza en niveles de inequidad, una falta de estabilidad fiscal en las finanzas estatales, infraestructura y sistema educativos en deterioro y un ascenso en la intolerancia hacia nuevos inmigrantes.

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## Introduction

AT the start of the 1990s, the Cold War ended, the United States went into recession, world demand for civilian aircraft collapsed, the bubble in California real estate burst, and a severe drought hit the state's agriculture. The ultimate social, economic, and political consequences of these events are uncertain, but in many respects it does not matter: the fact is that the state of California cannot maintain its living standards by avoiding change. One possibility is that the 1990s will lay the foundation for a painful but necessary structural transformation which will recreate the state's unique ability to generate income, growth, and prosperity. Another possibility is that the 1990s will be a period of slow deterioration in living standards, increasing income inequality, and rising social tensions, all set against a background of political squabbling. While the contrast between a renewed "California Dream" on the one hand, and a collapse in economic opportunities on the other hand, may seem extreme, it accurately reflects the possibilities inherent in the forces that are shaping the state's future.

Some of the forces acting on the state have their roots outside of California and the United States. These include the pressures on industrial societies that stem from increasing economic integration, the restructuring required by the end of the Cold War, and the wave of immigration that gathered momentum throughout the world in the 1980s. Other pressures forcing significant change are more exclusively local in origin, such as the sensitivity of the state budget to swings in the economic cycle and the increased vulnerability of the state fiscal system to manipulation for short-run political gain. A third set of pressures stem from a combination of state, national, and world forces, such as the spread of labor-saving technology and new organizational forms requiring fewer unskilled workers.

This paper examines the challenges to California created by the need to restructure its economy while creating opportunity for all classes. The thesis of the paper is that the state is in the midst of a profound historical experience which will shape the nature of its economy for the next several decades. The nearly simultaneous ending of the Cold War, the bursting of California's real estate bubble, and the onset of recession in 1990 intensified the social pressures that have been building for more than a decade. These pressures come from a widening gap between high and low incomes, the rising impact of international trade on the economy, and a dramatically increased level of immigration. The resulting social conflict involves both class and ethnic tensions. The response of the state, both politically and in its wider civil society, will shape the opportunities presented by the economic changes facing the state. The outcome will lie somewhere between a high-tech, outward-looking, and socially diverse society, and a divided, inward-looking, and increasingly paranoid one.

The paper proceeds as follows. The first section examines the cyclical economic forces that have contributed to California's poor growth record in the 1990s. The second section brings in several long-run trends which are separate from the business cycle. These include the structural shift of California's economy away from defense-based manufacturing, the growth of the export sector, and foreign immigration. Each of these forces are long-run factors shaping the state's economy, and each provides a new set of opportunities as well as problems to overcome. The final section looks at five obstacles to an increase in incomes that will go beyond the most skilled and the most highly educated and be of benefit to all Californians. For the most

part, these obstacles grow out of the short and long-run trends examined in the first two sections; the manner and extent of their resolution will significantly determine future living conditions up and down the length of the state.

## The Recession of 1990-1993

### *Impact on Income*

California's economy grew more slowly than any other state economy during the three years of recession that lasted from mid-1990 until mid-1993 (Table 1). From the beginning of 1990 through the end of 1993, total real U.S. personal income rose at an annual average rate of 1.6%. The average annual rate for California was 0.6% (Bureau of Economic Analysis, April 1995). Given that population in the state expanded by approximately 1.8 million between 1990 and the end of 1993, California real per capita incomes fell during the recession at about 1.1% per year. By comparison, real per capita personal income rose in the United States from 1990 through 1993 at an average annual rate of about 0.25%.

For the United States as a whole, the recession was relatively mild and ended in mid-1991, after one year. The difference in the length and severity of the recession in the state and in the nation is due to three factors: concurrent defense cuts, a bursting of the financial-real estate bubble that had developed in the second half of the 1980s, and a decline in state spending relative to income. The change in the spending-income relationship probably reflected increased consumer uncertainty and pessimism that arose in the wake of recession, the collapse in home prices (houses are the largest asset of most households, and a primary stimulus to the construction industry), fears of defense cutbacks, and the civil unrest in Los Angeles.

### *Impact on Jobs*

Overall job loss in the state from the recession's onset in July of 1990 to the low point in December of 1993 was approximately 600,000 jobs (Employment Development Department, various years). The unemployment rate has continued on an irregular downward trend since peaking in January of 1994 at 10.1%. The April 1995 unemployment rate was 7.9%, compared to an overall U.S. rate of 5.8% in the same month. (All figures are seasonally adjusted.) Despite the decline in the unemployment rate during 1994 and 1995, the total number of jobs in the state remains nearly 400,000 below its pre-recession peak of 14.516 million jobs in June of 1990.

The regional variation in job losses within California reflects the major forces that prolonged the state recession beyond the national one. For example, the greater Los Angeles region has the largest concentration of manufacturing and has been disproportionately affected by the cuts in U.S. defense procurement expenditures. The result is that Los Angeles, with 47% of the state labor force, lost 78.5% of the 600,000 jobs that disappeared in the state. Other regions experienced much milder impacts. For example, the San Francisco Bay Area, with 19% of the labor force, lost 17.6% of the total jobs, and San Diego, with 7.8% of the labor force, lost 5.4%.

Changes in the number of jobs has resulted in a significant shift in the structural composition of the labor force. Over one-half of all job losses were in manufacturing, and about half of those were concentrated in aerospace and defense-related manufacturing (Table 2). Jobs continued to be gained in services, leading many to fear that California's future growth will be mostly in low-wage, unskilled jobs (San Diego Association of Governments, 1994). With the ending of the recession, manufac-

turing has resumed growth, but at a slower pace than the economy as a whole (and more slowly than in the nation). As a result, manufacturing has continued its trend towards providing jobs for a smaller percentage of the workforce, and of generating a smaller share of the state's regional product (Bureau of Economic Analysis, April 1995).

The relative decline in manufacturing has raised two questions. The first is whether a majority of the jobs created over the next decade will be predominantly low or high wage. There is a tendency in public policy discussions to associate manufacturing with high wages and other sectors with somewhat lower wages. While this assumption is far from accurate, the prospect of losing the last pool of jobs that pay middle-class wages to people without college degrees is disturbing. The second question raised by the loss of manufacturing jobs is about the kinds of labor force skills that will be necessary to compete in the new economy. More than before, high wages require high skills, but exactly what sort of skills, and how their development can be expedited, is uncertain.

In addition to the specific industry and regional effects of unemployment, there are also differential effects on ethnic groups. Table 3 illustrates the impacts of rising unemployment rates on three ethnic groups. All groups experienced a nearly equal proportionate increase in the unemployment rates, but given that blacks and Hispanics began from a higher base, the absolute increases in their rates of unemployment have been greater than for non-Hispanic whites. Note also that at the recession's onset, Hispanics and blacks both had lower unemployment rates in California than in the nation as a whole. These lower rates disappeared in the midst of the recession, however, so that by September 1993 all three groups had higher unemployment rates than the national average.

### *The Impact on Housing*

One positive effect of the recession and the collapse of the real estate market has been an increase in housing affordability. Between 1990 and the beginning of 1994, the percentage of California households able to afford a median-priced home rose from 17% to 44%. Although this improvement was double the national trend, the California housing market is still over 60% more expensive than the rest of the nation (Legislative Analysts Office, 1994). The downside to this significant improvement in housing affordability is that since there was no income growth, all the improvement occurred as a result of a decline in home values. For example, six months after the recession officially ended, 38% of all homes sold (February 1994) were for less than the seller originally paid, with an average loss of $27,000. Southern California counties were hurt the most, and much higher percentages of their total home sales were for losses (California Trade and Commerce Agency, 1994). Although the decline cannot be considered a social loss due to the fact that the winners and losers in the housing market exactly offset each other, it caused significant job losses in the construction industry and intensified the impact of the recession.

## The Impact on Economic Catch-up

Slower growth and higher unemployment in California inevitably led to an erosion of California's relatively higher average income. Table 4 shows California's per capita gross state product (GSP) relative to the United States for the period before and during the recession.

Two earlier years are included (1982 and 1987) in order to illustrate the fact that there was no long-run trend towards in-

come convergence prior to the late 1980s. It is also obvious from Table 4 that the primary erosion of California's lead in incomes occurred during the recession. At this point it is too early to know if this is the beginning of a long-run trend towards greater homogeneity in California-U.S. income levels.

## Long-Run Trends

### *Relative Decline of Manufacturing*

The long-run relative decline of manufacturing was temporarily accelerated by the defense cutbacks and the recession. Still, with the restoration of economic growth, manufacturing has continued to shrink as a share of the economy. This fact, together with the fact that low-wage retail trade jobs have come back relatively quickly, causes many to believe that California (and perhaps the United States) is permanently losing its base of high-wage jobs. These analysts predict a dire set of consequences for the state unless some form of active intervention prevents the continued loss of manufacturing. Two counterpoints should be kept in mind. First, except during the recession, California is not losing manufacturing jobs. Rather, it is adding them at a slower pace than the economy as a whole is growing, and, as a result, manufacturing is a smaller share of the state's regional product. Secondly, economic forecasts predict strong new job growth over the next decade in many high- wage non-manufacturing sectors.

Table 5 lists a few of the high-wage jobs outside manufacturing that are predicted to grow rapidly over the next ten years. The non-manufacturing jobs in Table 5 accounted for 2,304,500 total jobs in 1993, while manufacturing jobs totaled 1,803,000 (Center for the Continuing Study of the California Economy, 1994). Each of the areas of job growth is linked to one or more of the job bases in the California economy, and several are linked to world trade. (The Center for the Continuing Study of the California Economy has determined that the economic bases of California are:

(1) high technology and manufacturing;

(2) diversified manufacturing; (3) aircraft, space, and defense; (4) resources (agriculture, canning, forestry); (5) transportation and wholesale trade; (6) professional services; and (7) tourism and entertainment services.) For example, computer services and engineering and management services comprise the high-wage sector of professional services, along with legal services. These services are sold within state, out of state, and internationally. The U.S. Department of Labor has forecast that professional services will increase nationally by more than 50% between 1993 and 2005, and that it is the fastest-growing component of the nation's job base (U.S. Department of Labor, 1993). Growth in this area is fueled by the forces of expanding world trade in services, California's high-technology manufacturing, and the entertainment industry, among others.

### *The Growth of International Trade*

In addition to the growth of high-wage non-manufacturing jobs, a second long-run trend has been the growth of international trade (Table 6). Over the last seven years, trade has grown by 105% from $34.3 billion in 1987 to $70.3 billion in 1993. Furthermore, between 1983 and 1993, every region of the state experienced a more rapid growth in foreign trade activity than the nation as a whole. There are several reasons for the continuing strength of trade. As the table below demonstrates, the major trading partners of the state are the rapidly growing NICs of the Pacific Rim.

The top six purchasers of California's products are Pacific Rim nations, and the growth of trade with them is key to California's overall export expansion. California is orienting its trade towards the Pacific Rim and is benefiting from growth in the Pacific economies. Trade stimulates state growth in areas as diverse as wholesale trade, diversified manufacturing, high-technology manufacturing, professional services, and resource-based activities such as food processing. The Japanese recession dramatically slowed the growth in exports to Japan over the last few years, but the fall in the value of the dollar relative to the yen should counteract some of this effect. The growth of trade with the NAFTA partners and with the NICS of Asia also offset the slowdown in the growth of trade with Japan. Canada and Mexico take about 20% of California's exports, and trade has grown approximately 155% over the last seven years. The Four Dragons of South Korea, Taiwan, Hong Kong, and Singapore take another 22% of state exports and their trade grew almost 160% between 1987 and 1993.

A second reason for the strong showing of trade is that many of the top exports from the state are high-tech, manufactured products and components which have high income elasticities (Table 7). Therefore, rapid growth in the Pacific Rim translates into faster export growth.

The fact that manufactured products have been a source of rapid export expansion contradicts the notion that California is on the verge of losing its manufacturing sector. Manufacturing continues to be an important component of the state's economic base, especially high-technology goods. Another indicator of this fact is that a record amount of venture capital was invested in the state during 1993 and the first quarter of 1994 (Center for the Continuing Study of the California Economy, 1994). Silicon Valley alone attracted $950 million in 1993, or one-third of all such funds invested in the United States.

### *Foreign Investment Trends*

Foreign direct investment (FDI) in the state has also been strong, at least up to the middle of the recession. There is a lag of several years before data on foreign investment are published, but as recently as 1992, FDI in California accounted for over 17% of all FDI in the United States and over 40% of the value of transactions in which values were known. Overall, the state attracted FDI in 1992 of $6.067 billion, more than any other state (International Trade Administration, 1994). These investment flows were added to an already significant stock of foreign-owned capital. Approximately 4.9% of California's employment is in foreign-owned firms, mirroring the national figure of 5.0%. In total, approximately 522,000 employees work for foreign (non-bank) owned firms (BEA, July 1994). Investment by country figures show that Japan was the leading investor in 1990, followed by Western European nations and Canada (California Department of Commerce, 1992). Figures for foreign direct investment by country since 1990 are still preliminary, but there are strong indications that Japan has slowed its California (and U.S.) investments from the pace of the late 1980s and early 1990s. Much of their earlier investment in California has been in real estate, and the collapse of this market, along with the recession in Japan, has slowed its outward FDI.

### *Trends in High-Technology Manufacturing*

Many less formal indicators of manufacturing prowess signal continued strength in the region. For example, the 1995 Business Week list of the 100 best small corporations

in the United States included a disproportionate number of California firms (23), most of which are in high-technology sectors. Surveys by Inc. Magazine, Fortune, and the rest of the business press continue to include a disproportionate number of California firms in their lists of leading growth companies. California has the largest biotech cluster in the nation in the San Francisco region, the fourth largest cluster in San Diego, and the sixth largest in the Los Angeles Basin.

In addition to biotechnology, the Los Angeles region has perhaps the largest concentration of diversified manufacturing skills and enterprises of any metropolitan region in the world. These enterprises have helped to put the state at the forefront of developments in the new environmental technology industry. Most of this industry will be devoted to producing pollution control equipment, but also covers alternative energy sources and has significant inputs from engineering and environmental design services. According to some estimates, as many as 147,000 jobs currently in the state are related to environmental technology production, systems management, and services. The same source estimates that firms in this area had $18 billion in revenue in 1992, which is projected to grow to $25 billion by 1997. The California Environmental Technology Partnership was created by the governor in 1993 to bring together business leaders, environmentalists, research institutions, and state agencies to promote and assist the development, manufacture, use, and export of California environmental technologies, goods, and services (California Trade and Commerce Agency, 1993).

The creation of a public-private partnership in the emerging environmental technologies is indicative of similar efforts in other technologies. Examples include the development of an advanced transportation manufacturing cluster in the Los Angeles Basin and the many defense conversion programs throughout the state. The mechanisms and organizational forms of state, local, and federal coordination with the private sector vary a great deal, making it difficult to generalize about the extent and effectiveness of these strategic state interventions; in any case, they represent a significant public policy shift from the 1980s and signal a strong intention to transform defense into civilian uses. In the medium to long run, as unemployed defense engineers discover market niches for their new firms, and as ex-defense contractors create new civilian product lines, it is likely that high-technology manufacturing and consulting will grow.

The paradox of high-tech manufacturing is that, despite output growth, it is not likely to generate many new jobs. The reason stems from its rapid productivity increases and the ability of firms to expand output while holding constant (or even shrinking) employment. Almost by definition, high technology is capital intensive. Its labor inputs tend to be concentrated in research, engineering, and science, with a relatively much smaller component of unskilled or semi-skilled labor than in traditional heavy industry or light manufacturing. Over the last two decades, the distributional effects of the spread of this type of manufacturing have been to increase the demand for highly skilled labor and to push their wages upward, while lowering the demand for unskilled and semi-skilled labor. In this regard, manufacturing raises some of the same basic questions that the growth of high-wage non-manufacturing sectors raises: (1) What sorts of skills will be most in demand? (2) How can public policy insure an adequate supply of the needed skills? And (3) will the growth of these high-technology manufacturing and highly skilled non-manufacturing sectors

continue to generate increasing inequality in incomes?

## The challenges ahead

### *Rising Inequality*

Income inequality has been on the rise in the United States since the mid-1970s. The reasons are not well understood and there is no consensus about the causes. One hypothesis holds that it is related to the integration of the U.S. economy with newly industrializing countries (NICs) such as Taiwan, South Korea, and Mexico, where wages are much lower. According to this hypothesis, both trade with the NICS and investment by U.S. firms in foreign manufacturing put downward pressure on the wages of less skilled U.S. workers. The view is consistent with the predictions of the Stolper-Samuelson Theorem of international trade theory, which holds that a fall in the price of a traded good will have a magnified or disproportionately large downward effect on the returns to the factors used relatively intensively in its production. For example, suppose steel is relatively intensive in the use of unskilled and semi-skilled labor. If increased trade in steel causes a relative decline in its price, then there will be an even larger fall in the wages of unskilled and semi-skilled workers.

One problem with this view is that trade in manufactured goods constitutes too small a component of the U.S. economy to be able to explain the growth in inequality. Secondly, the Stolper-Samuelson Theorem and basic economic reasoning predict that a further response to the changes in factor prices would be a substitution away from skilled labor, which has become relatively more expensive in comparison to unskilled. Yet the data show an increase in the use of skilled labor and a long-run trend away from the use of unskilled labor. The trend towards relatively greater demand for skilled labor is consistent with the second hypothesis about one of the underlying causes of increasing inequality. The second hypothesis points to technological changes as the primary cause of falling demand for unskilled labor in manufacturing and, indirectly, one of the factors that has contributed to an increase in income inequality. (An introduction to the formal debate over technology versus trade as causes of falling wages for the less skilled can be found in Freeman, 1995; and Bur-tiess, 1995.) Technological shifts over the last two decades cannot explain the full extent of increasing inequality, but they probably play an important role. As on-the-job technology has increased in complexity, and as manufacturing processes have become more skill intensive, the wages of unskilled and less skilled workers have fallen in real terms.

California is no exception to the national trend toward increases in both poverty rates and income inequality. (Poverty is defined by the U.S. government as less than $12,674 in annual income for a family of four.) For example, between 1980 and 1990 the poverty rate in California rose from 11.4% of the population to 12.5%, with much greater increases in poverty for certain demographic groups. The number of California children below the age of 18 who now live in poverty increased by 41% to 1.3 million, while state population grew only 26% (Los Angeles Times, May 11, 1992). Black Californians have historically enjoyed a higher standard of living than blacks in other parts of the nation, but since 1980 they have lost much of this advantage as their poverty rate rose from 17.5% in 1980 to 24.7% in 1990. (National poverty rates for black Americans fell from 1980 to 1990, from 32.2% to 31.9%.) Similarly, Hispanics in California have had higher living standards and lower poverty

rates than elsewhere in the nation, but by 1990 their poverty rates in California had risen nearly as high as the 28.1% national poverty rate for all U.S. Hispanics (Los Angeles Times, May 2, 1992).

Poverty and income inequality are more than abstract concepts. For example, the higher poverty rates in inner cities and among ethnic minorities played an important role in the rioting in South Los Angeles after the Rodney King verdict. The core area of rioting was a part of the city in which every objective economic indicator is worse today than it was in 1965, the year in which federal civil rights legislation began to be enforced. More than half of the residents of South Los Angeles age 16 and older were unemployed when the rioting began, and per capita incomes were approximately 43% of the Los Angeles county average. In the aftermath of the riots, many commentators observed that the economic plight of South Los Angeles residents contributed to the looting in which baby diapers, food, and other basic consumer items were carried off (New York Times, May 24,1992; and Los Angeles Times, May 2, 1992).

### *The Challenge to the State's Fiscal System*

The problems of increasing income inequality and poverty raise questions about how prepared the labor force is for a modern, high-technology economy in which the ability to manipulate and process information flows is a key determinant of success. A major component of the solution to this problem is to raise the skill levels of the labor force through education, which in the United States is almost exclusively the financial obligation of states. The fact that the state budget is the primary source of educational funds (education is the largest single component in the state budget, about 43% in 1995) is a major obstacle to increasing funding since the constraints on the state's ability to spend have gotten more severe.

The constraints on spending are both cyclical and secular. The cyclical component became severe once the 1990 recession began. By 1991, there was a $14 billion deficit that was closed through a budget agreement between the governor and the legislature. The agreement included tax increases and expenditure cuts to education and social welfare programs; at the time, everyone assumed the recession would be short and that the state budget deficit would soon disappear. These assumptions were wrong, however, and the 1993-1994 budget year ended in June of 1994 with a $2 billion deficit. The initial budget forecast for 1996 estimated a return to a slight budgetary surplus, but recent budget proposals contain a deficit of about $500 million. In addition, the governor's desire to seek the 1996 Republican presidential nomination led him to call for a permanent cut in income taxes.

The call for a tax cut so soon after the experience of the largest deficits in California's history illustrates two central fiscal problems of the state. The first is the degree to which the state budget has become vulnerable to cyclical economic fluctuations. Earlier episodes of recession did not have as severe an impact on the budget process because revenue sources were less influenced by the business cycle. The second problem is the influence that the political process has on the basic design of the state's fiscal system. Taxation and expenditure limitations have become tools of the state legislators and the governor for seeking election.

The most visible manifestation of this tendency is the so-called taxpayer revolt. California led the nation in initiating a series of limitations on the ability of states

and cities to raise tax revenue. The first and most important limitation was the 1978 passage of Proposition 13, which rolled back property taxes to their level of several years earlier and limited the scope for future property tax increases. Later initiatives passed by popular vote included more stringent limitations on the ability of state and local governments to raise nearly all non-property taxes. It is estimated that the cumulative effect of Proposition 13 has been to reduce state revenue by approximately $220 billion between 1978 and 1994 (Los Angeles Times, October 11, 1993).

In addition to the loss of revenue, the limitation placed on property taxes has been a major factor in the increased sensitivity of the budget to cyclical economic swings. This fact stands out when the historical changes in the sources of state revenue are considered (Table 8). In 1961, property taxes accounted for 50% of state revenue, and personal income and sales taxes were a combined 22.3% of state revenue. In 1991, property taxes were 27.4% and income and sales taxes were 61.2%. The consequence of these changes in the sources of tax revenue is that the state's fiscal position has become more dependent on cyclical influences. When the level of economic activity slows, sales and income tax revenues fall and the budget tends towards deficit. This was a major factor in the appearance of large deficits during the state recession of 1990-1994.

A second impact of the limitations on state revenues is that the state fiscal system has not been able to adjust to the structural changes in the economy occurring over the last twenty years. Specifically, corporate taxes continue to be paid disproportionately by manufacturers, while services are relatively lightly taxed.

There is widespread agreement that the state's fiscal system is in need of reform. Independent projections of state spending in the next decade show that drastic reductions will be required in the share of the state budget going to higher education in order to maintain the required increases for criminal justice spending (prisons) and health care and public assistance (Carroll, McCarthy, and Wade, 1994). A commission appointed by the governor has begun work on the issue of fiscal reform as part of a larger set of deliberations on constitutional reform. At the same time, the University of California, Berkeley, and Stanford University have created the Berkeley-Stanford Project on Constitutional Reform. Whether concrete changes will occur as a result of these efforts is uncertain; in historical terms, constitutional changes have been exceptionally difficult to accomplish. Nevertheless, the existence of both of these efforts, together with the fact that fiscal reform is high on the list of priorities for reform, illustrates both the severity of the problem and the widespread recognition of the need for change.

### *The Challenge to the State's Educational System*

The impact of the fiscal deficit on education has been significant. The first and most noticeable impact has been a rise in university fees in each of California's three systems of publicly funded higher education. (These are the University of California, the California State University, and the California Community Colleges.) The University of California has traditionally guaranteed admission to every student from the top 12% of California's graduating senior high school class; the California State University has accepted all applications from the top 30%. These institutions of higher education, along with the Community Colleges, have been one of

the most accessible, highest quality systems in the United States. Historically, student fees have been well below the average for similar institutions in other states, but during the recession they have risen each year until they are about average for the United States. For example, during academic year 1989-1990, the annual cost (tuition and fees) of full-time attendance at a four-year public institution was $1,123 in California versus $1,781 for the United States as a whole. By 1993-1994, the costs had risen to $2,378 and $2,543 for California and the United States, respectively. In other words, costs rose 112% in California, while in the nation as a whole they went up 43% (National Center for Education Statistics, 1991; 1994).

Proposition 98, passed by popular vote in 1988, requires that 40% of the state budget must be spent on primary, secondary, and community college education. While the state budget is in decline, spending in these areas decreases as well, but the 40% is not discretionary (Legislative Analysts Office, 1994). The University of California and the California State University, on the other hand, are part of the discretionary spending which can be cut from the state budget. There are serious questions as to whether the state will find sufficient financial resources to maintain these two systems at their current status (for example, Carroll, McCarthy, and wade,1994).

Proposition 98 was viewed as necessary by the supporters of public education after the passage of the Proposition 13 property tax reduction initiative in 1978. Proposition 13 reduced by approximately 54% the tax revenues available to fund services of cities, counties, school districts, and other local governments. As a result, the state general fund became much more important to the overall funding of kindergarten through high school (K-12) (Legislative Analysts Office, 1994). When the state budget went into deficit, many supporters of public education worried that funding for schools would be cut in order to restore budgetary balance, and they resorted to the initiative process to guarantee at least 40% of the state budget for schools.

In addition to reducing property taxes as a source of funding for public education, Proposition 13 also had the effect of eliminating local responsibility for the level of funding. Since most school district revenues are provided by the state, and given that local school districts are extremely limited in their ability to raise revenue locally, the state has become the primary agent in charge of determining the level of funding. In effect, this means that there is a complete separation of responsibility for the level of funding from control over the expenditure of funds since the latter remains a local school district responsibility. A significant problem with this arrangement is that it has eliminated accountability for school outcomes by enabling local school districts to blame the state funding level for poor student performance. In addition, the separation of funding-level responsibility from actual expenditure decisions has led to numerous instances where local school authorities have made expenditure commitments which exceed their revenues. In the final analysis, the state of California is legally responsible for these commitments.

Another problem with the current arrangement of school finance is that it frustrates parents and school boards that prefer a higher level of funding. The current method of finance has more or less equalized spending in rich and poor districts, but it has placed strict limits on the ability of wealthier districts to raise additional revenue for expanded educational programs.

Although wealthier districts still manage to obtain funds through informal channels, the lack of regularization and standardization of these funds makes them less dependable as sources of finance.

### *The Challenge to the State's Infrastructure*

A number of recent studies in the United States and by the OECD have raised the issue of U.S. under-investment in infrastructure. These studies have tried to connect the long-run decline in public investment with the slowdown in economic growth which began in the middle of the 1970s (Gramlich, 1994). There does not appear to be a consensus among economists about the correlation between growth slowdown and infrastructure investment. Nevertheless, recent empirical measurements of publicly owned infrastructure capital have shown that California ranks 36th out of 50 states in its state and local governmental capital per capita, and 47th out of the 50 states in its level of state and local governmental capital in infrastructure uses (Holtz-Eakin, 1993). Furthermore, the growth rate of state and local governmental capital per capita was dead last among states between 1961 and 1988. While the U.S. average annual growth rate was 1.76%, the California rate was a mere 0.34%. In the second half of the period, from 1975 to 1988, the per capita growth rate of public infrastructure was an annual average -1.40%. In other words, as population growth rose in the 1980s, it has overwhelmed the ability of state and local governments to keep up in the provision of basic public services.

The lack of investment in public infrastructure has begun to affect the ability of the state of California to take advantage of the NAFTA agreement. In particular, two major highway linkages with the border remain unconstructed while traffic flows have grown dramatically. These linkages to the border are State Route 125 which will connect the Otay Mesa Port of Entry in Tijuana to the major east-west thoroughfare of Interstate Highway 8; and Interstate Highway 905 which connects Otay Mesa to the main north- south routes of Interstate Highways 805 and 5. The relocation of the primary commercial crossing between San Diego and Tijuana eastward to Otay Mesa means that commercial vehicles will encounter several miles of surface streets,. which will act as a bottleneck between the border and the interstate highways. The;

United States and California plan to up-;

grade these streets to make them a part ofj. the interstate highway system, but no funds | have been approved and no environmen-1 tal impact statements have been written. In I other words, it will be years before the( roads are built. In addition, the state of|;

California plans to make the State Route! 125 a toll road and has awarded the fran-j chise to a private contractor. This is a break | with the tradition of public funding of|

infrastructure in the state, and it remains to be seen if it will be a successful strategy for future funding.

An additional border-related project that is currently under consideration and study is the repair and reconstruction of the San Diego, Arizona, and Eastern Railroad. The rail connects north to Los Angeles and south to Tijuana where it crosses the U.S.Mexico border and then winds eastward to Tecate. After Tecate it crosses back into the United States and winds it way to Mexicali, but it is inoperable beyond Jacumba due to collapsed tunnels and rotted ties. Several groups are interested in restoring the roadbed, tunnels, and trestles, but as of yet there are no final plans or financing strategies. The project would give San Diego and Tijuana rail linkages to Mexicali and make the region more attractive as a manufacturing center (Peinado et al., 1994).

### *The Challenge of Immigration*

The leading U.S. expert on immigration recently wrote: "The rapid increase in the size of the immigrant flow reaching the United States, the major changes in the national origin composition of the immigrant population, and the decline in the skills of immigrants relative to the skills of native workers have rekindled the debate over immigration policy" (Borjas, 1995). Nowhere is this truer than in California, where more than one in five residents are foreign born compared to less than one in twelve for the United States as a whole (Borjas, 1994). Over the last decade, California absorbed one-third of all the legal immigrants to the United States, one-half of all political refugees, and about 43% of the estimated number of illegal immigrants (Business Week, 1994; Center for the Continuing Study of the California Economy, 1992). Table 9 disaggregates the annual state population growth from 1985 to 1990. California has traditionally received a large share of all U.S. immigrants, but the recent upsurge of the 1980s, coupled with the turmoil in the state economy, has created extraordinary levels of social tension, not unlike the tensions in other parts of the world that have received large immigrant flows (e.g., France). Proposition 187, the state initiative to deny all social services to illegal immigrants, is but the most dramatic example of the level of social conflict engendered by the recession, growing ethnic diversity, and the large number of immigrants, legal and illegal.

The upsurge in immigration in the last decade has raised concerns about the effects on the employment and wages of native workers, and whether immigrants pay for the full cost of social services they receive. There is a large literature on both of these issues; surprisingly, it is difficult

to quantify any impact of immigrants on employment of native workers, and their effect on wages is very small if it exists at all (Freidberg and Hunt, 1995). Numerous studies have tried to quantify the purely fiscal impact of immigration. Given that many of the recent studies have been done in order to further a political agenda, there has been a wide variation in the estimates of the number of illegal immigrants and their economic impacts. The State of California Assembly Office of Research surveyed the recent studies and reached the following conclusions:

> There is no conclusive evidence that immigrants have either a positive or negative impact on the California economy. There have not been any comprehensive studies of the impact of immigrants in California.
>
> All statistics on the number of immigrants using state services are estimates rather than actual numbers.
>
> Cost-benefit studies of immigration have methodological problems, but have produced two general conclusions. First, immigrants pay more in federal taxes than they cost the federal government. Second, they often pay less in state and/or local taxes than they cost state and/or local governments (Assembly Office of Research, 1993).

There are three major groups of immigrants in California, and although their impacts are difficult to measure, they are probably very different. The three groups are legal immigrants, political refugees, and undocumented (illegal) immigrants. Some refugee groups (Laotians and Cam-bodians, for example) have nearly 50% of all households on public assistance. Legal immigrants who are not political refugees are not entitled to public assistance until they have been in the United States for at least three to five years. Undocumented immigrants cannot legally receive public

assistance, but they do consume other services such as education and emergency medical care.

Estimates of the number of undocu-mented immigrants in the United States range between the 3.2 million lower bound estimated by the U.S. Census Bureau and the 8 million estimated by Parker and Rea (1992). The latter estimate is certainly mistaken. The range of the U.S. Census Bureau's estimates are from 3.2 to 3.8 million. The Census Bureau further estimates that 43% of all undocumented immigrants in the United States live in California, implying that the state is home to between 1.4 and 1.5 million (California Institute for Federal Policy Research, 1994). The Census Bureau also estimates that approximately 300,000 of the 1.4-1.5 million persons are immigrant children. If they all attend school, then at an average cost per child of $5,650, the total cost to the state would be approximately $1.7 billion. This is an upper bound on state costs since it is unlikely that all 300,000 attend school, and it is not clear if an average or marginal cost figure should be used to compute state costs. In any case, the state claims it is owed $1.7 billion from the federal government as reimbursement costs for a failed federal immigration policy; in addition, the state estimates that the cost of health care for undocumented workers and costs to the criminal justice system are about $300 million each (State of California, 1994).

The pattern of a large immigration flow followed by a reaction among natives is fairly typical of the pattern as it has occurred throughout U.S. history. What is new about today's flow of immigrants is that their origins do not reflect the traditional source of immigrants, their skill level is less than that of native workers, and they have a greater tendency to collect public assistance than either natives or earlier generations of immigrants. Undoubtedly, much of the tendency to collect public assistance is attributable to the increased flow of refugees and the general expansion of the welfare state. Unfortunately, the increase in immigrant flow is occurring in the context of both a reduced ability to educate and provide health care to immigrants and increased job insecurity among native workers. There is no obvious resolution to the growing concerns of natives, but the trend in the political process is towards a reduction in legal immigration and a further enlargement of the effort to prevent illegal immigration.

## Conclusion

The problem of immigration is the problem of a large group of marginalized people who share a living space in the core of an advanced industrial economy. The social conflict that has arisen over this issue is a reflection of the uncertainties and fears that many Californians are experiencing. Immigrants are both an easy scapegoat and a constant reminder to the middle class that it is far too easy to lose their economic status.

Middle-class insecurity in California is a microcosm for the anxiety that people feel in many parts of the United States. Technological and organizational changes are reshaping many kinds of work and have also created a generation gap in which older workers feel vulnerable and left out. Contracting-out, telecommuting, multiple careers, and the growing demand for language skills are threatening trends for workers who are well into careers and who have a limited range of skills. These trends are also hard on new entrants into the labor force who lack skills.

Ironically, California is probably farther along in its adjustment to these trends than most other regions of the world. The opening of world markets to trade in services,

the expansion of Asian and North American markets, the increase in consumer spending on leisure and entertainment, and the development of new high technology are changes which complement the strengths of the state economy.

Nevertheless, there are two major challenges that must be met in order for the state to resume its position of economic leadership. First, the state's finances must be stabilized and made more independent of the business cycle. The accumulation of surpluses during an upswing in the cycle is not a reasonable strategy for covering the large deficits that develop during a downswing. The reason this strategy cannot work is because it is politically impossible for the state to hold on to unused surpluses. Taxpayers inevitably demand that state surpluses are returned to them, and they elect politicians who promise to do so. Consequently, the state's fiscal system must be completely rebuilt. This will be difficult in a state in which the taxpayer's revolt has gone as far or farther than anywhere else.

Fiscal reform is related to the second challenge the state must meet. California's infrastructure, including its schools, community colleges, and universities, is not prepared to enter the next century. Population growth in the state, much as in Tijuana, has overwhelmed the state's abili-ty to provide roads, water, waste disposal, schools, universities, and so on. The solu-tion to the infrastructure problem may lie in alternative funding sources; in any case, the current system has proved inadequate.

The alternative to reform of the fiscal system is a period of muddling through, in which the state continues to develop the characteristics of a Third World economy within the core of its First World one. If this were to occur, it is almost certain to increase the social antagonisms which have developed between natives and immi-grants, and in the long run it will jeopardize the gains from the restructuring that has already occurred. Nevertheless, if the state can reform its finances, and if the forces of social tolerance can regain control of the public debate, California should be in good shape as it enters the next century.

TABLE 1. *Average Annual Growth Rates of Real Personal Income, in Percents*

| *Year* | *Total Personal Income* | | *Per Capita Personal Income* | |
|---|---|---|---|---|
| | *US* | *California* | *US* | *California* |
| 1990 | 2.2 | 2.3 | 0.1 | -0.2 |
| 1991 | -0.2 | -1.4 | -1.3 | -3.1 |
| 1992 | 3.1 | 2.1 | 1.9 | 0.4 |
| 1993 | 1.4 | -0.6 | 0.3 | -1.6 |
| 1994 | 3.4 | 0.9 | 2.4 | 0.2 |

SOURCE: Bureau of Economic Analysis, April 1995.

TABLE 2. *Changes in the Number and Percentage of Jobs, California, July 1990 to December 1993*

| | *Change in Number of Jobs (000)* | *Percent Change* |
|---|---|---|
| Mining | -3.5 | -9.2 |
| Construction | -115.1 | -20.5 |
| Manufacturing | -302.9 | -14.6 |
| Transportation and Utilities | -15.5 | -2.5 |
| Wholesale Domestic Trade | -92.7 | -12.1 |
| Retail Domestic Trade | -140.1 | -6.3 |
| Finance, Ins., and Real Estate | -29.5 | -3.6 |
| Services | 111.0 | 3.3 |
| Government | -13.9 | -0.1 |
| TOTAL | -602.3 | -4.8 |

SOURCE: Center for the Continuing Study of the California Economy, 1994; Employment Development Department, various years.

TABLE 3. *Unemployment Rates by Ethnicity*

| *Ethnic Group* | *Unemployment: Sept., 1990 (in percents)* | | *Unemployment: Sept., 1993 (in percents)* | |
|---|---|---|---|---|
| | *California* | *US* | *California* | *US* |
| Non-Hispanic Whites | 5.3 | 4.9 | 8.1 | 5.8 |
| Hispanics | 7.9 | 8.5 | 11.9 | 10.0 |
| Blacks | 9.8 | 12.1 | 13.6 | 12.5 |

SOURCE: Employment Development Department, October, 1994; Bureau of Labor Statistics, US Department of Labor (http://www.bls.gov/).

TABLE 4. *California Per Capita Gross State Product, as a Percent of the US's*

| *Year* | *Index, US=100* |
|---|---|
| 1977 | 114 |
| 1982 | 114 |
| 1987 | 115 |
| 1988 | 114 |
| 1989 | 113 |
| 1990 | 113 |
| 1991 | 111 |
| 1992 | 108 |
| 1993 | 106 |
| 1994 | 104 |

SOURCE: Bureau of Economic Analysis, August 1994; and author's calculations.

TABLE 5. *High Wage Jobs in California*

| *Sector* | *Average Salary, 1993* | *Growth Forecast, 1990-2005* |
|---|---|---|
| Manufacturing | $35 776 | 4.3% |
| Air Transportation | $38 459 | 8.7% |
| Wholesale Trade | $34 944 | 28.4% |
| Finance, Insurance, and Real Estate | $35 932 | 18.4% |
| Computer Services | $48 832 | 42.9% |
| Motion Picture Production | $54 848 | 24.0% |
| Engineering and Management Services | $42 635 | 44.1% |

SOURCE: Center for the Continuing Study of the California Economy, 1994; Employment Developmet Department, December 1993.

TABLE 6. *California's Top Export Markets, 1993*
*($ billions)*

| | *1993 Exports* | *Percent Change, 1987-1993* |
|---|---|---|
| Japan | $10.5 | 87.5 |
| Canada | 7.7 | 126.5 |
| Mexico | 6.5 | 182.6 |
| Taiwan | 4.7 | 176.5 |
| South Korea | 4.1 | 115.8 |
| Singapore | 3.7 | 146.7 |
| Germany | 3.5 | 59.1 |
| UK | 3.5 | 52.2 |
| Hong Kong | 3.0 | 233.3 |
| France | 2.2 | 69.2 |
| TOTAL | $70.3 | 105.0 |

SOURCE: Massachusetts Institute for Social and Economic Research (MISER).

TABLE 7. *California's Top Export Industries*
*($ billions)*

| | *1993 Exports* | *Percent Change, 1990-1993* |
|---|---|---|
| Electrical Equipment | 16.9 | 43.2 |
| Computers and Industrial Equipment | 16.6 | 23.0 |
| Transportation Equipment | 8.5 | 7.6 |
| Instruments | 5.3 | 20.5 |
| Food Products | 4.3 | 13.2 |
| Crops | 2.7 | 12.5 |
| Petroleum | 2.6 | -3.8 |
| Chemicals | 1.6 | 6.7 |
| Other | 12.8 | 12.1 |
| TOTAL | 70.3 | 20.4 |

SOURCE: MISER.

TABLE 8. *Sources of California State Revenue (in percents)*

| | *1961* | *1991* |
|---|---|---|
| Property Taxes | 50.0 | 27.4 |
| Sales Tax | 16.2 | 23.1 |
| Personal Income Taxes | 6.1 | 28.1 |
| Corporate Taxes | 6.2 | 7.6 |
| Other | 21.4 | 13.6 |

SOURCE: *Los Angeles Times*, 1993.

TABLE 9. *State Population Growth by Source, Average Annual Increase, 1985-1990*

| | |
|---|---|
| Natural Increase | 290 000 |
| Domestic Migration | 108 000 |
| Foreign Immigration | 252 000 |
| Legal | 160 000 |
| Illegal | 92 000 |
| TOTAL | 600 000 |

SOURCE: Center for the Continuing Study of the California Economy, 1992.

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