

# Rethinking the California Business Climate

• • •

Michael Dardia  
Sherman Luk

1999

PUBLIC POLICY INSTITUTE OF CALIFORNIA

Library of Congress Cataloging-in-Publication Data

Dardia, Michael.

Rethinking the California business climate / Michael Dardia,  
Sherman Luk.

p. cm.

Includes bibliographical references (p. ).

ISBN: 1-58213-011-6

1. California—Economic conditions. 2. California—Economic  
conditions—Regional disparities. 3. Industries—California.

I. Luk, Sherman, 1965- . II. Title.

HC107.C2D37 1999

330.9794'053—dc21

99-33965

CIP

Copyright © 1999 by Public Policy Institute of California

All rights reserved

San Francisco, CA

Short sections of text, not to exceed three paragraphs, may be quoted  
without written permission provided that full attribution is given to  
the source and the above copyright notice is included.

Research publications reflect the views of the authors and do not  
necessarily reflect the views of the staff, officers, or Board of  
Directors of the Public Policy Institute of California.

# Foreword

---

The size and resiliency of California's economy continues to astound even the most die-hard cynics. With the recession of the 1990s, it appeared that the cynics finally had their day. In due course, however, the state pulled out of its worst recession since the 1930s and set sail again. In this report, Michael Dardia and Sherman Luk look back over the years of the recession and conclude that both critical observers and policymakers are vulnerable to making misleading statements about an economy that is fundamentally too complex for simple characterizations. Each region of the state, and even major economic sectors, fared quite differently during the recession. While some were suffering from severe downturns in employment, others were either holding their own or actually continuing long-term growth that had started in the 1980s.

The authors show that although Los Angeles experienced deep cuts in employment over a seven-year period from 1990 to 1997, the Riverside-San Bernardino and Sacramento areas saw solid growth. And while employment in manufacturing sectors declined sharply, the service

sectors in the state grew steadily over the entire decade. The authors conclude that this variation in California's economy across regions and industries makes it virtually impossible to establish a simple business climate "ranking" for California and that the state's competitiveness with other states is not a meaningful comparison. They state that "California is too large and diverse to be the appropriate level of analysis for the business climate debate." Rather, business climate issues should be analyzed at the industry and regional level, where most business decisions are actually made and policies can be better targeted.

To further underscore this point, the authors review the factors that constitute popular business climate indices and summarize what is known about the role of each factor in influencing business location decisions. In conclusion, they observe that "the large degree of variation across regions and industries may also help explain why it is sometimes so difficult to attain a consensus in the legislature."

The temptation to generalize about California—whether about its economy or its culture—is too powerful to resist for the cynic and celebrant alike. For the policymaker, however, solutions to simplistic problem statements may have undesirable consequences. The authors provide ample warning of the dangers of oversimplifying the character of the California economy.

David W. Lyon  
President and CEO  
Public Policy Institute of California

# Summary

---

Many of California’s policy issues are driven, or at least affected, by the level of economic activity in the state. In addition to national economic conditions and industry-specific factors, the level of business activity in a state is affected by the costs and benefits of doing business there—in short, by the state’s “business climate.” Given the importance of economic growth, much attention is paid to how well a state’s business climate compares to that in other states or to the state’s own past. These concerns are amplified during recessions—even more so during prolonged recessions such as the one in the early 1990s. Periodic national rankings of state business climates, as well as self-assessments from within California, pass judgment on the state’s business climate and offer suggestions for policy improvements. Some of these suggestions are very useful, and the publicity produced by such reports may help attract legislative attention to the needs of the business community.

Most discussions of the business climate involve comparing aggregate data on industry performance or socioeconomic variables across states or compiling stories of businesses decamping for greener pastures or threatening to do so. This report presents a framework for thinking about the issue that does not involve a list of comparative state characteristics. Instead, it examines what we know about the determinants of regional growth and how these factors, especially those that are affected by policy decisions, vary across regions and industries in California. Factors such as labor's share of total costs, education of the workforce, and regulatory costs are shown to vary widely across California's major industries. Such factors also vary widely across the state's metropolitan areas, and on several measures most of the state's regions are comparable to other western metropolitan areas that are commonly thought of as competitors.

The idea that there is a single business climate in the state that is applicable for all businesses and regions is too simplistic: What business climate does a software firm in Palo Alto have in common with an agribusiness in Fresno or an apparel manufacturer in Los Angeles? The appropriate response for policymakers to the question "How bad (good) is California's business climate?" should be "For what kind of firm, in which region?"

# Contents

---

Foreword . . . . .	iii
Summary . . . . .	v
Figures and Table . . . . .	ix
Acknowledgments . . . . .	xi
1. INTRODUCTION . . . . .	1
2. BUSINESS CLIMATE RANKINGS . . . . .	11
3. FACTORS THAT AFFECT ECONOMIC GROWTH . . . . .	17
4. EVIDENCE OF VARIATION IN BUSINESS CLIMATE FACTORS . . . . .	27
Variation by Industry . . . . .	27
Human Capital: Wages and Education . . . . .	28
Business Taxes . . . . .	31
Regulation . . . . .	32
Variation by Region . . . . .	34
Business Taxes and Fees . . . . .	35
Wages . . . . .	37
Education . . . . .	39
Housing Prices . . . . .	41
Business Rents . . . . .	42
5. CONCLUSIONS . . . . .	45
About the Authors . . . . .	49

# Figures

---

1.1. Nonfarm Employment in California, 1939–1998 . . . . .	3
1.2. Postrecession Employment Levels in the Past Three Recessions . . . . .	4
1.3. Nonfarm Employment Levels, by Metropolitan Statistical Area, 1990–1997 . . . . .	5
1.4. Employment Changes, by Major Industry Sector, 1990– 1997 . . . . .	7
4.1. Labor Cost as a Share of Total Sales, by Industry . . . . .	29
4.2. Educational Attainment, by Industry . . . . .	30
4.3. Development and Tenant Fees for Representative Firms . . . . .	35
4.4. Representative Fees and Costs Within the Los Angeles Region . . . . .	36
4.5. Average Regional Wages, by Sector . . . . .	38
4.6. Average Manufacturing Wages, Adjusted for Labor Productivity . . . . .	38
4.7. Share of Labor Force with at Least a Bachelor’s Degree . . . . .	40



4.8. Median Housing Value and Monthly “Fair Market” Rent, by Region . . . . .	42
4.9. Range of Industrial Space Sales Prices, by Region . . . . .	43

## Table

---

2.1. Business Climate Index Factors . . . . .	14
---	----

# Acknowledgments

---

The authors would like to thank Roger Dunstan of the California Research Bureau, Doug Henton of Collaborative Economics, and Michael Shires and Fred Silva of the Public Policy Institute of California (PPIC) for their thorough reviews of this report. We are also indebted to PPIC colleagues Mark Baldassare, Paul Lewis, David Lyon, Paul Rhode, and Michael Teitz for their comments and suggestions at various stages of this project. The tireless Gary Bjork and Patricia Bedrosian ensured that the text was comprehensible. Any remaining errors are solely those of the authors.

# 1. Introduction

---

There is a long history of concern about the condition of states' "business climates." Several companies produce annual rankings of state business climates, which often attract considerable newspaper coverage. Although California has traditionally had the luxury of assuming growth as a given, the early 1990s recession led to much public concern over whether California was competitive with other states and to what extent its problems were due to a bad business climate. Governor Wilson actually described the state as a "bad product,"<sup>1</sup> and a number of state and local programs were implemented in response. But was the business climate uniformly bad?

Before proceeding further, we should define the term "business climate." Conceptually, it is the collection of prices and availability of labor and other resources that businesses find in a given location. In practice, the term has been most often used to characterize the relative

---

<sup>1</sup>Peter H. King, "On California: The Exodus Scenario Doesn't Fly," *Los Angeles Times*, January 17, 1992, p. A3.

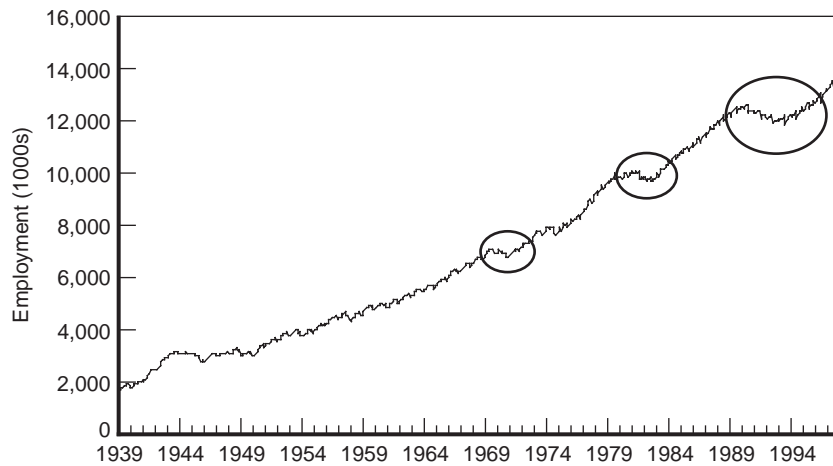
costs faced by manufacturing firms in a given state. Manufacturing firms are viewed as more “footloose” than those in other industries and are presumed to move to the cheapest location to produce their products. The costs most commonly noted are wages, corporate tax rates, utility costs, workers’ compensation, and unemployment premiums. Although business climate indices often include such factors as the educational attainment of the workforce and its productivity, they have tended to weigh cost factors most heavily.

The definition of business climate has broadened somewhat in recent years, perhaps partly because of manufacturing’s shrinking share of employment. When nonmanufacturing firms are considered, the list of relevant inputs grows. Some analysts stress the importance of the positive conditions that a region or state provides for firms located there: the quality of the workforce, the adequacy of public infrastructure, the depth of capital markets, and general quality-of-life factors.<sup>2</sup> We may consider the business climate, then, to consist of all the location-specific factors that determine how productive local firms can be.

Postwar California has led a very charmed existence in terms of growth, as Figure 1.1 attests. Employment in the state has quadrupled in the past 50 years (twice the national average). Before 1990, the state suffered only mild and brief contractions during national recessions (recessionary periods are circled in the figure). Per capita income is 8 percent higher than the national average—albeit down from 19 percent higher than the nation as a whole in 1969—and average wages are 12

---

<sup>2</sup>For an example of this more positive approach in a California context, see Douglas C. Henton and Steven A. Waldhorn, “Inventing the Future Through Innovation,” in R. Scott Fosler (ed.), *The New Economic Role of American States*, Oxford University Press, New York, 1988.



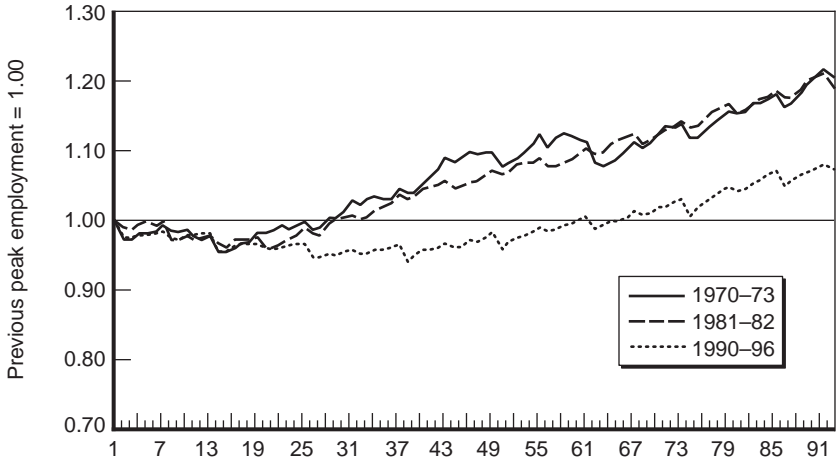
SOURCE: California Employment Development Department.  
 NOTE: 1998 employment level is for the month of July, rather than the annual average.

**Figure 1.1—Nonfarm Employment in California, 1939–1998**

percent higher. From the benefit of a long-term perspective, California has had little reason to worry about its overall business climate because of continuing economic growth. Growing regions rarely worry about their business climates, and factors that can trouble lagging regions—such as high wages and tax rates—are instead seen as the rewards of success.

By the end of the 1980s, in fact, many analysts focused on the undesirable side effects of growth, and a number of cities enacted growth controls of one form or another. Common concerns became the lack of affordable housing, growing traffic congestion, water shortages, and pollution. The primacy given such concerns reflected complacency about the inevitability of growth. Such complacency came to an end when the economy failed to rebound rapidly from the deep recession in

the early 1990s. Figure 1.2 shows the pattern of employment in the last three recessions and eventual recoveries. The prerecession employment peak is indexed at one, with subsequent monthly employment shown as a fraction of peak employment. The 1990s recession was dramatically longer in duration than the other two recessions. All three led to declines in employment of about 5 percent just over a year after the recession began. In the 1970s recession, employment quickly rebounded and regained its prerecession peak 25 months after the recession began. The 1980s recession was slower to rebound, but it regained its prerecession peak 29 months later. In contrast, the 1991 employment peak was not reached again until the fall of 1995, almost five years later. By that point in the previous recoveries, employment was 10 percent higher than before the recession. The sluggish recovery, combined with the rapid decline of the aerospace industry—one of the state’s key growth

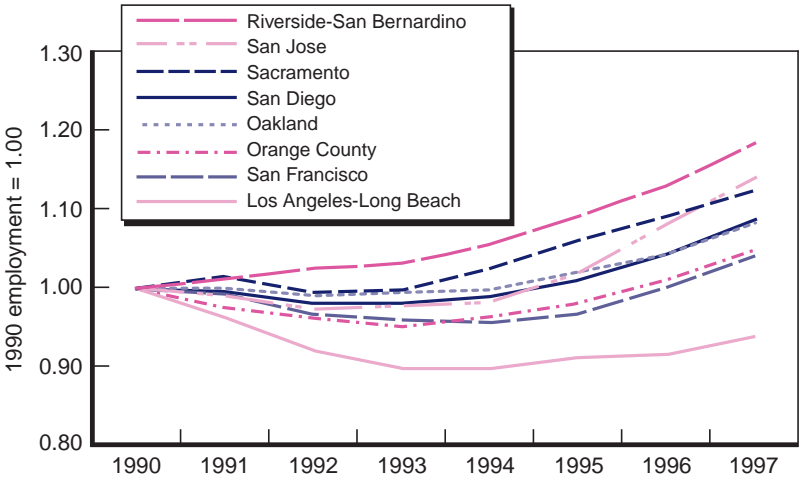


SOURCE: California Employment Development Department.

**Figure 1.2—Postrecession Employment Levels in the Past Three Recessions**

drivers—led many to claim that California as a whole was no longer competitive, especially given that the national recovery was fairly rapid.

The employment declines were not universally shared among the metropolitan areas of the state, however. As Figure 1.3 shows, the employment changes varied widely across the state’s metro areas during the past business cycle. Although the Inland Empire, Oakland, and Sacramento metropolitan areas experienced little decline, Orange County and San Francisco employment fell by slightly more than the state average. Employment in Los Angeles—the largest metropolitan area in the state—fell by over 10 percent. Even five years after the recession began, when the state itself had just about recovered all of the jobs it lost, employment in Los Angeles had barely increased. With the exception of Los Angeles, the rest of California actually had a smaller percentage decline in employment than did the nation. These regional patterns



SOURCE: California Employment Development Department.

**Figure 1.3—Nonfarm Employment Levels, by Metropolitan Statistical Area, 1990–1997**

challenge the idea that a bad *statewide* business climate was responsible for the extent of its job losses. If the state itself was so bad for business rather than particular regions within it, why did areas other than Los Angeles perform as well or better than the nation as a whole during the recession? Why were the business climates of some widely cited competitor regions, such as Phoenix, considered better than California's when they suffered even greater declines in manufacturing employment?

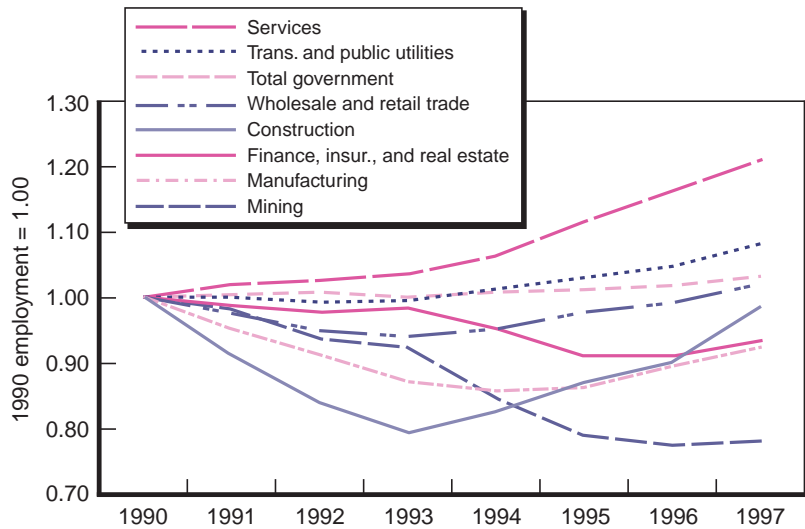
A widely cited study of manufacturing firm migration out of California reported large variation in the likelihood of plant relocation across manufacturing industries even while it estimated a substantial job exodus overall.<sup>3</sup> By focusing on the jobs relocated or created elsewhere, the study helped establish an image of a state hemorrhaging jobs as a result of government-induced problems. Yet large sectoral differences are seen in the changes in employment over time, which are also hard to reconcile with the claim that there was a uniform deterioration in the state's business environment. Figure 1.4 shows the changes in employment from 1990 to 1997 by major industrial sector: The dispersion in performance across sectors was even larger than that across metropolitan areas. Although employment in construction, mining, and manufacturing fell by 15 percent or more, employment in government and in transportation and public utilities remained stable, and employment in services grew by more than 20 percent.

Despite this variation in outcomes, there was widespread concern about the supposed decline in the state's competitiveness. "We're frightened about the state's future," said Peter Ueberroth, chairman of

---

<sup>3</sup>Bules & Associates, *California Industry Migration Survey*, San Francisco, California, October 1992.





SOURCE: California Employment Development Department.

**Figure 1.4—Employment Changes, by Major Industry Sector, 1990–1997**

the Council on California Competitiveness.<sup>4</sup> Although some analysts thought the problems would be temporary, others were concerned that problems with the state’s business climate would continue to cause jobs to leave California. The industry migration study, for example, charged that “industry is increasingly disenchanted with California as a manufacturing locale” and that business costs and other business climate issues (the regulatory process, environmental laws) were the primary reasons.<sup>5</sup> The California Business Roundtable also worried about a bad and worsening state business climate, and their survey data cited taxes,

<sup>4</sup>John M. Berry and Lou Cannon, “Hard Times Fuel California Voters’ Anger,” *Washington Post*, June 1, 1992.

<sup>5</sup>Bules & Associates, op. cit., pp. 14–17.

workers' compensation costs, and labor and housing costs as the primary problems. The Roundtable survey also claimed that *one-fourth* of the surveyed firms would be forced to move or expand out of state.<sup>6</sup> California policymakers were seen as being indifferent if not hostile to business, compared to those in other states, who were seen as eager to attract the firms. Businesses were also frequently quoted as complaining about the difficult and lengthy process to obtain building and other permits.<sup>7</sup> Other quality-of-life issues were also frequently cited as contributing to the state's uncompetitive position, especially within the context of the large net outflows of population that California suffered in the early 1990s.

The concerns about the decline in the state business climate led to several important reforms. The state government established Red Teams—ad hoc groups mobilized to respond rapidly to firms that were considering relocation or expansion elsewhere. The legislature reduced the sales tax on equipment purchases and made its unitary tax consistent with the practices in most other states. It reformed the workers' compensation system and it also made permanent the tax credit for firms' research and development investments, citing the large role that high-technology firms play in the state economy.

Fostering business activity in the state—whether by encouraging startup firms, attracting outside businesses, or retaining existing ones—is indeed a critical policy goal. The prosperity of the state's residents and the resources of state and local government depend primarily on the level and rate of growth of the economy. Some public policy outcomes are

---

<sup>6</sup>*San Jose Mercury News*, p. 1-F, November 15, 1991.

<sup>7</sup>Jonathan Weber, "Rebuild California," *Los Angeles Times*, p. D-1, November 29, 1992.

more conducive to business activity than others, and it is often the case that the effects on businesses are not adequately considered during policy formulation. However, the variation in fortunes across industries and regions makes the notion of a single statewide business climate hard to accept, even if one acknowledges the need for sensitivity toward the needs of business. When setting policy, the state is simply too large and diverse to be viewed as having a uniform climate. Several institutions already produce periodic reports that comprehensively summarize the economic conditions in California's regions and industries<sup>8</sup> and the prior discussion of the 1990s recession will not be news to readers of these reports. However, even these reports often resort to statewide generalities when turning to policy recommendations. This study makes the case that the regional and sectoral diversity regularly described in these other reports should be incorporated into any discussions related to business climate policy.

Before considering alternatives to state business climate indices and policies, an examination of such indices would be valuable. This report examines the most popular business climate rankings and their shortcomings and summarizes the important factors for regional and state growth that have been identified by economic studies. It then shows that these factors vary across regions and industries and argues that the extent of this variation renders the notion of a general, statewide business climate of little use for policy decisions. Although past concerns

---

<sup>8</sup>The most prominent of these are the *UCLA Anderson Forecast*, UCLA's Anderson Graduate School of Management, Los Angeles; *California Economic Growth*, the Center for the Continuing Study of the California Economy, Palo Alto; *State and Regional Economic Developments in California*, Legislative Analyst's Office, Sacramento; and *1998 Index of Silicon Valley*, prepared for Joint Venture: Silicon Valley by Collaborative Economics, San Jose.

about the state business climate led to positive changes in state policies (e.g., reform of workers' compensation, shareholder lawsuits, and business permit processes), policymaking needs to more explicitly address regional and sectoral variation.

## 2. Business Climate Rankings

---

Traditional business climate rankings are used to categorize climates as good or bad. Bad climates result in increased costs for a state's firms relative to those located elsewhere, leading to relocation and the reluctance of outside firms to invest within the state. Although the idea of a business climate ranking is intuitively appealing, deciding which factors to include in the ranking and how much weight to give each is rife with problems. Moreover, there is the question of whether an entire state can be considered to have a single business climate. Most firms face common costs, but many costs (and their relative importance) vary significantly by region and industry. A uniform corporate income tax rate can affect firms very differently: High-margin businesses suffer more from an income tax than from a revenue tax, whereas high-tech industries benefit more than most from research and development (R&D) tax credits. Property tax burdens depend, under Proposition 13, on when the property was purchased or modified. Environmental regulation costs depend on a firm's location within the state and the

nature of its production processes. Any index that averages these effects across all industries and regions within a state will at best provide an incomplete picture of the business climate.

A further complication involves the issue of tax incidence—the ultimate burden of a given tax is not necessarily borne by the person or entity paying it. When a tax is placed on a product, the share of that tax borne by the producer rather than the consumer depends on the nature of supply and demand in that particular market. For those products facing very strong (or “inelastic”) demand, most of the tax will probably be borne by the consumer. In such a case, the firm may be less sensitive to the imposition of the tax, at least with respect to where the firm is located. When tax rates are averaged across all industries in a state, it is impossible to discuss the importance of tax incidence in business location decisions.

This chapter summarizes some common rankings and discusses some critiques that have been published. The two pioneers in this area were the consulting firms Fantus and Grant Thornton, and together they established the approach that encapsulated into a composite index the attractiveness of a state for business. Fantus produced its first study in 1975 for the Illinois Manufacturers’ Association, and the manufacturing orientation remains in most business climate rankings. The Fantus ranking included 15 variables covering state and local taxes, unemployment and workers’ compensation insurance, wages, public indebtedness, and labor policies (10 of the variables were tax measures). In 1979, Grant Thornton<sup>1</sup> produced an index with more variables and a

---

<sup>1</sup>*Annual Study of General Manufacturing Climates of the Forty-Eight Contiguous States*, Chicago, Illinois, 1979–1996. The firm was named the Alexander Grant Company at the time of the original survey.

different weighting scheme, although tax policies and employment costs still dominated the list. Weights were assigned to each factor, and states were ranked by the total score. In 1987, the Corporation for Enterprise Development (CED) responded to the Grant Thornton survey by producing an annual report that assigned letter grades to states in each of four categories.<sup>2</sup>

Table 2.1 lists the main categories of factors and their index weights for the Grant Thornton and CED surveys. The Grant Thornton survey is focused strictly on manufacturing costs, whereas the CED survey attempts a more comprehensive assessment of the climate in each state, including past performance in (nonbusiness) areas such as job and income growth and income distribution. As an example of the dramatic difference in focus, higher average wages negatively affect the Grant Thornton index but positively affect the CED score. In some ways, the CED survey attempts to capture the benefits from being in a given state while ignoring the costs. In its capacity index, for example, a state is given credit for the benefits provided by the tax revenue collected: schools, roads, sewers, and airports. In the Grant Thornton index, the taxes levied to provide this infrastructure have only a negative effect on the prosperity of a business. Similarly, CED gives states credit for having an educated, productive workforce.

However, the CED index is not very useful in determining the climate relevant for business location or expansion decisions. Its focus is

---

<sup>2</sup>*Development Report Card for the States*, Corporation for Enterprise Development, Washington, D.C., 1986–1997. The 1997 edition has reorganized the factors into three categories and changed many of the specific indices used. To use comparable years for the two surveys and because no specific weights were provided in the 1997 report, we list the categories included in the earlier report.

**Table 2.1**  
**Business Climate Index Factors**

Category	Examples	1985 Weight (%)	1987 Weight (%)
<b>Grant Thornton</b>			
Fiscal policies	Tax rate; change in taxes; public debt	21	
Employment regulation	Unemployment and workers' compensation	19	
Labor costs	Manufacturing wage; unionization	23	
Labor force quality	Educational attainment; productivity	22	
Other costs	Utility costs; population density	16	
<b>Corporation for Enterprise Development</b>			
<b>Performance index</b>			
Employment	Job growth; unemployment		20
Income	Average income and its growth		20
Job quality	Percentage in poverty; manufacturing wages		20
Equity	Income inequality; AFDC <sup>a</sup> benefits		20
Quality of life	Life expectancy; infant mortality		20
<b>Business vitality index</b>			
Firm competitiveness	Export share of output; new investment		50
Entrepreneurial energy	New-firm growth; self-employed share		50
<b>Capacity index</b>			
Human resources	Percentage college educated; school spending; R&D		50
Financial resources	Bank deposits; venture capital firms in state		25
Infrastructure	Road and sewage plant needs; airport traffic		15
Amenities	Physicians; arts spending; foundation grants		10

<sup>a</sup>Aid to Families with Dependent Children.



geared more toward social policy than business policy, as evidenced by the absence of any tax variables, the positive scoring of higher average wages, and the heavy emphasis on poverty-related issues. Business leaders may well value such social issues, but their first responsibility is to increase or maintain profits; for this, they need to factor in the costs of doing business in a given location as well as the availability of appropriate resources.

In addition to all of the private assessments and critiques of the California business climate, the state's Trade and Commerce Agency performed its own study.<sup>3</sup> The agency's report compared California to key "competitor" states—i.e., those that were the most likely destinations for businesses leaving California.<sup>4</sup> According to the report, "California is not sufficiently competitive with the other states in general, and with key competitors in particular." The report goes on to cite as disadvantages "taxes, workers' compensation costs, [the quality of] pre-college education, and litigation." The report ranked California against the competitor states in 12 categories; some categories were, in a sense, redundant—such as housing costs and wage rates<sup>5</sup>—and others worked in opposite directions—such as wage rates and the fraction of the population with college degrees (the two are highly correlated but have different implications for the business climate ranking).

---

<sup>3</sup>*A Competitive Assessment of California*, California Trade and Commerce Agency, Office of Economic Research, Sacramento, California, June 1994.

<sup>4</sup>The report used the data from Bules & Associates, *op. cit.* The states assessed were Arizona, Colorado, Illinois, Nevada, Oregon, Utah, and Washington.

<sup>5</sup>Housing costs and wage rates can be considered redundant in terms of a business climate because the local cost of living (of which housing costs are the largest component by far) affects local wages. To the extent that housing costs are not reflected in wages, they will not be likely to influence business location and employment decisions.

These business climate indexes have not been without their critics.<sup>6</sup> Some have compared the relative state rankings across surveys, and others have examined the correlation between states' rankings and subsequent economic performance. As might be expected, the relative ranking varied significantly across surveys. In addition, states' rankings did not correlate well with subsequent growth, and some of the factors that made up the index were better at predicting future growth than the index itself. Even on the narrower subject of tax competitiveness, the standard measures fell short by not reflecting the actual tax burden faced by a firm.<sup>7</sup> Although the commonly cited indexes are flawed, this does not mean that regional economic characteristics do not affect growth. Recent economic research has shed some light on the factors that influence economic growth and business location decisions. There are varying degrees of consensus about the importance of particular variables, but the results are worth summarizing briefly. These studies point to the characteristics we need to compare across industries and regions.

---

<sup>6</sup>Charles L. Skoro, "Rankings of State Business Climates: An Evaluation of Their Usefulness in Forecasting," *Economic Development Quarterly*, Vol. 2, No. 2, May 1988, pp. 138-152; Donald N. Steinnes and Lawrence J. Syck, "The Perils of Providing Economic Information on the Business Climate," *Economic Development Review*, Fall 1990, pp. 36-42; Robert D. Atkinson, "Understanding Business Climate Studies: Their Use and Validity," *Economic Development Review*, Winter 1990, pp. 46-49.

<sup>7</sup>Robert Tannenwald, "Business Tax Climate: How Should It Be Measured and How Important Is It?" *State Tax Notes*, May 13, 1996, pp. 1459-1471. Tax comparisons are discussed further in the next chapter.

### 3. Factors That Affect Economic Growth

---

Studies of state economic growth typically estimate the effect on per capita income or on job growth of factors such as tax rates, education of the local labor force, housing costs, public infrastructure, and unionization rates. Studies that focus on business location decisions and business climate issues sometimes use surveys or case studies of businesses to determine what factors matter most to them or what persuaded them to make a particular location decision. Although these studies suffer from the limitations of the available regional data, four general findings stand out.

1. *Differences in tax rates have a mild but variable effect on employment or output. Important differences exist across industries in their sensitivity to local tax rates.*

Many economic studies in the 1970s and early 1980s focused on how taxes affected regional employment and output. On the whole, they showed that tax rates had no significant effect on either measure of growth. More recent studies, using better data and sometimes controlling better for other factors, often show that taxes do have a small effect. In a survey of a large sample of studies, Bartik's<sup>1</sup> estimate from studies *across* states or regions is that a 10 percent decrease in business taxes leads to a long-run increase in business activity of 2.5 percent. The strongest effects appear to be for manufacturing activity. Local service industries primarily compete for local customers against other local firms that face the same tax rates, whereas manufacturing firms are more likely to be competing against firms in other regions in the wider national market.<sup>2</sup>

An increase in business activity of 2.5 percent is associated with an increase in annual earnings of 1 percent, housing prices of just under 1 percent, and rents of almost 2 percent. Among studies that analyze the effect on cities *within* the same region however, a 10 percent decrease in tax rates leads to an increase in business activity of about 15 percent. This implies that taxes are much more important in determining business location *within* a metropolitan area than between metropolitan areas or states.

Estimates of the influence of tax rates on economic growth are plagued by measurement issues, so these magnitudes should be considered approximate. Average tax rates do not necessarily reflect the actual, marginal tax rate faced by firms, which varies widely across

---

<sup>1</sup>Timothy J. Bartik, *Who Benefits from State and Local Economic Development Policies?* W. E. Upjohn Institute for Employment Research, Kalamazoo, Michigan, 1991.

<sup>2</sup>This distinction is discussed in more detail in Chapter 4.

industries. For example, employee-oriented taxes, such as workers' compensation, unemployment insurance, and the credit for hiring welfare workers, have a larger effect on firms that are labor intensive. Capital tax policies, such as the 8 percent R&D tax credit and the 6 percent manufacturing equipment investment credit, loom larger for capital-intensive manufacturing firms.

A more in-depth approach would be to estimate the effect of taxes on a "representative" firm.<sup>3</sup> In this approach, the actual tax bill for the same type of firm would be compared across several locations, allowing a more realistic comparison from that firm's point of view *within a given industry*. To determine the effect of a region's tax system on aggregate business activity, such studies should be performed for all of the significant industries in a region. A related concern involves the issue of who bears the burden of these taxes, given that some firms have the market power to pass along tax increases to their customers and others do not. Once industry-specific tax rates have been calculated, estimates of supply and demand elasticities can be used to predict the incidence of those taxes among firms, workers, and consumers. In small open economies such as metropolitan areas, supply elasticity is generally higher than in national estimates because of capital mobility. In the long run, the region itself will likely bear most of the tax burden through wages and land prices.

Results from a study done for Massachusetts show that the ranking on tax competitiveness for Los Angeles ranged from 8th to 13th (out of 16 locations largely composed of small- to medium-size cities), for the five manufacturing industries examined. This wide variation—

---

<sup>3</sup>This is the approach taken for the Massachusetts Tax Study Commissions, discussed below (from Tannenwald, op. cit.).

evaluating only tax climate, solely for manufacturing industries— illustrates the problem with generalization across industries. Even for a question as narrow as this, the results are very sensitive to the assumptions made about the “representative” firm. Recently, the Department of Revenue in Washington State analyzed the effect of different tax policies on different types of manufacturing firms, comparing Washington to 11 other states.<sup>4</sup> The analysis examined the tax burden facing three hypothetical firms (new small firm, established firm, new branch plant) in each of 10 industries. As in the Massachusetts study, there were wide variations in ranking across industries and between new firms and more established firms.

*2. The effect of local wages, although small, is roughly double that of taxes.*

Other things being equal, a 10 percent lower average manufacturing wage is associated with 5 percent higher local employment.<sup>5</sup> Most studies examine manufacturing employment, since manufacturing firms have been the most common target of development incentives and are viewed as the most footloose of firms. In those cases where nonmanufacturing sectors were studied, the wage effect was smaller but still statistically significant. The logic for expecting such a wage effect is that lower wages make labor cheaper relative to capital, which makes firms hire more workers than they otherwise would. Such wage differences across regions are not necessarily permanent—higher wages in

---

<sup>4</sup>Washington viewed its “competitor” states as Alabama, Arizona, California, Colorado, Florida, Idaho, Minnesota, Montana, North Carolina, Oregon, and Texas.

<sup>5</sup>From summary provided by Bartik, *op. cit.*

a region can attract workers from other areas, which would tend to drive local wages down. Such migration of workers has, in fact, been shown to reduce regional wage differences but the convergence process is rather slow—on the order of 2 percent per year.<sup>6</sup>

Estimates of the wage effects on employment levels suffer from their own measurement issues. Few studies examine the separate effect of unemployment benefits on employment levels—areas with more generous unemployment benefits might have lower levels of employment (all else being equal). Once local wages are accounted for, the studies do not reach any consensus about the effect of unionization rates on employment levels.<sup>7</sup> In addition, the wages used are either average manufacturing wages or the average of all wages in the area. As with tax rates, the use of regional averages can confound the effect of wage differences with that of different regional industrial mixes.

Another problem is that these studies generally fail to account for any differences in productivity (within industries) across regions. The assumption is that an industry's production function is the same across regions and that firms will change their labor-capital ratio in response to local wages. In some studies, the wage effect on economic performance is insignificant when labor productivity is also included in the analysis.<sup>8</sup> To the extent that wages have an effect separate from productivity, localities would get more return from implementing policies that reduce

---

<sup>6</sup>Robert J. Barro and Xavier Salai-Martin, "Convergence Across States and Regions," *Brookings Papers on Economic Activity*, No. 1, 1991, pp. 107–182.

<sup>7</sup>In addition to their effects on wages, unions are also thought to influence the level of noncash benefits, workforce flexibility, and other productivity-related measures.

<sup>8</sup>Leslie E. Papke, "Interstate Business Tax Differentials and New Firm Location: Evidence from Panel Data," *Journal of Public Economics*, Vol. 45, 1991, pp. 47–68.

the effective cost of labor (such as reform of labor regulations) than from policies that lower the statutory tax rate.<sup>9</sup>

3. *Public investments in educating the labor force and in infrastructure show positive effects.*

Few studies at the local level directly examine the effect of the educational attainment of local workers on a region's growth rate. Economic studies of growth in states and countries do find a very strong influence of education, however; and business surveys and case studies repeatedly demonstrate that business leaders place a high value on the quality of local labor forces when making location decisions. Unlike the case of local public infrastructure, however, states are not constrained by the educational attainment of their existing labor force or by the number of graduates of local colleges. California, for example, is generally a net importer of highly educated workers from other states.<sup>10</sup> In the absence of many empirical estimates, the educational attainment of the local labor force should be viewed as a positive influence on a region's growth rate. It is an indicator of the quality of the local labor force—given that education is an important factor in labor productivity—but ultimately it is the actual labor force productivity that is most important for growth in regional economic output.

---

<sup>9</sup>Productivity-adjusted wages are compared to nonadjusted wages in Figure 4.6, Chapter 4.

<sup>10</sup>In addition to producing high-skill workers, local universities are important to some industries as a source of innovation and technology diffusion. Firms that commercialize scientific breakthroughs generally locate near the universities where the basic research was done. See Adam B. Jaffe, Manuel Trajtenberg, and Rebecca Henderson, "Geographic Localization of Knowledge Spillovers as Evidenced by Patent Citations," *Quarterly Journal of Economics*, Vol. 108, 1993, pp. 577–598.



Other studies show that public infrastructure might have significant effects on regional growth rates, with two caveats. First, the type of infrastructure matters quite a bit: The largest positive effect comes from streets and highways but investments in water and sewage treatment systems have little influence. Estimated rates of return at the national level run from 15 percent for new urban highway construction to as high as 35 percent for some kinds of highway maintenance.<sup>11</sup> Second, as with educational attainment, little empirical work has been done at the metropolitan area level. Local returns may well be lower than state- or national-level returns, because at least some of the benefits from infrastructure investment come from externalities (that is, the benefits also accrue to other regions that trade with the region making the investment). In fact, there is evidence that neighboring counties might even face slower growth when a given county increases spending on highways, implying that newer highway construction might rearrange economic activity within a given region, even while it increases trade with other regions.<sup>12</sup>

4. *Businesses rank regulatory reform very highly in surveys; some regulatory effects may be quite large.*

The difficulty in measuring regulatory costs or inefficiencies at the regional level means that little econometric research has been done in this area (although national gains from recent deregulation are estimated to

---

<sup>11</sup>*New Directions for the Nation's Public Works*, U.S. Congressional Budget Office, Washington, D.C., 1988.

<sup>12</sup>Marlon Boarnet, "Highways and Economic Productivity: Interpreting the Evidence," *Journal of Planning Literature*, Vol. 11, No. 4, May 1997, pp. 476-486.

exceed \$30 billion annually).<sup>13</sup> A few studies have estimated the effect of environmental regulations on the total number of new manufacturing plants or on overall employment and found little effect—although new plant formation in pollution-intensive industries was reduced.<sup>14</sup> In addition to environmental regulations, social regulations can affect business activity, especially employment levels. Recent studies of the effect of changes in wrongful termination doctrines across states, for example, show that although the direct legal costs in states with more expansive doctrines are small, the employment effects can be quite large—perhaps 3 percent or more of total state employment.<sup>15</sup> Survey evidence shows that regulatory practices are a major concern for businesses of all types, and many localities themselves have started to respond to these perceptions by creating programs to streamline the permitting process, reconcile conflicting standards, and collect more timely information on the needs of local businesses.<sup>16</sup>

In conclusion, the results from econometric research and tax climate studies suggest that the relevant factors in business location and expansion decisions—and their relative importance—differ widely across industries and metropolitan areas. The lack of detailed regional data limits our ability to put precise estimates on the size of many of these effects but several key factors have been identified. Differences in

---

<sup>13</sup>Clifford Winston, “Economic Deregulation: Days of Reckoning for Microeconomists,” *Journal of Economic Literature*, September 1993, pp. 1263–1289.

<sup>14</sup>Robert Repetto, *Jobs, Competitiveness, and Environmental Regulation*, World Resources Institute, Washington, D.C., March 1995.

<sup>15</sup>James N. Dertouzos and Lynn A. Karoly, *Labor Market Responses to Employer Liability*, RAND, R-3989-ICJ, Santa Monica, California, 1992; J. N. Dertouzos, E. Holland, and P. Ebener, *The Legal and Economic Consequences of Wrongful Termination*, RAND, R-3602-ICJ, Santa Monica, California, 1988.

<sup>16</sup>This was also the focus of California state government’s Red Teams.

productivity-related factors—an educated workforce, adequate streets and highways, less intrusive regulation—appear to matter more than differences in tax rates in determining regional growth rates. The experience in California during the latest recession reinforces this picture of variability. Some regions fared better than the nation as a whole, whereas Los Angeles experienced the steepest decline in employment since the Depression. Some industries, such as aerospace, saw employment fall by half, but growth in the service sector merely slowed for a few years. The next chapter provides some concrete examples of the type of business climate variation that exists across both regions and industries in California.

## 4. Evidence of Variation in Business Climate Factors

---

The preceding chapters offer a critique of business climate rankings and summarize the factors that the economic literature has found to matter for regional growth. In this chapter, we provide examples of the heterogeneity of these factors among industries and regions to support the argument that business climates operate at the intersection of industry and region (and in some cases, city).

### **Variation by Industry**

The basic environment of each industry—its production function, market structure, regulatory burden, and tax policies—is unique. Nevertheless, at the most aggregated level, analysts distinguish broadly between industries that sell (or “export”) most of their output outside their local region and industries that produce goods and services mainly for local consumption. (Another commonly used expression for this distinction is “traded” versus “nontraded” goods.) Export industries are

assumed to be more sensitive to costs than other industries because they compete in a national or international market. Any cost differentials that are not accompanied by higher productivity will leave the local industry at a competitive disadvantage; this is one reason why many business climate studies have focused on the manufacturing sector (another important reason is that the available data are much better than those for other sectors).<sup>1</sup>

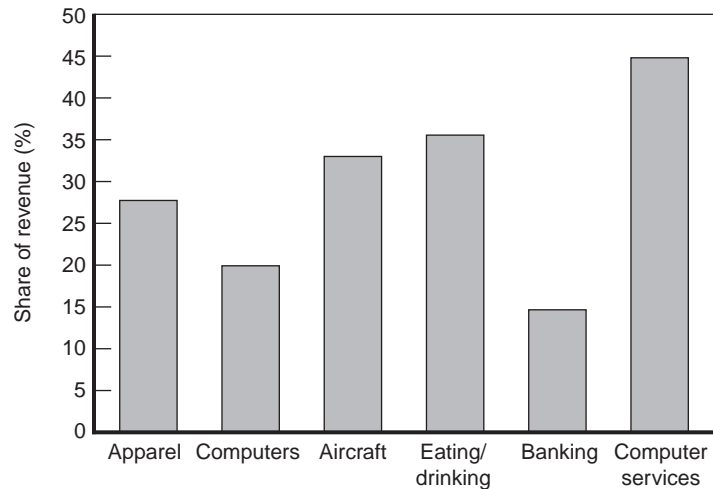
The heterogeneity of the business climate across industries can be demonstrated by examining several climate factors in six illustrative industries. Three are manufacturing industries (apparel, computer equipment, and aircraft) and three are in the broadly defined service sector (eating and drinking establishments, classified in the retail trade sector; banking; and computer services). These six industries accounted for almost 1.5 million jobs in California in 1992, or 11 percent of nonfarm employment in the state at the time, and their fortunes over the last business cycle varied widely.

### ***Human Capital: Wages and Education***

For all the concern about tax levels, the economic studies mentioned above show that wage levels have a stronger effect on economic performance. The wages measured in these studies were typically average manufacturing wages. Figure 4.1 shows the share of total sales that labor costs—salary and benefits—represent in each of these six industries. Within the three manufacturing industries, labor costs ranged from 20 percent to 33 percent of revenues. In the three service industries, labor

---

<sup>1</sup>Firms in export industries that depend upon physical attributes of a given location—as in agriculture and extractive industries such as mining and forestry—do not have the same locational flexibility that manufacturing firms typically do.



SOURCE: 1992 Economic Census.

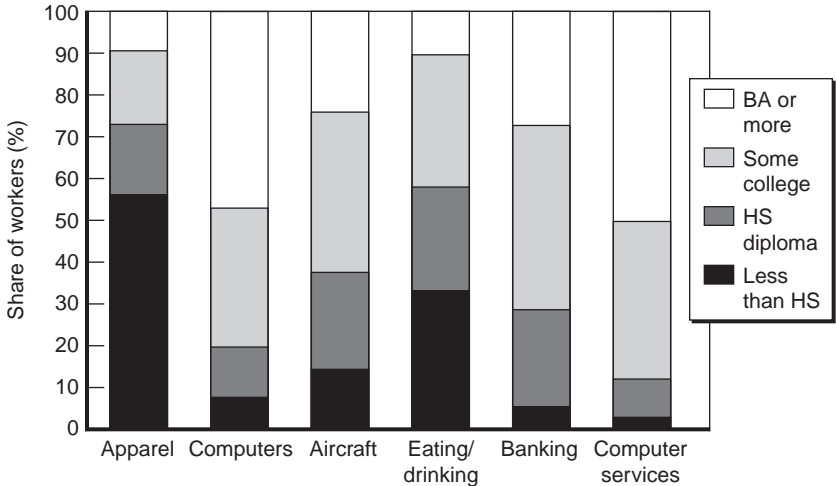
**Figure 4.1—Labor Cost as a Share of Total Sales, by Industry**

costs varied even more dramatically—from 14 percent in banking to almost 45 percent in computer services. Whatever the effect of wages on profits is in the aggregate, it has much less effect on banks than it does on computer services.

Although its importance varies across industries, the quality of the local labor force remains an important component of the business climate. In the traditional business climate indexes, higher wages were assumed to have a negative effect on business profitability since they raised costs without increasing output. However, higher wages might also reflect more skilled workers or the occupational mix within a given region, in which case wages could be positively associated with business growth unless the productivity of the workforce is controlled for. Some economic studies, for example, have shown that the negative effect of higher wages on economic performance is insignificant when labor

productivity is accounted for. Since different industries have varying needs for skilled labor, examining average wages or educational attainment does not help policymakers understand a given industry’s needs.

As Figure 4.2 shows, the labor forces in each of these six industries have very different skill levels. When a retail chief executive officer (CEO) speaks of the need for an educated labor force, he is almost certainly not referring to the same kind of education as a computer services CEO would.<sup>2</sup> In computer equipment and computer services, half the workforce has at least a bachelor’s degree. At the other end of the spectrum, less than 10 percent of the apparel workers have a



SOURCE: 1992 Economic Census.

**Figure 4.2—Educational Attainment, by Industry**

<sup>2</sup>On the other hand, both executives are likely to be concerned about the education their own children receive. This would fall in the quality-of-life dimension of the business climate—an area fraught with measurement and value issues.

bachelor's degree, and more than half have not completed high school. In assessing the business climate, the fraction of the overall population with a college degree—a commonly used measure of labor force quality—would have little relevance for the staffing needs of an apparel firm or a restaurant.<sup>3</sup> The condition of the K–12 education system would have a much stronger bearing on their ability to hire appropriate workers, especially since they are unlikely to recruit employees from beyond the local area. In computer equipment manufacturing or computer services, however, the quality of local universities would be more important than the K–12 system (although these firms are also more likely to engage in nationwide recruiting).

### ***Business Taxes***

In 1993, California modified two of the biggest differences between its corporate tax structure and that of other states: the sales tax on equipment purchases and the unitary tax. Before the 1993 Omnibus Tax Bill, businesses incurred a sales tax liability whenever they purchased capital equipment. Although the bill exempted most kinds of manufacturing equipment from the sales tax, it had more of an effect on some firms than others. An exact breakdown of the exemptions is not available but, in 1992, capital equipment purchases amounted to only 1 percent of sales in apparel firms, compared to 2 percent in aircraft firms and over 4 percent in computer manufacturing firms. The effects of the tax bill probably differed even within industries. As the Washington State tax study showed, sensitivity to these kinds of taxes is often much higher for newer and more capital-intensive firms than for older and

---

<sup>3</sup>The relative size of the educated and affluent population could still affect the local demand for the goods and services these firms produce.



more labor-intensive firms. Newer and more capital-intensive firms are important to California's economy, so the change was a welcome one—but reducing this tax liability did little to change the business climate for apparel firms or restaurants.

Because of Proposition 13, the property tax burden a firm faces depends on when it purchased its property. Older firms that owned most of their current real property before 1978 face very low property tax liabilities compared to comparably priced property in other states. New firms not only face high real estate prices but must pay property taxes that may be several times higher than those paid by the firm selling the property. From the authors' analysis of all parcels zoned as industrial in one California county, it seems that the property tax bill for a given property rises by almost 3 percent for each year after 1977 that the property was purchased.<sup>4</sup> This situation suggests that few firms actually face the average property tax—most pay either much less or much more than the average. It also implies that there are disincentives to expansion that vary by plant vintage.

### ***Regulation***

The specific regulatory climate facing each industry is difficult to measure. No sources of data are available to estimate the extent of the regulatory burden that firms face or the cost they face in complying with particular regulations. There are certainly large differences in the cost of compliance with environmental regulations, depending on the production processes of a given industry. For example, commercial

---

<sup>4</sup>Alameda County, using FY 1995–1996 data from the County Assessor's Office. The change in assessed value as a function of the last year sold was estimated after controlling for the year built, size of parcel and structure, initial assessed value and percentage improvement, and the city.

aircraft built in Los Angeles must be flown to Arizona to be painted because of the stringent air quality standards set by the Southern California Air Quality Management District. Such regulations would presumably entail little if any costs for computer services firms or banks and less cost for apparel firms than for aircraft or computer manufacturing firms (which have their own costs associated with waste solvents). The cost of reducing sulfur oxide emissions varies from nothing for dry cleaners to \$200 per ton for glass-bottle manufacturers to \$20,000 per ton for electric utilities.<sup>5</sup> Estimating the relative incidence of regulatory costs for different industries and workers is an important area for further investigation.

A recent study of the employment effect of social regulation provides some sense of the incidence of these costs. The study estimated the employment loss stemming from wrongful termination doctrines and found that employment in the states with the most liberal doctrines was 2 to 5 percent lower than before the doctrines were adopted. Such a decline is similar to that expected from a 10 percent increase in average wages.<sup>6</sup> The relative employment decline following adoption of the most liberal tort version of wrongful termination doctrine was insignificant in the highly unionized manufacturing sector but was almost 3 percent for the nonmanufacturing sector as a whole. The most affected were the finance, insurance, and real estate industries, with a 7.2 percent decline, followed by the service industries, with a 5.5 percent decline in

---

<sup>5</sup>Robert W. Hahn and Roger G. Noll, "Designing a Market for Tradable Emissions Permits," in Wesley Magat (ed.), *Reform of Environmental Regulation*, Lexington Books, 1982, pp. 119-146.

<sup>6</sup>Dertouzos and Karoly, *op. cit.*

employment. These magnitudes are as large or larger than the sectoral employment declines typically seen in recessions.

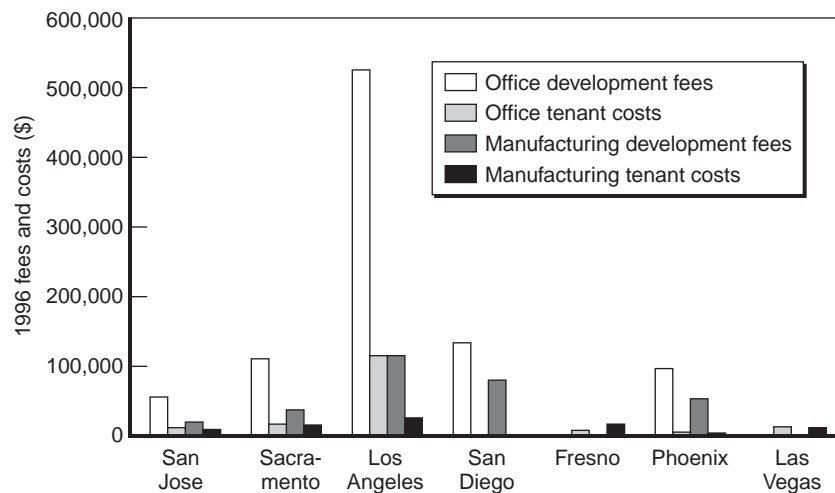
## **Variation by Region**

As noted in Chapter 2, business climate studies compare California averages for inputs such as home prices, office rents, energy costs, and labor force quality with the averages for competitor states. But no businesses actually locate in “California”—they locate in a city or unincorporated area within the state. Although many of these costs faced by businesses are high almost anywhere in urban areas of California, there is still almost as much variation among cities in California as there is among cities in other states. Setting aside the question of whether the higher prices reflect the value of unmeasured amenities in the state, it can be useful to quantify the extent of regional variation. Regional prices vary widely, as do the regional educational and industrial distributions and local governments’ responsiveness to the needs of business.

The economic research on business climate factors shows that their effects are strongest on location decisions made within metropolitan areas. For example, the estimated effect of business taxes on the level of business activity is six times larger in studies that examined *intraregional* location decisions than in studies of *interregional* decisions. This makes sense, in that most business location decisions revolve around broad regional attributes such as access to markets and transportation nodes, appropriate labor force, and specialized suppliers. Taxes are rarely a deciding factor at the first cut. Once a region has been selected and the larger factors already accounted for, local land prices and taxes will influence where in the region a plant will locate (or expand).

### **Business Taxes and Fees**

At the local level, business taxation comes in the form of business license fees, utility user taxes, and developer's fees (e.g., impact fees for planning, traffic mitigation, and parks).<sup>7</sup> Figure 4.3 highlights the variation across central cities in initial development fees and ongoing tenant costs (i.e., license fees and utility taxes) facing a representative professional service and manufacturing firm.<sup>8</sup> Although Los Angeles is much more expensive than the other regions, fees and costs in



SOURCE: Kosmont Survey.

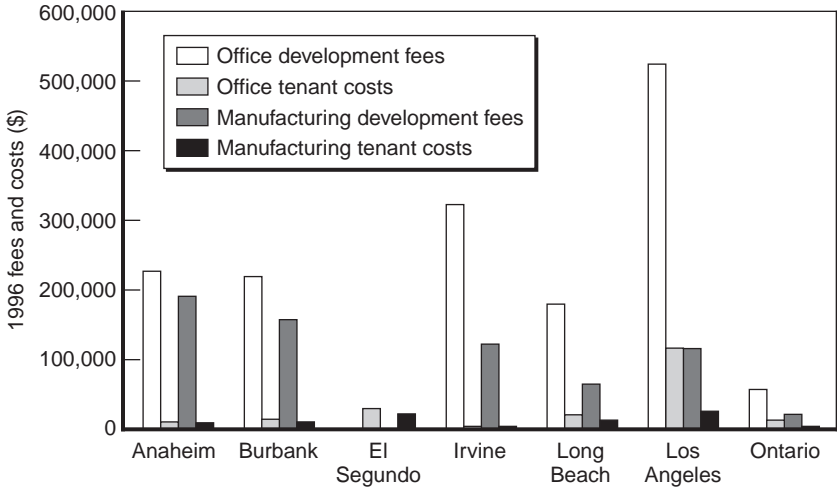
**Figure 4.3—Development and Tenant Fees for Representative Firms**

<sup>7</sup>In most states, property tax rates also vary significantly at the local level. Since the passage of Proposition 13 and AB 8, there is little local variation in property tax levels among cities in California.

<sup>8</sup>Note that these estimates are for *cities* rather than *regions*. They come from the case study comparison section of Kosmont & Associates, *Kosmont Survey of Municipal Business Fees, Taxes, and Economic Incentives*, Sherman Oaks, California, 1996. The representative firms used in the case studies cited here are a 30,000 square foot law firm office and a 50,000 square foot electrical equipment manufacturing facility.

Sacramento and San Diego are comparable to those in Phoenix and are noticeably lower in San Jose. Both Fresno and Las Vegas have essentially no such taxes and fees.<sup>9</sup> In Figure 4.3, costs are compared across the central city in each of the regions. As mentioned above, there is good reason to believe that taxes and fees are much less important to firms making interregional location decisions than to those making intraregional decisions. A more relevant comparison in making such decisions is in the relative expense of locating in different municipalities in the same general area.

To illustrate this comparison, Figure 4.4 shows the range of development fees and tenant costs just for cities within the Los Angeles



SOURCE: Kosmont Survey.

**Figure 4.4—Representative Fees and Costs Within the Los Angeles Region**

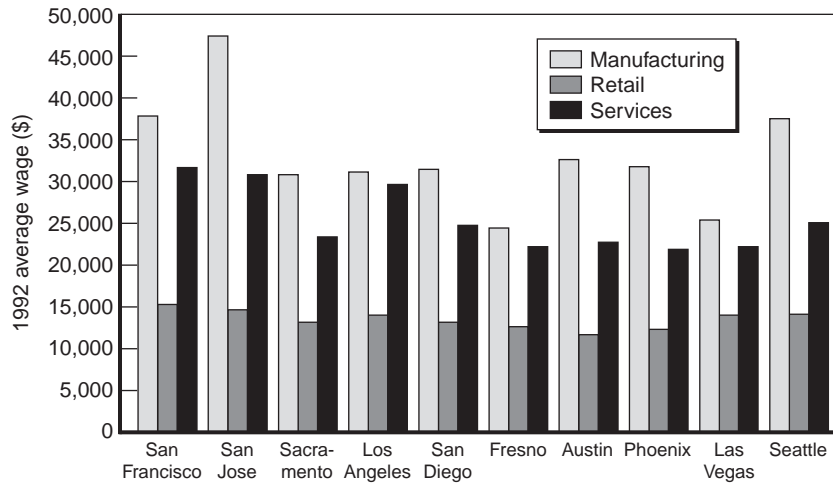
<sup>9</sup>San Francisco was not included among the case studies in the Kosmont Survey so it is not included in this chart. The city was also missing from the data underlying Figure 4.9.

region. A city with relatively high taxes and fees certainly risks losing businesses to nearby cities, all else equal, but cities that are more appealing locations for other reasons may be able to extract some extra taxes and fees before they risk losing firms. Where the taxation threshold lies can only be known once it has been crossed and there is an outflow (or decline in growth) of businesses. Los Angeles is still in a class by itself in terms of its high development fees and tenant costs for professional service firms, but the city is relatively competitive in terms of the level of fees and costs faced by manufacturing firms. (Even on the more narrowly defined issue of local taxes, a given city's relative tax climate can differ widely across industries, as was discussed in the previous section.)

### **Wages**

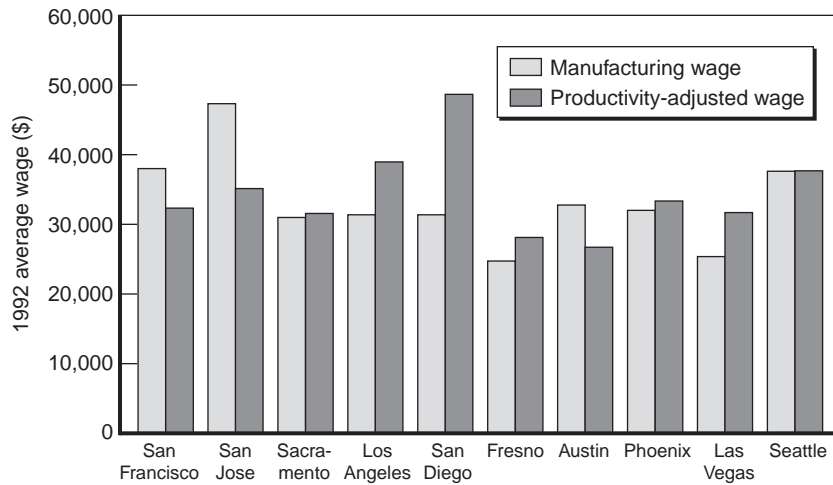
Figure 4.5 shows average regional and aggregate state wages for three sectors—manufacturing, retail trade, and services. Wages are fairly uniform within retail trade, but there is quite a bit of variation across the regions for manufacturing and service wages. The average wage across the state, however, provides little useful information to a business that is choosing where to site a new plant, even within a particular industrial sector. It also does not reflect the possible employment effect of mandated minimum wages on industries hiring primarily low-skill workers.

Since wages show wide variation across industries, and the industrial mix within regions also varies, average wages may differ across regions in a manner that is unrelated to competitiveness. To address the wage competitiveness issue, Figure 4.6 compares manufacturing wages across the main regions of the state and some neighboring competitor



SOURCE: 1992 Economic Census.

**Figure 4.5—Average Regional Wages, by Sector**



SOURCE: 1992 Economic Census.

**Figure 4.6—Average Manufacturing Wages, Adjusted for Labor Productivity**

regions.<sup>10</sup> The figure shows both the actual manufacturing wage in each region and the wage when adjusted for productivity.<sup>11</sup> There is little systematic difference between California regional wages and those in competing regions. Although the regional variation is the same when wages are adjusted for productivity, the relative rankings change quite a bit. For example, average manufacturing wages in San Jose are 45 percent higher than they are in Austin; after correcting for productivity differences they are only 30 percent higher. These numbers do not imply that, within a given industry, workers in San Jose are paid higher wages than those in Austin when productivity is accounted for—because even between San Jose and Austin there are important differences in industry mix. They do suggest that average manufacturing wage differences across regions should not be confused with competitiveness problems.

### ***Education***

In the previous section on industry variation, Figure 4.2 showed the differences in the educational attainment of employees across the selected industries. There is also regional variation in the educational attainment of the local labor force, although the variation across regions is not nearly as extreme as it is across industries. The primary determinant of the level of education in a region's labor force is the local industry mix.

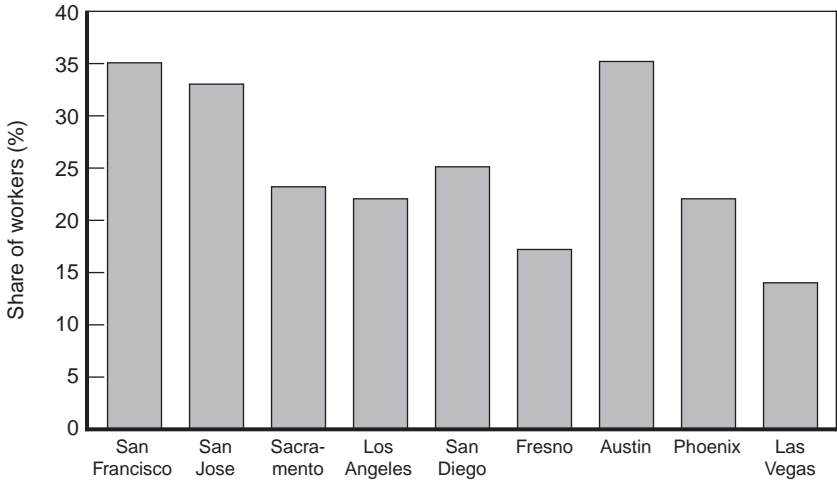
---

<sup>10</sup>Note that these wage rates are also affected by the income tax rates in each state. Arizona, Texas, and Washington had significantly lower income taxes per \$1,000 of personal income than did California.

<sup>11</sup>Productivity-adjusted wages divide the average manufacturing wage by the average value-added per worker. (The reported value in the Economic Census is in units of \$1,000 value-added per worker; this figure uses \$10 value-added per worker so that both wages are more readily comparable in the figure. The relative rankings are unaffected by this change.)



Occupational distributions within a given industry are fairly uniform across states, so one would expect that only regions with very different industrial mixes would show large differences in the education levels of the overall labor force. Figure 4.7 shows the share of the labor force with at least a bachelor's degree in each of the regions. The regions known for their high-technology industries—San Francisco, San Jose, and Austin—have highly educated labor forces. The other regions are more heterogeneous in educational attainment, although they are more similar to each other in this regard than they are to the high-tech regions. Once again, the state average (of 23 percent) does not provide much guidance as to the educational attainment of the local labor force that a given firm would actually face.



SOURCE: 1990 City & Country Data Book, U.S. Census Bureau.

Figure 4.7—Share of Labor Force with at Least a Bachelor's Degree

## ***Housing Prices***

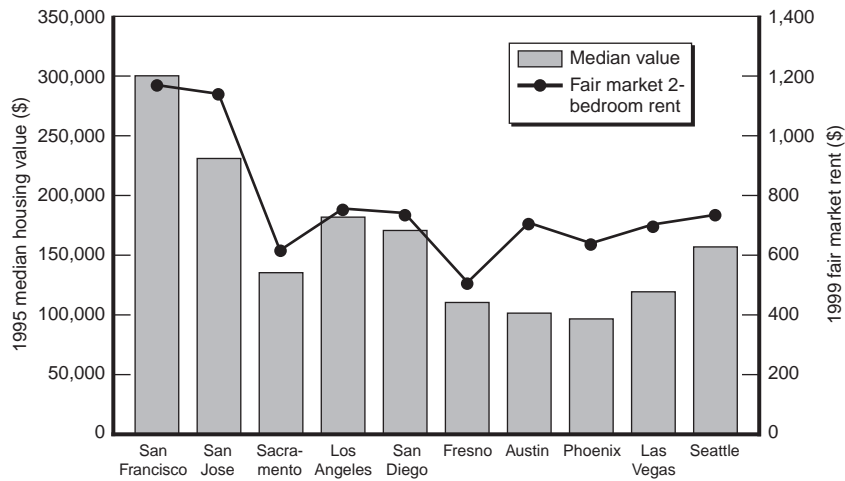
Housing prices are frequently included in business climate comparisons, and housing is an important factor in an area's quality of life. However, it is not clear how important housing prices are to the business climate, over and above their effect on wages. Higher housing prices relative to wages may make recruiting new employees from other regions more difficult and may cause new entrants into the labor force to leave the area. Housing prices are not direct factors in business costs, however, so including them as well as wages in business climate comparisons is redundant.

Figure 4.8 shows the median value<sup>12</sup> and “fair market” rent<sup>13</sup> for housing in the selected regions. San Francisco and San Jose are much more expensive housing markets than elsewhere in California, and housing prices in most of the metropolitan areas of California are higher than in the other states. Note that Sacramento and Fresno are much less expensive than the rest of California and are comparable to regions in other states. More important, median rents are much higher relative to median housing value in the other states than in California. This means that rents in the competing regions are well within the range of rents in Sacramento, Los Angeles, San Diego, and Fresno—in short, anywhere but the Bay area. Fresno was the most affordable rental market in this group, with very competitive home values—a fact that might help

---

<sup>12</sup>Median home value comes from the American Housing Survey, a biennial survey of housing units conducted by the Census Bureau for the U.S. Department of Housing and Urban Development (HUD). It does not represent prices of homes actually sold.

<sup>13</sup>“Fair market” rent is a term used by HUD to describe the 40th percentile gross rent, by type of apartment unit (two-bedroom apartments are used here). It represents what HUD calls gross rent—actual rent plus the cost of nontelephone utilities, for recent movers—and is surveyed annually.



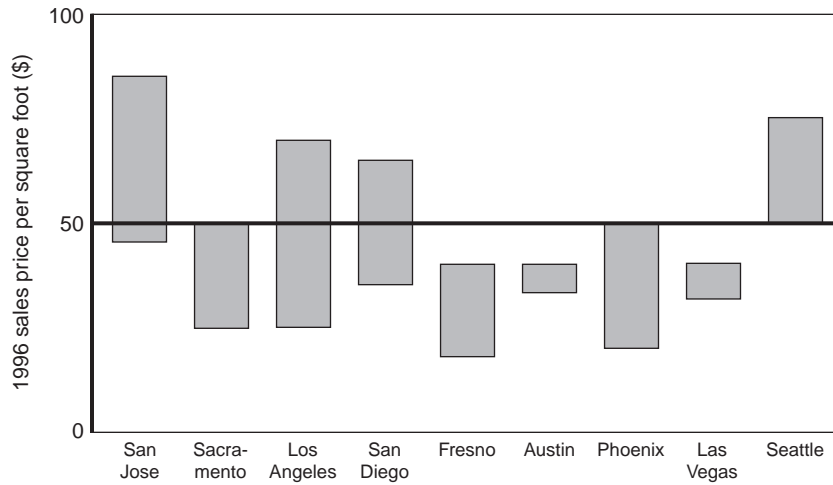
SOURCE: American Housing Survey, 1995; HUD, Fair Market Rents for the Section 8 Program—FY 1999.

**Figure 4.8—Median Housing Value and Monthly “Fair Market” Rent, by Region**

explain why the Fresno metropolitan area has been one of the fastest growing in the state.

### **Business Rents**

Sale and lease values for business space are more directly relevant for business purposes than are housing costs. Prices vary widely even within a given city, depending on whether a property is considered Class A (highest quality) or not and its exact location within a city. Given this price variation, a range of values is reported for most markets. Figure 4.9 shows the range of sales prices (per square foot) for industrial space in the



SOURCE: Comparative Statistics of Industrial Office Real Estate Markets 1996.

**Figure 4.9—Range of Industrial Space Sales Prices, by Region**

central city (in most cases) of each region.<sup>14</sup> Fresno and Sacramento were very competitive with the regions in other states, and only San Jose was vastly more expensive. Even in Los Angeles and San Diego, the low-end industrial space was similar in price to the same kind of property in the other states' regions. However, there was a much wider range of prices between the prime and sub-prime properties. Sales prices for office space were similarly distributed within California but were unavailable for the other states; office rents were similar except for Las Vegas—where downtown office space was the most expensive of all the regions.

<sup>14</sup>No information was available for San Francisco; only suburb values were reported for San Jose; suburb values rather than central business district values were used for Las Vegas.

Looking at these figures, it is once again hard to discern a California problem when examining statewide averages. There is large variation in almost every measure across industries and across regions, and some regions commonly seen as taking business away from California do not have dramatically lower costs. California's regions also look very competitive in the educational attainment of their labor forces and in their productivity-adjusted manufacturing wages.

## 5. Conclusions

---

In the rivalry between states for business, business climate rankings have a strong appeal to business leaders, politicians, and the media. Having a single number that captures the “competitiveness” of a state is guaranteed to attract media attention and can stimulate policy debates. Given that aggregate business activity in a state is the ultimate source of most public revenues, policymakers are often tempted to increase taxes on business activity to provide additional public goods and services—especially when the costs to consumers and workers are indirect and therefore difficult to identify. These costs can take the form of taxes, regulations, fees and exactions, or requirements placed upon firms. In the face of this temptation, it is useful to have some means of alerting legislators to the consequences of these activities. If the costs imposed on firms in a given locality are sufficiently higher than those in competing areas, some of those firms will quite sensibly consider relocating or expanding elsewhere.

This report has no quarrel with the notion that the costs imposed on businesses by the public sector must not only be balanced with their benefits but also need to be imposed with an eye toward what other localities are doing. Instead, our point is that California is too large and diverse to be the appropriate level of analysis for the business climate debate. Business climate rankings certainly have their faults, but the biggest problem with using statewide comparisons is that businesses generally choose to locate within a particular region rather than a state. This assertion is supported not only by conversations with, and surveys of, business leaders but by the body of economic research that has examined the effects of business climate factors on economic growth. The estimated effect of differences in taxes and other factors on economic activity is significantly larger for *intrametropolitan* area comparisons than for *intermetropolitan* comparisons. Therefore, policies meant to address business needs should be better targeted at problems faced by specific industries and regions.

The large variation in industrial and regional characteristics that were presented in the previous chapters show that the climate perceived from statewide averages is not that faced by most firms. The large degree of variation across regions and industries may also help explain why it is sometimes so difficult to attain a consensus in the legislature. For example, policies aimed at improving education for the sake of the business climate need to be focused on the needs of particular industries. The immediate employment needs of Silicon Valley computer equipment and computer services firms are not going to be met by local elementary school reforms—as important as that may be in the long run. Improvements in undergraduate and graduate education (and perhaps community college vocational programs) would have the most direct and

immediate effect on their needs. On the other hand, local retail firms might benefit quickly from improvements to the local K–12 system. In an environment of constrained public resources, it is imperative that policy interventions be better targeted at the specific problems they are meant to solve.

The diversity in California’s economy is a beneficial fact of life. Policymakers need to get feedback on how their actions affect the business community, but there is no single community for them to hear from. Efforts such as the annual “Index of Silicon Valley”<sup>1</sup> are examples of how business climate studies can be better targeted regionally (and in this particular example, sectorally as well). By focusing on a specific region, the reports give policymakers information that is focused on the factors that matter most to local firms and workers. Only then can legislators make informed policy decisions concerning the many business climates of California. The task of examining the “microclimate” at the intersection of industry and region is time-consuming and costly, but it is essential when crafting relief for specific problems. The annual *Economic Report of the Governor* would be a natural place to begin this kind of detailed approach, because it expresses the administration’s assessment of the economy and the government’s role in it. The Legislative Analyst’s Office would be another good source for this kind of information, in its role as adviser to the state legislature. Policy initiatives could thereby be tailored toward the specific business problems outlined in these reports.

---

<sup>1</sup> 1998 *Index of Silicon Valley*, op. cit.



## About the Authors

---

### **MICHAEL DARDIA**

Michael Dardia is a research fellow at the Public Policy Institute of California. His research interests include redevelopment, regional economics, and industrial restructuring. In previous work, he has examined defense conversion and the effects of defense cuts on the California economy. He is the author of publications on redevelopment, defense spending, and the aerospace industry. He holds a B.S. in biological sciences from the State University of New York at Stony Brook, an M.S. in policy analysis and management from that university's W. Averell Harriman College of Management and Policy Analysis, and a Ph.D. in public policy analysis from the RAND Graduate School of Policy Studies.

### **SHERMAN LUK**

Sherman Luk, who is currently building an e-commerce/Internet company, was recently a research assistant at the Public Policy Institute of California. He specialized in the competitive analysis of technology industries, economic development strategy of technology regions, community indicators, and application of technology in urban planning. Previously he worked for information systems consulting and technology services companies. He holds a B.S. in aerospace engineering from MIT, an M.S. in engineering-economic systems from Stanford University, and a Master's in City and Regional Planning and a Certificate in Management of Technology from the University of California, Berkeley.