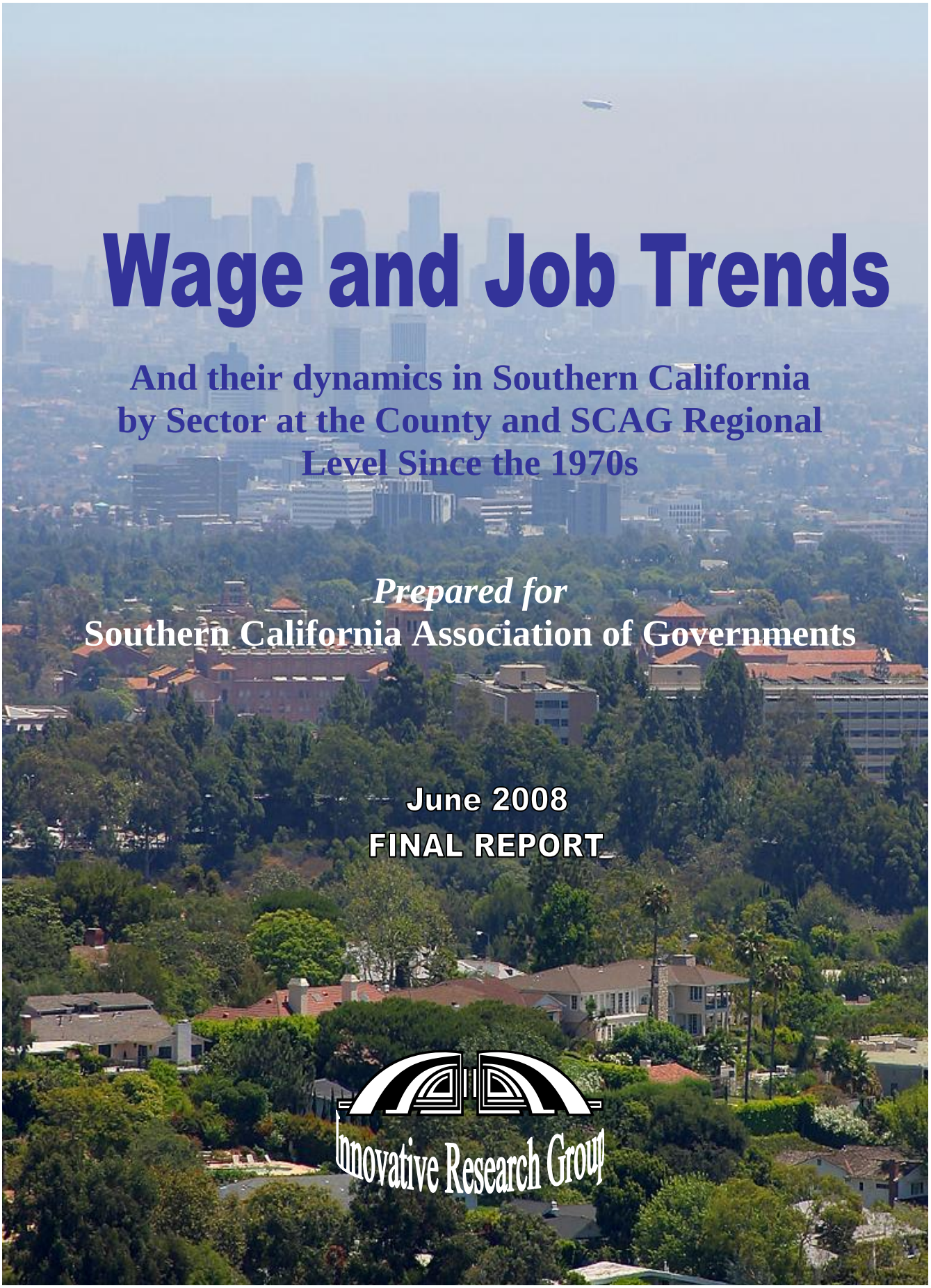

Wage and Job Trends

And their dynamics in Southern California by Sector at the County and SCAG Regional Level Since the 1970s

Prepared for

Southern California Association of Governments

June 2008

FINAL REPORT

Innovative Research Group

Acknowledgment

We thank the management of the Southern California Association of Governments (SCAG) for giving us the opportunity to work on this project. Their instruction and recommendation in setting the principal parameters of the study were extremely useful and instrumental in the initial design of the study. Our special gratitude goes to Mr. Ping Chang, Program Manager for Performance Assessment and Monitoring of the SCAG for his invaluable inputs during the research design and for helping us to frame the principal objectives of this study from the onset and supporting us throughout its conduct. We have enjoyed and benefited a great deal from our frequent discussions and meetings with Mr. Chang either in person or through conference calls during the course of this study. We are grateful for Ms. Huasha Liu, Manager of Program Development and Monitoring Division for her support.

We are very appreciative of the efforts of our data collection staff and confident about the high standards of integrity they showed in pursuing the guidelines they were given for their professional conduct. This is an important issue in every project concerned with human reaction when asked to give accurate, and even personal, information about themselves and their perceptions, concerns, and professional views. Proficient behavior of our researchers is the seal of successful research conduct. We are grateful that our assistants earned the trust of hundreds of industry representatives within the region while they were conducting the survey.

We would like to thank Ms. Heidi Creed, our senior research assistant and other graduate assistants: Ms. Sapna Desai, Pawan Nandwani, Ankush Malhotra, and Srinivas Tam Tam Guru for helping with gathering and processing published data. We acknowledge and express our appreciation for the skillful editing of this report by Ms. Gina Smurthwaite. We are deeply grateful for the advice and technical assistance of our senior consultant Dr. David Smith.

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Funding: The preparation of this report was financed in part through grants from the United States Department of Transportation. Additional financial assistance was provided by the California Department of Transportation.

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Executive Summary

This study looks at a wide spectrum of regional economic and social factors that have impacted job and wage trends during the last three decades. It used a review of current literature, a detailed analysis of published data on job and salary trends, and a survey of industry representatives to argue the causes and to determine the influence of contributing factors that created the trends.

Cultural diversity in California has grown and will continue to grow. There will continue to be a need and a challenge to enhance the skills of the less educated. At the same time the region has attracted and retained more highly educated workers. There is a need to accommodate the growing share as well as absolute number of older workers. The argument about appropriate education is a vital piece of creating prosperity in Southern California, and this has been confirmed by both the literature review and the industry representative survey.

Over the last three and a half decades, Orange and Ventura counties have shown a relatively lower rate of unemployment than other counties. Imperial County consistently has a much higher unemployment rate throughout the period than any other counties partly because of the seasonality of its large agriculture sector and also large migrant workers across the border. There has been a considerable shift in the contribution of various counties in creating wage and salary employment within the region.

A trend analysis of employment generated in various counties and across the region between 1972 and 2005 shows a significant increase in share of services as the principal sector in creating employment in the region. It indicates a significant decline in the manufacturing sector, which was formerly the chief sector for creating employment in Southern California. It also shows a decline in the contributions of agriculture and mining. There is a marginal increase in share of the construction sector over the entire period. Trade, finance, insurance, real estate, transportation and public utility showed some fluctuation but very little change.

Average wages in the U.S. and in Southern California failed to keep up with inflation, reinforcing a trend of wage stagnation and decline. There seems to be a significant growth in low-pay jobs and a widening of wage differential in Southern California. Overall, the wage scale differential in 2005 was larger than in any other period since the 1970s.

Despite a much higher level of household income in counties such as Orange and Ventura, the average wage per job since 1970 has often been lower than the state as a whole or the Los Angeles County, which is the biggest economic source in the SCAG region. This shows that most likely these counties, along with Riverside and San Bernardino, have much wider wage differentials.

The impact of globalization on an entrepreneurial economy imposes a dilemma on local job markets. High employment can be combined with high wages, just as low wages do not necessarily imply high employment. This indicates that by paying less employers do

not necessarily increase their hiring. Employment growth in California is clearly polarized between "good jobs" and "bad jobs" and relatively very little in between. A number of recent studies point out considerable regional differences within California. The Los Angeles metropolitan area showed an even more extreme pattern of job polarization than the state as a whole. In the San Francisco Bay Area, including Silicon Valley, "good jobs" dominated growth with little expansion of jobs at the low end or in the middle. This clearly suggests that the much-touted "new economy" of the 1990s is a geographically bounded phenomenon and one that may depend on a more polarized and less salutary set of economic arrangements in nearby regions.

Building on the knowledge gained from the survey of current literature and the study of the published data for the region, a comprehensive survey of industry representatives was carried out to find the opinion of regional industry representatives concerning the extent of the change in job and wage trends and the underlying economic and social reasons for such changes. The survey in various phases was conducted from October to December 2007. The major themes employed in the design of the questions include the following:

i. Demographics and industry information
ii. State of the county's economy, employment, jobs, and wage trends in the recent past, present, and near future
iii. Employment and wages and their trends in the industry of the respondents within each county of the region.
iv. Impact of outsourcing/globalization on jobs and wages in the industry and the county of the respondent
v. Impact of immigration on jobs and wages in the industry and the county of the respondent
vi. Impact of labor unions on jobs and wages in the industry and the county of the respondent
vii. Impact of market structure on jobs and wages in the industry and the county of the respondent.
viii. Impact of information/communication technology (ICT) on jobs and wages in the industry and the county of the respondent
ix. Reasons for skill shortages in the industry and the county of the respondent
x. Importance of housing cost in wage/salary determination in the industry and the county of the respondent
xi. Industry practice for wage and salary determination in relation to skill shortages

Current State of the Economy

More than half of the respondents gave a rating of good to the state of the economy in their county of work. A significant proportion (31.2%) gave it a fair rating. A small minority either believed that the state of the economy was excellent (9.9%) or poor (5.4%). On a county by county comparison, there is a higher level of positive (stated by excellent or good) view than negative (revealed by statement of fair or poor). There is, however, a considerable negative opinion among the respondents about the state of economy in their own county. Among them, Imperial, Ventura, Riverside, and San

Bernardino counties stand out. There is a significant difference in the opinion of business executives across different business sizes. Analysis of cross-tabulations indicates that there is a positive correlation between business size and the rating of economy in the county of the respondents' work.

State of the Economy in the Last Five Years

In every county, the percentage of those who believed the economic condition in the last five years got much worse or worse was higher than the percentage of those who believed the condition in their county got much better or better. The picture in Ventura County stands out as nearly 50% of its respondents believed that the economic condition in their county compared to five years ago got worse or far worse.

State of the Economy in the Next Five Years

As for the future, a quarter of the respondents believed that it will stay the same in the next five years. Almost a quarter of them believed that it will deteriorate. However, a proportionally higher percentage (40.4%) believed that it will improve in the next five years. Optimism in the future of the economy can be traced in observing higher percentages of opinion about improvement in the state of the respondents' economy in the next five years. On a comparative basis, Imperial County's respondents showed the highest share in believing that their county's economy will improve in the future.

Expectations about future job opportunities show significant differences across various businesses. There is a strong positive correlation between business size and the expected number of jobs that will be offered in the county of the respondents' work in the next five years. The positive expectation about future jobs for large size companies (52.3%) was significantly higher than expectations anticipated by companies with 20 or less employees (28.9%).

Such negative sentiment expressed by the owners/managers of small businesses is likely to affect their investment strategy as well as their future demand for labor.

Change in Availability of High-paying Jobs in the Recent Past

With a ratio of two to one, the respondents believed that the number of high-paying jobs in their county of work deteriorated rather than improved (37.3% deteriorated versus 18.1% believing that it improved). Almost a third of the respondents believed that it did not change in their industry within their own county. In all counties, the percentages of those who believed that the situation deteriorated are much higher than the percentages indicating improvement. In Riverside and San Bernardino counties, more than 50% of the respondents believed that the number of high-paying jobs deteriorated. In both Imperial and Los Angles counties, more than 40% of respondents believed that number of high-paying jobs in their industry within their own counties deteriorated. In Ventura County 50% of respondents believed that the number of high-paying jobs in their industry stayed the same. In contrast, the percentage of those who believed number of high-paying jobs improved in Ventura County was the lowest at 14.0%. Los Angeles County respondents registered the highest percentage of responses (26.6%) for stating that the number of high-paying jobs improved in their industry within their county.

Expectation about Availability of High-paying Jobs in Near Future

Across the counties, the answers to the near future expectation of number of high-paying jobs creates an interesting picture. At first glance in almost all counties 30% or more of the respondents believed that the situation with regard to the number of high-paying jobs will stay the same. The percentage of such responses is as high as 39% in Los Angeles County. Percentages of those who believed the number of high-paying jobs is likely to deteriorate is more than the percentages of those who believed it will improve in four of the six counties. These counties are Imperial, Orange, Riverside, and Ventura counties. In Riverside County some 50.0% of respondents believed that the overall number of high-paying jobs is likely to deteriorate compared with 20.5% who believed it would improve in the next five years. There is a significant correlation between business size and the respondents' assessment of the overall number of high-paying jobs in the county of their work and industry in the near future. The pattern of responses suggests the larger the business size the lower the chance of stating that the number of high-paying jobs is expected to deteriorate in the next five years.

Possible Sings of Skill Shortages in the Region

A high rate of increase in recruitment from outside Southern California may indicate certain skill shortages in some industries. It could also be indicative of a faster growth of economic activities that bring a region to expand its labor force beyond its own population growth. A majority of those who could answer this question thought that the situation did not change. However, out of those who detected a change, at a ratio of two to one, they believed that the rate of recruiting from outside increased rather than decreased.

Impact of Globalization

The highest proportion of respondents (45.0%) believed that globalization does not have any impact on overall wages in the industry of respondents within their county of work. However, with a ratio of two to one (25.2%) compared with 12.2%, the respondents believed that globalization has a negative impact on overall wages in their industry of work within their county than any positive impact. A proportionally significant number of respondents (17.6%) could not make up their minds and did not know how to respond to this question.

Impact of Immigration

Some 44.2% believed that immigration did not impact overall wages in the industry of their work and within their county of work. Indeed slightly more than a quarter believed that it had a positive impact. However, slightly more a fifth of the respondents believed that it had a negative impact.

More than fifty percent of the total respondents believed that immigration had no impact on the overall number of jobs offered within the county of their work. Almost a fifth of the respondents (19.33%) believed in the negative impact of immigration on the overall number of jobs offered in their industry of work within their county of work. A slightly

higher percentage of respondents (19.63%) believed in the positive impact of immigration on the overall number of jobs in their industry within their county of work.

Impact of Unionization

A significant proportion of respondents, almost a quarter of them, did not have any opinion on this subject. Some 50% of the respondents believed that labor unions have no effect on overall wages in their industry within their county of work.

Impact of Market Structure

The results of the survey show that nearly a quarter of the respondents did not have any opinion about how market structure affected the overall wages in their own industries. Out of the remaining groups, some 34.7% believed that it did not have any impact. Some 22.8% believed that market structure negatively impacted the overall wages in their industry within their county of work. Finally, 17.9% supported the idea of seeing a positive impact on overall wages based on market structure.

Impact of Information Technology and Communication

In response to the question concerning the impact of information technology and communication (ITC) on the overall number of jobs offered in the industry of respondents within their county of work, the same pattern of responses showing an agreement on the positive impact of ITC appear. However, the percentage of those who believed in the negative impact of ITC goes up significantly compared to the responses to the previous question on the impact of ITC (12.2%). This does not come as a surprise. As mentioned earlier, ITC can cause some job dislocation particularly in the short-term. The impact of reducing the number of jobs per se is still a debatable argument. The question regarding the impact of ITC on a number of high-paying jobs is of particular interest. The majority believed that it has a positive impact (44.7%). A significant proportion said that ITC has no impact on the number of high-paying jobs (34.0%). Some (15.2%) did not know how to answer this question, and only a small percentage of respondents believed in the negative impact of ITC in creating high-paying jobs.

Impact of National and Local Standards on Wage/Salary Determination

Some two-thirds (68%) of the businesses surveyed did not use national agreement in determination of their own wage or salary. This suggests that for most of the businesses surveyed, local standards and economic factors are more important than what occurs at the national level. Nonetheless, there is still a significant proportion (32%) that base their wage and salary determination on national level agreement.

Nearly 80% of businesses surveyed said that cost of housing was either very important or important in wage and salary determination in their industry within their county of work. Some 45.6% said that it is very important. Only 11.3% said that it is not important at all.

Factors Impacting Skill Shortages

In searching for possible reasons to explain some of the existing skill shortages, the following reasons are mentioned:

- Poor quality of candidates (20.3%)

- High staff turnover (18.1%)
- Lack of experience of recently recruited staff and failure to train staff (more than 15%)
- Recruitment problems and lack of staff motivation (more than 10%)

Policy Implications

Finally, a series of policy implications emerged that calls for actions and interventions to put in place elements of the needed changes for continuation of prosperity and creation of more jobs, particularly high-paying jobs in the future. A detailed list of these suggestions is found in the fourth section of this study. The following policy implications present some of the most important ones:

- Reduction in manufacturing jobs is a part of restructuring of the economy in Southern California and many other parts of the world. Reversing the situation is impractical given the increasing desire in opening up economic cooperation, promoting factor mobility, and trade liberalization. Instead, Southern California can take certain steps towards using the emerging conditions to its advantage. They may include
    - pertinent skill development where needed,
    - quality secondary and tertiary education as well as vocational and professional trainings, and
    - helping to create industry clusters.

- Restructuring of an economy at any level (national, regional, and local) creates political tension and puts different groups of those who may win or lose face to face. The following measures may help to bridge the gap and facilitate consensus that can make sense to people in affected areas.
    - Support of greater citizen participation in local and regional decision making by taking their pulse through scientific means of public inquiry.
    - Production and dissemination of information that would allow people know how present decisions may affect their lives in the near and distant future.

- This study showed that through structural changes certain industries have been and continue to be the source of low wage and salary employments in Southern California. Hospitality and agriculture are among the ones that pay some of the lowest wages and recruit a large segment of their employees from immigrants, from which a significant proportion may be undocumented. Increase in pay without any changes in productivity of labor force or legal structure of pay are unlikely. Therefore, the following measures may become necessary:
    - Helping to increase productivity of labor force through better training programs.
    - Encouraging use of technology that gradually reduces the need for an unskilled labor force. This may cause a reduction in availability of some jobs, but in turn will create more productive jobs with better pay.

- In the interim period, authorities should pay attention to the basic pressing needs of this group of workers such as housing, healthcare, and development of more productive skills. The issue of being in poverty for a period of one's life is different than being trapped in poverty. Upward mobility in economic status is a vital piece of creating a more prosperous economy for greater proportion of people in an area.

- The theoretical promise or threat of globalization is at best mixed. There is consensus about its positive long-term impact. As for the short-term, the job dislocation in certain areas may cause serious concerns despite its positive job creation impact in other areas. The notion of fair trade and creating a greater integration among local, regional, and national economies should be supported. This calls for the following actions to be taken:
  - Creation of a regional commission to look into business, labor, and environmental practices in countries that Southern California trades with.
  - Conduct of a comprehensive study focused on the short-, medium-, and long-term effects of globalization as occurring or likely to emerge in Southern California.

- Immigration reform is likely to bring upward pressures on wage rate in unskilled labor markets. The consequence on job creation or dislocation is unclear. Many studies show that many low-pay jobs are location specific and unlikely to deter businesses from such activities. Location comparative advantages are most evident in hospitality. Increases in wages are unlikely to send such businesses away from the region and in turn will improve the pay rate.

- Information/communication technology is a welcome development and any regional policy should be directed towards creating greater possibility for its further development. This can be pursued through the following measures:
  - Promoting factor mobility (labor and capital)
  - Paid internship, educational support, and creation of economic incentives for companies to move into desired areas
  - Greater network of private public business ties and cooperation

- Quality of life has merged as a factor impacting the hiring of workers in industries, particularly in the knowledge-based industries. The following steps may create greater appeal and attract the needed workforce to an area.
  - Improving quality of regional schooling, promotion of arts, and recreation facilities
  - Reducing youth gangs and other forms of violence
  - Creating a smart and innovative institution to take the pulse of the residence in an area by conducting regular surveys, promoting citizens' participation in local and regional public decision making, and developing a well-structured database of socio-economic indicators showing quality of life issues in a systematic manner.

Introduction

The Southern California region plays a significant role in the economy of the state. This region accounts for approximately 49% of California's population and 46% of California's jobs and has per capita income and wage levels that are slightly below the state average.[1] Globalization, international trade, and immigration have disproportionate effects on the dynamics of the SCAG region. Regional experiences of labor migration and factors bringing about such trends have had important consequences during the last three decades.

Change of technology and the emergence of a modern economy that connect different parts of the world through the World Wide Web brought an unimaginable convergence in the labor market where a growing proportion of jobs created are and may increasingly become unrelated to the geographical location of the workforce. Moreover we have seen the growing importance of the quality of life as a factor impacting labor markets, availability of labor and its level of compensation. This has grown to be a more important factor than has been in the past. Varying housing prices and significant gaps in cost of living in different parts of the United States in general and in Southern California in particular have added to the complexity of a study that embarks on finding the root causes of the recent changes in job trends and employment in the SCAG region. On a deeper level, there is a need to go beyond the effect of the first round of the external factors and look into the secondary impact of such development through changes in federal and state governments' policy and regulations on local and regional labor markets. There is also a need to look at factors affecting industrial structure in the region and the impact of such change on labor markets.

Looking at each of the above mentioned topic requires an extensive study of its own that falls outside the focus of this study. There is, however, a compelling need to look at most of the listed tasks and bring them together for the clear purpose of explaining the causes of the change in wage and employment trends in the region as a basis for development of much needed policy implications. The study looks at the following topics:

1. What can be Learned from Review of Current Literature

Our literature survey looks at a number of themes. The themes were chosen based on the existing economic views, opinions, and theories that try to explain the pertinent trends.

1.1. The Impact of Population Change on the Regional Labor Market

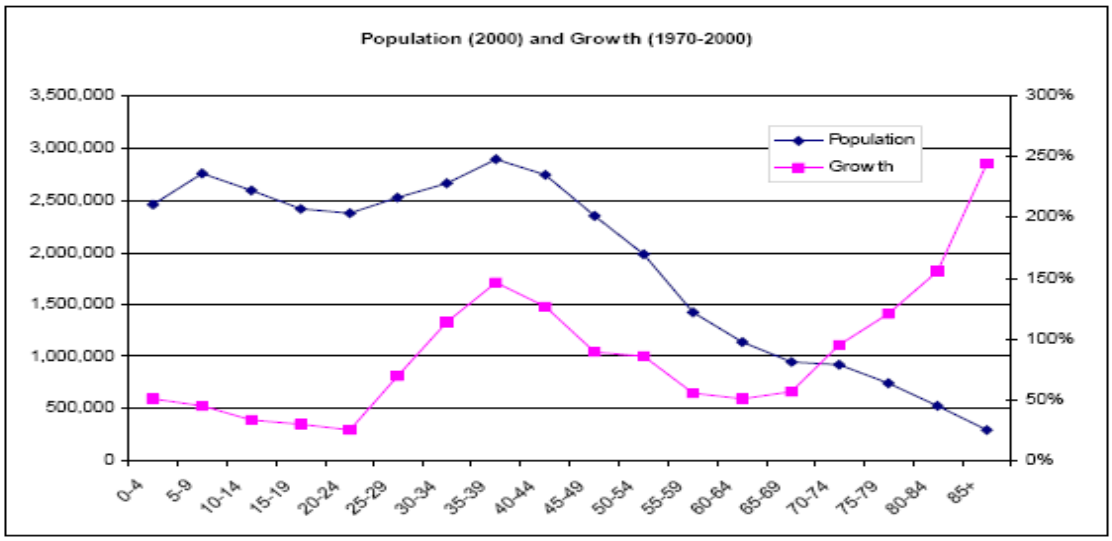
According to the Center for Continuing Study of the California Economy (CCSCE), a reasonable expectation is that California will add 3 million jobs, 5 million people, and 2

[1] Southern California Economic Base Report: A Product of the California Regional Economies Project, Prepared by Center for Continuing Study of the California Economy, 2004.

million households between 2005 and 2015.[2] The major debate is the role of public policies in creating the economic environment that can support such growth with a better quality of life for the present and the future population of the state. A major component of quality of life is the positive economic growth that can improve personal and household income.

Population trends have strong implications on the composition of the labor force. The UCLA School of Public Policy and Social Research study of Southern California's labor force showed that California has grown at an exceptional rate and has experienced high overall population growth between 1970 and 2000. This growth varies by age and race/ethnicity. The following chart represents California's population in year 2000 and its growth rates for different age groups from 1970 to 2000.

"Population structure has far-reaching consequences for the labor markets."

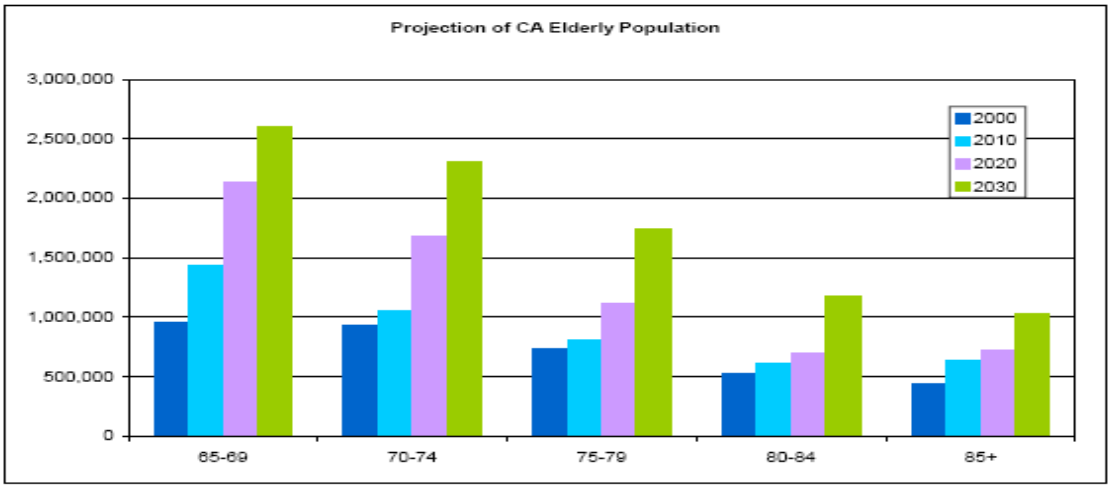


Source: US Census 5 percent PUMS data published in Paul Ong, Doug Houston, and Jennifer S. Wang (2003), Southern California's Labor Force: Diversity and Aging. UCLA School of Public Policy and Social Research

The above chart shows that the population age 70 and over has grown by over 100% and, according to existing population estimates, this group is projected to continue growing.[3] The chart below demonstrates this population, past and projected, by age group and by decade. The California Department of Finance estimates that in four decades the elderly will more than double in population. Population structure has far-reaching consequences for the labor markets.

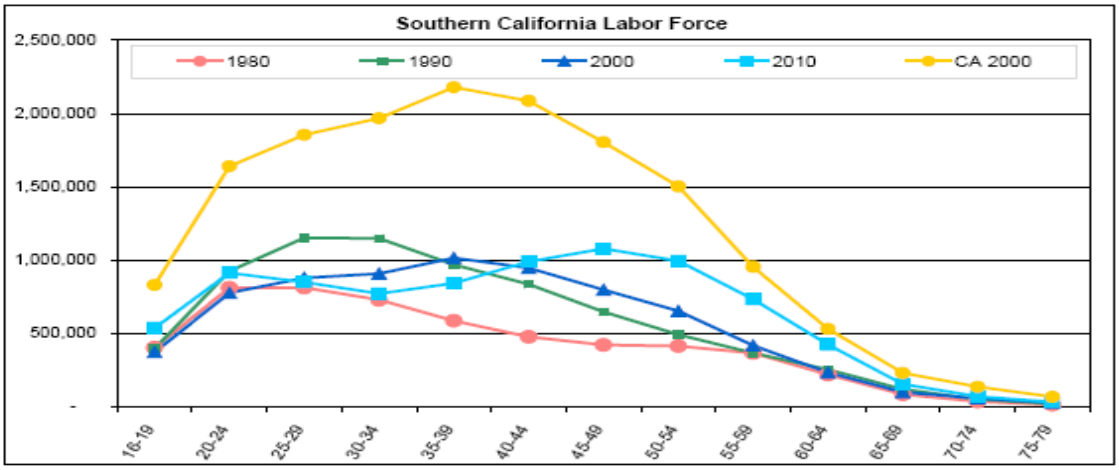
[2] Center for Continuing Study of the California Economy (2006), Opportunities and Challenges for the California Economy

[3] For more information see Paul Ong, Doug Houston, and Jennifer S. Wang (2003), Southern California's Labor Force: Diversity and Aging. The Ralph and Goldy Lewis Center for Regional Policy Studies, UCLA. See http://repositories.cdlib.org/cgi/viewcontent.cgi?article=1044&context=lewis



Source: US Census 5 percent PUMS data, published in Paul Ong, Doug Houston, and Jennifer S. Wang (2003), Southern California's Labor Force: Diversity and Aging. UCLA School of Public Policy and Social Research

Population dynamics directly impact the composition of the labor force with regards to emerging age structure. The existing information shows a bump in the age structure that can be seen in the following graph. It indicates that the 25 to 35 year old age group in 1980 as a whole showed the same highest component of all groups as the age group of 35 to 39 in 1990 and the age group of 45 to 55 in 2010. These pattern forms a "bump" in the labor force that "moves" across the older age group over time, a clear indication of the aging of the workforce over time. Indeed, in every decade the highest age group in the labor market is becoming older.



Source: US Census 5 percent PUMS data published in Paul Ong, Doug Houston, and Jennifer S. Wang (2003), Southern California's Labor Force: Diversity and Aging. UCLA School of Public Policy and Social Research

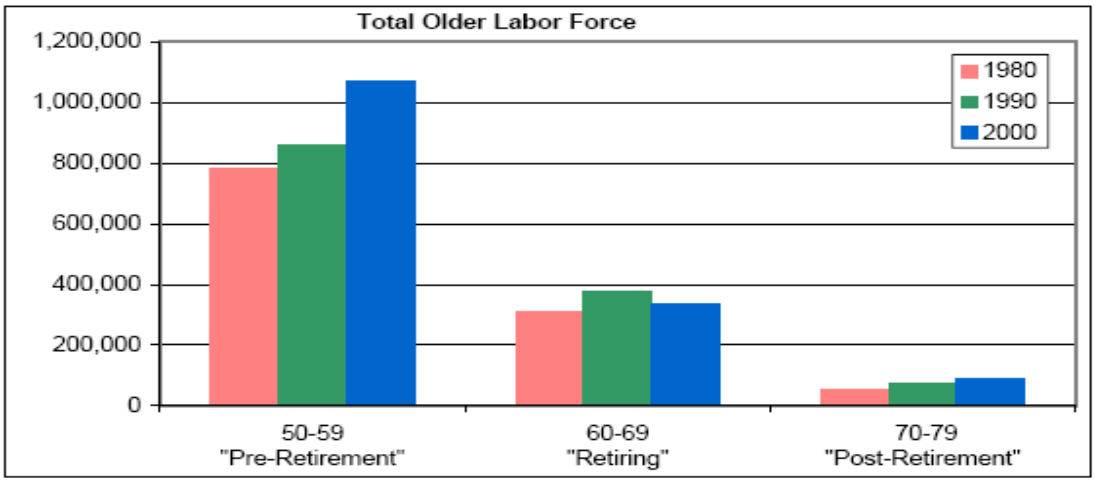
At the same time the Southern California's racial/ethnic composition has undergone substantial shifts. Non-Hispanic whites are on a declining trend in Southern California, showing a drop of almost 20% from 1980 to 2000.[4] In 2000, non-Hispanic whites

[4] Ibid.

comprised 45% of the labor force in Southern California compared to 77% at the national level.

The existing and projected data show that California is continuing to be an even more multi-ethnic and multi-racial state. Indeed Southern California has become increasingly comprised of Latinos between 1970 and 2000. In four decades, non-Hispanic whites dropped from over 70% of the overall population to less than 40%. While the black population remained stable, Latinos more than doubled, and Asian Pacific Islanders increased by multiple folds.[5]

While the older labor force is increasing by absolute size, the overall participation rate in the labor market remains unchanged. The number of older workers increased between 1990 and 2000 as the following chart shows. The growth is especially pronounced for the highly educated. As for the retirement rates between 1980 and 2000, the participation rate of older workers has remained constant. This trend holds true for the highly educated older workers.[6]



Source: US Census 5 percent PUMS data published in Paul Ong, Doug Houston, and Jennifer S. Wang (2003), Southern California's Labor Force: Diversity and Aging. UCLA School of Public Policy and Social Research

The foregoing discussion about the structure of population and its impact on California's labor force in general, and Southern California in particular, shows that

- ❖ the population and workforce are aging.
- ❖ moderate job growth is likely to continue.
- ❖ cultural diversity has grown and will continue to grow.
- ❖ there will continue to be a need to enhance the skills of the less educated.
- ❖ at the same time the region has attracted and retained more highly educated workers.
- ❖ there is a need to accommodate the growing absolute number of older workers.

"Average wages in the U.S. failed to keep up with inflation, reinforcing a trend of wage stagnation and decline."

[5] Ibid.
[6] Ibid.

In the Labor Center Policy Brief, a study published by UC Berkeley, Arindrajit Dube and Dave Graham-Squire (2006) looked at the causes of wage and job changes in recent years in California. They found that job growth was moderate in the United States as a whole, as well as in California, but the employment growth has not returned to pre-recessionary levels.[7] Productivity and corporate profits have posted strong gains throughout the recovery. The gap between productivity and compensation is at an all-time high since 1947, which was the first year for which figures are available. Similarly, labor's share of GDP is at an all-time low since the same year**.** Average wages in the U.S. failed to keep up with inflation, reinforcing a trend of wage stagnation and decline. They concluded that wage inequality is growing. Young workers, male workers, and those without a college degree lost the most ground in wages. But even college-educated employees saw a real wage decline in the United States as a whole. Nationally, workers experienced the sharpest wage declines in personal/laundry services, administrative support services, and waste management services. In California, transportation/warehousing, personal/laundry services, and social services led the list for wage declines. In the United States overall, the biggest contributors to the decline in average wages were blue collar construction jobs, sales jobs in retail, and blue collar jobs in transportation and warehousing. In California, the biggest contributors to the declining average wage were sales jobs in retail, blue collar jobs in transportation and warehousing, and professional jobs in health services.[8]

"In California, the biggest contributors to the declining average wage were sales jobs in retail, blue collar jobs in transportation and warehousing, and professional jobs in health services."

1.2. Growing Needs of an Entrepreneurial Economy in the Region

The existing opportunities show a remarkable degree of affluence in the state of California. The 2006 report by the CCSCE shows that California accounts for 20% of the nation's high tech jobs, 25% of new patents, and 45% of new venture capital. California is the center of innovation in new ways to use the Internet for businesses and consumers. California is the nation's center for rapidly growing trade with China and the Pacific Rim. The state has the nation's largest entertainment and tourism sector, and stands ready to benefit from a growing world economy. California has an above-average share of jobs in most high-wage and fast-growing professional services including computer, architectural, scientific, and management consulting services.[9]

[7] The recessionary level reefers to the economic slow down of 2001.
[8] See Arindrajit Dube and Dave Graham-squire (2006), Where Have all the Wages Gone? Job and Wages in 2006, UC Berkeley Labor Center Policy Brief.
[9] Center for Continuing Study of the California Economy (2006), Opportunities and Challenges for the California Economy.

Our literature review looks at what happened in the recent past in order to understand the factors creating the existing situation in the SCAG job markets. It also looks at elements that may shape the emerging future job trends in the region. While Southern California has its own particular socio-economic conditions that have impacted its job markets, the overall economic conditions of the region by no means are unique to this area.

In the fall of 1997, the National League of Cities (NLC) embarked on a new initiative. This was called The Municipalities in Transition Project. The goal was, and still is, to connect public policy and other discussions to the reality of what is happening in America's cities by working closely with a representative group of cities from across the United States.[10] The report takes a deep look at the fundamentals of change that have affected the country in the last several decades. It states that

"Tremendous changes are occurring in America's cities—changes that are dramatically reshaping what cities do and how they do it:

- In recent decades, the U.S. economy has moved from a manufacturing powerhouse to a services leader.
- Much of the nation's population now commutes across state and other jurisdictional lines or works from home.
- America's schools must cope not only with providing instruction in reading, writing, and arithmetic but also with the World Wide Web and juvenile crime and gangs."

To conduct the project, NLC researchers interviewed more than 70 local officials representing 27 diverse cities across the United States. When asked what factors were having the most significant effects on their cities, the officials gave a variety of answers. In the end, however, the following were the six recurring factors:

- The new economy
- Limited revenue capacity
- Suburbanization and sprawl
- Education
- Changing city government roles and relationships
- Local context affects cities' responses

"The emergence of the entrepreneurial economy is a response to two fundamental aspects of globalization:

The advent of low-cost but highly skilled competition in Central and Eastern Europe as well as Asia...

And…

The telecommunications and microprocessor revolution, reducing the cost of shifting standardized economic activity out of high-cost locations… into lower-cost locations elsewhere in the world."

A glance at the themes revealed in the sentiments expressed by local officials explains some of the fundamental economic issues that have impacted job and wage trends in Southern California. Among the themes expressed, the

[10] The National League of Cities (1998), Major Factors Affecting America's Cities: A Report from the National League of Cities' Municipalities in Transition Project.

emergence of a new economy and the impact of education on job markets are of utmost importance.

Audretsch and Thurik (2000) consider the emergence of the entrepreneurial economy as a response to two fundamental aspects of globalization. The first is the advent of low-cost but highly skilled competition in Central and Eastern Europe as well as in Asia. The second is the telecommunications and microprocessor revolution which has greatly reduced the cost of shifting standardized economic activity out of high-cost locations, such as Europe and the United States, into lower-cost locations elsewhere in the world. Audretsch and Thurik argue that globalization eroded the comparative advantage of high-wage countries in routine economic activity and transferred those jobs to lower cost regions outside OECD countries. Maintenance of high wages requires knowledge-based economic activity that cannot be cost-diffused across geographic space. The authors proposed and discussed various trade-offs that surfaced in the process of globalization.

"…employment growth in California is clearly polarized between 'good jobs' and 'bad jobs' and relatively very little for in-between jobs."

The first trade-off is between localization and globalization. The second trade-off is between change and continuity. Change goes together with knowledge-based activity, and knowledge-based activity results in innovations that are more radical and less incremental. An inherent characteristic of knowledge is high uncertainty, which individuals assess differently. For example, differences in the evaluation of knowledge results in an increased role of new and small firms. Small firms are viewed negatively in the managed economy because their sub-optimal size imposes a less efficient use of resources. The third trade-off of this group compares the view that increased employment requires a reduction in wages with the view in the entrepreneurial economy that higher wages can accompany increased employment. These are among the changes that found their place in various economies around the globe with far-reaching economic and political consequences.

One of the interesting and often misunderstood concepts of our emerging global economy is the distinction between information and knowledge. The important difference in

economic terms is that the marginal cost of transmitting *information* may be invariant to distance while marginal cost of transmitting *knowledge*, and especially tacit knowledge, rises with distance. The distinction between the two is captured by Von Hipple (1994) who argues that high context, uncertain knowledge, or what he terms as *sticky knowledge*, is best transmitted via face-to-face interaction and through frequent contact.[11]

The dichotomy between knowledge and information does not contradict globalization. On the one hand, globalization has made it possible to transfer information liberally across geographic space. On the other hand, the geographic dimension of knowledge remains a local phenomenon largely unchanged by globalization. Thus, globalization has exerted a powerful shift on the relative prices of obtaining information and knowledge. While the relative cost of obtaining information has been drastically reduced, the cost of obtaining knowledge remains largely unchanged. This change in the relative prices of knowledge and information has triggered a shift in comparative advantage.

In a managed economy or in an economy where a decision about choice of technique is made jointly by the workforce and the management, with or without the influence of the government, unemployment could be reduced often at the cost of lower wages. In the entrepreneurial economy the choice is less ambiguous. High employment can be combined with high wages just as low wages do not necessarily imply high employment. This is not a new phenomenon but certainly has intensified to a greater extent through globalization. The wave of corporate downsizing as a global response to the emergence of economies that had the comparative advantage in low-skill-low-wage production has left virtually no OECD country untouched.

"High employment can be combined with high wages, just as low wages do not necessarily imply high employment."

Ruth Milkman and Rachel Dwyer (2002) explore the characteristics of job growth in California during the long economic expansion of the 1990s.[12] They look at the quality of jobs generated during the boom years of 1992 to 2000. They study the median hourly earnings during these years taken from US Current Population Survey data. Their analysis shows that employment growth in California is clearly polarized between "good jobs" and "bad jobs" and relatively very little for "in-between" jobs. Their study shows that the state's pattern of job growth was more polarized than that in the U.S. as a whole, although in both the state and the nation, the 1990's pattern contrasts sharply with that of the 1960s when economic expansion generated a more evenly distributed array of new jobs. This study brings up a very important issue that any study of job and employment trends should consider. In the 1990s, race, ethnicity, and nativity were

[11] Von Hipple, E., 1994, "Sticky information and the Locus of Problem Solving: Implications for Innovation," *Management Science*, 40(4), 429-439.

[12] Ruth Milkman and Rachel E. Dwyer (2002), Growing Apart: "The New Economy" and Jobs Polarization in California, 1992-2000, University of California Institute for Labor and Employment.

tightly linked to the new polarization. Although in the case of gender, their analysis reveals extensive within-group polarization.

One of the most striking findings of this study is the regional differences within California. For example, the Los Angeles metropolitan area showed an even more extreme pattern of job polarization than the state as a whole. In the San Francisco Bay Area including Silicon Valley, good jobs dominated growth with little expansion of jobs at the low end or in the middle. This clearly suggests that the much-touted "new economy" of the 1990s was a geographically bounded phenomenon and one that may depend on a more polarized and less salutary set of economic arrangements in nearby regions.

The challenge of producing good jobs presents a paradox that is best captured in the Center for Continuing Study of the California Economy's 2006 report.[13]

> "The paradox is that affluent communities with a majority of high-income residents are able to spend more income—and choose to do so—in sectors that employ lower wage workers. If success means attracting more high-wage jobs, then success means having these higher-income families hire nannies and gardeners and housecleaners and also having these high-income families spend more at restaurants, stores, cleaners, and other industries that employ a high share of workers who earn less than the average wage."

The above assertion suggests that having low-pay jobs allows people with higher productivity to acquire those higher pay jobs and therefore the existence of low-pay jobs supports the higher pay jobs to be taken by people who have the qualification for those jobs. This statement may make economic sense but it is hard to justify based on its implication for those who work in the low-pay job sectors. However, the same situation may be looked at from a different angle.

This argument becomes more complicated and contentious when the source of low paid labor force is studied in an economy. One can argue that as higher pay jobs attract qualified people and in turn increase their demand for labor that could help them with their needs such as house work, child care, food preparation, and gardening, the pay scale for such low skilled jobs may also climb. Indeed the argument put forward by some suggest that the availability of high-pay jobs increases the demand for low-pay workers and a rising tide may lift all boats. However if there is a relatively elastic source of labor that is willing to take up such jobs, then the increase in

> ***"The availability of high-pay jobs increases the demand for low-pay workers and a rising tide may lift all boats. However if there is a relatively elastic source of labor that is willing to take up such jobs, then the increase in low-pay jobs may be halted and the increase in the wage gap may widen***

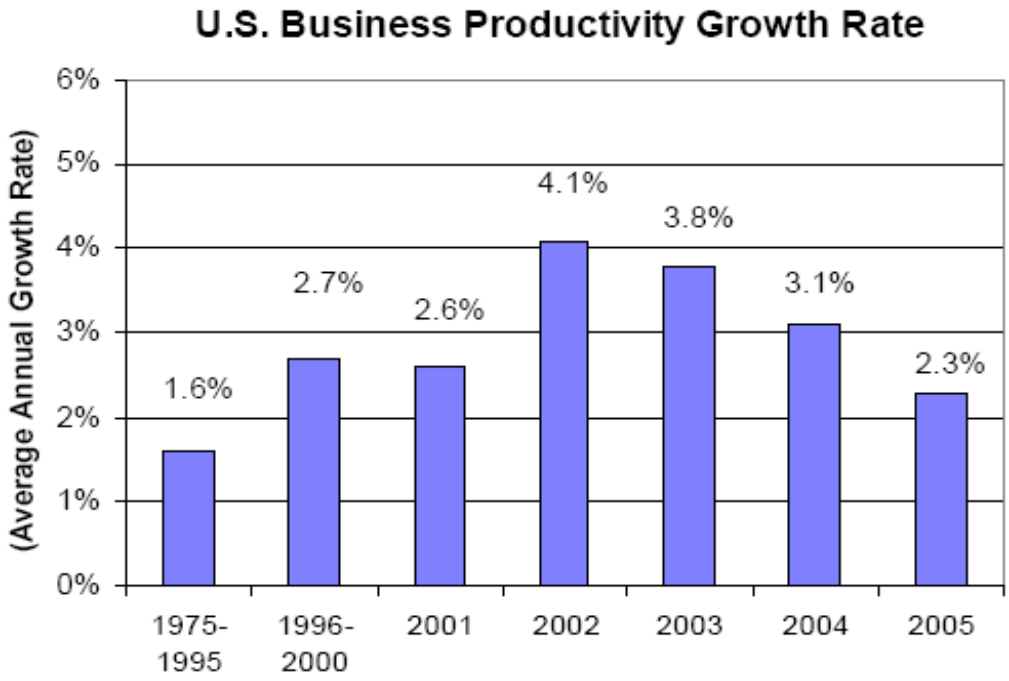
[13] Center for Continuing Study of the California Economy (2006), Opportunities and Challenges for the California Economy

low-pay jobs may be halted and the increase in the wage gap may widen accordingly. This is the very debate about the rise in immigration (documented and undocumented immigrant labor force) and its impact on low-pay jobs in states such as California.

Debate concerning a growing need for higher paying jobs opens a new dimension of complication when we look at the rising productivity and falling wages. This is best

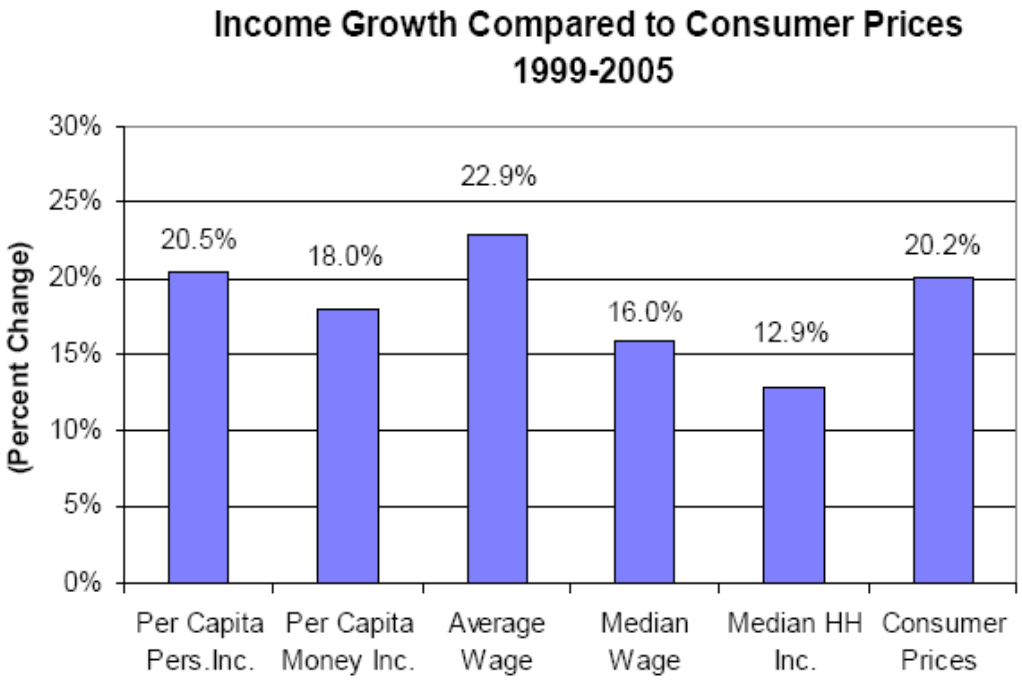
> ***"The standard of living fell considerably in the last three decades despite a clear increase in the productivity in the state economy."***

depicted in the following charts published in the 2006 CCSCE report.[14] According to this report, productivity growth has averaged 2.9% per year since 1996, and 3.0% annually between 1999 and 2005. Normally, this level of productivity growth translates into substantial gains in real income. However, this did not occur between 1999 and 2005.



Source: Center for Continuing Study of the California Economy (2006), Opportunities and Challenges for the California Economy, page 2-21.

[14] Ibid.



Source: Center for Continuing Study of the California Economy (2006), Opportunities and Challenges for the California Economy, page 2-22.

> ***"There is no disputing the national and state data, which shows an increase in inequality during the past ten years, an extension of the gradual increase in inequality of incomes that has taken place over the past 30 years."***

The above two charts show what the CCSCE report concludes:

"If Californians are to have a conversation about the middle class falling behind, it is important to distinguish that conversation from the conversation about inequality and the share of income going to high-wage earners and investors. There is no disputing the national and state data, which shows an increase in inequality during the past ten years, an extension of the gradual increase in inequality of incomes that has taken place over the past 30 years. The earnings of the most highly educated workers have grown more than the earnings of workers with middle and lower education and skill levels. Finding the best approach for restoring an increase in real earnings and the standard of living for many middle-class families may or may not reduce inequality. Toward the end of the 1990s, the strong economy and very low unemployment rates resulted in real income gains for middle- and lower-income workers. These gains

came as a result of economic forces and not as the result of any effort to reduce incomes for high-wage workers."

1.3. The Question of Immigration and Its Impact on the Regional Labor Market

Immigration has accounted for approximately 200,000 new residents per year, equating to roughly 40% of California's population growth over the past 15 years.[15] California's share of both legal and undocumented immigrants has declined since 1990, with half of its legal immigrants coming from Mexico and Central America and 40% coming from Asia.[16] At 80%, most of the undocumented immigrants come from Mexico and Central America. Immigrants are younger than the rest of California's population. More than 75% of immigrants to California are below the age of 40. Half of California's undocumented immigrants did not graduate from high school, while more than 30% of California's legal immigrants have college degrees. Interestingly, this is slightly higher than the college graduation rate for native-born residents.[17]

" As the supply of young workers shrinks relative to that of older workers, the wage premium attached to labor market experience is likely to decrease, a phenomenon that may have started to take place in the late 1990s."

Jane Sneddon Little and Robert K. Triest (2002) explored the impact of U.S. demographic changes on labor markets.[18] Their research shows that demographic shifts will likely affect labor. For example, changes in the relative supplies of different types of labor are likely to affect the structure of wages. As the supply of young workers shrinks relative to that of older workers, the wage premium attached to labor market experience is likely to decrease, a phenomenon that may have started to take place in the late 1990s. Their paper suggests that projected demographic changes are likely to increase the U.S. dependency ratio, on a long-term basis, to a level well above the previous peak touched briefly in 1961. They argue that this increase will occur despite the substantial immigration and a consequent increase in fertility that keep the dependency ratio from rising even higher than in the Census Bureau's middle series projection. Because the increase in the dependency ratio primarily reflects longer life expectancies, it may be welcomed. However, it also raises questions in some observers' minds about the ease with which a relatively small workforce will supply the consumption needs of a relatively large number of dependents.

Sneddon and Triest (2002) propose a growing role for immigrants and their descendants. One perspective is that the increase in immigration implies an easing of the pressure on

[15] Ibid.
[16] Ibid.
[17] Ibid.
[18] Jane Sneddon Little and Robert K. Triest (2002), The Impact of Demographic Changes on US Labor Markets, Federal Reserve Bank of Boston.

the dependency ratio and should therefore be welcomed. However, some are concerned that an increased reliance on immigration could slow this country's productivity gains only because many of these new Americans arrive with very little schooling. Indeed based on existing data, immigrants from countries outside Latin America are on average slightly better educated than U.S. citizens, and the average educational attainment of immigrants has risen over time. The principal area of concern is the importance of unskilled migrants from Mexico and the Caribbean that may create a growing gap between U.S. and foreign-born average education attainment. This gap is likely to persist well into the future despite expected gains in schooling in the source countries. In contrast to the past century, which brought big gains in U.S. schooling that were important in boosting U.S. productivity growth, the current century could see average U.S. educational attainment stagnate or even decline.

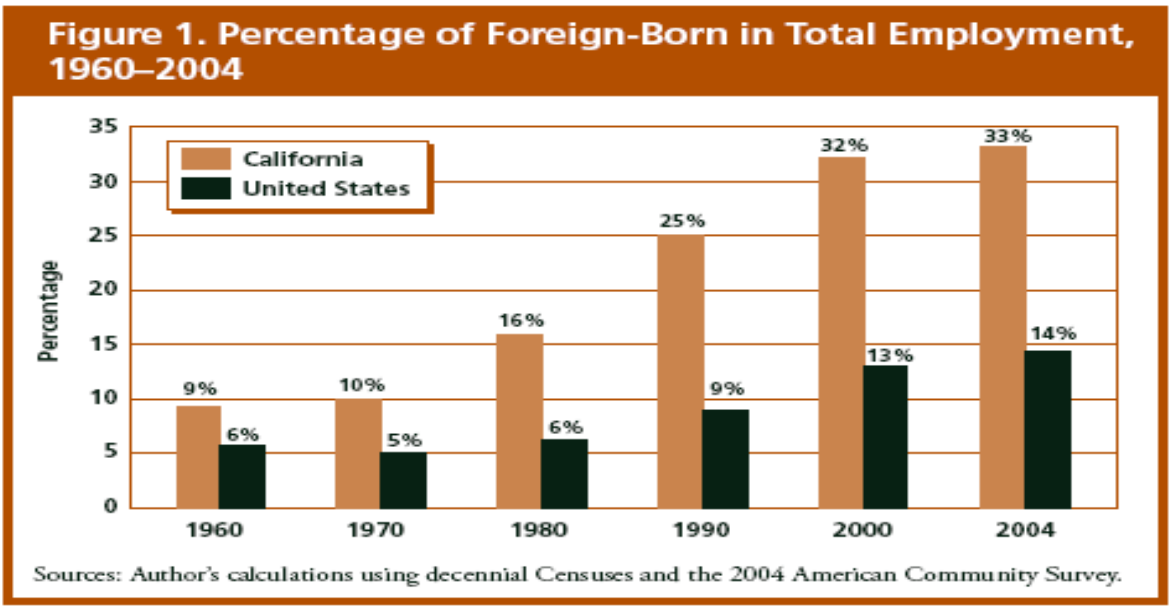
Immigration is a federal responsibility in the United States and the views of people and industries are often based on their own economic conditions. There is also a non-economic value judgment about the importance of immigration in the U.S. that has impacted this debate through the years.

"…by 2004, immigrants constituted one-third of the state's labor force and population."

The Public Policy Institute of California (PPIC) looks at the present immigration debate as one of the most contentious issues of recent time. The debate is about how immigration is affecting the wages and employment opportunities of U.S. natives. If immigrants hurt the labor market options of native workers, Californians are likely to feel the most pain. California has a higher share of immigrants in its population and labor force than any other state. The large inflow of documented and undocumented immigrants during recent decades increased the presence of foreign-born individuals in California so much that by 2004 immigrants constituted one-third of the state's labor force and population. [19]

The following table shows that California has always had a proportionally higher rate of foreign-born residents in its total employment figures; however, the rate has increased considerably since the 1990s. Two of the most fundamental aspects of the supply of immigrants and their skills are their numbers and their education.

[19] Public Policy Institute of California (2007), How Immigrants Affect California Employment and Wages, Volume 8, November 3, February 2007.



Source: Public Policy Institute of California, How Immigration Affects California Employment And Wages.

The following table looks at the educational attainment of the foreign-born workers in California since 1960. The table shows that the percentage of foreign-born has increased in both the less educated and the most educated. In 2004, two-thirds of high school dropout workers and 42% of workers with a Ph.D. in California were immigrants compared to only 21% of workers with some college education. National data for 2004 shows that about 32% of U.S. workers without a high school diploma and 28% of those with a Ph.D. were foreign-born compared to only 9.3% of workers with some college education.[20]

Table 1. Percentage of Foreign-Born Workers in Each Education Group, California 1960–2004

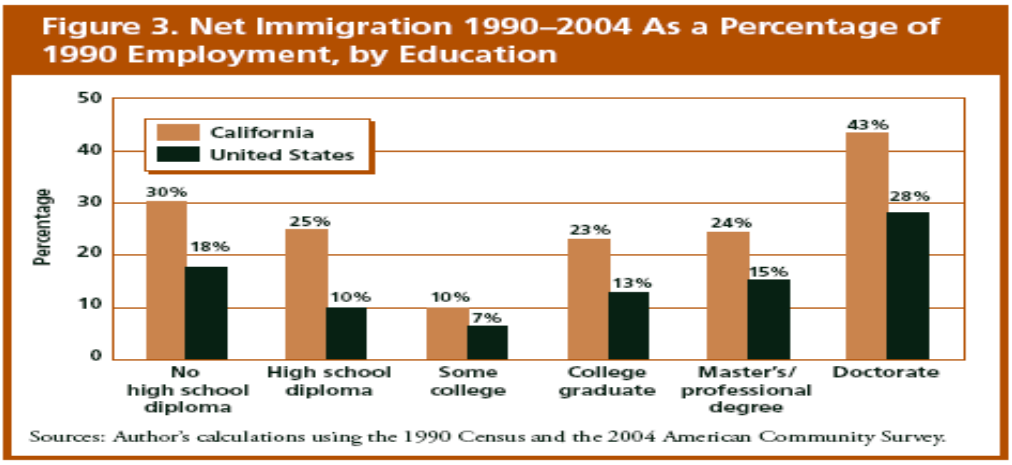
Years of Education	1960 Census	1970 Census	1980 Census	1990 Census	2000 Census	2004 American Community Survey
0 to 11	13.0	15.7	33.68	52.17	63.44	66.78
12 (high school graduate)	6.4	7.4	11.31	19.11	27.55	31.19
13 to 15	7.4	7.8	11.02	15.37	20.59	20.73
16 (college graduate)	7.7	8.3	13.87	18.70	24.87	27.85
Master's/professional degree	n.a.	n.a.	n.a.	19.88	26.68	28.93
Doctoral degree	n.a.	n.a.	n.a.	28.46	37.23	42.06
Average In California	9.4	10.0	16.06	24.59	31.98	33.17

Sources: Author's calculations using decennial Censuses and the 2004 American Community Survey.
Note: Workers included are individuals ages 17–65, not residing in group quarters, who worked at least one week during the previous year.

Source: Public Policy Institute of California, How Immigration Affect California Employment And Wages.

[20] Ibid, page 5.

The recent flow of immigrants has the same general skill composition. Net immigration of workers during this time period accounted for a much higher percentage of initial employment among workers *with* a college degree and among those *without* a high school diploma than in the group of workers with a high school diploma or some college but no degree. The following table shows net immigration in 1990–2004 as a percentage of 1990 employment by education groups for California and for the United States as a whole.



Source: Public Policy Institute of California, How Immigration Affect California Employment And Wages.

The major findings of the PPIC have important policy implications for the ongoing debate concerning the economic impact of immigration on the U.S. economy, job markets, wages, and income. This study reached the following three important conclusions:

1. There is no evidence that the inflow of immigrants over the period 1960–2004 worsened the employment opportunities of natives with similar education and experience. The study finds no association between the inflow of immigrants and the out-migration of natives within the same education and age group.
2. According to the calculations of the Institute, during 1990–2004 immigration induced a 4% real wage increase for the average native worker. This effect ranged from near zero (+0.2%) for wages of native high school dropouts and between 3% and 7% for native workers with at least a high school diploma.
3. The results indicate that recent immigrants lowered the wages of previous immigrants. Wages of immigrants who entered California before 1990 were 17% to 20% lower in 2004 than they would have been absent any immigration between 1990 and 2004.

1.4. Globalization, Outsourcing, and Regional Job Markets

Globalization is often defined as a combination of four major trends: the expansion of international trade, financial flows (with FDI as the most important component of these

flows), global communications (including transport), and movements of people (immigration).

On the positive side of globalization, the process is believed to give consumers more choice and a broader range of qualities to choose from. Globalization is likely to permit an increase in the level of global output, stimulate economic growth, and generate new employment. Trade allows countries to export those goods and services that they can make efficiently and to import those goods and services that they make inefficiently. Increasing trade can add to national incomes and personal incomes. Globalization results in lower prices enabling consumers to buy more at lower prices and, therefore, enjoy a higher standard of living. Trade introduces more competition into domestic markets so that local monopolies can be avoided. Free trade exposes countries to new production and management technologies that foster higher productivity at both the firm and the industry levels. Globalization brings better and more advanced technology and other forms of intellectual capital to countries that would otherwise have to live without it.

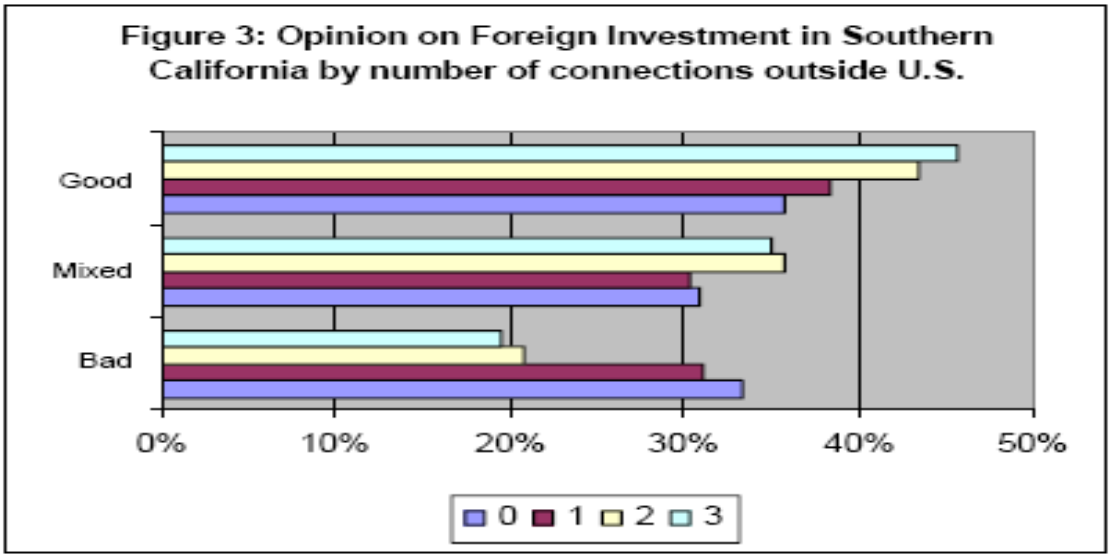
On the side opposing globalization, the list of complaints is not any shorter. Many claim that commercial interest takes priority over development so that developing countries are exploited. Globalization widens the gap between rich and poor and contributes to the impoverishment of developing countries. Companies move to countries with lower environmental standards which increases pollution. Health and safety regulations are avoided by moving into countries with lower standards. Globalization destroys jobs due to rationalization. The economic power is concentrated in the hands of a few large multinational corporations such as banks and petroleum companies. Individual cultures are endangered by a global culture. A global network makes it easier to distribute illegal goods and contributes to violence and crime. The interdependence between countries is increasing and the economic development in one country can easily be influenced by policies in other countries. It is hard not to be attracted to either side of this argument.

Findings from the Southern California Public Opinion Survey (SCS) of Southern California residents conducted in the Ralph and Goldy Lewis Center for Regional Policy Studies of UCLA School of Public Affairs resulted in some interesting findings about how members of the public think about the impact of globalization on the region.[21] The SCS asked respondents very briefly to define what comes to their mind when they hear the world globalization. The report provided the following as the summation of the responses they received.

[21] See Ralph and Goldy Lewis Center for Regional Studies, UCLA School of Public Affairs (2006), Findings from the Southern California Public Opinion Survey (SCS), http://lewis.spa.ucla.edu. The 2005 Southern California Public Opinion Survey is supported by the UCLA Ralph and Goldy Lewis Center for Regional Policy Studies and was developed with input from campus and community organizations. UCLA units include the Center for Communications and Community, the Institute of Transportation Studies, the Center for Civil Society, and the Anderson School of Management. Three public agencies participated in the process: the Southern California Association of Governments (SCAG), the Metropolitan Transportation Agency (MTA), and the Los Angeles Economic Development Corporation (LAEDC). Several UCLA faculty provided valuable input: Professors Vickie Mays, Michael Stoll, Brian Taylor, Amy Zegart, Frank Gilliam, Helmut Anheier, Chris Thornberg, and Ed Leamer.

> "Over a third of respondents tied the term to some aspect of economic globalization. Within this category, responses included references to trade, jobs, outsourcing, economic competition, and transnational corporations. Another common response was global interconnections, including "unity" or "one world" or some reference to nations coming together, such as to solve problems. Finally, the third most popular type of response referred to the environment, such as global warming. We should also note that a large portion of respondents (41%) did not respond to the question at all, presumably because they were not sure how to define the term or were not familiar with it. About 11% of those who did respond offered answers that could not be coded, and almost 3% of these responses were negative, normative statements about globalization."

Americans in general tend to have mixed feelings about globalization. The SCS asked respondents more specifically about the effect of foreign investment on the regional economy and the effect of international trade on several areas from the environment to consumers. The answers to these questions were cross-tabulated across the range of connections to outside the United States relative to foreign investment. The outcome as presented in the following chart shows that those who had no connections outside the U.S. were much more likely to say the effect was bad (34%) than those who had two or three connections (21% and 18% respectively). More connected residents were more likely to rate the effects of foreign investment as good or mixed.



Source: Ralph and Goldy Lewis Center for Regional Studies, UCLA School of Public Affairs (2006), Findings from the Southern California Public Opinion Survey (SCS)

As for the effect of foreign investment on the regional economy, one-third of respondents thought the effect was somewhat or very good, 27% remained neutral, and 21% said somewhat bad or bad. Almost 20% did not know or did not respond.

In terms of international trade relative to globalization, the clearest response was that trade is good for business and consumers at 61% and 64% respectively. For workers, the

response was slightly more mixed with 40% saying good, 30% saying bad, and 20% reported mixed feelings. Respondents were very split over the effect of trade on the environment with just over one quarter saying it had a bad effect, 27% were mixed, and 28% felt globalization was good for the environment.

In brief, this survey shows that there are major concerns and challenges to address with globalization, but Southern California residents indicate that despite these problems they are also aware of the potential gains and seem cautiously optimistic about the future of globalization in the region.

Thomas Palley (2006) from Foreign Policy in Focus (FPIF) considers outsourcing. While a central element of economic globalization, it presents a great challenge to many local and regional economies in the United States and many other parts of the world.[22] He concludes that

> "Viewing outsourcing through the lens of competition connects with early 20th century American institutional economics. The policy challenge is to construct institutions that ensure stable, robust flows of demand and income, thereby addressing the Keynesian problem while preserving incentives for economic action. This was the approach embedded in the New Deal, which successfully addressed the problems of the Depression era. Global outsourcing poses the challenge anew and calls for creative institutional arrangements to shape the nature of competition."

"Many service companies started creating jobs overseas to gain access to foreign markets."

Reasons for outsourcing are elaborated in a statement published by Weidenbaum Center on the Economy, Government, and Public Policy in their 2004 annual presentation.[23] The ideas presented in this statement bring up a number of important issues that can explain the economics and possible future trend of outsourcing for many regions including SCAG. Many service companies started creating jobs overseas to gain access to foreign markets. The other equally important factor has been that many foreign markets have been growing quickly while some domestic areas have become relatively saturated or at least mature. This has made access to the needed labor more difficult and costly. At the same time some domestic businesses hired specialized workers stationed overseas to respond to U.S. limits on immigration. Indeed American employers send the work to them instead of having them come here. In the process the companies learned how to use modern technology to shift the location of work economically. They thus became accustomed to taking advantage of lower costs both domestic and foreign.

[22] See Thomas Palley (2006), The Economics of Outsourcing: How Should Policy Respond? Foreign Policy in Focus (FPIF), www.fpif.org

[23] Weidenbaum Center on the Economy, Government, and Public Policy Breakfast Presentation: Outsourcing and American Jobs (June 2004), by Murray Weidenbaum

The other equally important factor that increased the pace of outsourcing in recent time is the growing tendency among companies to focus on their core competencies. This created an environment within which most businesses subcontract out most of their activities to other companies mainly domestic. Viewed from that perspective, overseas outsourcing is a minor part of the trend to decentralize business operations. However, the potential is there and with greater improvement in variety and quality of services offered from overseas, there will be a greater level of competition placed on domestic firms to compete with their foreign rivals.

"Looking at the total employment effects of outsourcing, the less visible part of the impact is much larger. Far more U.S. employees keep their jobs because outsourcing helps the company stay competitive. Some get new or better jobs because the firm enhances its financial strength."

Outsourcing jobs overseas allows domestic companies to compete with their international rivals creating strength to offer better opportunities to their domestic labor force. The effect of outsourcing on U.S. employment is far more complicated than it appears at first. Murray Weidenbaum (2004) states that

> "Looking at the total employment effects of outsourcing, the less visible part of the impact is much larger. Far more U.S. employees keep their jobs because outsourcing helps the company stay competitive. Some get new or better jobs because the firm enhances its financial strength. For example, as companies upgrade their software systems, there may be less domestic demand for basic programmers — but more need for higher paid systems integrators."

"Most jobs will remain unaffected altogether: close to 90% of jobs in the United States require geographic proximity."

The views about the net effect of outsourcing and its impact on total employment and wage rates is a highly contentious topic that attracts a number of national and regional studies.

In an article published in *Foreign Affairs,* Daniel Drezner (2004) points out the historic evidence on the validity of the opinion that outsourcing is the driving force behind the loss of millions of jobs in recent years.[24] He argues that during the 1990s offshore outsourcing was not uncommon. But no one much cared because the number of jobs leaving U.S. shores was far lower than the number of jobs created in the U.S. economy. As for the future he makes the following prediction:

> "Most jobs will remain unaffected altogether: close to 90% of jobs in the United States require geographic proximity. Such jobs include everything from retail and restaurants to marketing and personal care—services that have to be produced and consumed locally, so outsourcing them overseas is not an option. There is also no evidence that jobs in the high-value-added sector are migrating overseas. One thing that has made offshore outsourcing possible is the standardization of such

[24] Daniel W. Drezner (2004), Foreign Affairs May/June 2004.

business tasks as data entry, accounting, and IT support. The parts of production that are more complex, interactive, or innovative—including, but not limited to, marketing, research, and development—are much more difficult to shift abroad. As an International Data Corporation analysis on trends in IT services concluded, 'the activities that will migrate offshore are predominantly those that can be viewed as requiring low skill since process and repeatability are key underpinnings of the work. Innovation and deep business expertise will continue to be delivered predominantly onshore.' Not coincidentally, these are also the tasks that generate high wages and large profits and drive the U.S. economy."

The Economic Policy Institute (EPI) provides a different perspective on the issue of outsourcing and how it is impacting the U.S. economy.[25] It argues that much of the discussion about the negative impact of outsourcing is that such opinion is only based on the gross number of jobs lost. However, one needs to look at the impact of "insourcing," the phenomenon by which foreign companies increase their investments and employment in the United States. EPI points out that some have suggested that the jobs lost to outsourcing are offset by the millions of American workers hired by foreign companies to produce new goods and services. However, the vast majority of employment associated with new investments by foreign companies has taken the form of acquisitions of ongoing U.S. companies such as Daimler's takeover of Chrysler. As a result of insourcing, 2.78 million U.S. jobs were lost in foreign-owned firms between 1991 and 2001. The following chart provides a better understanding of the issues discussed.

Source: Taken from Economic Policy Institute (2004), Economic Snapshot

EPI's Economic Snapshot of 2004 indicates

[25] Economic Policy Institute (2004), Economic Snapshot.

> "Between 1991 and 2001, foreign multinationals acquired firms employing 4.1 million workers. However, only 274,000 workers were employed in the newly established U.S. companies owned by foreign firms, for an average of 25,000 jobs per year over this period. Thus, only 6.2% of job growth in foreign companies represented actual new jobs in the United States. At the start of 1991, employment at foreign-owned companies in the United States stood at 4.74 million. If no jobs had been lost, the addition of 4.14 million jobs in acquired firms and 274,000 jobs in new start-up firms should have brought the 2001 total to 9.15 million jobs. But instead, 2001 employment at foreign-owned companies stood at only 6.37 million. Thus, 2.78 million U.S. jobs disappeared in foreign-owned firms because of import displacement, sales losses, productivity, or divestiture. Foreign-owned companies are indeed employing millions of Americans, but the evidence suggests that they have destroyed more jobs than they created in recent years."

The trend for losing blue collar jobs has a comparatively longer history than competing for white collar jobs that seem to have been secure and protected by the economic conditions in the United States and many other developed countries. There have been many studies during the last decade targeting the cost and benefits of offshoring blue collar and, recently, white collar workers. The costs and benefits of offshoring were explored in a recent study commissioned by the PPI.[26] This study aimed at taking a close look at a number of well-publicized previous studies in order to find the net overall impact of offshoring on the U.S. economy. The study concludes that

- while offshoring has clearly provided substantial cost savings and improved profits for a number of firms that have engaged in it, one cannot assume that these benefits will scale up for the broader economy.
- mainstream international economics teaches that deepening international integration *usually* increases national income, but not always.
- the offshoring of white collar work and its consequences (i.e., foreign productivity growth in what is an export sector for the United States) fits in with many of the characteristics of the exceptions.
- even if this offshoring does increase national income, American workers will still likely miss out on many of the benefits. Mainstream international economics is equally clear that international integration redistributes more income than it creates.
- if total the U.S. GDP is raised by offshoring, but American workers lose at the expense of corporate profits, then workers are wholly justified in resisting offshoring, at least until they receive some compensation for their losses.
- good economic policy should not rest on insisting that American workers sacrifice their own self-interest in terms of lower wages to the larger national interest of increased national income.
- policy should also not be driven by studies that mask the costs of offshoring while providing inflated estimates of its benefits.

[26] See Josh L. Bivens (2005), Truth and Consequences of Offshoring, Public Policy Institute, Briefing Paper # 155.

- if proponents of offshoring want to reap the potential efficiency gains it offers, a new social contract needs to be proffered to American workers to insure them against the very real risks offshoring poses to their living standards."

1.5. Educational Needs of a Growing Regional Economy

> ***"Over the next quarter century, an additional two billion people will be added to our planet. Whether a large population represents an asset or a setback to progress depends, above all, on whether people will have the capacity to shape their future."***

California's first major workforce program, vocational education, was established in 1917 through federal funding from the Carl Perkins Act. The program expanded in the 1920s–1950s with the establishment of polytechnic high schools and then in 1968 Regional Occupational Centers and Programs (ROCPs) were founded.

In the early days of catering to a well-suited workforce through federal programs, the main issue was to have an educational program that could send students directly to the job market after graduating from high school. That approach made sense in the context of the post-agrarian era and the prevailing industrial economy of the time when only a small elite workforce with solid liberal studies education was needed for the economy to prosper and when workers seldom veered from one career over a lifetime. The advent of the information age, however, began to promise change in the educational system. Now, students are required to have more substantial knowledge as well as more technical workplace skills in the post-industrial economy.

This trend has only recently been captured and catered to by the California legislature in 1981. In that year the legislature expanded the Peninsula Academy at Sequoia High School in Redwood City to a statewide Partnership of Academies program that focused on computer and electronic training as well as preparing students for both college and careers through an integrated curriculum. Later in 1985, inspired by a report published as the Carnegie Report (*A Nation at Risk)*, the legislature more firmly established an emphasis on academic and college preparatory programs with its passage of the Hart-Hughes Education Reform Act.[27]

Shengman Zhang (2007) captures the importance of relevant education of the workforce in the emerging new economy.[28]

> "Over the next quarter century, an additional two billion people will be added to our planet. Whether a large population represents an asset or a setback to progress depends, above all, on whether people will have the capacity to shape their future. The new

[27] For more information about the SB and its history and impact within the larger context of education and workforce development see http://www.cpec.ca.gov/completereports/2005reports/WP05-02.pdf.
[28] Shengman Zhang (2007), Human Capacity Building for the New Economy, Development Outreach published by World Bank Institute.

economy offers unprecedented opportunities. But the gains will not be automatic. It will benefit nations in proportion to their success in building human capacity."

The argument about appropriate education is a vital piece of creating prosperity in an economy. Education is expected too help society meet a number of economic challenges such as the need for a workforce with varied skills that facilitate the distribution of talents and wages across the population. Economic changes in the recent past show that the current political climate favors reducing the role of the federal government while placing more responsibility in the hands of state governments or the private sector.

"Educational institutions are often behind in their attempt to keep pace with the change in business needs. In many areas what is taught today becomes obsolete in the early part of the professional life of those people who are currently trained."

According to the Business and Industry Advisory Committee of the OECD (Organization for the Economic Co-operation and Development) education and training pose new challenges in the economies of many developed countries.[29] This report lists the following as principal issues of the new economies compared to the past environment and practices.

- Despite the important role of the private sector, public authorities have the main responsibility for offering a high-quality initial education that prepares individuals for lifelong learning throughout their career.
- Training for lifelong learning has become increasingly important.
- Individuals should be provided with a solid basis of primary, secondary, and university level education that can be used for effective lifetime learning as the need of the labor market changes over time.
- Educational institutions are often behind in their attempt to keep pace with the change in business needs. In many areas what is taught today becomes obsolete in the early part of the professional life of those people who are currently trained.
- The solid base of education should be supported through a dialogue between business, labor, and governments to guarantee that educational systems take into account the realities and needs of the new economy workplace.
- Training is one of the keys to economic growth, business competitiveness, and employability.
- Government can encourage further training by offering incentives for investment while, at the same time, accepting a special responsibility for those who never reached the first level of vocational qualification in the initial education system.

California's challenges for a well-trained and educated workforce is presented by the "California Education Dialogue," a statewide dialogue on California's master plan for education from pre-kindergarten through post-graduate levels supported by the William and Flora Hewlett Foundation.[30] In a report by the Working Group on Workforce

[29] Business and Industry Advisory Committee to the OECD (2001), Joint Meeting of Management and Trade Union Experts on "Firms, Workers and the Changing Workplace: Considerations for the Old and the New Economy".
[30] For more information see http://www.info-ren.org/what/dialogues_projects.shtml

Preparation and Business Linkages, the challenges for the kind of workforce the state needs in the years ahead are summed up in the following points:

- In California and across the nation, there is a shortage of science and math instructors in grades K-12.
- California lags behind other states and countries. Awarding baccalaureate degrees in key scientific and technical disciplines actually declined over the last decade forcing more employers to hire from overseas. California ranks 44th among the states in the percentage of 19 to 24 year olds with a baccalaureate in these fields.[31]
- Based on the available information in year 2000, nearly half (45%) of California's projected job growth would occur in occupations requiring only short or moderate on-the-job training. Consider the following figures for the rest of the jobs:
    - 20% of the jobs would be available to new workers with career technical training, a community college degree, or long-term, on-the-job training.
    - 16–20% would require a four-year degree.
    - 2% would require a graduate degree.
    - The remaining 16% would require significant work experience and thus would not be available to first-time workers.[32]
- The gap between high school graduates and high school drop-outs is widening in California.
- High school academic preparation has a high correlation to first-generation students' likelihood of enrolling and remaining enrolled in post-secondary education. The more rigorous the high school curriculum, the more likely students are to persist along the education continuum to a degree.[33]
- Education has a critical role in preparing people to be productive members of the workforce and to stimulate its own economy. The current education system is primarily designed to give people basic education early in life and thus provide them access to entry-level positions. It is poorly suited to provide all people with the access to affordable life-long learning and continuing education opportunities that will enhance their employment skills throughout their work life.

[31] Lynne G. Zucker & Michael R. Darby (October 2001). Critical Path Analysis of California's Science and Technology Education System: Universities and Colleges in California. California Council on Science and Technology.

[32] Will Work Pay? Job Creation in the New California Economy (April 2000). The California Budget Project.

[33] Edward C. Warburtun, Rosio Bugarin, Anne-Marie Nunez (2001). MPR Associates, Inc. and National Center for Education Statistics

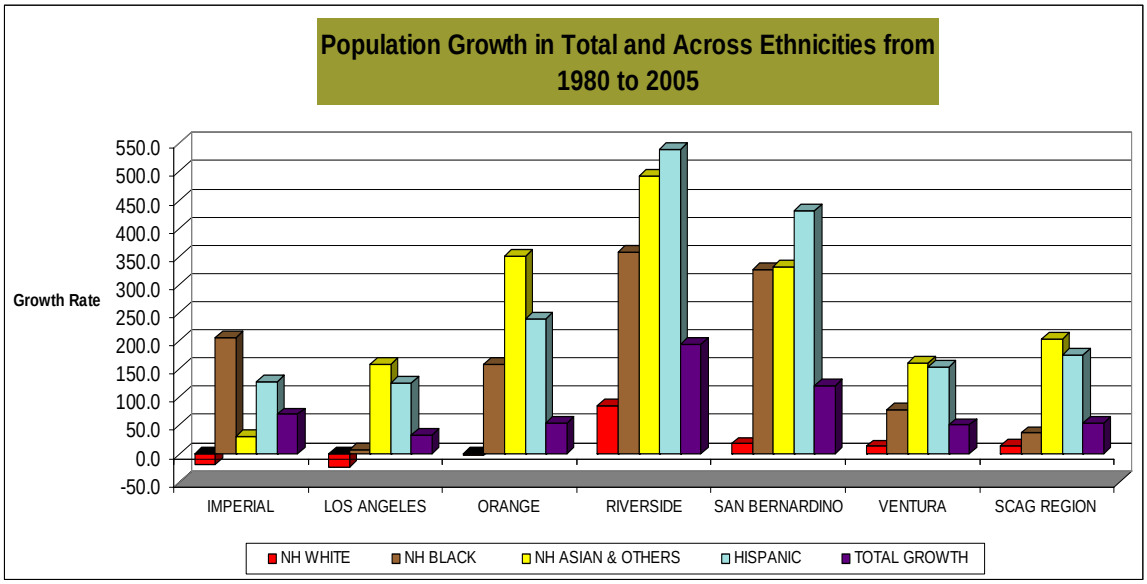
2. SCAG Regional Economy and Job Markets

2.1. Change in the Ethnic Structure

This segment of the report looks at population growth and its ethnic structure since 1980. The salient elements of this population change are highlighted below.

- The region continued to have significant growth, albeit at a lower rate than the decade before.
- There was a significant growth rate in blacks in Imperial County.
- The percentage of whites declined in all but Riverside County.
- The population of Imperial County showed a much higher rate of growth than a decade ago.
- The highest rate of population growth occurred in Riverside County.

This section pools the two segments of the population changes into one stretch of 25 years from 1980 to 2005.



Source: 1980 (STF2) & 1990 (STF1) Census. Some of the data are taken from the data that was complied by SCAG Community and Economic Development Staff. The authors augmented the database with information from the Census for the additional years since year 2000.

The principal changes are listed below.

- The population of the region increased by nearly 55% during the past two and a half decades. This is a remarkable growth by any standard.
- The growth rate of the white population was the lowest over this period at just 13.5%. The black population grew less than the regional total but was much higher than the white population at 36.9%.

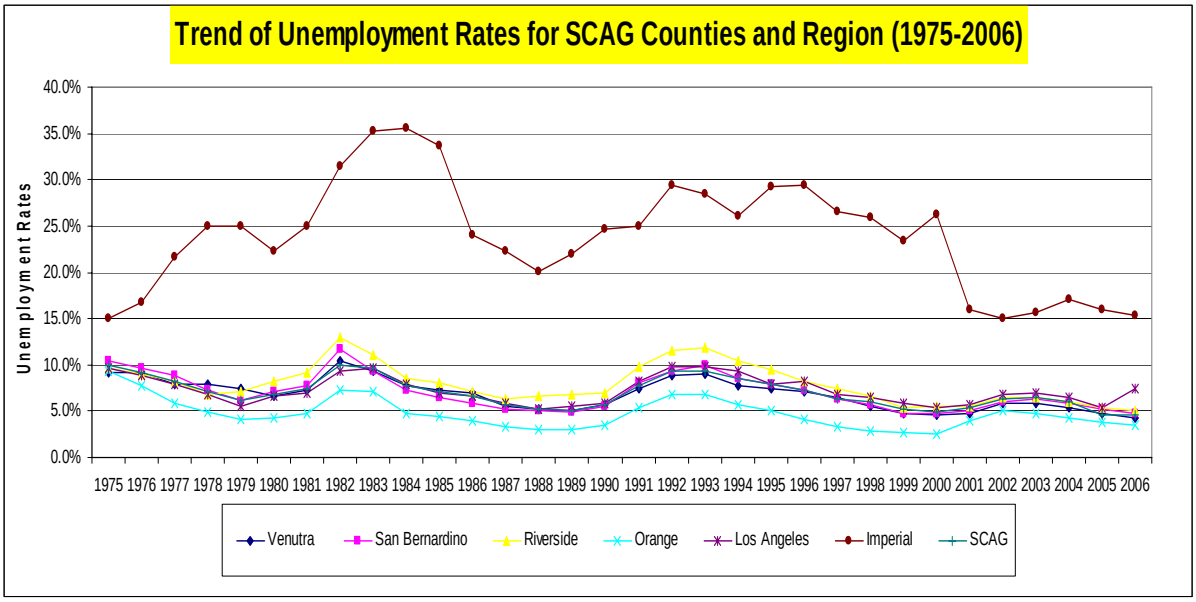
- The highest rate of growth belonged to Asians and other ethnicities with a 204.2% increase, showing a doubling of their population over this period of time. This is followed by a 174.5% growth in the Hispanic population.[34]
- Riverside and Orange counties showed the highest rates of increase in Asian and other ethnic segments of their populations.
- There has been a significant increase in the percentage of the black population in Imperial County and a much lower increase at just 7.7% in Los Angeles County over 25 years.
- Overall Los Angeles County showed the lowest rate of population growth, much less than the total regional growth during this period. At 50%, the Ventura County population growth has been slightly less than the overall regional growth which was 54.5%. Orange County's growth was slightly higher at 55.1%. Imperial County had a lower than average growth in the 1980s that closed the gap and grew at a rate of 70.1% over the two decades. Both Riverside and San Bernardino counties grew at a rate higher than the average growth rate (Riverside at 194.8% and San Bernardino at 120.8%).

The foregoing discussion indicates remarkable population changes in the region. In sum, a large number of people chose Southern California as their home. Los Angeles County experienced a decrease in its residents likely relocating to nearby counties.[35] Overall the data suggests that the ethnic mix of the regional population changed significantly bringing about a much larger increase in minorities. These findings are in concurrence with other findings about the change in population structure in California.

2.2 Regional Labor Market and Unemployment Rates

As pointed out in the early section of this report, SCAG is a prosperous region with a variety of existing and potentially competitive advantages in the nation and the state. In order to present a snapshot of each county and the region overall, we collected the rates of unemployment from 1975 to 2006. The result is presented in the following graph.

[34] Bearing in mind that the Hispanic population has a much larger base than Asians, this numbers suggests a much higher increase in the absolute number of Hispanics over this period of time.
[35] This is based on a casual observation and should be investigated much further.



Source: Source: California Employment Development Department (EDD), Bureau of Labor Statistics, http://www.bls.gov

This chart presents an interesting picture of what can be traced in various counties and the region over that last three decades. The principal findings of this trend are summarized below.

- The overall trend follows the business cycle over this period of time.
- Over the period, Orange and Ventura counties show a relatively lower rate of unemployment than other counties.
- Imperial County has a much higher unemployment rate throughout the period than any other county partly because of the seasonality of its large agriculture sector and also large immigrant workers from across the border. Notably, the 1980s show a state of economic crisis, presenting a very high level of unemployment. There seems to have been a considerable improvement in the mid 1980s. More recent times show the job situation at its best since the 1970s, albeit unemployment is still very high and significantly higher than anywhere else within the region.
- Recent data shows a rise in unemployment in Los Angeles County, a trend not seen in any other county within the region.

The foregoing argument shows a considerable degree of differences within the region. This is one of the primary areas of focus in the continuation of this study.

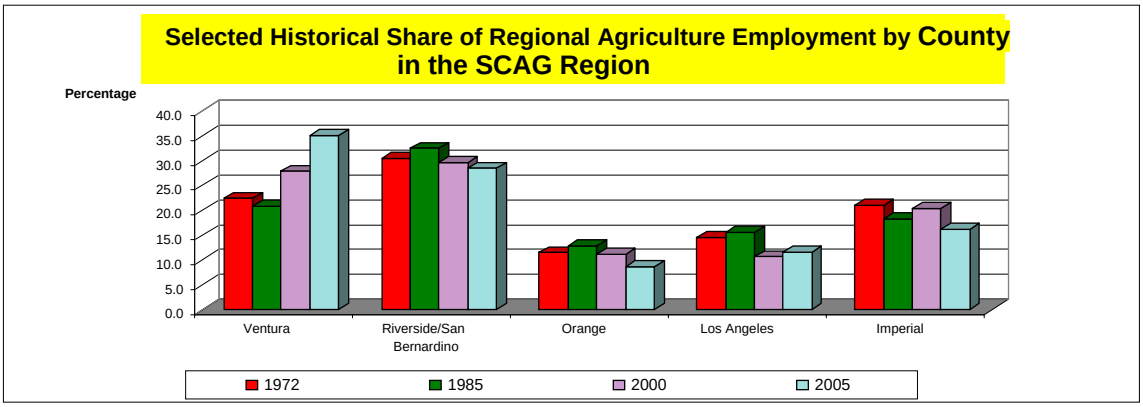
2.3. Pattern of Industrial Change and Employment within the Region

This segment of the report looks at the changes that have taken place from the 1970s to the end of the millennium. We used total wage and salary employment by major industrial sectors in each county and the region as a whole to study the pattern of changes that have taken place since the 1970s. It should be stated that the comparison made for a number of industries such as services, trade, and government sectors are likely to be less than perfect as we were unable to find the needed data for more extended components of

these industries (higher digit classification that in aggregate defines an industry). We used definitions of Standard Industrial Classification (SIC) for all the years between 1972 and 2000 whereas 2005 North American Industrial Classification System (NAICS) definitions were used for data complied for year 2005. We used the information collected by the SCAG Community and Economic Development department to conduct our analyses for 1972 to 2000 and collected the same information from the Employment Development Department (EDD) for 2005. Our analyses depicted a clear picture of how employment changed in the following manner:

- Change in share of each major industrial sector in every county and the region as a proportion of total employment created by that sector in the region.
- Change in share of each major industrial sector in creation of employment within each county and the entire region.

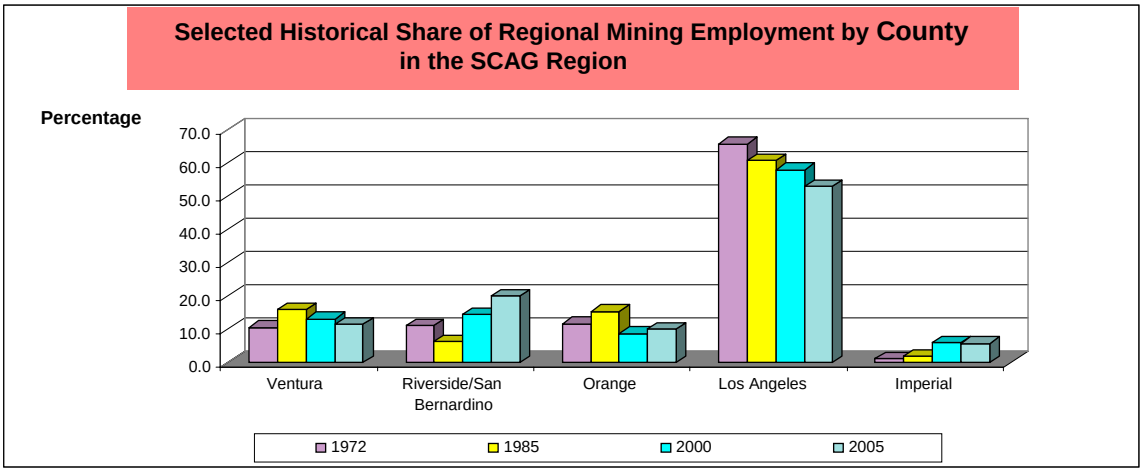
The following charts show the trend for a selected number of years that can best present the picture over the last three decades.



Source: Authors used and added to the data series provided by SCAG Community and Economic Development staff to produce the chart. Original data provided by EDD, Bureau of Labor Statistics.

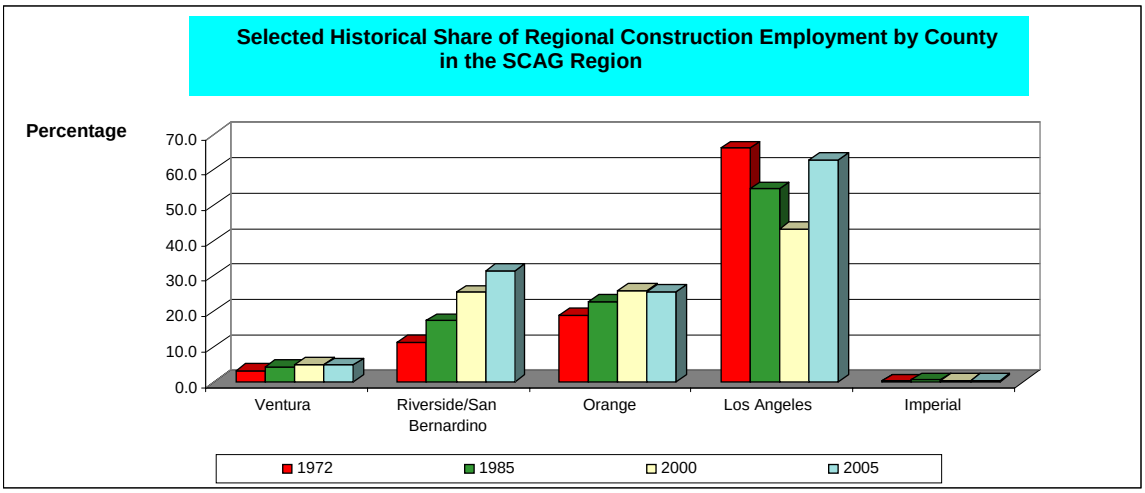
The above chart presents two pieces of very important information. It shows the relative importance of agricultural production in each county within the region by itself and over time. It also shows the trend of change in each county over time. The following conclusions can be derived from the analysis of the data:

- Despite their large populations, Orange and Los Angeles counties provide a relatively small portion of employment in this sector.
- In both Ventura and Imperial counties, the relative share of agriculture increased after a fall during the middle period.



Source: Authors used and added to the data series provided by SCAG Community and Economic Development staff to produce the chart. Original data provided by EDD, Bureau of Labor Statistics.

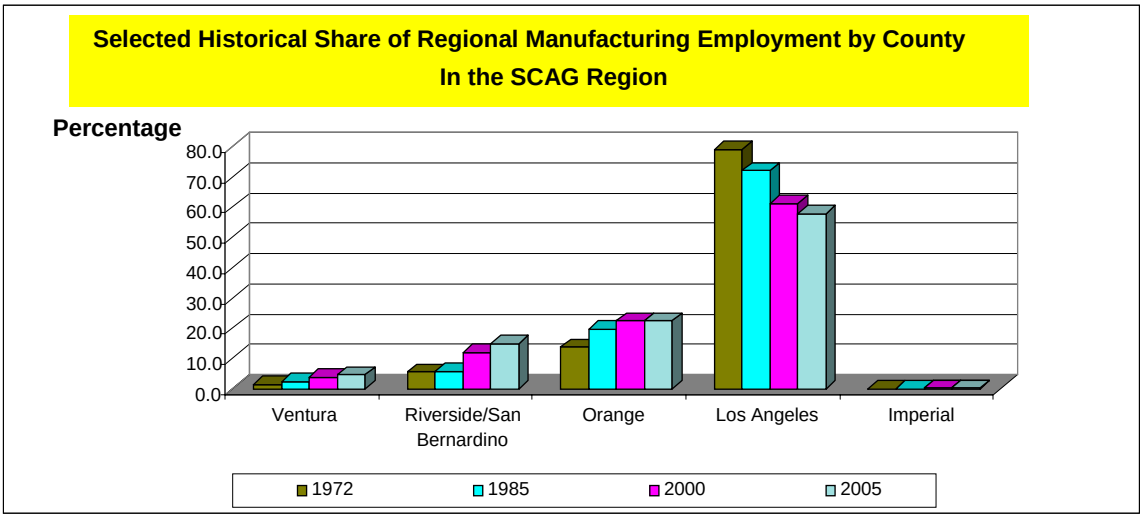
- The bulk of mining is done in Los Angeles County.
- The trend overall is a gradual decline.
- The decline is most evident in Los Angeles County.



Source: Authors used and added to the data series provided by SCAG Community and Economic Development staff to produce the chart. Original data provided by EDD, Bureau of Labor Statistics.

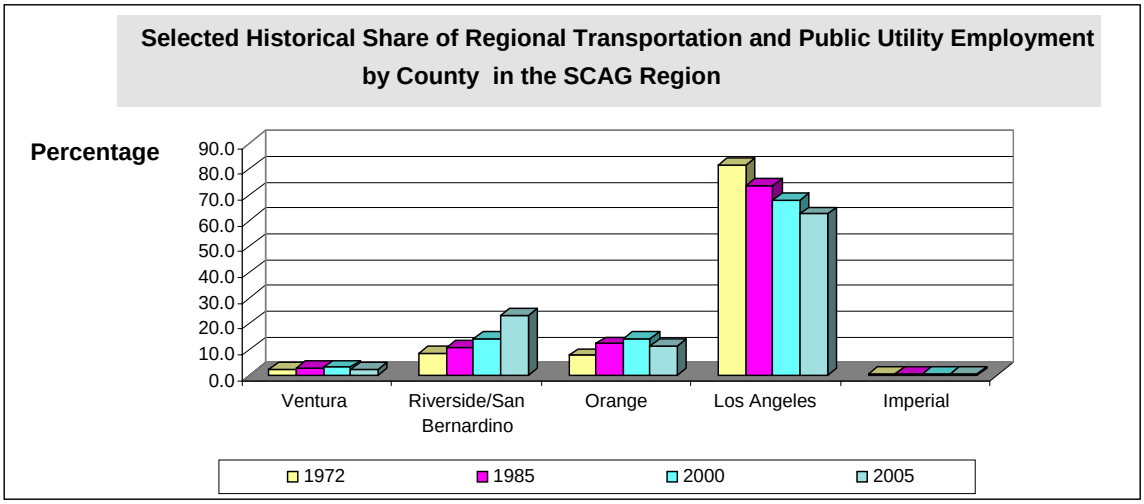
- The employment size of the construction industry is likely to depend on the population size of the respective counties. As such we can see a larger share for Los Angeles County than other counties.[36]
- Every county except Los Angeles, which showed a decline, presented an increase in its relative employment share over the time period.

[36] Population is a major determinant of the size of construction industry. But by no means is it the only factor that should be taken into consideration.



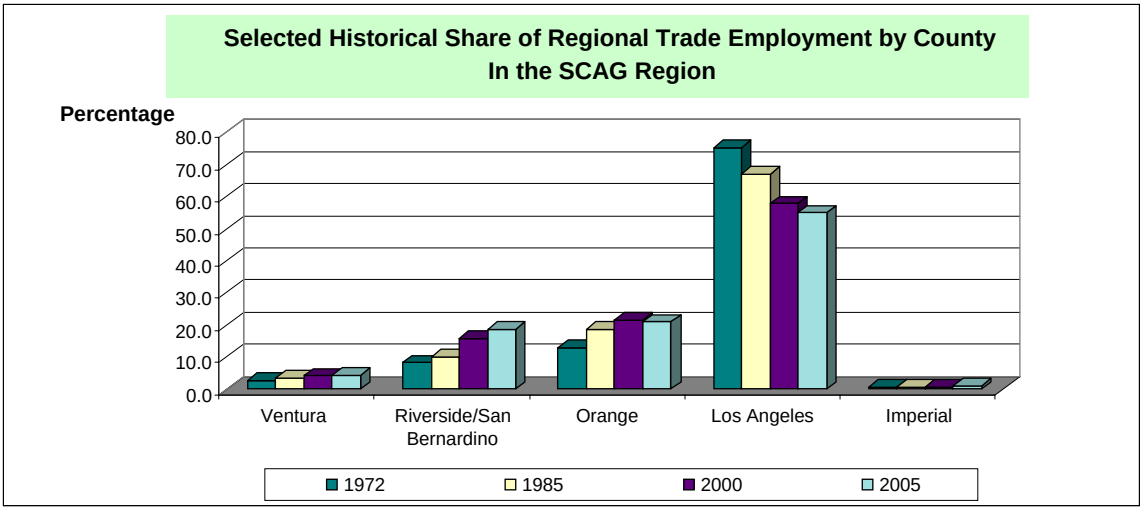
Source: Authors used and added to the data series provided by SCAG Community and Economic Development staff to produce the chart. Original data provided by EDD, Bureau of Labor Statistics.

- The Los Angeles County contribution to creating employment in the manufacturing sector declined consistently over the selected period.
- The share of creating jobs in the manufacturing industry increased for all counties except Imperial and Los Angeles.



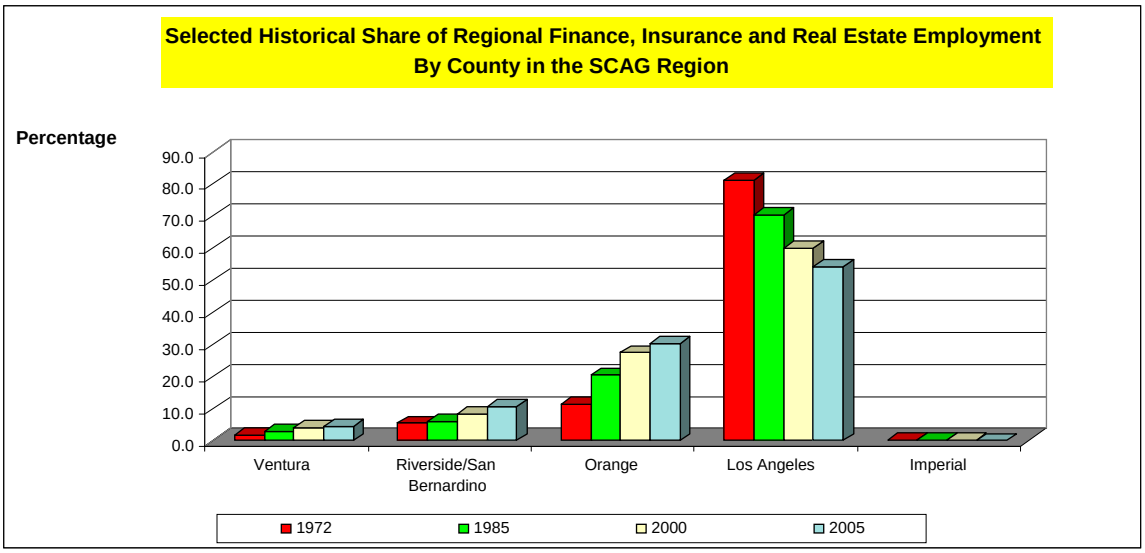
Source: Authors used and added to the data series provided by SCAG Community and Economic Development staff to produce the chart. Original data provided by EDD, Bureau of Labor Statistics.

- A clear decline in relative share of this industry in Los Angeles is evident.
- Both Orange County and Riverside/San Bernardino show a relatively higher proportional increase than other counties.
- Orange County's share almost doubled over this period of time.



Source: Authors used and added to the data series provided by SCAG Community and Economic Development staff to produce the chart. Original data provided by EDD, Bureau of Labor Statistics.

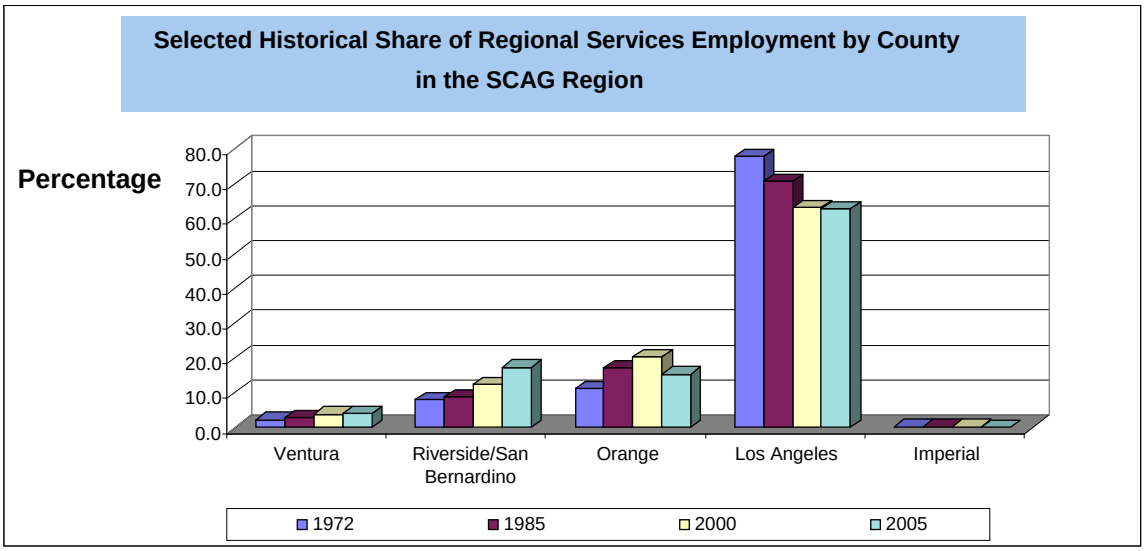
- As in other sectors, a decline in Los Angeles is evident over this period.
- Orange County shows the greatest increase in its contribution to jobs created within the region in the overall trade sector.
- A significant jump can be detected from the middle of this period to the end in Riverside/San Bernardino.
- Little change can be seen in Imperial County over this period of time.



Source: Authors used and added to the data series provided by SCAG Community and Economic Development staff to produce the chart. Original data provided by EDD, Bureau of Labor Statistics.

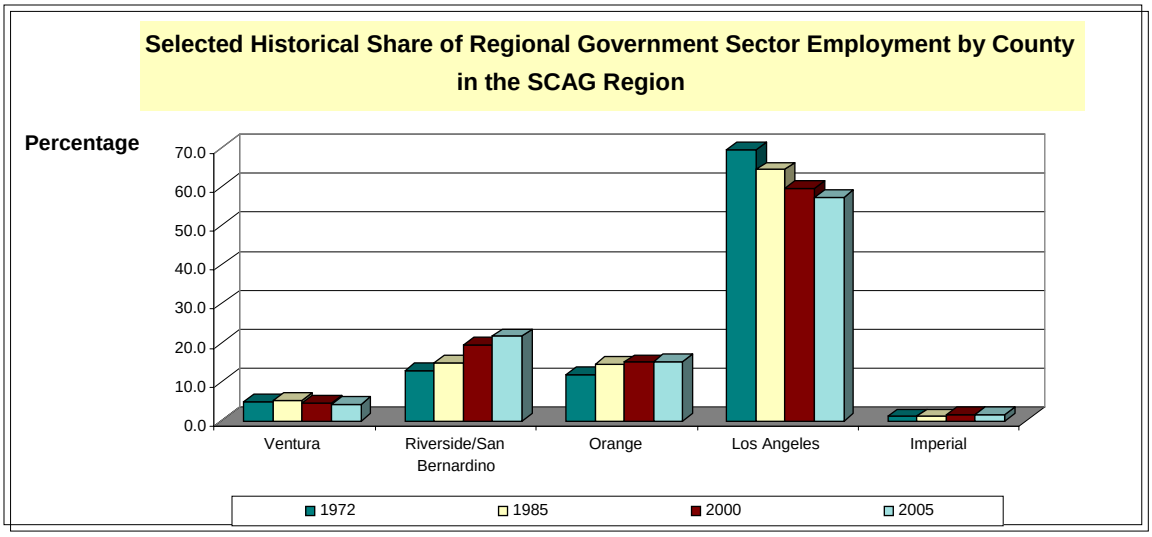
- There is a significant decline in the contribution of Los Angeles County.
- Orange and Ventura counties showed a significant increase at almost two and a half times in contributing to job growth in this sector.

- Imperial County demonstrated virtually no change in its relative contribution for creating employment in this sector.



Source: Authors used and added to the data series provided by SCAG Community and Economic Development staff to produce the chart. Original data provided by EDD, Bureau of Labor Statistics.

- Los Angeles County showed a significant decline in its contribution to employment in this sector.
- With the exception of Imperial County, all other counties showed a steady increase in their contribution to job creation in the services sector.

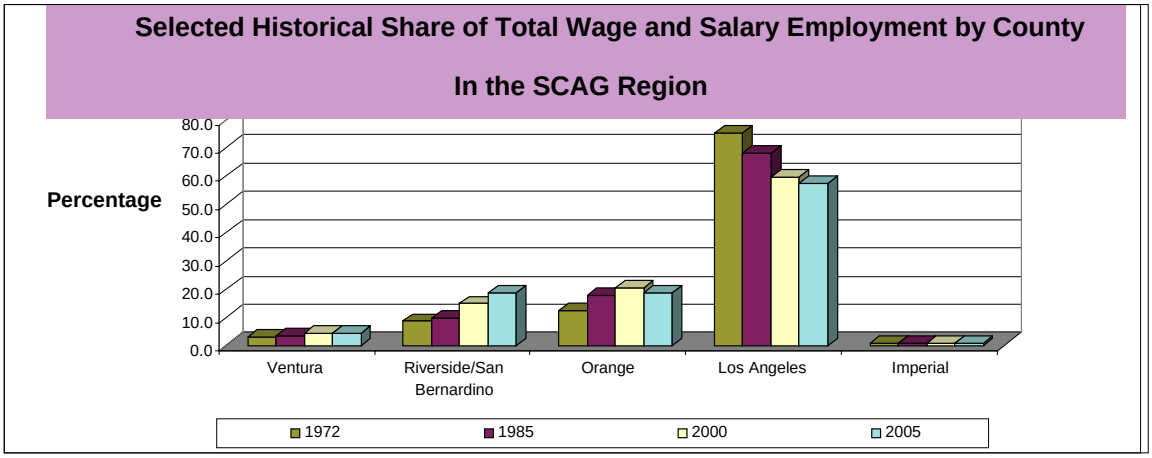


Source: Authors used and added to the data series provided by SCAG Community and Economic Development staff to produce the chart. Original data provided by EDD, Bureau of Labor Statistics.

- Los Angeles County's share declined in the creation of government jobs.
- While Ventura County experienced a slight increase in the middle third time period, it was flanked by an overall decline.

- Share of government sector employment in Imperial County increased substantially.
- The trend in Orange County is similar to that of Ventura County showing an increase in the first half and a marginal increase in the remainder of the period.
- Riverside and San Bernardino counties' share increased considerably over the period showing a sharper increase in the second half of the period of consideration.

The following chart shows the relative importance of each county in creating various industrial employments in the last three decades. The following chart is a summary of what has been discussed in the previous sections of this segment.

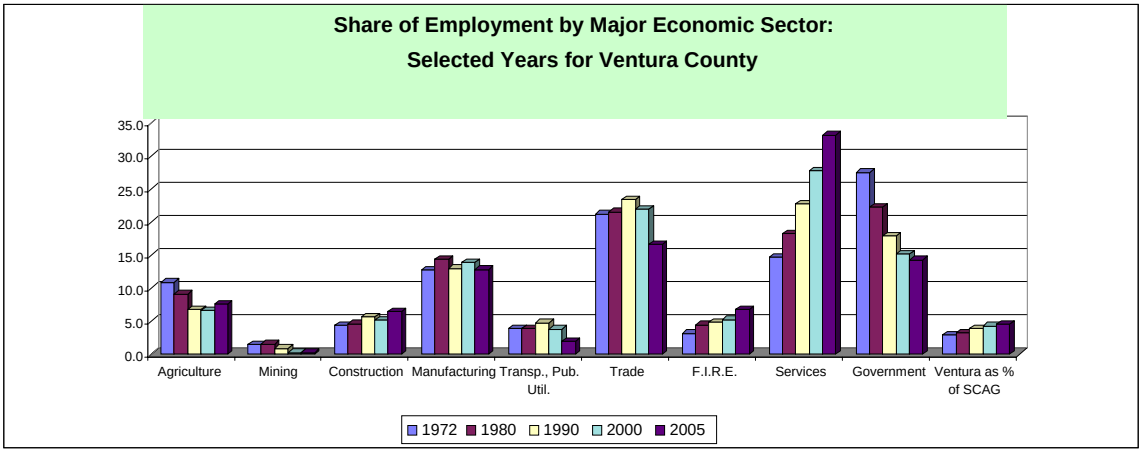


Source: Authors used and added to the data series provided by SCAG Community and Economic Development staff to produce the chart. Original data provided by EDD, Bureau of Labor Statistics.

- There has been a considerable shift in the contribution of various counties in creation of wage and salary employment within the region.
- Los Angeles County's proportional contribution decreased giving way to an increase in the share of other counties. Los Angeles County used to produce 75.2% of industrial employment in 1972 compared to a much reduced share of 57.4% by year 2005.
- Orange County emerged as a major center for the creation of wage and salary employment. It had a share of 12.5% in 1972 compared with a much higher contribution of 18.6% in year 2005.
- Ventura County showed a significant increase in creating employment from a mere share of 2.9% in 1972 to a share of 4.5% in 2005.
- A similar pattern of increase in share of wage and salary employment can be seen in Riverside and San Bernardino counties for a combined share of 8.6% in 1972 to 18.7% in year 2005.
- Imperial County showed no increase over this period of time. Its share of employment in various industries within the region declined in the first half of our observation from 0.8% in 1972 to 0.7% in 1985 and back to its original level of 0.8% by the end of the period of our observation in year 2005.

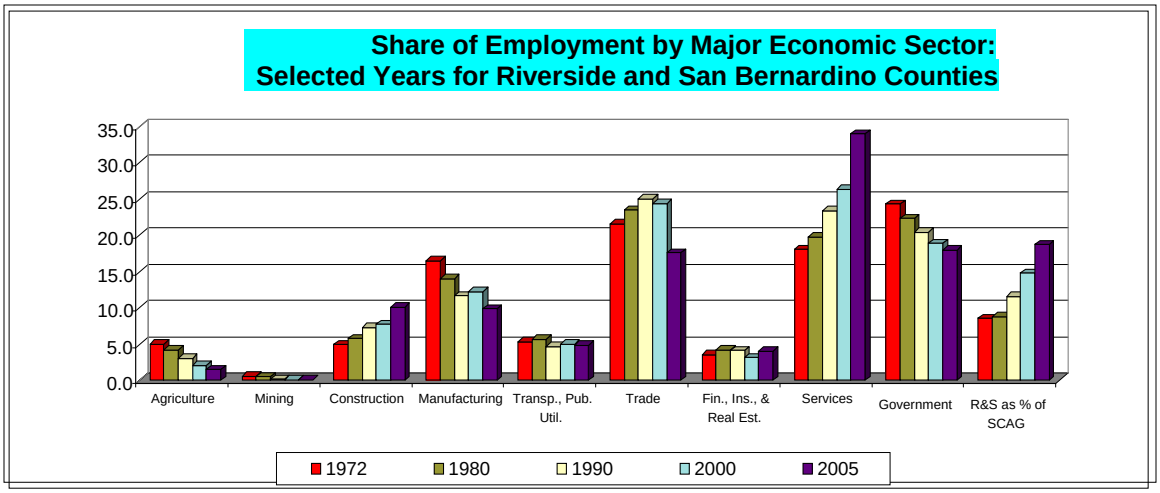
2.4. Change in Share of Each Major Industrial Sector in Creation of Employment within Each County and the Entire Region

The previous section depicted a clear picture of how various counties' proportional contribution to the entire region changed. It also traced the change in the pattern across various industrial sectors. This section looks at the rise and fall of various industrial sectors within each county and the entire region. In essence, this section of the report shows where the pattern of employment has shifted over the last three decades. As pointed out earlier, the inability to have a perfect match between SIC and NAICS definitions of some industries may have caused an over or under reporting of the share of employment by certain economic sectors in the segment of the study. We should therefore consider the comparisons for the government, the trade, and the services sectors with caution. Indeed the high percentage of increase in the services sector and a decline in the trade sector may have very well in part been caused by the change in the breakdown of the these industries due to change from SIC to NAICS. Nonetheless, the rise in services can be detected in most counties during the period.



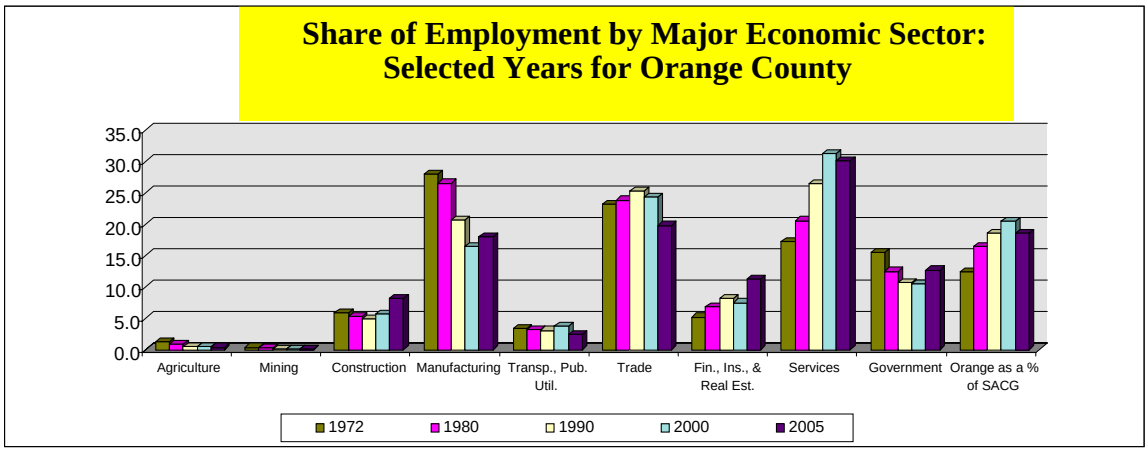
Source: Authors used and added to the data series provided by SCAG Community and Economic Development staff to produce the chart. Original data provided by EDD, Bureau of Labor Statistics.

- Agriculture is still an important source of economic contribution and employment in Ventura County, although its contribution declined over this period of time.
- The role of mining has been small and has reduced to an even smaller proportion over time.
- The role of manufacturing is significant and has even increased in recent time.
- The contribution of government jobs is falling.
- The contribution from finance, insurance, and real estate has been on the rise.
- The greatest rise has been in the services industry.



Source: Authors used and added to the data series provided by SCAG Community and Economic Development staff to produce the chart. Original data provided by EDD, Bureau of Labor Statistics.

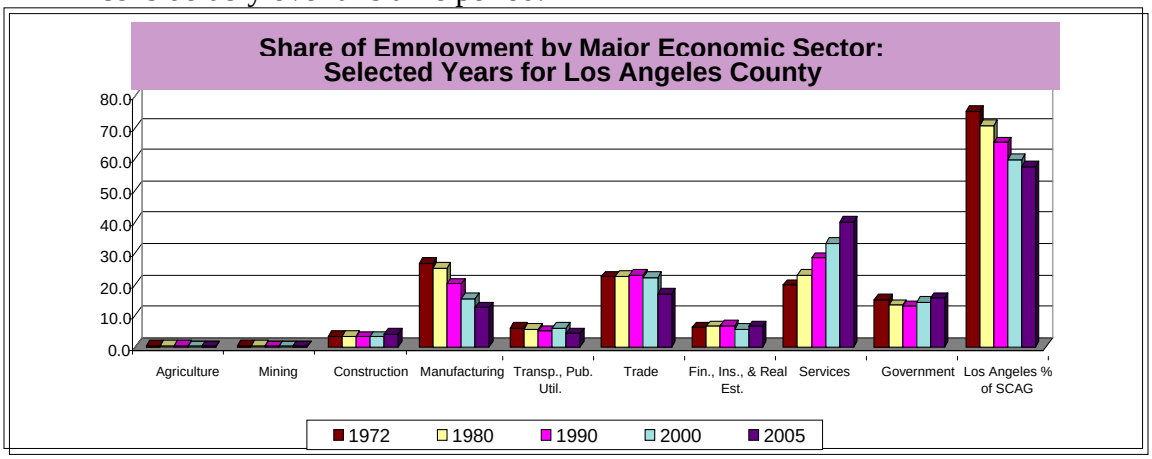
- The role of agriculture has fallen over time and has made a very small contribution in creating employment in this area by the end of the period.
- The role of manufacturing in creating employment has declined but still counts as an important sector.
- The greatest gain has been in services.
- Mining has a negligible contribution in creating employment.
- Finance, real estate, and insurance have fluctuated over this period, and they provide jobs to less than 5% of people employed in these counties.
- The overall contribution of these two counties within the region increased by a significant proportion.



Source: Authors used and added to the data series provided by SCAG Community and Economic Development staff to produce the chart. Original data provided by EDD, Bureau of Labor Statistics.

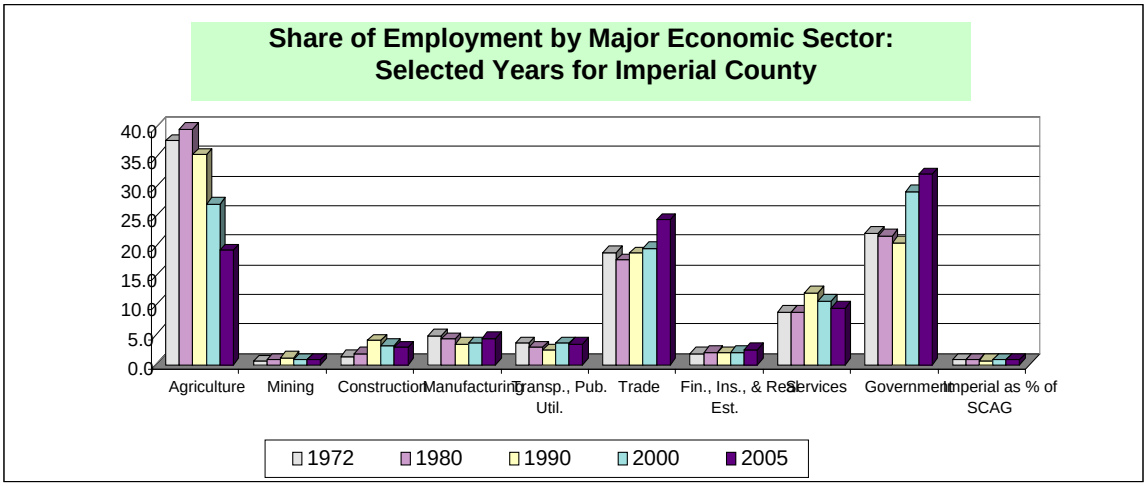
- Agriculture has had a minor role in creating employment in the county and was further reduced into a negligible proportion by the end of 2005.
- Although manufacturing is responsible for a significant proportion of employment in Orange County, the trend over the last three decades is a decline.

- Services have expanded to become the principal creator of employment in the county.
- The role of trade is very significant and has remained steady over this period of time.
- The overall contribution of Orange County within the SCAG region expanded considerably over this time period.



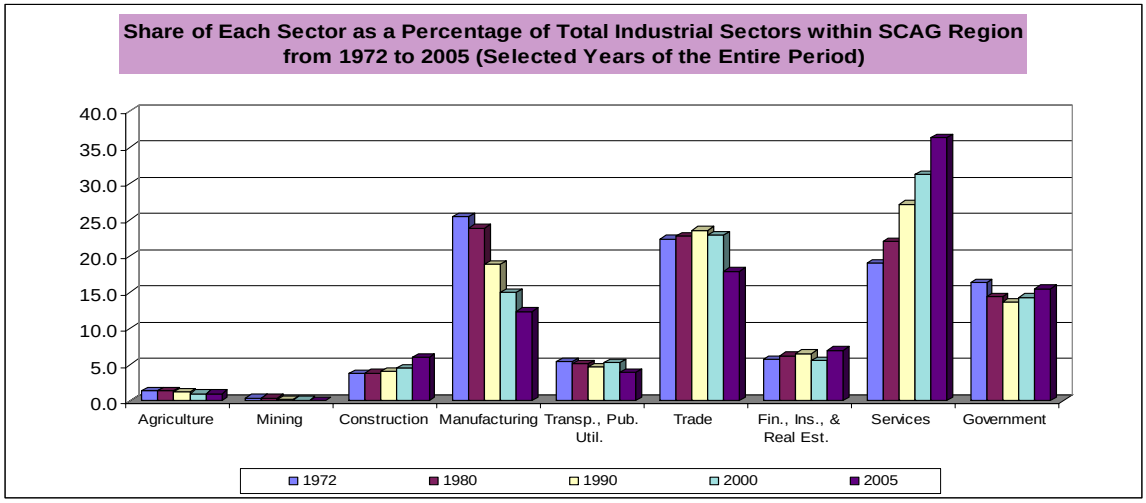
Source: Authors used and added to the data series provided by SCAG Community and Economic Development staff to produce the chart. Original data provided by EDD, Bureau of Labor Statistics.

- The overall contribution of Los Angeles County within the region declined over this period of time. Nonetheless, it is the biggest area producing nearly 60% of the total employment in the region.
- The roles of mining and agriculture compared to other sectors are negligible and have declined over time.
- The contribution of trade remained the same and is a major source of employment for the county and the region as a whole.
- The contribution of services has increased like other areas by a large proportion.



Source: Authors used and added to the data series provided by SCAG Community and Economic Development staff to produce the chart. Original data provided by EDD, Bureau of Labor Statistics.

- Agriculture is the most significant source of economic activity and employment in Imperial County. However, its overall contribution has been on the decline.
- Next to agriculture, government is the second highest employing sector in Imperial County. The role of the government in creating jobs has risen despite an opposite trend in many other economies within the region.
- The contribution of trade is the third most significant industrial sector.
- Service jobs are proportionately significant but have not increased within this period as seen everywhere else within the region.
- It should be noted that the industrial employment pattern of Imperial County is different from the others. This combined with a much higher level of unemployment are important concerns.



Source: Authors used data provided by SCAG Community and Economic Development staff to produce the chart. Original data provided by EDD, Bureau of Labor Statistics

The previous chart shows the share of each sector in four selected years during the last three decades of the past century. It provides a vivid picture of how the industrial pattern of creating employment has changed within the region. A close examination of the findings presented in the chart suggests the following:

- There were no major changes from 1972 to 1980 in the industrial pattern for creating wage and salary employment in the region. There were mild declines in manufacturing, transportation and utility, and government sectors. During the same period, the role of trade in creating employment increased only marginally. The biggest gain was in services with a 22% regional increase; this was up from the lower proportion of 19% in 1972.
- From 1980 to 1990, the same structural changes continued. While most industries experienced a decline in employment, the services sector had a noticeable rise in employment. There was also a marginal increase in employment in trade, finance, insurance, and real estate.
- The direction of decline followed the same path from 1990 to 2000. The role of agriculture in the region went down to a mere 1%, while construction went up

from 4.1% in 1980 to 4.5% in 2000. Manufacturing dropped to 15% from 18.9% a decade ago. Finance, insurance, real estate, and trade all declined by a very small percentage. The greatest gain continued in services showing a relative contribution of 31.3% in 2000 compared with 27.2% a decade ago.

- Finally an overall comparison between 1972 and 2005 shows the following major shifts:
    - There was a significant increase in the services industry as the principal sector in creating employment in the region.
    - A significant decline in the contribution of manufacturing as an important sector in creating employment in Southern California is evident.
    - The roles of agriculture, mining, trade, and government all declined.
    - The construction sector enjoyed a marginal increase in share over the period.
    - Some fluctuation and relatively very little change were seen in finance, insurance, real estate, transportation, and public utility.

2.5. Change in Wage and Salary Patterns since the 1970s

This segment looks at the wage trends within each industry sector across the counties and the SCAG region as a whole over the last three decades. To show the direct impact of the economic forces on the wage and its implied impact on individual and household income, this section will show the relative importance of each sector by indicating its share in the overall creation of wage and salary employment. The story will be told for each county in 10-year sequences beginning with 1975. These snapshots will reveal the trend and amount of high- and low-paying jobs that have been created through the years.

Details of data and graphs showing the periodic changes over time can be found in appendix A. A summary of the findings is presented below.

2.5.1. Summary of Findings for 1975

- Weekly payment for retail trade is considerably higher in Los Angeles County than anywhere else. This may reflect a higher rate of a unionized labor force and a higher cost of living adjustment paid for the Los Angeles location.
- Manufacturing makes up a significant proportion of industrial employment (wage and salary) in most counties comparatively paying a good salary.
- Both retail trade and services have a considerable share of employment and offer a relatively low salary.
- Mining has a relatively small sector in terms of job creation but offers a much higher weekly salary.

2.5.2. Summary of Findings for 1985

- A similar trend emerges for 1985 compared with 1975. However, there are some differences in the relative importance of various industries and their relative pay.
- Manufacturing was still an important segment for most counties, paying a relatively higher salary. In some areas, like Orange County, its share of

manufacturing production within the SCAG increased, although its relative share within the county showed some decline.[37]

- Imperial County appears quite different in having a distinctively higher percentage of low-pay employment within its total local economy than any other counties in the region.
- There are clear differences in pay level in most industries and between counties. This calls for greater attention to the breakdown of pay scale to various jobs within each industry sub-sectors. One also needs to consider the cost of living in each county as a reason for the difference in pay scale between counties.
- There is a need to separate and capture the proportionate contribution of various factors that cause a significant pay differential in wage and salary levels in different counties.

2.5.3. Summary of Findings for 1995

- Reduction in relative contribution of manufacturing industries in creating jobs shows itself in all regions. Riverside and San Bernardino counties have shown a relatively lower rate of reduction in proportion to their manufacturing sector as a significant economic sector producing higher paying jobs. Imperial County remained low in creating employment in the manufacturing sector.
- The major trade off in most areas regarding the creation of employment is a proportionate increase in employment offered in the services sector coupled with a reduction in the proportional importance of the manufacturing sector. There is a clear rise in relatively lower paying employment industries and a decline in higher paying industries as a result of the aforementioned trade off.
- The gap in weekly pay of the same industry across various counties is evident. The largest gap can be seen in the services sector. In order to present an accurate picture we present the following table.

	Weekly Wage in Dollars Among Counties in 1995					
Industry	**Imperial**	**Los Angeles**	**Orange**	**Riverside**	**San Bernardino**	**Ventura**
Agriculture	220	347	318	282	334	312
Mining	744	1107	953	517	751	926
Construction	442	639	636	510	550	545
Manufacturing	434	655	713	574	574	659
Trans& pub utility	548	745	653	625	611	714
Wholesale trade	533	698	798	559	606	648
Retail trade	261	340	338	288	309	307
Fin. insurance & real estate	436	816	805	571	567	668
Services	344	647	554	420	458	514

Source: Bureau of Labor Statistics, Local Area Unemployment Statistics.

[37] This can be deduced by considering both the trend presented in this section together with the data reported in the previous part of this report (relative importance of each industry and change in its pattern over the last three decades.)

- In general, Imperial County has the lowest wage rate. This should be looked at with the understanding of the purchasing power of the residents who might be enjoying lower cost of living particularly with regard to the cost of housing.[38]
- Retail trade pays a more consistent weekly salary than other areas. This may be due to a higher level of unionization. Unfortunately this sector is a major provider of jobs in all of these counties, which suggests low-pay workers are far worse off in high cost of living areas or may be the ones who travel the longest distance to work in one place and live where they can afford to live.[39]
- There are considerable disparities in services' weekly pay across the counties. This may suggest differences in the relative weights of various sub-sectors within each county. It also suggests the possibility of more apparent and widely accepted salary adjustments based on cost of living in the respective areas. For example, a much higher weekly pay in Orange and Ventura counties support this concept of wage adjustment based on cost of living, and a different breakdown of sub-sectors based on the higher weekly pay in the Los Angeles area. The impact of union wage bargaining or other economic factors also cannot be ruled out.

2.5.4. Summary of Findings for 2005

- The role of mining, with a relatively high weekly pay, is reduced to a negligible level in all counties.
- Agriculture, forestry, fishing, and hunting are still a significant industries in creating employment in both Ventura and Imperial counties. This is an important issue considering the relatively lower pay scale these industries offer. The problem is of greater concern for Ventura County where the cost of living, and housing in particular, has emerged as an important development over the last decade. This is why farm workers' housing has emerged as an important economic and social concern in Ventura County.
- The services sector was broken down in greater detail. The leisure and hospitality industry is a significant employer in all counties, with the exception of Imperial County, representing more than 10% of all jobs offered. The share of employment generated by this industry is 13.75% and 12.3% in Riverside and Orange County respectively. This industry pays one of the lowest wage and salary rates, and in some places, even less pay than the agriculture sector. This is clearly a source of low-paying jobs in the region that has grown and will most likely continue to grow in the years to come.
- Overall we see a continuation of growth in services in spite of offering a relatively lower pay in most segments of the industry.

[38] The views expressed with regard to the purchasing power of the residents are not based on a detailed analysis, clear identification, and calculation of specific purchasing power party in these counties. It is merely based on casual observation and common knowledge and perception with regard to general price level and cost of living in these areas.

[39] Once again this is a suggestion and proposition for a more detailed research than a proven conclusion within the confinement of this technical report.

- The information on the trade sector presents a combination of retail and whole sale trade even though there is a considerable pay scale difference between the two. It is safe to assume that a major component of this sector consists of retail trade which has a low-pay scale.
- There are significant wage differentials within a single industry that reflect a different composition of the sector in various counties, and/or a wage adjustment factor based upon the location of companies. A detailed comparison can be seen in the following table:

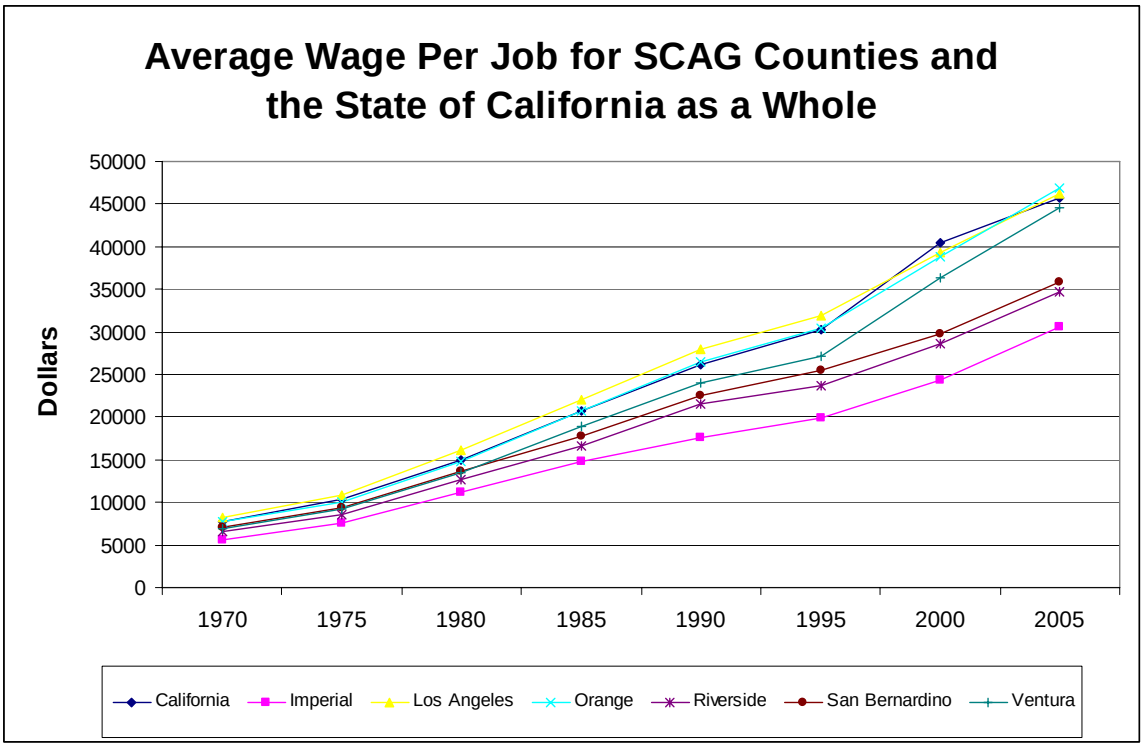
Weekly Wage in Dollars Among Counties in 2005						
	Imperial	**Los Angeles**	**Orange**	**Riverside**	**San Bernardino**	**Ventura**
Mining		1,760	1,339	571	680	654
Construction	721	877	956	743	789	785
Manufacturing	633	916	1,054	792	754	1,426
Trade	523	740	834	603	651	728
Information	701	1,570	1,239	838	904	1,224
Financial Activities	647	1,416	1,500	872	937	1,435
Professional and Business Services	537	1,018	939	636	598	823
Education and Health Services	523	803	822	732	778	770
Leisure and Hospitality	244	557	371	335	270	310
Other Services	268	407	539	476	424	480
Unclassified		771	747	514	543	542
Agriculture, Forestry, Fishing and Hunting		499	492	407	504	426

Source: Bureau of Labor Statistics, Local Area Unemployment Statistics.

- The near elimination of mining in most counties coincides with the significant reduction in the relative pay scale in some of the counties such as Riverside, San Bernardino, and Ventura counties. The pay scale for Los Angeles and Orange counties remain much higher suggesting the existence of different categories of jobs with relatively higher pay in the sector within these counties.
- One of most interesting pictures emerging from the pattern of weekly pay is the difference in pay scale of leisure and hospitality. Los Angeles County clearly has a weekly pay scale far in excess of every other county in the region. Without a detailed study of what contributes to this gap, one surmises it is due to greater existence of a unionized workforce, better cost of living adjustment factors, and the possible relative tightness in supply of the needed workforce. These are some of the issues that need a closer look as well as exploring other existing reasons.
- Overall the wage scale differential widened much more in 2005 than in other periods of our observation since the 1970s. This trend will be explored further in this study's pursuing phases.

2.6. An Overall Comparison of Wage per Job in SCAG Counties and the State of California from 1970 to 2005

The ongoing discussion shows a great deal of differences in pay scale and proportional importance of various industries in creating employment in the SCAG region since the 1970s. The following chart used the information provided by the Bureau of Economic Analysis to compare annual average wage per job in various SCAG counties compared with the same averages for the state of California.



Source: Regional Economic Information System, Bureau of Economic Analysis, U.S. Department of Commerce, CA34 Footnotes http://www.bea.gov/regional/reis/CA34fn.cfm .[40]

This chart shows a number of interesting facts that are not recognized without scrutiny.

- Despite a much higher level of household income in counties such as Orange and Ventura, the average wage per job show a level consistently lower than the state as a whole or Los Angeles County, the biggest economic zone in the SCAG region. This shows that most likely these counties, in addition to Riverside and

[40] The employment estimates used to compute the average wage are a job, not person, count. People holding more than one job are counted in the employment estimates for each job they hold.

San Bernardino, have much wider wage differentials than what can be seen in the state as a whole or Los Angeles County.

- The wage per job is consistently lower in Imperial County.
- Both Orange and Ventura counties show a sharp increase in the average wage per job in the last decade. Orange County in particular has emerged as a county with a higher level of wage per job in most recent years.

3. Survey of Industry Representatives

This part of the study draws from the experience of a large group of industry representatives from many industries within the region. It takes a close look at the opinion of these representatives based on their experience regarding the current and the future state of job trends and wage levels within their region as a whole and in their specific industry.

These interviews are an important segment of our research method that can take us beyond the existing statistical information and offer insight based on the opinion of those with inner knowledge of the pertinent issues. The major themes employed in the design of the questions include the following:

- Demographics and industry information
- State of the county's economy, employment, jobs, and wage trend in the recent past, present, and near future
- Employment and wages and their trends in the industry of respondents within each county of the region
- Impact of outsourcing/globalization on jobs and wages in the industry and the county of respondent
- Impact of immigration on jobs and wages in the industry and the county of respondent
- Impact of labor unions on jobs and wages in the industry and the county of respondent
- Impact of market structure on jobs and wages in the industry and the county of respondent
- Impact of information/communication technology (ICT) on jobs and wages in the industry and the county of respondent
- Reasons for skill shortages in the industry and the county of respondent.
- Importance of housing cost in wage/salary determination in the industry and the county of respondent
- Industry practice for wage and salary determination in relation to skill shortages

The task of selecting a statistically representative group of industry captains and managers who could speak on behalf of their industry was difficult and complex for the following reasons.

- Search for choosing a statistically representative group from each industry at a meaningful breakdown that would explain specific problems of that industry would require a selection of hundreds of industries.
- Industry captains and managers are hard to reach and therefore it would require many folds over-sampling for the purpose of reaching them and having them to complete the survey.
- Making sure that each county is well represented within the total sample would add another layer of complication and impracticality to this research.

- The early phase of this research showed that a number of factors such as demographic characteristics and size of the company might influence the opinion of respondents. Adding these additional dimensions to the sampling criteria made the task even harder.

Considering the problems explained, the research team decided to be creative in their plan of conducting the survey and devised a pragmatic approach for the interview phase of the survey. This resulted in taking the following steps in conducting the survey:

- The research team took advantage of the annual meeting of Professionals in Human Resources Association (PIHRA) in Newport Beach, California, and interviewed a large group of executives who attended this meeting in October 2007. PIHRA was founded as the Personnel and Industrial Relations Association in 1944 by a small group of Los Angeles personnel executives. They have affiliation with the Society of Human Resources Management (SHRM). PIHRA is the largest chapter of SHRM in the country. The current membership of PHIRA is more than 4500 representing more than 3000 forms. PIHRA is comprised of all levels of HR practitioners representing the complete spectrum and breadth of every type of industry in Southern California.
- The task of interviewing PHIRA members did not stop after their annual meeting. Individual contacts were made with the county organizers of PIHRA's chapter in all six counties of SCAG region. This resulted in increasing the size of our sample.
- Finally, we added to the number of questionnaires filled out by taking random samples of business establishments in all six counties. This effort was to increase the proportionate contribution of smaller establishments that may not have been amply presented in PIHRA's membership.
- Using all the above-mentioned methods allowed us to have a total of 334 completed surveys.

In order to understand the viewpoint of the industry captains of a wide range of businesses in Southern California, local companies were divided into small, medium, and large businesses.

For the small businesses, the study focused on the viewpoint of the managers and/or owners of these companies. For this category, a total of 134 surveys were collected. For the category of small size businesses, the sampling frame was defined as the business population in SCAG counties. For each county, a stratified random sampling method was used to select five ZIP codes. For the selected ZIP codes, using the Computer-Assisted Telephone Interviewing (CATI) procedure, 760 businesses were contacted from which 134 participated in the survey (achieving a 17% cooperation rate). From the group of 134 participating businesses, 80 businesses agreed to participate in the telephone interview and 54 other businesses asked to fill out the self-administered survey.

While the hiring and firing decisions of small companies are made by their owners or managers, for a typical medium to large business, these decisions are typically made by the HR practitioners in their respective human resource departments.

The sampling frame for the medium to large companies was defined as current members of the Professionals in Human Resources Association (PIHRA). Professionals in Human Resources Association (PIHRA), is a non-profit California corporation with more than 4,900 human resource practitioners representing more than 3,000 firms. PIHRA is affiliated with the Society of Human Resource Management (SHRM) which is the world's largest professional association devoted to human resource management. SHRM represents more than 225,000 individual members in over 125 countries, and has a network of more than 575 affiliated chapters just in the U.S. Today, PIHRA is the largest SHRM chapter in the United States.

PIHRA is comprised of all levels of human resource practitioners representing a complete spectrum of every type of industry in Southern California. PIHRA members are very knowledgeable about the dynamics of the job market and, due to their strategic positions, have the most vital information about labor markets; e.g., current situation, future needs, and overall trends of the regional job market.

The following table portrays composition of the strategic positions held by PIHRA members.

Positions Held by PIHRA Members	Percentage
Manager	**35%**
Director	**22%**
Vice President	**8%**
Consultant	**6%**
Specialist	**6%**
Administrator	**6%**
Generalist	**5%**
President	**4%**
Representative	**4%**
Supervisor	**2%**
Legal Counsel	**1%**
Assistant Vice President	**1%**

The Southern California chapter is divided into 16 districts and sub-districts 13 of which are a perfect match of SCAG region. The following table presents the wide geographical area of PIHRA's districts in Southern California.

- District 1 – Los Angeles
- District 3 – San Gabriel Valley
- District 4 – East San Fernando Valley
- District 5 – West Los Angeles, Santa Monica
- District 6 – South Bay

- District 7 – Long Beach, Palos Verdes Peninsula
- District 8 – East Los Angeles/Orange Counties
- District 9 – The San Fernando Valley
- District 10 – Ventura County
- District 11 – San Bernardino/Riverside Counties
- District 12 – Santa Clarita
- District 14 – Orange County
- District 15 – East San Gabriel Valley and Pomona Valley
- District 17 – South Riverside County
- District 18 – Coachella Valley
- District 19 – Antelope Valley

All in all, a total of 200 surveys were collected from the HR practitioners PIHRA category.

The sampling unit for the medium to large companies is defined as the human resource practitioner of these companies. For the small companies, the sampling unit is defined as a randomly selected business with 20 or less employees within each county.

The survey instrument was pre-tested with persons unfamiliar with the study and was refined to correct question wording that may have been unclear to some respondents. We selected a sample of 15 respondents and conducted a pre-test to complete the following tasks:

- Have interviewers verify that all instructions and "skip" patterns were correct.
- Watch for questions that were awkward to read or unclear about what the question was asking.
- Have interviewers ask respondents for their general reactions to the questionnaire at the end of the interview.
- Go over the questionnaire item by item noting questions that worked well and those that needed revision.

From November 10 to December 15, 2007, the survey team administered the telephone interviews. We used the CATI technique from a centralized telephone bank since it had the fastest turnaround time of all the available polling methods. Moreover, telephone surveys deliver almost instant analysis. The computer systematically guided the interviewers and checked the responses for appropriateness and consistency. The sample reflected the diversity of the businesses for each city or ZIP code area. The randomization method utilized the Table of Random Numbers generated by the SPSS statistical software system.

For the category of medium to large businesses, the sampling frame was defined as current members of the Professionals in Human Resources Association (PIHRA). PIHRA's 50th annual conference was held in Long Beach, California, from October 16 to October 18, 2007. A systematic random sampling method was used to conduct the survey at this annual conference. Every third PIHRA member who was attending this conference

was approached to take the self-administered survey. During the three-day conference, 485 members were approached and a total of 112 members agreed to participate in the self-administered survey. This effort represents 23% success rate.

From the list of sixteen of PIHRA's districts, seven districts were randomly selected from which five provided the permission to attend their monthly meetings and agreed to participate in the survey. In the period of December 3 through December 19, 2007, a total of 88 surveys were collected in the monthly meetings of these districts.

The following table shows the breakdown of the counties and their respective number of responses. Some respondents were working in multiple counties. The following table portrays the percentage of cases as well as percentage of responses from each of the SCAG counties.

Q7 County of work

		Responses		Percent of Cases
		N	Percent	
County of work[a]	Imperial County	30	6.7%	9.0%
	Los Angeles County	165	36.8%	49.5%
	Orange County	87	19.4%	26.1%
	Riverside County	50	11.2%	15.0%
	San Bernandino County	46	10.3%	13.8%
	Ventura County	55	12.3%	16.5%
	Other	15	3.3%	4.5%
Total		448	100.0%	134.5%

a. Dichotomy group tabulated at value 1.

3.2. Summary of the Findings and Their Overall Analyses

Appendices B and C contain a detailed account of the survey with easy-to-follow graphs and discussion of the findings. The following segment of the report presents a brief summary of the findings.

3.2.1. State of the Economy

More than half of the respondents gave a rating of good to the state of the economy in their county of work. A significant proportion (31.2%) gave it a fair rating. A small minority either believed that the state of the economy was excellent (9.9%) or poor (5.4%).

On a county-by-county comparison, there was a higher level of positive (stated by excellent or good) view than negative (revealed by statement of fair or poor). There was, however, a considerable negative opinion among the respondents about the state of economy in their own county. Among them, Imperial, Ventura, Riverside, and San Bernardino Counties stand out.

There was a significant difference in the opinion of business executives across different business sizes. Analysis of cross-tabulations indicates that there was a positive correlation between business size and the rating of economy in the county of the respondent's work. The observed association clearly implies that large businesses have a more sanguine attitude toward their local economy.

In comparing the state of the economy of a county with its state five years ago, the highest proportion of the respondents (32.0%) believed that economic conditions in their county of work got worse. A slightly lower percentage (30.2%) believed that it stayed the same. A very small percentage (3.6%) believed that it got much better and a similarly small group of respondents (6.0%) believed that the economic condition in their county of work got much worse. In every county, the percentage of those who believed the economic condition in the last five years got much worse or worse is higher than the percentage of those who believed the condition in their county got much better or better. The picture in Ventura County stands out as nearly 50% of its respondents believe that the economic condition in their county compared to five years ago got worse or far worse.

A high rate of increase in recruitment from outside Southern California may indicate certain skill shortages in some industries. It could also be indicative of a faster growth of economic activities that bring a region to expand its labor force beyond its own population growth. A majority of those who could answer this question thought that the situation did not change. However, out of those who detected a change, at a ratio of two to one, they believed that the rate of recruiting from outside increased rather than decreased.

As for the future, a quarter of the respondents believed that it will stay the same in the next five years. Almost a quarter of them believed that it will deteriorate. However, a proportionally higher percentage (40.4%) believed that it will improve in the next five years. On a county-by-county basis, a significant percentage of respondents in each county believed that the state of their economy stayed the same. Ventura and Imperial counties registered the lowest level of respondents who believed the state of their economies will stay the same. This suggests that respondents from these two counties have a greater expectation of change in the near future. Expression of pessimism in the future can best be traced in the higher percentage of respondents stating that the state of their economy in the next five years is likely to deteriorate. Using this indicator, the highest level is seen in Ventura and Imperial counties' pattern of responses.

Optimism in the future of the economy can be traced in observing higher percentages of opinion about improvement in the state of the respondents' economy in the next five years. On a comparative basis, Imperial County's respondents show the highest share in believing that their county's economy will improve in the future.

Difference of opinion about the future of an economy can also be observed across different sizes of businesses. The larger the business, the higher the level of optimism about the future of the local economy. This observed association has significant implications for the future of job

markets in Southern California. Since small businesses were the engine of the economic recovery in early 2000, a pronounced pessimism among such businesses is likely to set greater momentum for further economic slow down and have negative consequences in the near future. With regard to the future of the local economy, the rate of optimism is highest among the medium companies (63.4%), while small companies have the lowest rating (35.8%). This rate is 42.3% for the large companies.

The combination of the views of the past, present, and the near future that emerges from the series of the questions asked shows that proportionally a higher percentage of respondents believed that the economic condition in their county of work deteriorated compared to five years ago. However, a proportionally greater percentage of the respondents is optimistic about the future and believes that the economy of their county is likely to improve. The interesting point about the result is that there is no pattern of a strong majority answering these questions about the future, and this suggests that there is a climate of uncertainly about what the state of the economy is going to be in the next five years.

3.2.2. Employment and Wages and Their Trends

Proportionally a higher percentage of respondents believed either that the overall number of jobs stayed the same (35.9%) or it improved (34.4%). However, more than a fifth of the respondents (21.6%) did not share this opinion and believed that the overall number of jobs in their industry deteriorated. This question and the pattern of responses shows that overall job openings may considerably differ from one industry to another, and an overall presentation of the responses may not help to see the emerging pattern within the industry of respondents.

Looking across counties, it can be seen that a significant percentage of respondents in each county believed that the number of jobs stayed the same. The highest level of responses that the job situation in their own industry within their own county remained the same is shown in Imperial County (50.0%). Ventura County comes in second with a percentage of 46.0%. The lowest percentage of respondents who believed the number of jobs in their own industry within their own county of work did not change was registered for Los Angeles County.

In looking at percentages of respondents who believed the number of jobs offered in their industry within their county of work deteriorated, Ventura, Los Angeles, and San Bernardino counties have the highest rates. By contrast, Orange County shows the lowest percentage of responses believing that the number of jobs in their industry within their county of work deteriorated.

The question of change in the last year showed statistically significant change across business sizes. There is a strong positive correlation between business size and the likelihood of stating that the overall number of jobs offered in the county of their work has improved in the last five years. The positive assessment expressed by respondents from large companies is almost twice as large as those who work in companies with 20 or less employees.

As for the future of the job market, with a ratio of two to one, optimism prevails over pessimism. Some 40.9% believed that the situation will improve whereas 21.2% believed that the number of jobs offered will deteriorate. Almost a third of the respondents (30.1%) believed that it will stay the same.

Across the counties, with the exception of Ventura County (16.0%), a large percentage of respondents believed that overall job offers in their industry will stay the same. The rate is very high in Imperial County. With regard to views about deterioration, the percentages vary at some significant level among the counties. The rate of responses indicating that overall job offers in their industry will deteriorate stand highest in Riverside County (30.4%) and Ventura County (30.0%). At the same time, respondents in Ventura County registered the highest percentage of responses in believing that the overall job offers will improve in the next five years (54.0%). San Bernardino County with 51.2% and Los Angeles County with 50.3% of respondents stating that the overall job offers will improve show the same level of confidence in believing that job situations will improve in the next five years. The lowest level of response about improvement in overall level of job offers was found in Riverside County (34.8%).

Expectations about future job opportunities show significant differences across various businesses. There is a strong positive correlation between business size and the expected number of jobs that will be offered in the county of their work in the next five years. The positive expectation about future jobs for large companies (52.3%) was significantly higher than expectations anticipated by companies with 20 or less employees (28.9%). Such negative sentiment expressed by the owners/managers of small businesses is likely to affect their investment strategy as well as their future demand for labor.

Creation of high-paying jobs is the most important and the urgent need of any region. The outcome of this survey concerning the impression of respondents about the recent past or their expectation of the near future about the creation of high-paying jobs within their own industry has significant contributions in the formation of pertinent policy implication that can emerge from this study.

With a ratio of two to one, the respondents believed that the number of high-paying jobs in their county of work deteriorated rather than improved (37.3% deteriorated versus 18.1% believing that it improved). Almost a third of the respondents believed that it did not change in their industry within their own county.

In all counties, the percentages of those who believed that the situation deteriorated are much higher than the percentages indicating improvement. In Riverside and San Bernardino counties, more than 50% of the respondents believed that the number of high-paying jobs deteriorated. In both Imperial and Los Angles counties, more than 40% of respondents believed that number of high-paying jobs in their industry within their own counties deteriorated.

In Ventura County, 50% of respondents believed that the number of high-paying jobs in their industry stayed the same. In contrast, the percentage of those who believed the number of high-paying jobs improved in Ventura County is the lowest at 14.0%. Los Angeles County respondents registered the highest percentage of responses (26.6%) for stating that the number of high-paying jobs improved in their industry within their county.

Wage level, in part, is impacted by the interplay of demand and supply of labor in the labor market for each area of production of goods and services. The opinion about wage level is indicative of how the future labor market condition is perceived. This study questioned its participants about their impression concerning the wage level in general and in the high-paying jobs in particular in recent the past, present, and the near future.

The relation between business size and the respondents' assessment of the overall number of high-paying jobs in the county of their work shows that the larger the business size, the lower the chance of having a negative assessment about the number of high-paying jobs in the past five years.

The pattern of questions about the expectation of the number of high-paying jobs in the future is as important as knowing their assessment of the past. The overall pattern of responses provides a difficult picture for any conclusive assessment. A slightly higher proportion of respondents (29.5%) believed that the situation will deteriorate rather than improve (28.5%). A third of the respondents believed that the number of high-paying jobs will stay the same. Once again, the picture that emerges here shows a state of uncertainty about the number of high-paying jobs that is likely to emerge in the next five years.

Across the counties, the answers to the near future expectation of the number of high-paying jobs create an interesting picture. At first glance in almost all counties, 30% or more of the respondents believed that the situation with regard to the number of high-paying jobs will stay the same. The percentage of such responses is as high as 39% in Los Angeles County.

Percentages of those who believed the number of high-paying jobs is likely to deteriorate are more than the percentages of those who believed it will improve in four of the six counties. These counties are Imperial, Orange, Riverside, and Ventura Counties. In Riverside County some 50.0% of respondents believed that the overall number of high-paying jobs is likely to deteriorate compared with 20.5% who believed it would improve in the next five years.

There is a significant correlation between business size and the respondents' assessment of the overall number of high-paying jobs in the county of their work and industry in the near future. The pattern of responses suggests the larger the business, the lower the chance of stating that the number of high-paying jobs is expected to deteriorate in the next five years. While 26.1% of large businesses stated that the number of high-paying jobs will deteriorate in the next five years,

a significantly higher percentage (45.5%) of small companies expected the same outcome (deterioration).

With regard to the overall wage situation during the last five years, with a ratio of two to one, the respondents believed that overall wages improved rather than deteriorated (36.6% improved, 16.5% deteriorated). Some 39.5% of the respondents said that the situation in their industry within their own county did not show any change in overall wages.

Concerning the question of change in the wage level of high-paying jobs, the situation is somewhat different. More than a third of the respondents (32.3%) believed that it stayed the same. A slightly higher percentage of respondents (28.7%) believed that it deteriorated than those who believed it improved (27.2%). This picture shows an almost equal proportion in the answers of improvement, deterioration, or staying the same.

An understanding of the past wage situation across the county of respondents and size of the businesses has particular policy implication for the near future. Overall, in all counties, a higher percentage of respondents believed that overall wages improved rather than deteriorated. However, a significant percentage of respondents in every county believed the situation with regard to overall level of wages showed deterioration over the last five years. This is most evident in both Ventura County (26.4%) and Imperial County (21.4%).

With regard to the wage level of high-paying jobs in the recent past across the counties, a comparatively larger percentage of respondents in most counties believed that the wage level of high-paying jobs stayed the same. This is most evident in Ventura, Riverside, Orange, and Los Angeles counties. Among the counties whose respondents believed the wage level of high-paying jobs deteriorated, Imperial (44.4%) and San Bernardino (36.3%) stand much higher. The percentages of those who believed that wage level in high-paying jobs deteriorated are the lowest in Ventura County (23.1). Respondents in Los Angeles County believed that wage level of high-paying jobs improved at a higher percentage (34.3%) than all other counties. However, the difference is not unlike that in other counties with exception of Riverside County (16.3%).

The impressions of respondents about wage level in general and for high-paying jobs also differ based on the size of the industry. There is a strong positive correlation between the size of the business and the percentage of respondents who have stated that overall wages levels in the county of their work have improved. The positive assessment expressed by respondents from large companies (47.3%) was significantly higher than those who work in companies with 20 or less employees (35.5%). While 10% of respondents from large businesses believed that the overall wages deteriorated in the county of their work, about a quarter (25.8%) of respondents from small companies have the same assessment. Such a high rate of negative assessment of wage situations by respondents from small companies indicates a comparatively less optimistic view about the dynamics of labor market in Southern California.

The future of wage level in general and for high-paying jobs produced an interesting outcome. The overall response pattern shows that a higher proportion of respondents (40.5%) believed that it will improve rather than deteriorate (15.9%). With regard to the future wage level of high-paying jobs, more than a third of the respondents believed that it will stay the same (36.3%). Although once again optimism prevails over pessimism, its extent is different with regard to the pattern of response to the question concerning the overall wage levels. Some 35.8% believed that the level of wages in the high-paying jobs will improve against 23.9% who believed that it will deteriorate in the next five years. Less than a third of the respondents (11.5%) believed that it will stay the same.

The pattern of response about the future of wage levels in general and with regard to high-paying jobs produces an interesting outcome across the counties based on various sizes of the businesses. In all counties the percentage of those who believed the overall wage will improve is higher than those who stated that it would deteriorate. The gap between the percentages of respondents believing in improvement of overall wages is highest in San Bernardino County. In this county 53.7% of respondents believed that the overall wage will improve compared with only 7.3% who believed it would deteriorate.

Ventura County respondents registered the highest percentage of believers in thinking that the overall wage situation will improve in the next five years. However, some 16% of respondents in this county believed that the overall wages will deteriorate in the next five years.

With regard to the future wage level of high-paying jobs across the counties, the greatest level of optimism comes from respondents of Los Angeles County (48.6%). This is followed by San Bernardino County (46.3%), Ventura County (44.9%), and Orange County (42.1%). Only 30.2% of respondents in Riverside County believed that level of wages in high-paying jobs will improve in the next five years compared with 37.2% who believed the wage level of high-paying jobs in high-paying jobs is likely to deteriorate.

There is a strong positive correlation between business size and the percentage of respondents who expect the overall wages level in the county of their work to improve. The negative assessment expressed by respondents from large companies (9.5%) was significantly lower than those who work in companies with 20 or less employees (25.6%). The business size has no apparent affect on the percentage of respondents who expect the overall wages level in the county of their work to stay the same.

The pattern of response concerning the future change of the wage level of high-paying jobs across different industry sizes shows a negative correlation between business size and a pessimistic expectation about the future level high-paying jobs. This correlation can be looked at as indicative of the opinion of the owners/managers of small companies about a continuation of the negative trend of the high-paying jobs that had started earlier (shown in the pattern of response of the same group to the wage level of high-paying jobs from last five years). While 36.6% of medium companies stated that they expect no change on the level of high-paying jobs at the county of their work, almost an equal percentage of respondents from large (30.3%) and small companies (31.9%) expected no change on the wage level of high-paying jobs in their

counties. Among those who have stated that they expected the level of high-paying jobs at the county of their work to deteriorate in the near future, the negative sentiment for small companies is much more vivid. Compared to respondents from large businesses (21.2%), a significantly higher proportion of respondents from small businesses (38.8%) indicated that the level of high-paying jobs in their county will deteriorate in the next five years.

3.2.3. Impact of Outsourcing/Globalization on Jobs and Wages

The highest proportion of respondents (45.0%) believed that globalization does not have any impact on overall wages in the industry of respondents within their county of work. However, with a ratio of two to one (25.2%) compared with (12.2%), the respondents believed that globalization has a negative impact on overall wages in their industry of work within their county more than any positive impact. A proportionally significant number of respondents (17.6%) could not make up their minds and did not know how to respond to this question.

A majority of respondents believed that it had no impact (47.3% of total respondents) on the overall number of jobs. Indeed if we set aside the group who did not know (17.7%), it can be concluded that more than 57% of those who did give an answer believed that outsourcing did not have an impact on the number of jobs offered in their industry within their county of work. Slightly more than a quarter of the total respondents believed that it had a negative impact which outweighed the percentage of those who believed in the positive effects of outsourcing (9.5%) by an almost three to one ratio.

Almost half of the respondents (47.4%) believed that outsourcing does not have any impact on the wage level of high-paying jobs. Those who believed that it has a negative impact (19.5%) are higher than those who believed that it has a positive (13.7%) impact. Nonetheless, the difference between the latter two patterns of responses is not very large.

3.2.4. Impact of Immigration on Jobs and Wages

Some 44.2% believed that immigration did not impact overall wages in the industry of their work and within their county of work. Indeed slightly more than a quarter believed that it had a positive impact. However, slightly more a fifth of the respondents believed that it had a negative impact.

More than fifty percent of the total respondents believed that immigration had no impact on the overall number of jobs offered within the county of their work. Almost a fifth of the respondents (19.33%) believed in the negative impact of immigration on the overall number of jobs offered in their industry of work within their county of work. A slightly higher percentage of respondents (19.63%) believed in the positive impact of immigration on the overall number of jobs in their industry within their county of work.

A majority of respondents (56.4%) believed that immigration has no impact on the number of high-paying jobs in their industry within their county of work. Indeed setting aside the percentage of those who did not have an answer for this question, more than 63% believed that immigration has no effect on number of high-paying jobs in their

industry within their own county. Those who believed in the negative impact of immigration on the number of high-paying jobs were only 16.5% and an almost equal percentage of respondents (15.9%) believed that immigration had a positive impact on the number of high-paying jobs in their industry of work within their county of work.

3.2.5. Impact of Labor Unions on Jobs and Wages

A significant proportion of respondents, almost a quarter of them, did not have any opinion on this subject. Some 50% of the respondents believed that labor unions have no effect on overall wages in their industry within their county of work. Taking out the group that did not know what effect labor unions have on overall wages in their industry, the percentage of those who believed it has no impact grows to nearly 65% of respondents with an opinion about the impact of labor union. The remaining groups are equally divided between believing that labor unions have a positive or negative impact on overall wages in their industry within their county of work.

With a similar pattern of response, the majority of respondents believed that labor unions have no impact on the wage level of high-paying jobs in their industry within their county of work (53.05%). Taking out those who did not have any idea about the impact, the percentage of those who believed labor unions have no impact on high-paying jobs in their industry within their county goes much further (68%). The remaining groups are almost equally divided between those who believed labor unions have a positive effect (13.4%) and those who believed that they have a negative impact on the wage level of high-paying jobs in their industry within their county of work (12.2%).

With regard to the impact on the overall number of jobs offered in their industry within their county of work (53.0%), a significant proportion of respondents did not know how to answer this question (23.8%); the views of the remaining groups are again almost equally divided between those who believed that it has a negative impact (12.5%) and those who believed that labor unions have a positive impact on the overall number of jobs offered in their own industry within their county of work.

A majority of respondents believed that labor unions do not have an impact on a number of high-paying jobs in their industry within their county of work (56.4%). Some 22.0% do not have any opinion about the impact and the remaining groups are almost equally divided between those who believed in labor unions having a negative effect (10.1%) on the number of those having paying jobs and those who believed they have a positive impact (11.6%).

3.2.6. Impact of Market Structure on Jobs and Wages

The results show that nearly a quarter of the respondents do not have any opinion about how market structure affects the overall wages in their own industries. Out of the remaining groups, some 34.7% believed that it does not have any impact. Some 22.8% believed that market structure negatively impacts the overall wages in their industry within their county of work. Finally, 17.9% support the idea of seeing a positive impact on overall wages based on market structure.

Some 26.2% of respondents do not have any opinion about the impact of market structure on the wage level of high-paying jobs in their industry within their county. From the remaining group, those who believed market structure has a negative effect make up 19.8% of the respondents compared with 16.8% of respondents who believed market structure has a positive effect on wage level of high-paying jobs in their industry within their county of work. Some 37.2% indicated that they did not believe market structure has any impact on wage level of high-paying jobs in their industry within their county of work.

A similar picture emerges in responding to the question of the impact of changes in market structure on the number of high-paying jobs. This shows that a majority believed that market structure has no impact (34.1%). A significant proportion has no opinion (26.5%). A quarter of respondents believed that change in market structure negatively impacts the number of high-paying jobs. Only some 14.3% believed that change in market structure positively affects the number of high-paying jobs.

3.2.7. Impact of Information/Communication Technology (ICT) on Jobs and Wages

Technological advancement has an important impact on job markets. The impact can be argued for the job opportunity as well as the wage level. Automation is expected to result in both job creation and job dislocation. Job dislocation may create a loss of jobs to those who live in an area. Most theoretical and empirical evidences suggest that over time there will be greater job creation than loss. Nonetheless, the short-term consequence of automation is often looked at as a wide range of job dislocation. In order to mitigate possible negative short-term consequences, often there is an urgent need to retrain the existing workforce. Lack of appropriate retraining programs may cause skill shortages and a higher level of hiring from outside a region. Other factors such as labor mobility, educational attainment of the labor force and their age distribution may play significant roles. This research looks at the impact of information/communication technology (ICT) on jobs and wages.

In response to the question concerning the impact of ITC on the overall number of jobs offered in the industry of respondents within their county of work, the same pattern of responses showing an agreement on the positive impact of ITC appears. However, the percentage of those who believed in the negative impact of ITC increases significantly compared to the responses to the previous question on the impact of ITC (12.2%). This does not come as a surprise. As mentioned earlier, ITC can cause some job dislocation particularly in the short-term. The impact of reducing the number of jobs per say is still a debatable argument.

The question regarding the impact of ITC on a number of high-paying jobs is of particular interest. The majority believed that it has a positive impact (44.7%). A significant proportion said that ITC has no impact on the number of high-paying jobs (34.0%). Some 15.2% did not know how to answer this question and only a small percentage of respondents believed in the negative impact of ITC in creating high-paying jobs.

The pattern of responses on the impact of ITC on the overall wages in the industry of respondents within their county of work are clearly one of having a positive impact. Some 55.0% of respondents believed that it has a positive impact on the overall wages in their industry and place of work. Over a quarter believed that it has no impact (25.7%). Only 6.5% say that ITC might have a negative impact on wages in their industry and county of work.

Nearly half of the respondents (48.9%) believed that ITC has a positive impact on wages of high-paying jobs. If we take the responses of those who said they did not know the answer out of the pool of responses, the rate of positive assessment of ITC will go as high as 57%. Nearly a third of respondents said that ITC has no impact on wage level of high-paying jobs (30.1%). A very small minority, some 7.6%, said that ITC has a negative impact on the wage level of high-paying jobs in their industry within their county or work.

3.2.8. Industry Practice for Wage and Salary Determination

Industry practice is an important element of understanding how related or unrelated our regional market is compared to the state and national markets. The results show that about two-thirds (68%) of the businesses surveyed do not use national agreement in determining their own wage or salary. This suggests that for most of the businesses surveyed, local standards and economic factors are more important that what occurs at the national level. Nonetheless, there is still a significant proportion (32%) that bases their wage and salary determination on national level agreement.

The question of industry level agreement has a greater influence on wage and salary determination. Slightly more than half (50.9%) use industry level agreement in determining their own wage and the other half (49.1%) do not use such a method. A slightly greater attention is paid to business standard in wage and salary determination within the businesses surveyed (55.6%). However, still some 44.4% do not use business level agreement in their wage and salary determination.

Clearly using individual employee level agreement is the most commonly used method of wage and salary determination in businesses we surveyed. Some 74.1% of respondents said that they use individual level agreement for wage and salary determination suggesting that local and case-by-case standards are relatively more important than either national industry or business standards. This leads us to put greater emphases on what goes on regionally within each place of work that links all markets together. This is an important conclusion but does not mean that other standards are not important bearing in mind that in most cases close to half of the respondents made use of other standards too.

We learn that collective pay agreement is only used in 18.8% of the businesses surveyed. This does not come as a surprise as the majority of businesses do not belong to a union that uses collective pay agreement in its negotiation for salary and wage determination. An overwhelming majority of businesses surveyed use other methods for wage determination not categorized in this survey. This supports the view expressed earlier that

wage and salary determination within the region may strongly be influenced by the economic factors present in their own area and region.

3.2.9. Importance of Housing Cost in Wage/Salary Determination

The survey shows that nearly 80% of the businesses surveyed said that cost of housing is either very important or important in wage and salary determination in their industry within their county of work. Some 45.6% said that it is very important. Only 11.3% said that it is not important at all. This puts a great emphasis on housing cost as an important determinant of wage and salary determination in the SCAG region. The troubling deduction from this observation is that the cost of housing increased in the recent past and wage and salary did not climb accordingly based on published data. This shows that the purchasing power of many employees may have eroded considerably during the recent past in many businesses and for a significant number of employees particularly those who do not own a home. At the same time, the high cost of housing may play an important role in the inability of businesses to hire their needed workforce or experience significant increase in the cost of running their businesses. The latter may be the cause of relocating outside a region or even the state.

3.2.10. Possible Reasons for Skill Shortages

The survey shows that the highest level of skill shortages asserted by at least 45% of respondents are in the areas of management, communication, and customer services. The second areas of shortage, revealed by at least 24% of respondents, are technical, language (English), literacy, and IT (general) skills. Finally, at least more than 17% of respondents mentioned that they face shortages of skills in foreign language, IT (professional), and numeracy.

In searching for possible reasons to explain some of the existing skill shortages, the following reasons are mentioned:

- Poor quality of candidates (20.3%)
- High staff turnover (18.1%)
- Lack of experience of recently recruited staff and the failure to train staff (more than 15%)
- Recruitment problems and lack of staff motivation (more than 10%)

4. Conclusion and Policy Implications

In this section we take a close look at what has been learned from the study and what can be done to create a better economic environment for job creation and improvement in wages and salaries within the region. In order to present the conclusion and findings in a structured and easy-to-follow layout, we present each component of this study in a four segmented format. First, the theoretical foundation of the argument is presented. The second segment offers what has been learned from the review of pertinent literature. The third component of the report provides what has been learned from the industry representative survey. Finally, in the forth segment of the reporting format, there are specific recommendations and policy implications that focus on what can be done to improve the existing and near future environment of job creation and wage/salary improvements.

4.1. The General Arguments Explaining Wage and Job Trends in the Region

4.1.1. The Theoretical Foundation of the Discussion

Wage and salary levels, in part, are determined by the interplay of demand and supply of labor in its pertinent market. Market imperfections can influence wage levels. Market imperfections include a variety of intervention and non-market based influences. They range from immobility of factors of production to government policies and include regulation and market structure. World economic changes such as globalization also influence the labor market in a profound manner. Finally, the impact of the emergence of the "new economy" has had a major impact on the situation during the last several decades. These changes may set the price at levels significantly different than market cleared rates, change level of employment, and working conditions.

4.1.2. What has been Learned from Literature Review and Analyses of Published Data

The study of published data shows that there have been major changes in the availability of high-paying jobs across the region. The trend has been impacted by a number of factors such as development and growth of new population centers, decline of manufacturing industries, impact of globalization, and new and bigger waves of immigration. Ventura and Orange counties have shown a lower rate of unemployment over the last three and half decades. By contrast the rate of unemployment in Imperial County has been the highest. It should also be remembered that our survey of literature included a much longer period of time than it was allowed in our survey.

A trend analysis of employment generated in various counties and across the region between 1972 and 2005 shows a significant increase in share of services as the principal sector in creating employment in the region. It indicates a significant decline in the manufacturing sector, which was formerly the chief sector for creating employment and better pay jobs in Southern California. It also shows a decline in the contributions of the

agriculture, mining, and government sectors. There is a marginal increase in share of the construction sector over the entire period. Trade, finance, insurance, real estate, transportation, and public utility showed some fluctuation and very little change. The rise of the service sector and retail trade job opportunities in contrast to the fall of manufacturing jobs is perceived as an important economic reason for the fall in the overall pay and reduction of wage and salary for working people in many states and regions.

Average wages in the U.S. failed to keep up with inflation reinforcing a trend of wage stagnation and decline. The 2006 report by the CCSCE shows that California accounts for 20% of the nation's high-tech jobs, 25% of new patents, and 45% of new venture capital. California is the center of innovation using the Internet for businesses and consumers in new ways. Despite such impressive achievements within the state, there seems to be a significant growth in low-pay jobs and a widening of wage differential within the region. Since the 1970s the major trade off in most areas regarding the creation of employment in each county has been a proportionate increase in jobs offered in the services sector coupled with a reduction in the relative importance of the manufacturing sector. There is a clear rise in the relatively lower paying employment industries and a decline in higher paying industries as a result of the aforementioned trade off.

Available information for 2005 shows that the leisure and hospitality industry is a significant employer in all counties, with the exception of Imperial County, representing more than 10% of all jobs. The share of employment generated by this industry is 13.75% and 12.3% in Riverside and Orange counties respectively. This industry pays one of the lowest wage and salaries, in some places even less than in agriculture. This is clearly a source of low-paying jobs in the region that has grown and most likely will continue to grow in the years to come. Overall the wage scale differential widened in 2005 more than in any other period since the 1970s.

Despite a much higher level of household income in counties such as Orange and Ventura, the average wage per job since 1970 has often been lower than the state average as a whole or Los Angeles County which is the biggest economic source in the SCAG region. This shows that most likely these counties, along with Riverside and San Bernardino, have much wider wage differentials.

4.1.3. What has been Indicated by the Industry Representative Survey

We used the same arguments to build the themes of the industry captain survey. The principal objective of the survey was to assess the views of the experts as a proxy to argue about the influence of various factors that have been explored in our initial phase of the study and through literature survey of current studies and examination of published data.

The opinion about wage level and job opportunity in the past reflects the understanding of respondents on how the economic factors worked in the past, and their opinion about the future trend is indicative of how the future labor market condition is perceived. The

problem with an opinion survey is that it may be influenced by current status of job markets and wage levels in a particular time or emergence of observing some contrast may influence the opinion beyond the reality of the past experience and time. In other words, respondents may be too influenced by present circumstances.

However, our survey of industry captains provided an interesting perspective about past and present job situations within the counties. In looking at percentages of respondents who believed the number of jobs offered in their industry within their county of work deteriorated, Ventura, Los Angeles, and San Bernardino counties have the highest rates. By contrast, Orange County shows the lowest percentage of responses believing that the number of jobs in their industry within their county of work deteriorated. What should be remembered is that the survey of literature and analyses of published data provided us with a long-term view of the counties and, therefore, the short-term fluctuations which in part may be due to business cycles and that may not be highly visible. Nonetheless, it is important to look at both the long-term structural changes in the job markets along with short-term ups and downs.

Industry representatives have a much grimmer view about the high-paying job markets in the recent past. The survey shows that in all counties, the percentages of those who believed that the situation deteriorated are much higher than the percentages indicating improvement. In Riverside and San Bernardino counties, more than 50% of the respondents believed that the number of high-paying jobs deteriorated. In both Imperial and Los Angles counties, more than 40% of respondents believed that the number of high-paying jobs in their industry within their own counties deteriorated.

With regard to the future of the job market, with a ratio of two to one, optimism prevails over pessimism. Some 40.9% believed that the situation will improve whereas 21.2% believed that the number of jobs offered will deteriorate. Almost a third of the respondents (30.1%) believed that it will stay the same. The relation between business size and the respondents' assessment of the overall number of high-paying jobs in the county of their work shows that the larger the business size, the lower the chance of having a negative assessment about the number of high-paying jobs in the past five years. The views of small business managers about the future of job and wage trend in a county have a vital significance for the future of labor markets within the region as the growth of small businesses have been recognized as the engine of growth in the latest period of economic recovery in the region.

The survey of industry representatives shows a different pattern of response within the respondents from various counties. With a ratio of two to one, the respondents believed that the number of high-paying jobs in their county of work deteriorated rather than improved (37.3% deteriorated versus 18.1% believing that it improved). This supports what has been discovered in the survey of literature and trend presented by the wage trend. Almost a third of the respondents believed that it did not change in their industry within their own county. Following the same trend the study found that in all counties, the percentages of those who believed that the situation deteriorated are much higher than

the percentages indicating improvement. This shows a clear support for what has been said in the existing literature concerning the decline of high-paying jobs in the region. Due to some limitation of the survey of industry representatives, the study was unable to trace industry captains' responses across various industries to the extent of establishing large enough number of responses for a statistically acceptable conclusion. However, it was clear that opinion concerning reduction of high wage jobs was related to the type of industries and location of those industries. Size of the business entity showed statistically significant results that can be used for possible policy implications.

4.1.4. Policy Implications for Possible Corrections

In all counties where there is a relatively grimmer view of job market conditions and development, current economic downturn seems to have impacted them in a profound manner. Common causes are decline of the real estate market and the possible influence of the sub-prime mortgage loan debacle. Ventura County has an added burden of finding its major high wage/salary employers in deep trouble (i.e., Amgen and Countrywide). The nature of the problem in large measure is cyclical and will get better by the ensuing and hopefully not-too-far-off macroeconomic recovery. Nonetheless, the following measures can help:

- Creation of a more diverse economic climate and conditions where the decline of a few companies will not have a devastating impact on the county as a whole.
- Cities can look into a number of issues that can help the creation of jobs and improvement of wage levels—such as discussion about living wage initiatives (at least for public entities), incentives for investments in certain areas (creation of broader enterprise zones and greater economic assistance and financial support for public assisted housing).

Reduction in manufacturing jobs is a part of restructuring economies in many parts of the world, and it follows the emerging comparative advantages within the "new economy." Reversing the situation may not be possible and does not provide any sound basis for a plausible future regional public policy. Instead, a region can take certain steps toward using the emerging economic conditions for their own advantages.

- Providing more support for vocational training through public and private educational entities in the area.
- Developing pertinent and creative curriculum for such training through junior colleges or scholarships for attending private institutions focused on providing such training.
- Helping to create industry clusters in various areas that are compatible with their local and regional comparative advantages.
- Improving the quality of local educational system through after-school and full-service community schooling. The aim is to help students, their families, and everyone else in the community to have the opportunity of improving their education and skills for a faster changing economic environment.
- Assisting small businesses through providing access to business information, skills development, and more access to capital markets.

As indicated earlier, decline or stagnation of wages and salaries to a large measure has been caused by the decline of manufacturing jobs and, at the same time, the growth of jobs in the service sector. The paradox of creating jobs and at the same time high-paying jobs is not easily resolved. There seems to be a pecking order that puts creation of jobs over insisting on having higher paying jobs. Having the right labor force (in terms of education and skill sets), appealing quality of life (quality of housing, low crime rate, air quality, and cultural amenities), and affordable housing are some of the most important ingredients of creating the necessary conditions for attracting companies with better paying jobs. The problem is where to start and to what extent these changes can be made through public policy measures. The following suggestions aim at creating and fostering an inductive economic environment to bring about these changes and, therefore, they are long-term and structural by their nature.

- Creating and supporting greater citizen participation in local decision making.
- Providing financial and technical support for creating local civil societies that can address political and societal measures that can bring long-term change in their respective communities.
- Providing support in terms of studies and other similar activities that can create a desire to seek and find how social and economic possibilities of a region can be utilized for promotion of common goods, eradication of uninformed citizenry, better and productive engagement of youth, and nurturing of creative and entrepreneurship in both social and business arena.

Although the survey did not produce industry-based results that can help to provide specific recommendations for the mentioned industries in our literature survey, we have enough information to make a few observations and some specific recommendations for future improvement in the prevailing wage rates in some counties.

- Agriculture is and likely to remain a source of creating low-paying jobs where this activity is currently prevalent and is likely to remain prevalent in the foreseeable future. Ventura and Imperial counties both have agriculture as a significant sector in their county's economy.
- Although it is hard to capture the role of undocumented immigrants in agricultural sector, it is conceivable to assume that this is a major source of employment for the undocumented immigrants.
- The same can be said about the contribution of undocumented immigrants in the hospitality industry.
- There is a great likelihood that with ongoing changes through NAFTA and other looming possible regional treaties, both Ventura and Imperial counties lose their comparative advantages for agriculture due to the desirability of these areas for residential real estate and other commercial activities. This makes it necessary to have some interim arrangements for improving the lives of agricultural workers.
- Increase in pay to a great extent is unlikely due to both competitive pressure from other agricultural exporting countries and the ability of local workforce to push any strong pressure on agricultural producing companies.

- In the interim period, authorities should pay attention to a few pressing needs of this group of workers: housing, healthcare, and skill development through local educational institutions.
- A similar plan should be devised and followed for workers who are employed in the hospitality industry.

4.2. Impact of Globalization on Wage and Job Trends

4.2.1. The Theoretical Foundation of the Discussion

The emergence of the entrepreneurial economy has brought two structural changes to the scene of many western industrialized countries. The first is the advent of low-cost but highly skilled competition in Central and Eastern Europe as well as Asia. The second is the telecommunications and microprocessor revolution, which has greatly reduced the cost of shifting standardized economic activity out of high-cost locations such as Europe and the United States into lower-cost locations elsewhere in the world. While the impact of globalization is clear, its impacts on wage level and job trends are not very clear. Trade liberalization creates winners and losers and the consequences in the short term and long term are different. Furthermore, the success of globalization and its acceptance by a larger group of people often depend on the role of government and its policy to ameliorate the short-term negative consequences on those who stand to lose.

Americans in general tend to have mixed feelings about globalization. Many service companies started creating jobs overseas to gain access to foreign markets. Overseas outsourcing is a minor part of the trend to decentralize business operations. However, the potential exists and with greater improvement in the variety and quality of services offered from overseas, there will be a greater level of competition placed on domestic firms to compete with their foreign rivals. This competition can help domestic firms become stronger and more able to offer better opportunities to their domestic labor force.

4.2.2. What has been Learned from Literature Review and Analyses of Published Data

A number of studies show a wide income dispersion supported by the national and state data over the past 30 years. However, the past ten years in particular, have brought about a gradual and disproportionate increase in the inequality of incomes. High employment can be combined with high wages just as low wages do not necessarily imply high employment. This indicates that by paying less employers do not necessarily increase their hiring. Employment growth in California is clearly polarized between “good jobs” and “bad jobs” and relatively very little in between. This clearly suggests that the much-touted “new economy” of the 1990s is a geographically bounded phenomenon and one that may depend on a more polarized and less salutary set of economic arrangements in nearby regions.

4.2.3. What has been Indicated by the Industry Representative Survey

The survey of industry captains across six counties inquired about the impact of globalization on a number of issues that were pursued in the literature survey. The

highest proportion of respondents (45.0%) believed that globalization does not have any impact on overall wages in the industry of respondents within their county of work. However, with a ratio of two to one (25.2%) compared with 12.2%, the respondents believed that globalization has a negative impact on overall wages in their industry of work within their county than any positive impact. A proportionally significant number of respondents (17.6%) could not make up their minds and did not know how to respond to this question. Indeed if we set aside the group who did not know (17.7%), it can be concluded that more than 57% of those who did give an answer believed that outsourcing did not have an impact on the number of jobs offered in their industry within their county of work. Slightly more than a quarter of total respondents believed that it had a negative impact which outweighed the percentage of those who believed in the positive effects of outsourcing (9.5%) by an almost three to one ratio.

Almost half of the respondents (47.4%) believed that outsourcing does not have any impact on the wage level of high-paying jobs. Those who believed that it has a negative impact (19.5%) are higher than those who believed that it has a positive impact (13.7%). Nonetheless, the difference between the latter two patterns of responses is not very large.

4.2.4. Policy Implications for Possible Corrections

Globalization is a complicated concept and explaining its impact on every industry may not be a simple task. Our survey showed that a good percentage of respondents did not believe that it had any impact on job markets and wage rates in their county of work. Nonetheless, there seems to be a sentiment that some aspects of globalization such as outsourcing may have had a negative impact on wages and salaries. There is no logical argument for forestalling trade and competition. There is, however, every good reason to seek free and fair trade between countries and regions. The notion of fair trade and any agreement in creating a greater integration among local, regional, or national economies should be supported. On a regional level, some of the following steps may prove to be useful:

- Creating a regional commission (if it does not already exist) to look at business, labor, and environmental practices in countries that the SCAG region deals with to a large extent in its trade and improvement.
- Conducting a more comprehensive study to find out the impact of globalization and outsourcing in job creation as well as job destruction.

4.3. The impact of Immigration on Wage and Job Trends

4.3.1. The Theoretical Foundation of the Discussion

Immigration has significant impact on job markets. In a labor-constrained economy or in some sectors of that economy, immigration can reduce the existing bottlenecks, increase production, and help the competitive position of that sector. This may have a favorable impact on the economy and its workforce. On the other hand, the increase in inflow of labor in some areas of the economy that already has the needed workforce may increase competition between the domestic and immigrant workforce, reduce employment of the domestic workforce, and cause a decline in the prevailing wage rate. The important issue

in the theoretical context is the degree of substitution between the domestic and immigrant workforce. The lower the degree of substitution, the lesser the impact on jobs and wages.

4.3.2. What has been Learned from Literature Review and Analyses of Published Data

The large inflow of documented and undocumented immigrants during recent decades increased the presence of foreign-born individuals in California so much that by 2004, immigrants constituted one-third of the state's labor force and population. A snapshot of that time period in terms of education shows that two-thirds of workers without a high school diploma and 42% of workers with a Ph.D. in California were immigrants compared to only 21% of workers with some college education. Since workers with various levels of education tend to fill different types of occupations and jobs, this distribution of skills already suggests that fewer native workers are in "direct" competition with foreign-born workers than in "complementary" skill groups.

4.3.3. What has been Indicated by the Industry Representative Survey

The survey of industry captains provided an interesting look into how immigration has impacted the overall economy of the region, job, and wage trends. Some 44.2% believed that immigration did not impact overall wages in the industry of their work and within their county of work. Indeed slightly more than a quarter believed that it had a positive impact. More than fifty percent of the total respondents believed that immigration had no impact on the overall number of jobs offered within the county of their work. Almost a fifth of the respondents (19.33%) believed in the negative impact of immigration on the overall number of offered in their industry of work within their county of work. A slightly higher percentage of respondents (19.63%) believed in the positive impact of immigration on the overall number of jobs in their industry within their county of work.

This does not come as a surprise since, according to literature, the less apparent impact on total employment is much larger. The argument is that far more U.S. employees keep their jobs because outsourcing helps the company stay competitive. Some get new or better jobs because the firm enhances its financial strength. There seems to be a significant number of views supporting such possibility within their county of employment.

4.3.4. Policy Implications for Possible Corrections

The literature survey showed that immigrants do not create a large negative impact on job availability or wage rate. This is primarily due to fact that immigrants to our region are either highly educated or unskilled. The most pronounced negative impact is the impact of new undocumented immigrants on those undocumented immigrants who are already in the region. This situation does not call for any immediate policy intervention from a regional economic perspective. There are, however, a number of changes that will come about in the near future that will impact the regional labor market.

- Any immigration reform may bring about an upward pressure on wage rates in the hospitality and agricultural sector.
- It is possible that the increase in wage rates in the agriculture sector resulting from immigration reform increase prices of products and reduce the ability of regional growers to compete with international producers.
- However, possible increase in wage rates resulting in immigration reform is unlikely to create a movement away from Southern California in the hospitality industry as this industry is highly dependent on the location where it selects to operate.
- In general there is every reason to believe that the size of the agricultural sector in the SCAG region may further shrink in the years to come. However, such a statement cannot be made about size of the hospitality industry.

4.4. The Impact of Information/Communication Technology (ICT) on Wage and Job Trends

4.4.1. The Theoretical Foundation of the Discussion

Technological advancement has an important impact on job markets. It influences both job opportunity and wage level. Automation is expected to result in both job creation and job dislocation. Job dislocation may create a loss of jobs to those who live in an area. The overall expectation is loss of jobs and may appear to be the short-term consequence of automation and in time there will be new jobs in relation to the overall impact of the new technology.

4.4.2. What has been Learned from Literature Review and Analyses of Published Data

Most empirical evidences suggest that over time there will be greater job creation than loss. Nonetheless, the short-term consequence of automation is often looked at as a wide range of job dislocation. In order to mitigate possible negative short-term consequences, often there is an urgent need to retrain the existing workforce. Lack of appropriate retraining programs may cause skill shortages and higher level of hiring from outside a region. Other factors such as labor mobility, educational attainment of the labor force, and their age distribution may play significant roles. This research looks at the impact of Information/Communication Technology (ICT) on jobs and wages.

4.4.3. What has been Indicated by the Industry Representative Survey

The survey of industry captains shows that the rate of ICT having a positive impact on the number of jobs offered (48%) exceeds the rate of response believing on the negative impact (12.2%). The question regarding the impact of ICT on a number of high-paying jobs is of particular interest. The majority believed that it has a positive impact (44.7%). A significant proportion said that ICT has no impact on the number of high-paying jobs (34.0%). Some 15.2% did not know how to answer this question and only a small percentage of respondents believed in the negative impact of ICT in creating high-paying jobs. The pattern of responses on the impact of ICT on the overall wages in the industry of respondents within their county of work is clearly one of having a positive impact. Some 55.0% of respondents believed that it has a positive impact on the overall wages in

their industry and place of work. Over a quarter believed that it has no impact (25.7%). Only 6.5% said that ICT might have a negative impact on wages in their industry and county of work. The findings clearly suggest that majority of respondents viewed ICT as a positive development in their county of work from the perspective of job offers, level of wages, and number of high-paying jobs

4.4.4. Policy Implications for Possible Corrections

The positive impact of ICT on our area is a welcome development and any regional public policy should be directed toward creating greater facility for its further advancement and influence. Some of the following steps may assist the region to take more advantage of the existing opportunities:

- Opening up trade and having greater factor mobility creates some job creation and at the same time brings about considerable job diversion. It is hard and unwise to protect jobs that are outside the competitive advantages of a region. Instead we can concentrate on job creation aspect of such development. Retraining the labor force and replacing old and obsolete skills with new ones is the way forward. There is a great potential in the region to direct more attention to other fields of activities such as science, renewable energy, education, and transportation.
- Paying interns, educational assistants, supporting educational institutions, and creating economic incentives for companies to move to an area are all possible policy tools.
- Creating a much stronger and wider network of collaboration between public and private partners to develop a blue print for what needs to be done in the near future.

4.5 The Impact of County-specific Economic Factors on Job and Wage Trends

4.5.1. The Theoretical Foundation of the Discussion

The assumption of perfect mobility of labor is often exaggerated and does not match the reality of most labor markets. The cost of living has an important impact on wage rate and is likely to have a significant influence for industry location. Quality of life is equally an important factor in accepting a job in a particular area. This may be of greater importance in places where there may be significant differences in quality of life. Crime rates, quality of schools, and cost of housing are among some of the most important factors impacting labor supply in an area.

4.5.2. What has been Learned from Literature Review and Analyses of Published Data

Traditionally, decision about location of a business has been influenced by factors such as cost of labor, land, and access to raw materials and markets. Today quality of life has an important impact on cost of hiring and attracting the needed workforce to various businesses. This has become of greater relevance particularly for knowledge-based industries such as telecommunications, computers, entertainment, and biotechnology that

are part of the new economy. Quality of life has many dimensions and ranges from environmental quality to having good schooling to existence amities such as theatres and bike trails. Despite the clear awareness of the impact of quality of life on ability of firms to fire their needed employees, there is little empirical evidence showing the extent of such impact in recent years. Nonetheless, the interest in quality of life as an economic development strategy has grown considerably. In many cities and regions local policy makers see quality of life strategies as a potentially effective means of business development. This has given rise to the passage of local ordinances and laws to promote such development such as reducing congestion, improving air and water quality, preserving the local natural environment and open space, and upgrading cultural and recreational amenities for residents.

4.5.3. What has been Indicated by the Industry Representative Survey

The survey of industry captains included a number of factors that relate to the emerging economic conditions of the county of respondents. These factors included

- industry practice for wage and salary determination,
- cost of housing in wage/salary determination, and
- possible reasons for skill shortages.

On the importance of industry practice for wage and salary determination, we found about two-thirds of the businesses surveyed do not use national agreement in determination of their own wage or salary (68%). The question of industry level agreement has a greater influence on wage and salary determination. Slightly more than half (50.9%) use industry level agreement in determining their own wage and the other half (49.1%) do not use such a method. Slightly greater attention is paid to business standard in wage and salary determination within the businesses surveyed (55.6%). However, still some 44.4% do not use business level agreement in their wage and salary determination. Some 74.1% of respondents said that they use individual level agreement for wage and salary determination suggesting that local and case by case standards are relatively more important that national industry or business standards. This leads us to put greater emphasis on what goes on regionally within each place of work and what links all markets together. This is an important conclusion but does not mean that other standards are not important bearing in mind that in most cases close to half of the respondents made use of other standards too.

We learn that collective pay agreement is only used in 18.8% of the businesses surveyed. This does not come as a surprise as the majority of businesses do not belong to a union that uses collective pay agreement in its negotiation for salary and wage determination.

On the importance of housing cost in wage/salary determination, the study found that nearly 80% of businesses surveyed said that cost of housing is either very important or important in wage and salary determination in their industry within their county of work. Some 45.6% said that it is very important. Only 11.3% said that it is not important at all. This puts a great emphasis on housing cost as an important determinant of wage and salary determination in the SCAG region. The troubling deduction from this observation is that the cost of housing increased in the recent past and wages and salaries did not

climb accordingly based on published data. This shows that purchasing power of many employees may have eroded considerably during the recent past in many businesses and for a significant number of employees, particularly those who do not own a home. At the same time, the high cost of housing may play an important role in the inability of businesses to hire. Their needed workforce or experience significantly increased the cost of running their businesses. The latter may be the cause of relocating to outside a region or even the state.

The survey shows that the highest level of skill shortages asserted by at least 45% of respondents are in the area of management, communication, and customer services. The second area of shortage revealed by at least 24% of respondents is in areas of technical, language (English), literacy, and IT (general) skills. Finally, at least more than 17% of respondents mentioned that they face shortages of skill in foreign language, IT (professional), and numeracy. In searching for possible reasons to explain some of the existing skill shortages, the following reasons were suggested by the industry representatives:

- Poor quality of candidates (20.3%)
- High staff turnover (18.1%)
- Lack of experience of recently recruited staff and failure to train staff (more than 15%)
- Recruitment problems and lack of staff motivation (more than 10%)

4.5.4. Policy Implications for Possible Corrections

Quality of life has emerged as an issue directly impacting the cost of hiring workers in various parts of the country. As a result, what goes on in a community in relation to quality of schools, traffic congestion, quality of air and natural environment, and public safety directly impact the ability of business entities to attract the needed workforce. Here are the most important segments of what can be added to what have already been proposed in the earlier segment of this report.

- Improving quality of life is a key concept. It requires a multitude of social and economic interventions designed, guided, and ultimately owned by people who live and work in a region. Details for each area have to be developed.
- Many areas of SCAG regions suffer from a high prevalence of violence and this is one of the most impeding factors of economic growth. Prosperous areas have much less violence than economically deprived areas. A viable regional economic institution should send part of its resources to help eradication of violence.
- Quality of education is an important element of brining economic prosperity, better jobs, and stable regional economy. Helping to create a better and more inviting and inductive environment for better schooling is a pivotal part of a regional economic development plan.
- Creating a smart and creative institution that can have an early warning system to sound the emergence of social and economic problems in an area is very important. In order to set up and activate such a system in place the following ideas may come useful:

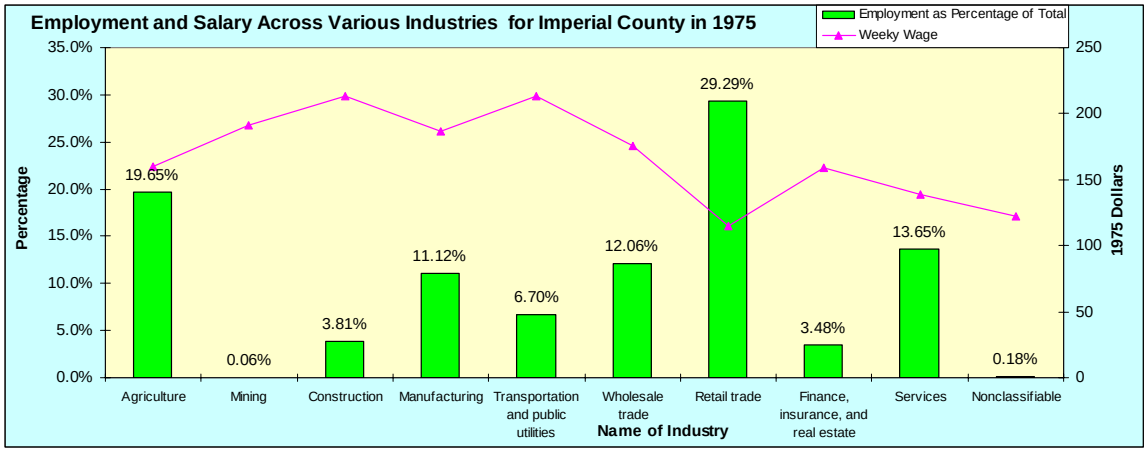
- Conducting regular public inquiry though scientific means where the pulse of the residents about their local economic conditions and policies can be taken, reported, and analyzed.
- Developing advisory boards that comprise public institutions, not-for profit entities, private companies, educational institutions, activist groups, and philanthropic entities. They should be charged to report their opinions about the state of their region in a well-structured and formatted manner in a pre-determined set of sequences.
- Developing and maintaining a well-structured database created by local entities that produce a set of socio-economic indicators that can present the ongoing change in the economic, social, and cultural characteristics of every local economy. The breakdown of geographic dimension and domains of these indicators must be carefully studied and developed and occasionally revisited in order to keep it relevant and useful.

Appendix A:

Change in Wage and Salary Patterns Since the 1970s

Appendix A shows pattern of change in wage and salary since the 1970s. To show the direct impact of the economic forces on the wage and its implied impact on individual and household income, this section shows the relative importance of each sector by indicating its share in the overall creation of wage and salary employment. The story is told for each county in 10-year sequences beginning with 1975. These snap shots reveal the trend and amount of high- and low-paying jobs that have been created through the years.[41]

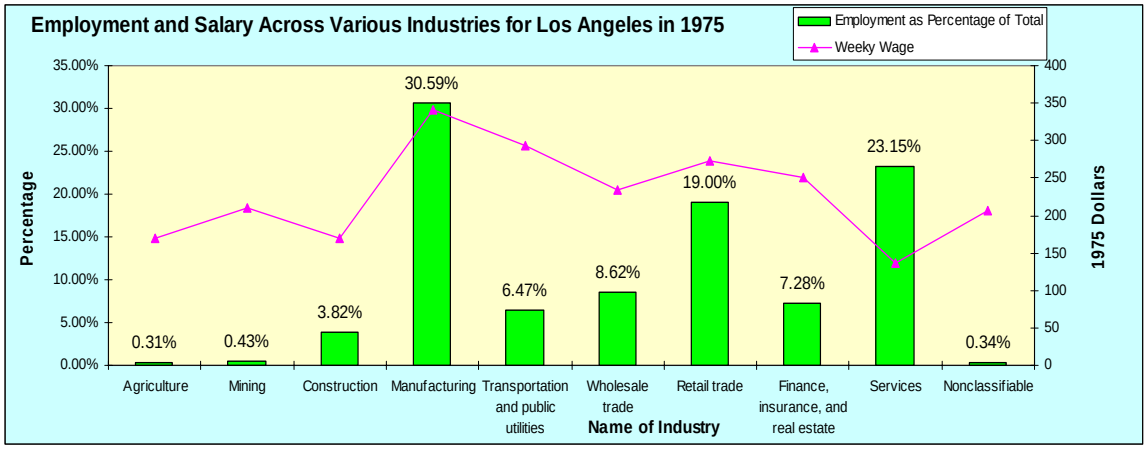
Imperial County



Source: Bureau of Labor Statistics, Local Area Unemployment Statistics.

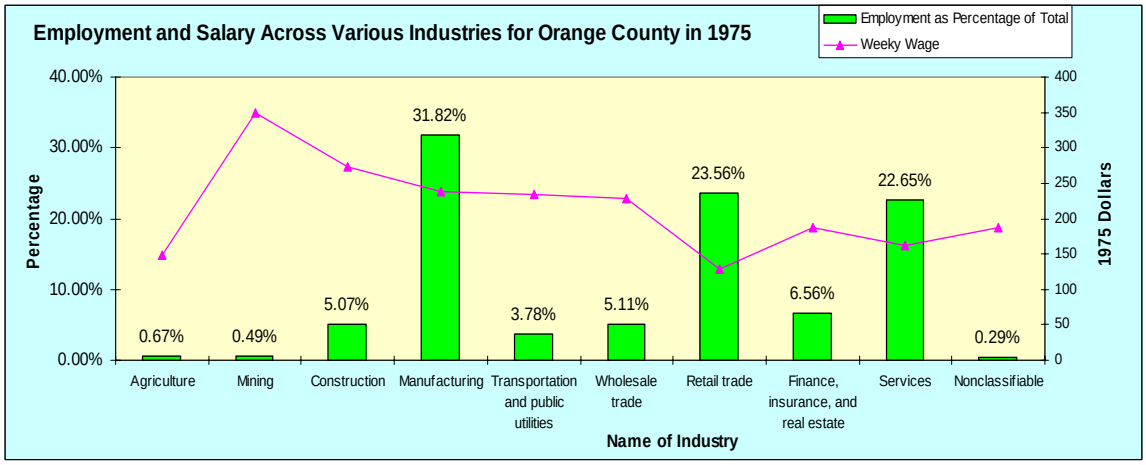
LOS ANGELES COUNTY

[41] Please note that the rate of employment for each industry is calculated as a percentage of employment created by that particular industry over total employment generated by the entire private sector in the county as a whole. This presents a minor difference with the rate of employment calculated and reported in the previous section of this report in which total industrial employment includes the government sector.



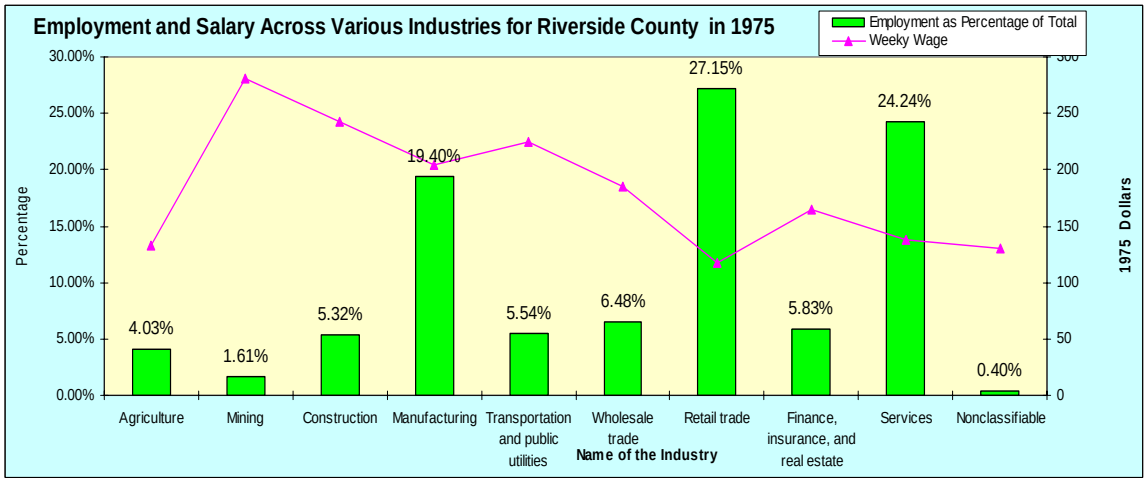
Source: Bureau of Labor Statistics, Local Area Unemployment Statistics.

ORANGE COUNTY



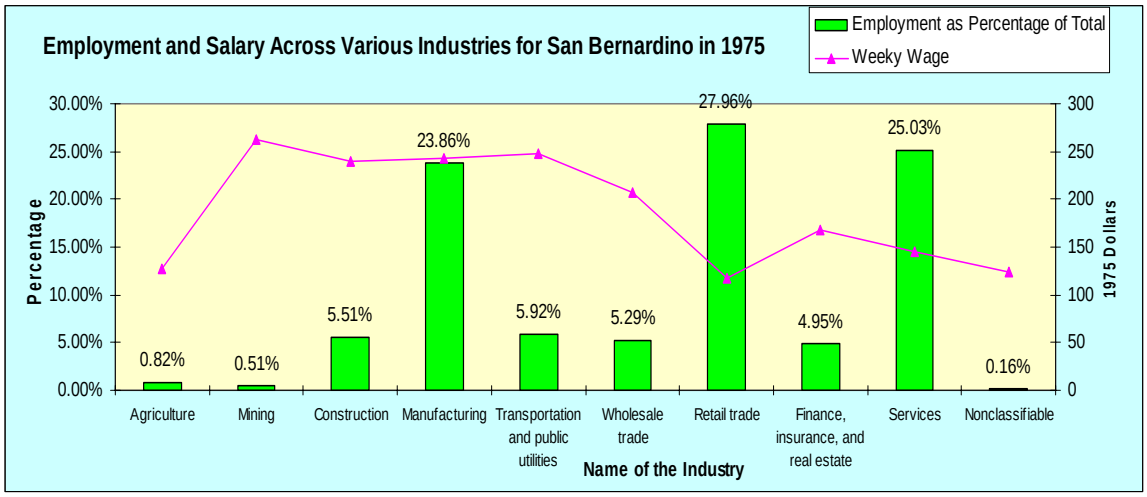
Source: Bureau of Labor Statistics, Local Area Unemployment Statistics.

RIVERSIDE COUNTY



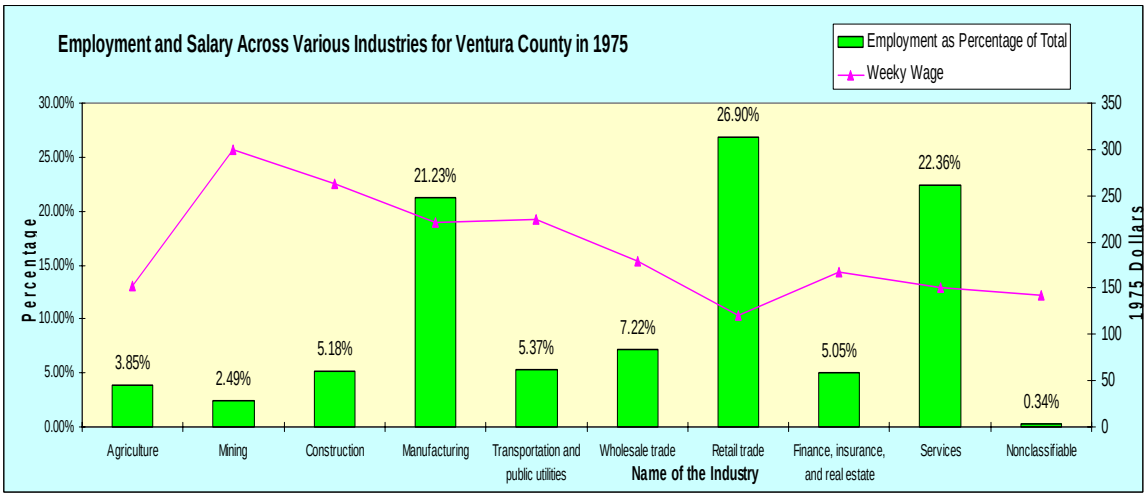
Source: Bureau of Labor Statistics, Local Area Unemployment Statistics.

SAN BERNARDINO COUNTY



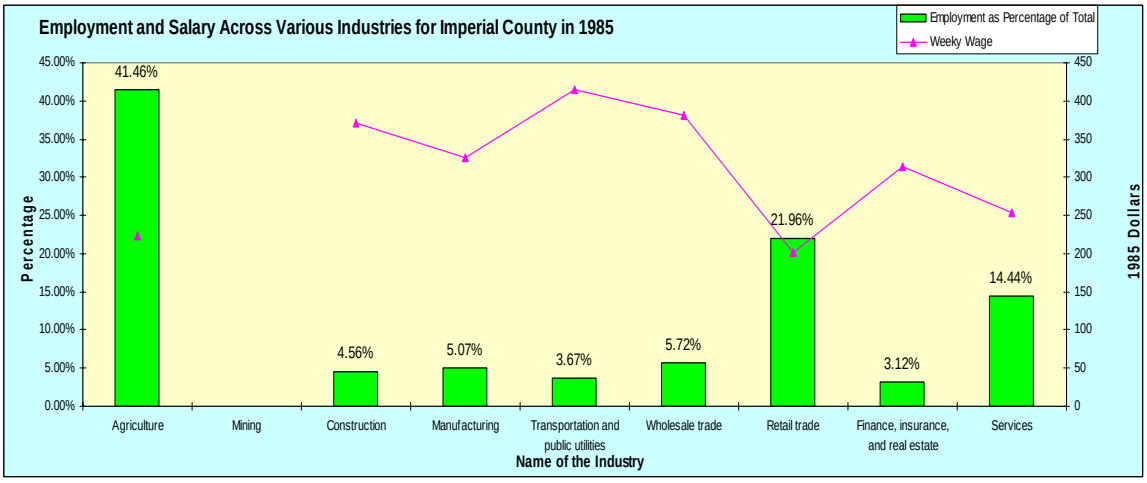
Source: Bureau of Labor Statistics, Local Area Unemployment Statistics.

VENTURA COUNTY



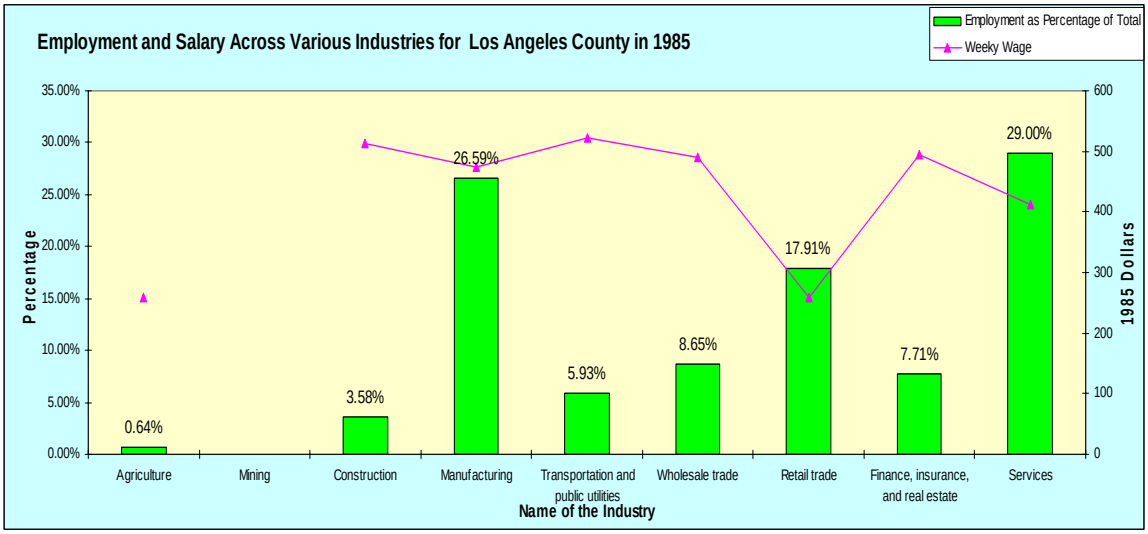
Source: Bureau of Labor Statistics, Local Area Unemployment Statistics.

IMPERIAL COUNTY



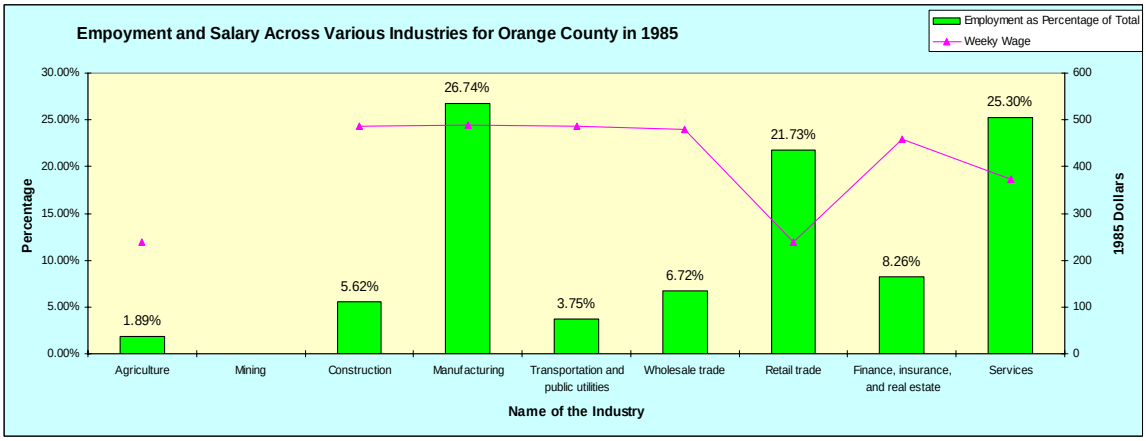
Source: Bureau of Labor Statistics, Local Area Unemployment Statistics.

LOS ANGELES COUNTY



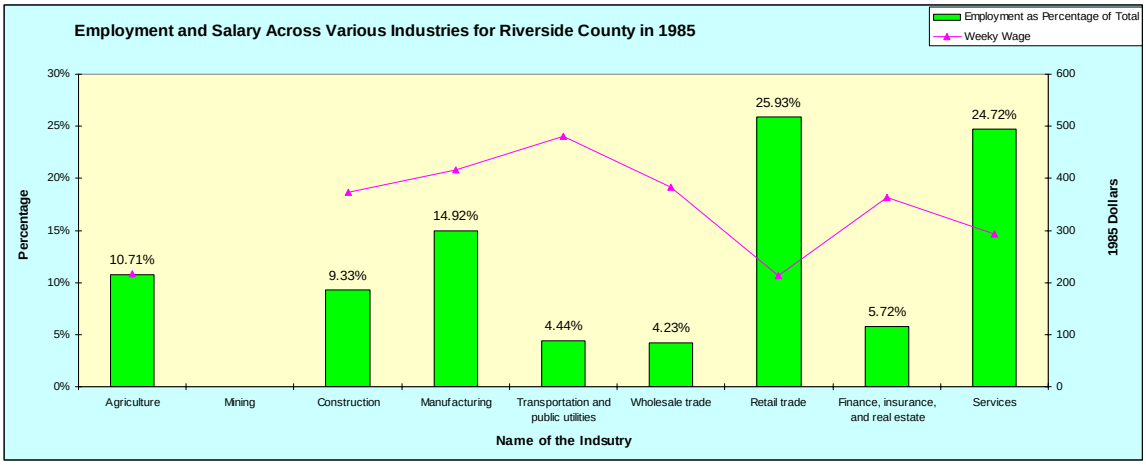
Source: Bureau of Labor Statistics, Local Area Unemployment Statistics.

ORANGE COUNTY



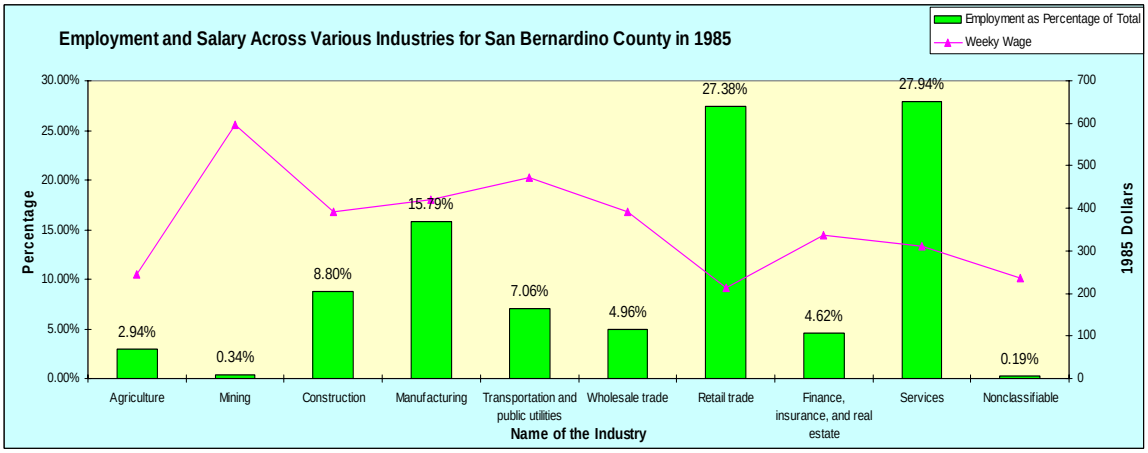
Source: Bureau of Labor Statistics, Local Area Unemployment Statistics.

RIVERSIDE COUNTY



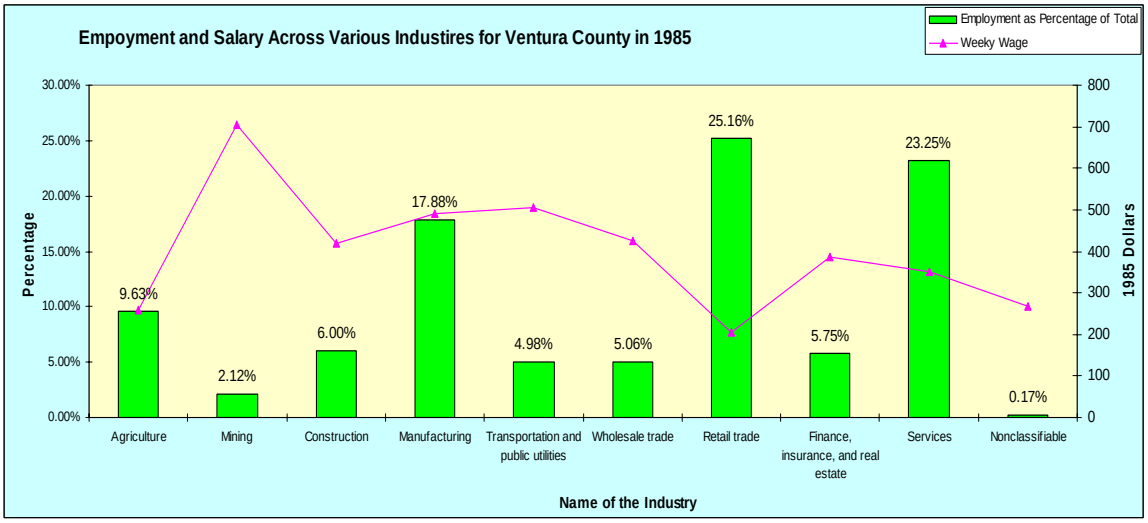
Source: Bureau of Labor Statistics, Local Area Unemployment Statistics.

SAN BERNARDINO COUNTY



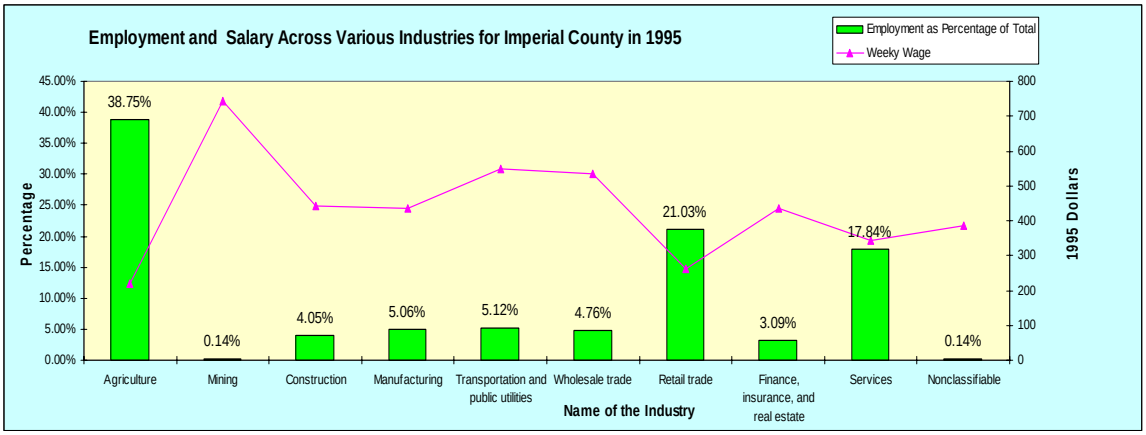
Source: Bureau of Labor Statistics, Local Area Unemployment Statistics.

VENTURA COUNTY



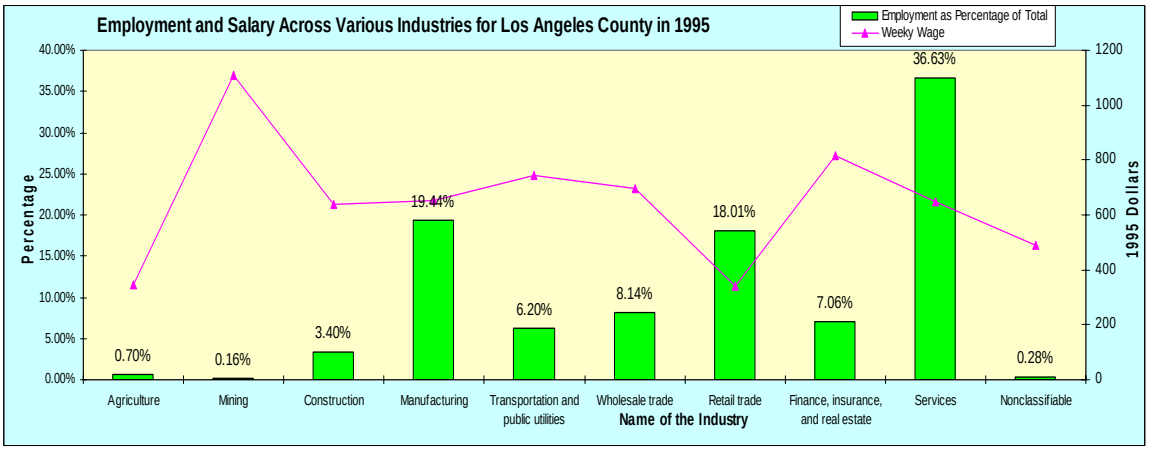
Source: Bureau of Labor Statistics, Local Area Unemployment Statistics.

IMPERIAL COUNTY



Source: Bureau of Labor Statistics, Local Area Unemployment Statistics.

LOS ANGELES COUNTY



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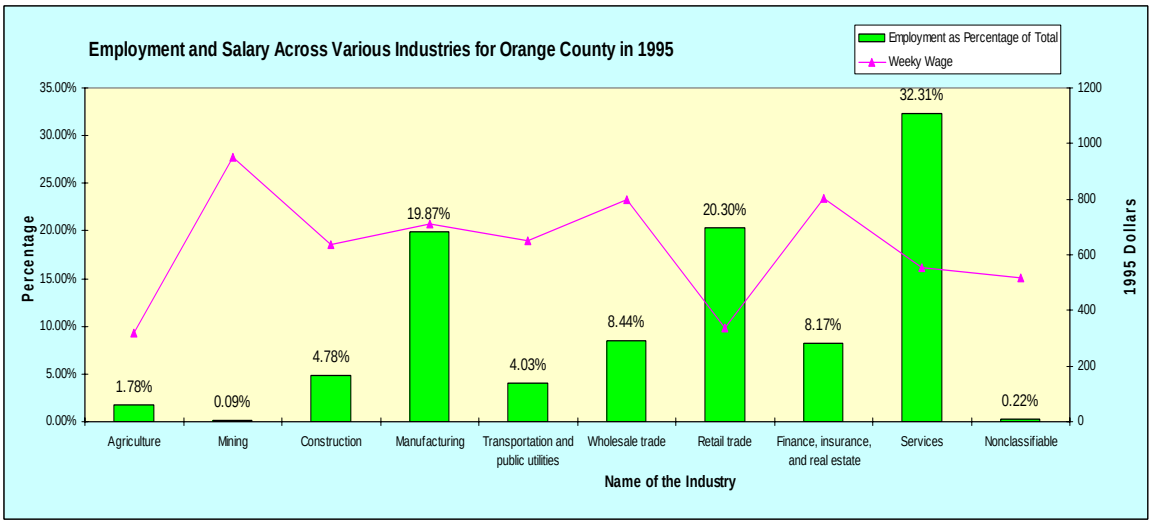
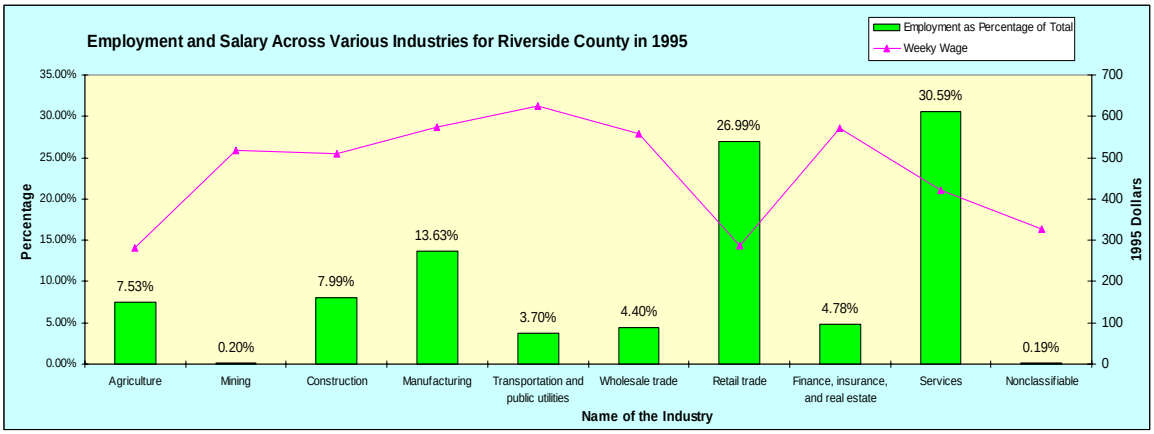
ORANGE COUNTY



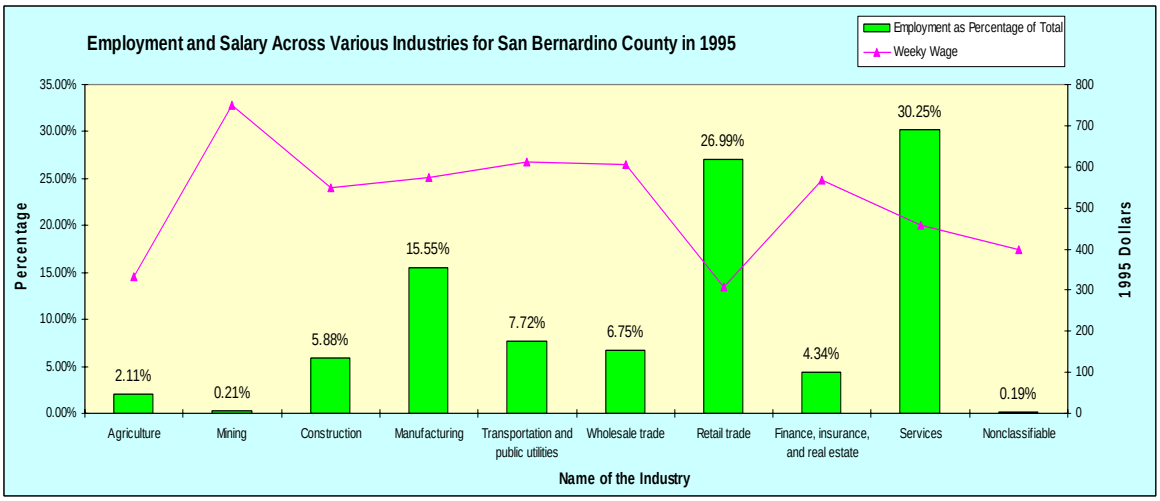
Source: Bureau of Labor Statistics, Local Area Unemployment Statistics.

RIVERSIDE COUNTY



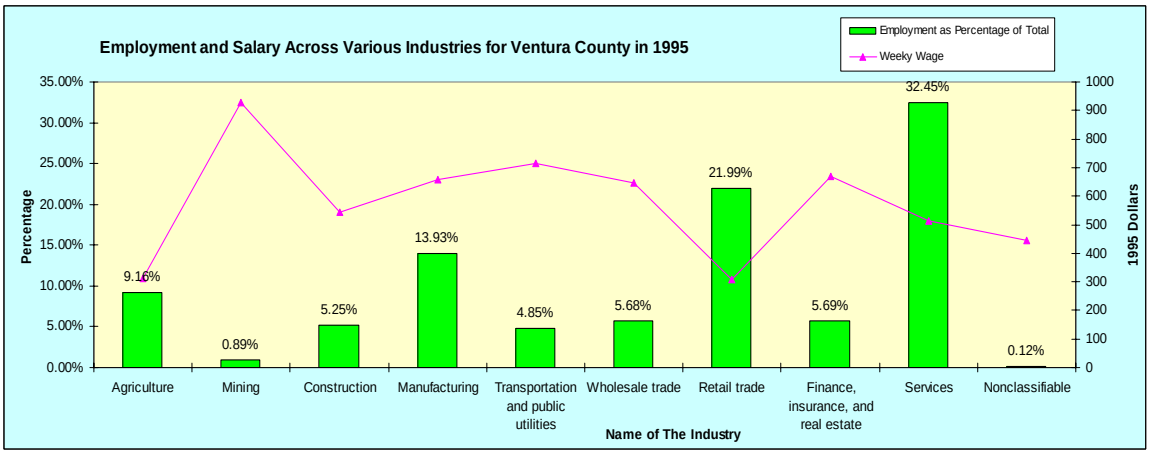
Source: Bureau of Labor Statistics, Local Area Unemployment Statistics.

SAN BERNARDINO COUNTY



Source: Bureau of Labor Statistics, Local Area Unemployment Statistics.

VENTURA COUNTY



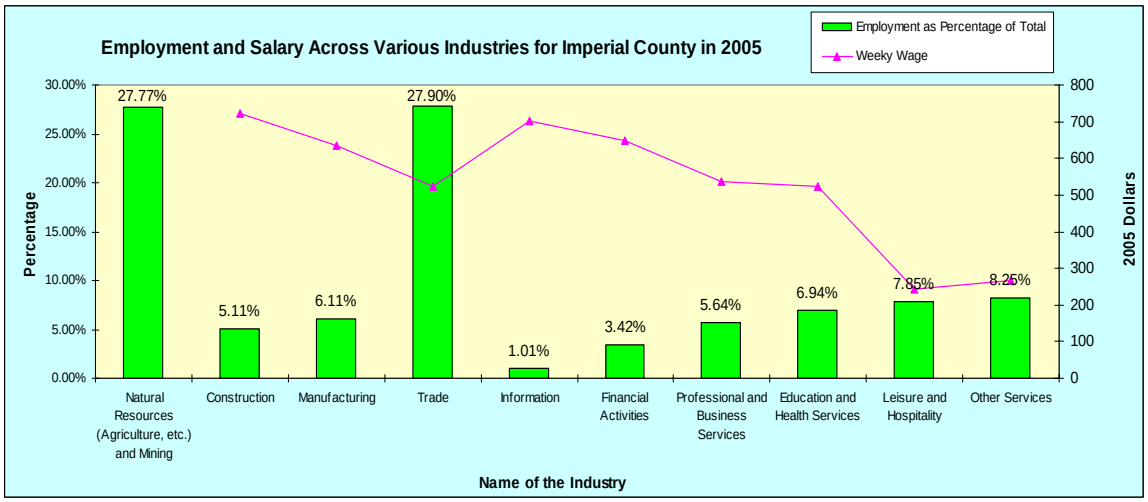
Source: Bureau of Labor Statistics, Local Area Unemployment Statistics.

	Weekly Wage in Dollars Among Counties in 1995					
Industry	**Imperial**	**Los**	**Orange**	**Riverside**	**San**	**Ventura**

		Angeles			Bernardino	
Agriculture	220	347	318	282	334	312
Mining	744	1107	953	517	751	926
Construction	442	639	636	510	550	545
Manufacturing	434	655	713	574	574	659
Trans& pub utility	548	745	653	625	611	714
Wholesale trade	533	698	798	559	606	648
Retail trade	261	340	338	288	309	307
Fin. insurance & real estate	436	816	805	571	567	668
Services	344	647	554	420	458	514

Source: Bureau of Labor Statistics, Local Area Unemployment Statistics.

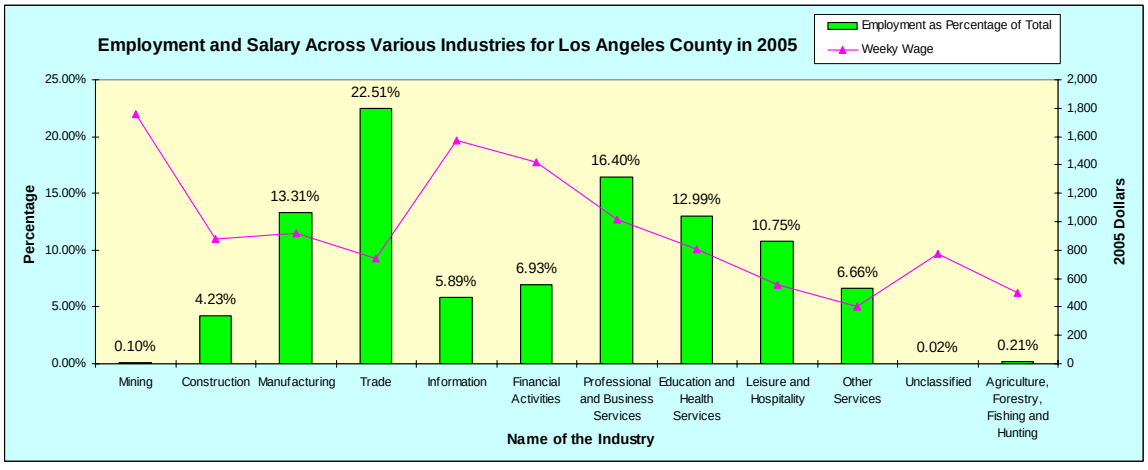
IMPERIAL COUNTY



Source: Bureau of Labor Statistics, Local Area Unemployment Statistics.

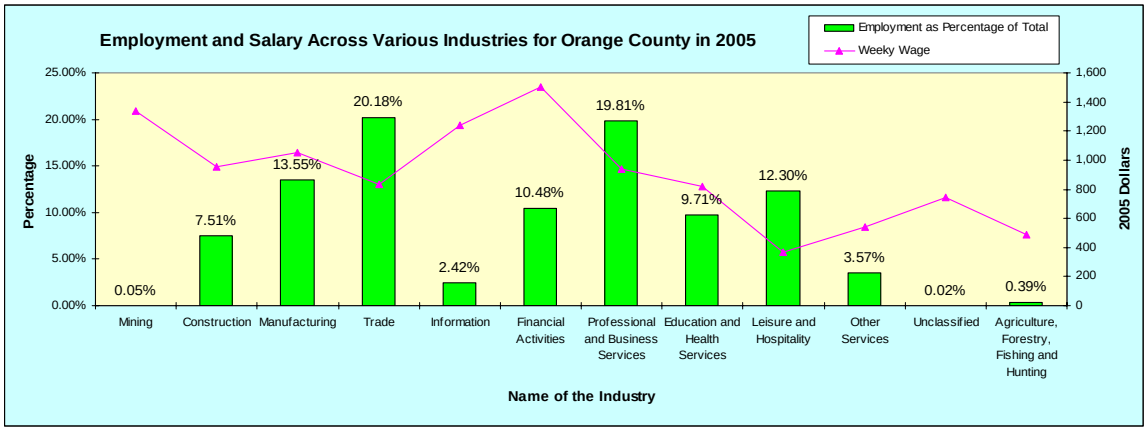
Note: In order to protect the privacy of the company involved in mining, there was not any information to allow us to disaggregate the data for natural resources (agriculture, etc. from mining). One can consider the level of proportional employment listed for natural resources, etc. and mining as agriculture.

LOS ANGELES COUNTY



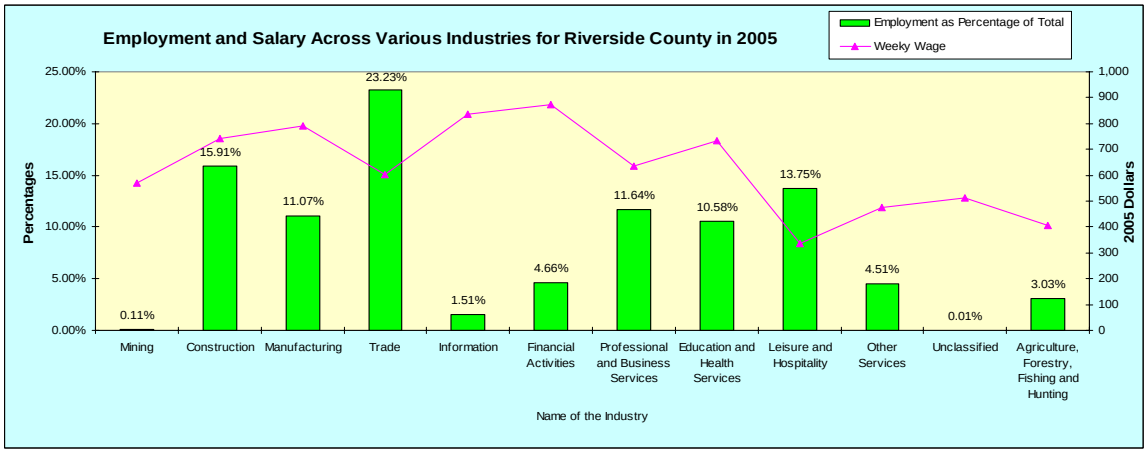
Source: Bureau of Labor Statistics, Local Area Unemployment Statistics.

ORANGE COUNTY



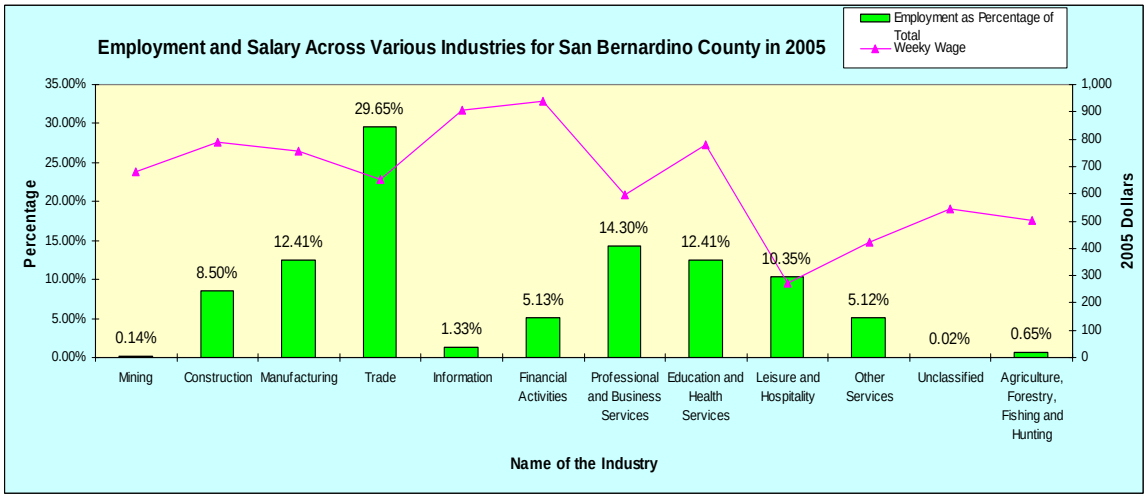
Source: Bureau of Labor Statistics, Local Area Unemployment Statistics.

RIVERSIDE COUNTY



Source: Bureau of Labor Statistics, Local Area Unemployment Statistics.

SAN BERNARDINO COUNTY



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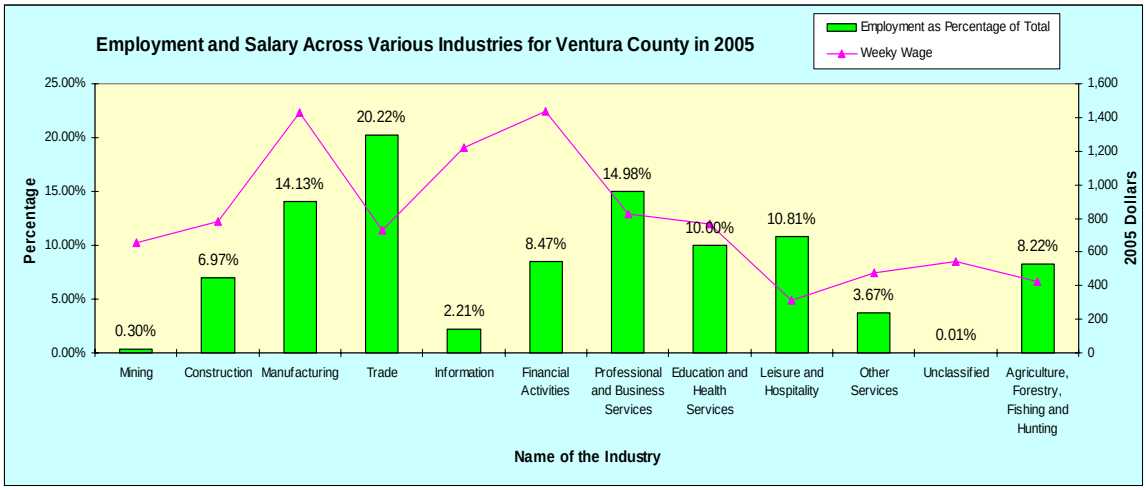
VENTURA COUNTY



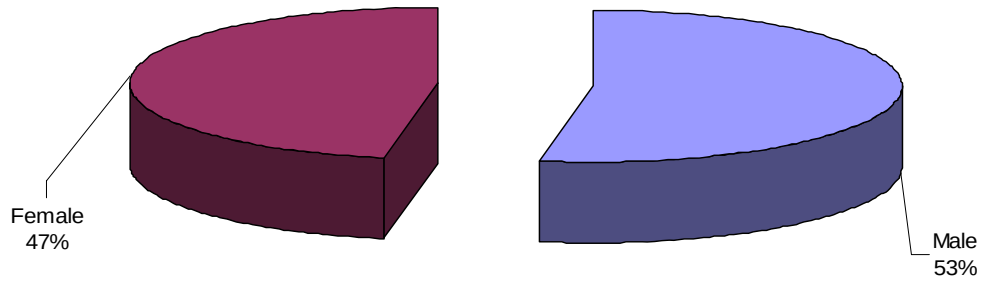
Weekly Wage in Dollars Among Counties in 2005						
	Imperial	**Los Angeles**	**Orange**	**Riverside**	**San Bernardino**	**Ventura**
Mining		1,760	1,339	571	680	654
Construction	721	877	956	743	789	785
Manufacturing	633	916	1,054	792	754	1,426
Trade	523	740	834	603	651	728
Information	701	1,570	1,239	838	904	1,224
Financial Activities	647	1,416	1,500	872	937	1,435
Professional and Business Services	537	1,018	939	636	598	823
Education and Health Services	523	803	822	732	778	770
Leisure and Hospitality	244	557	371	335	270	310
Other Services	268	407	539	476	424	480
Unclassified		771	747	514	543	542
Agriculture, Forestry, Fishing and Hunting		499	492	407	504	426

Source: Bureau of Labor Statistics, Local Area Unemployment Statistics.

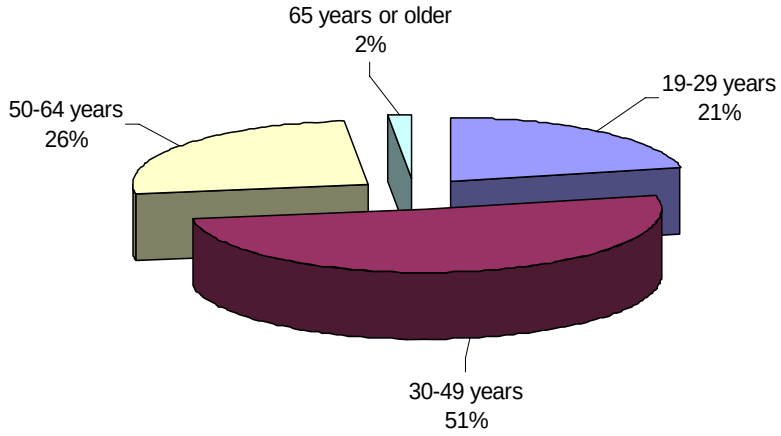
Appendix B

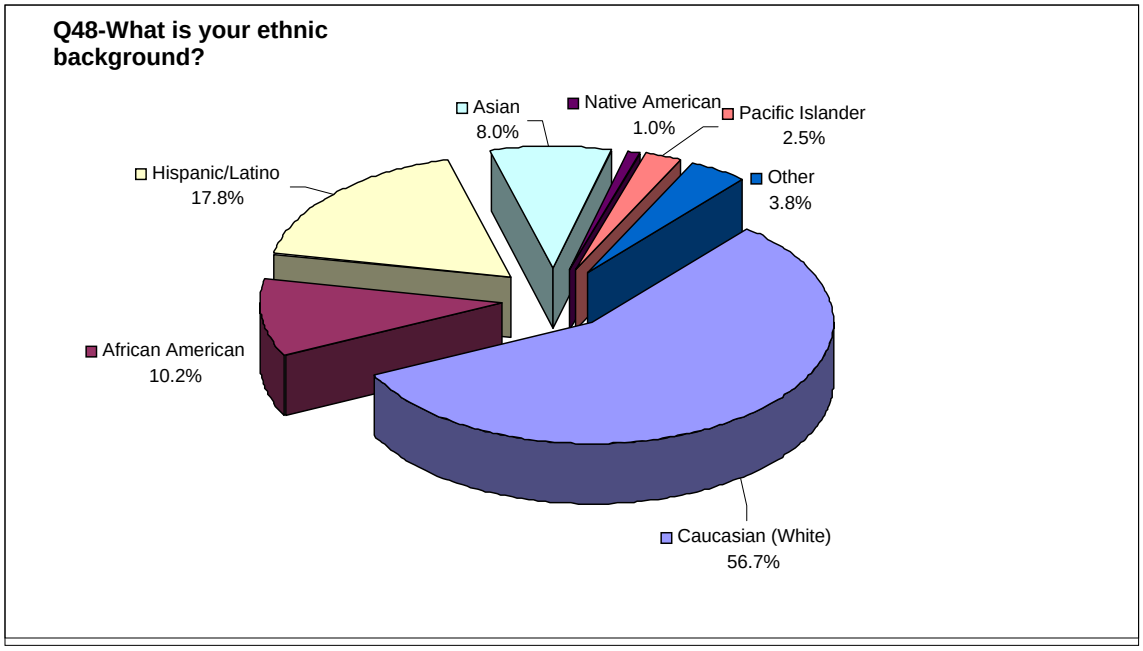
Summary of the Findings from Industry Representatives

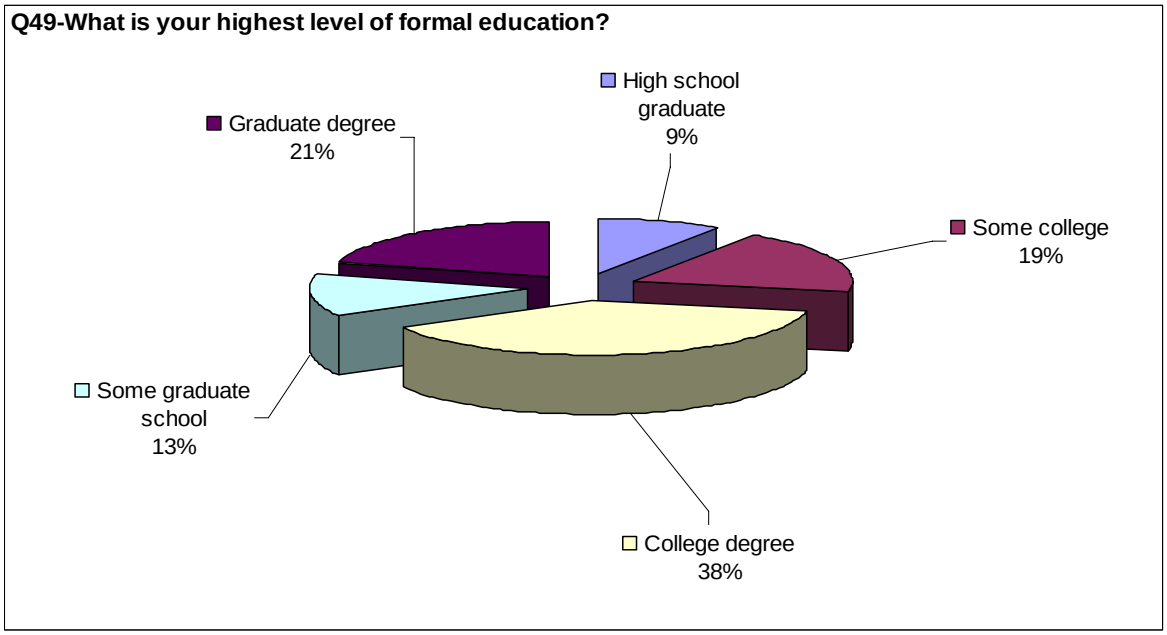
Q46-Gender:

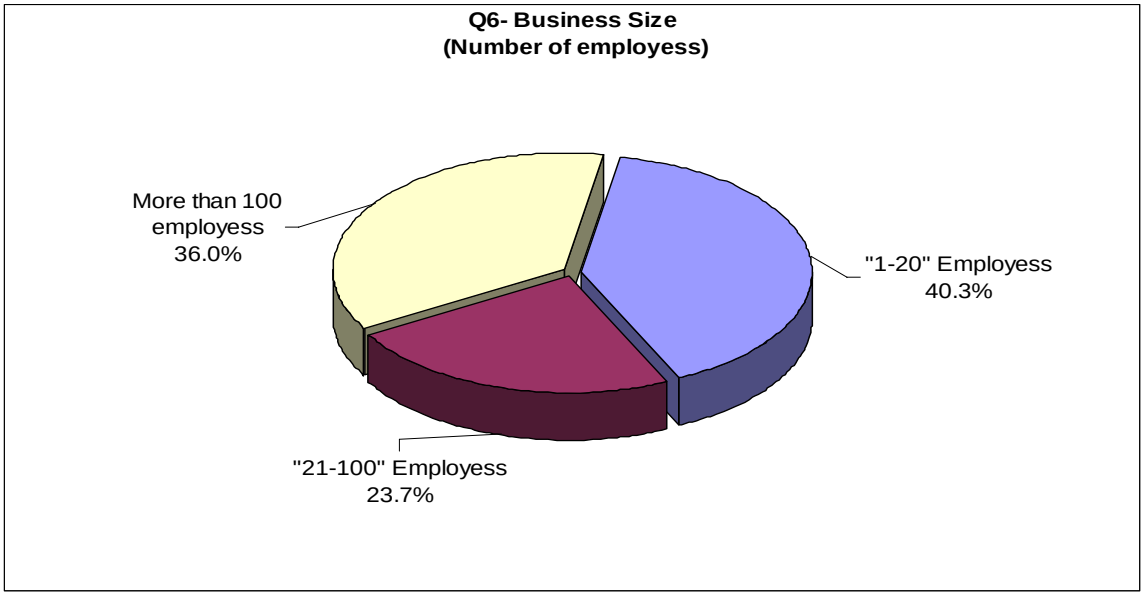


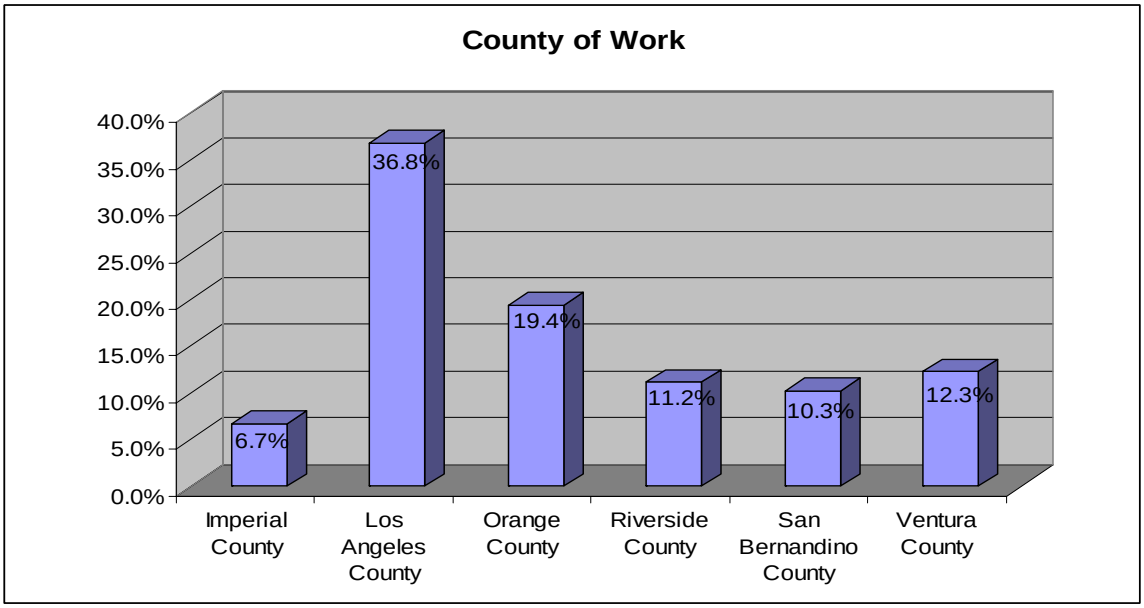
Q47-What is your age category?



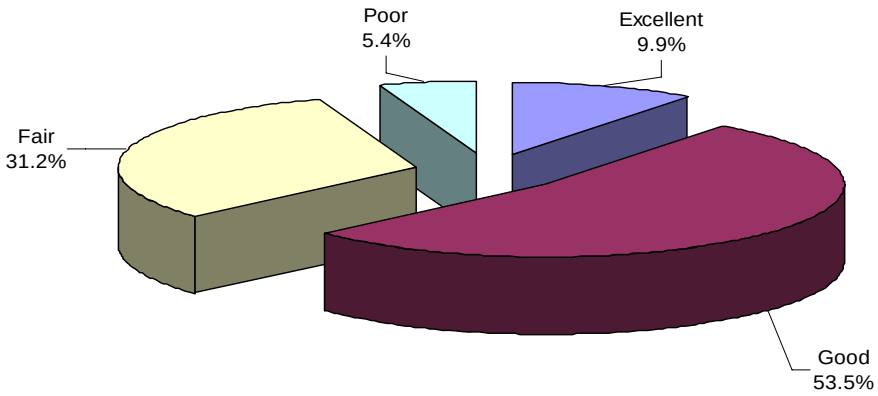

Q48-What is your ethnic background?
Asian 8.0%
Native American 1.0%
Pacific Islander 2.5%
Other 3.8%
Hispanic/Latino 17.8%
African American 10.2%
Caucasian (White) 56.7%


Q49-What is your highest level of formal education?
High school graduate 9%
Graduate degree 21%
Some college 19%
Some graduate school 13%
College degree 38%

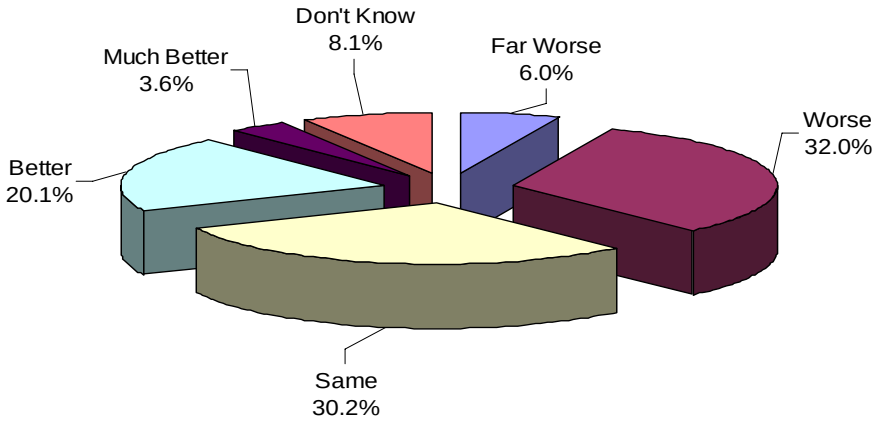

Q6- Business Size
(Number of employess)
More than 100 employess 36.0%
"1-20" Employess 40.3%
"21-100" Employess 23.7%


County of Work
40.0%
35.0%
30.0%
25.0%
20.0%
15.0%
10.0%
5.0%
0.0%
6.7%
36.8%
19.4%
11.2%
10.3%
12.3%
Imperial County
Los Angeles County
Orange County
Riverside County
San Bernandino County
Ventura County

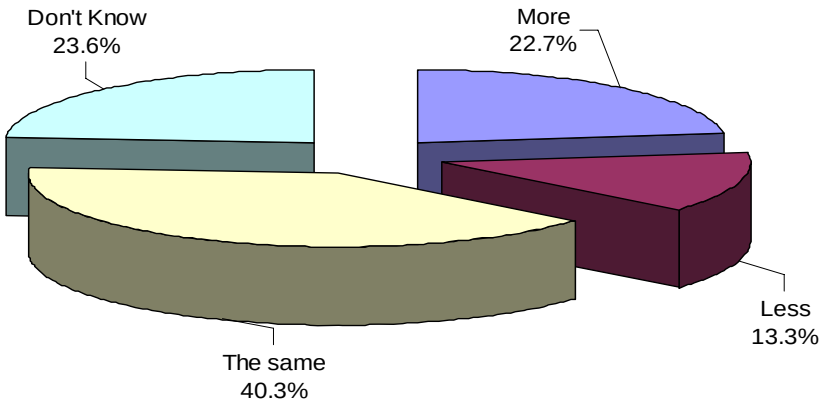
Q8-In general, how would you rate the economy in the county of your work?



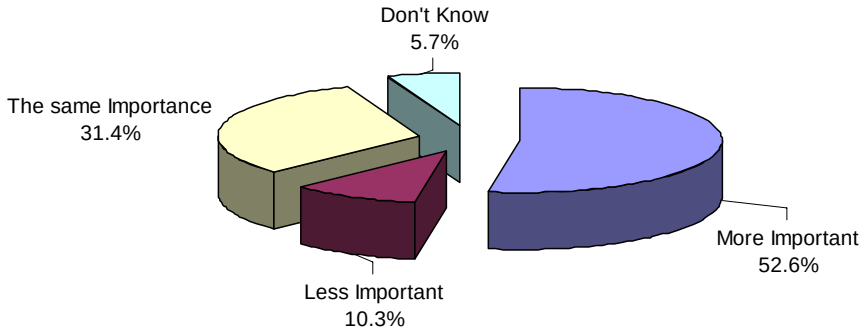
Q9-Compared to five years ago, how is the economic condition in the county of your work?



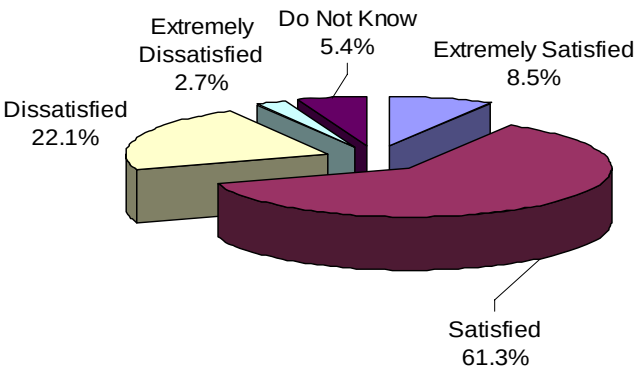
Q10-Compared to five years ago, do you recruit more, less or about the same number of people from outside Southern California?



Q11-Compared to five years ago, would you say that in determing wage level in your industry, the educational attainment has become more important, less important or has the same importance as before?

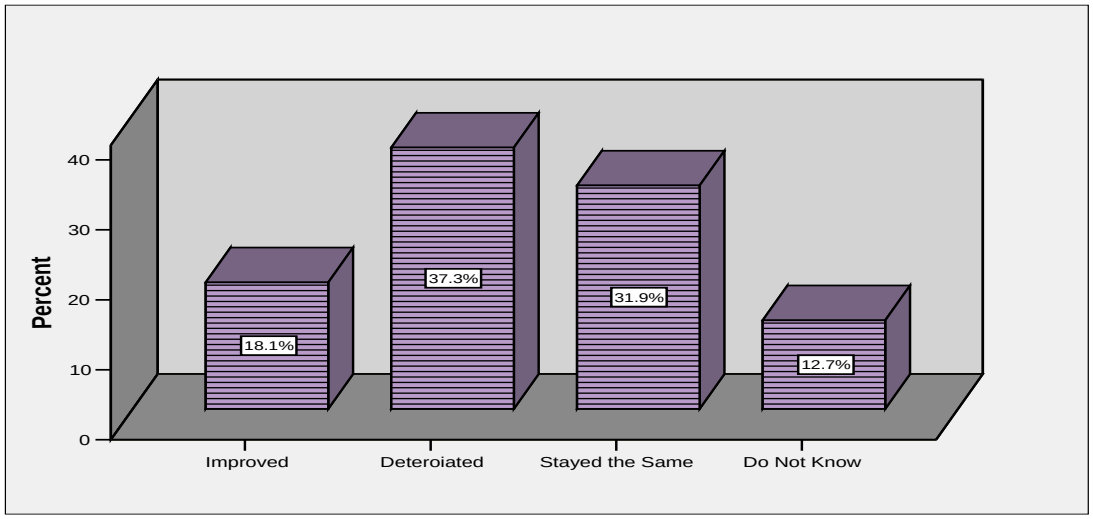


Q13-How satisfied are you with the employment opportunities in the county of your work?

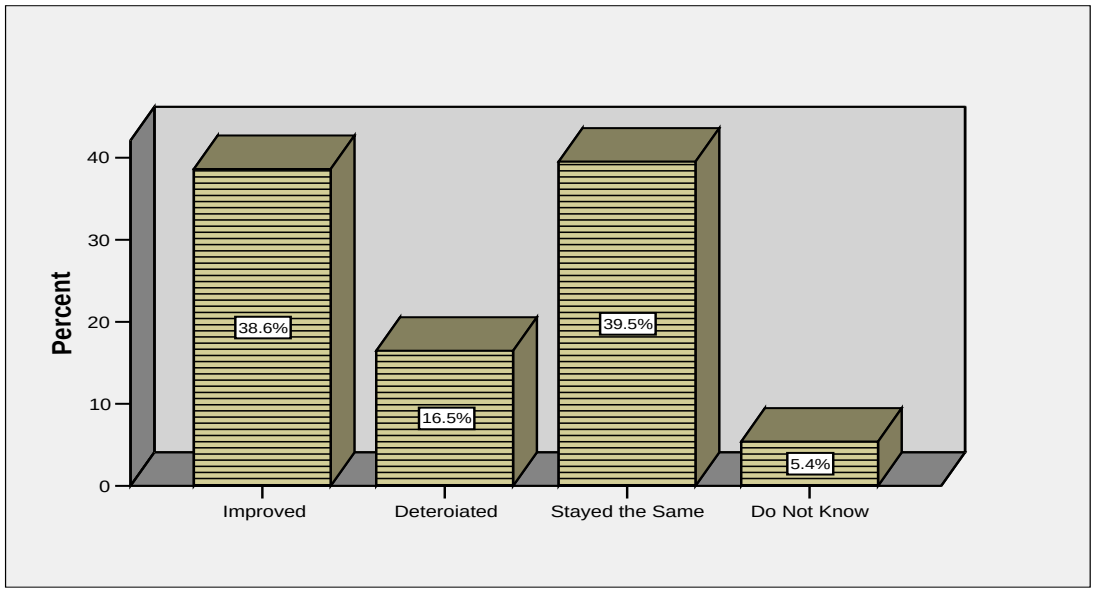


Q14-In the last five years in your industry, within the county of your work, the overall number of jobs offered improved, detoriated or stayed the same?

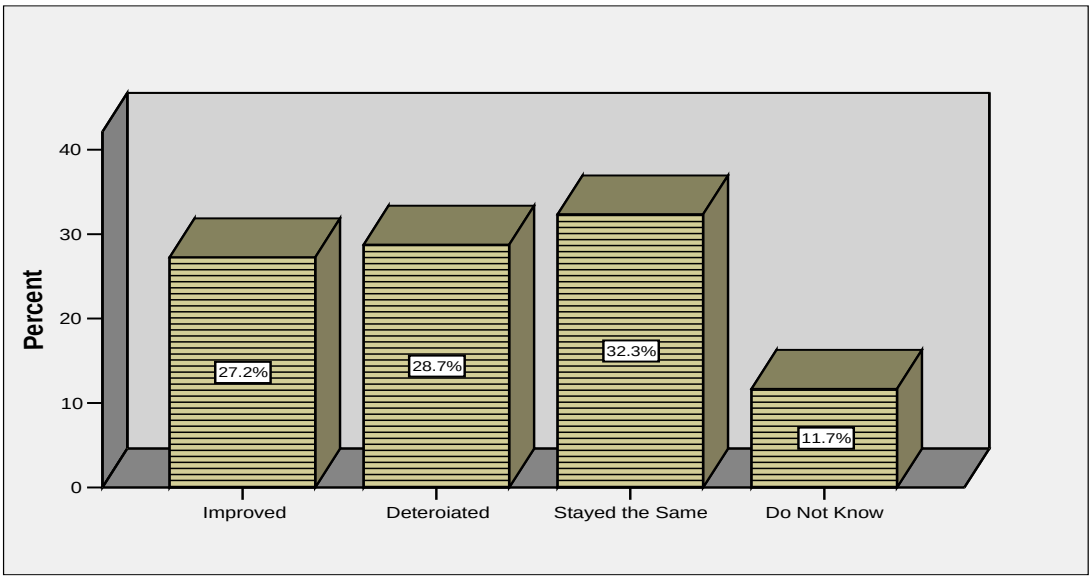
Q15-In the last five years in your industry, within the county of your work, the overall number of high paying jobs offered improved, deteriorated, or stayed the same?



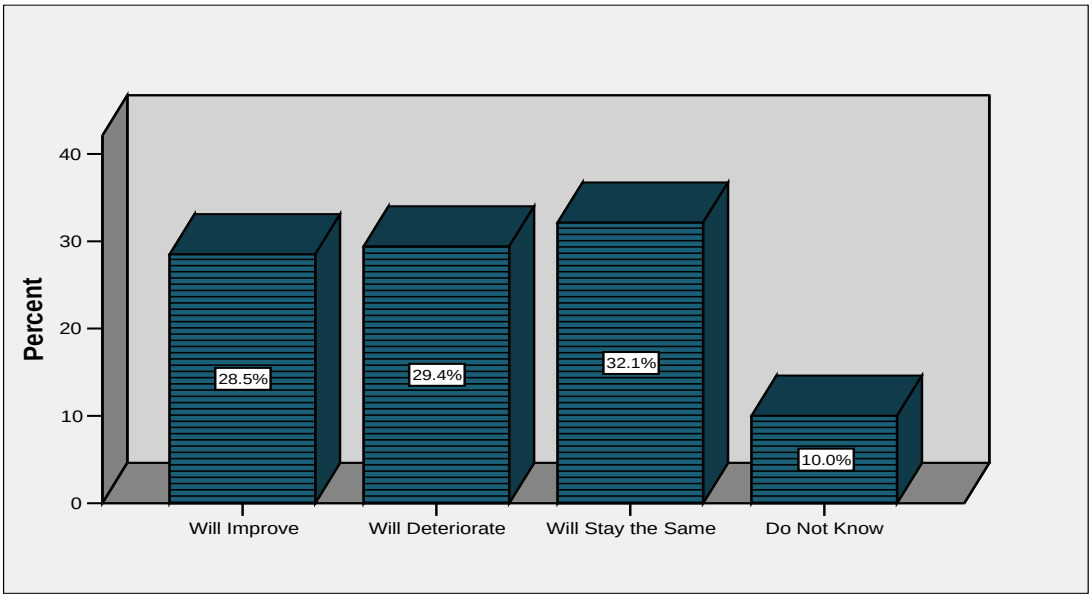
Q16-In the last five years in your industry, within the county of your work, the overall wages improved, deteriorated or stayed the same?



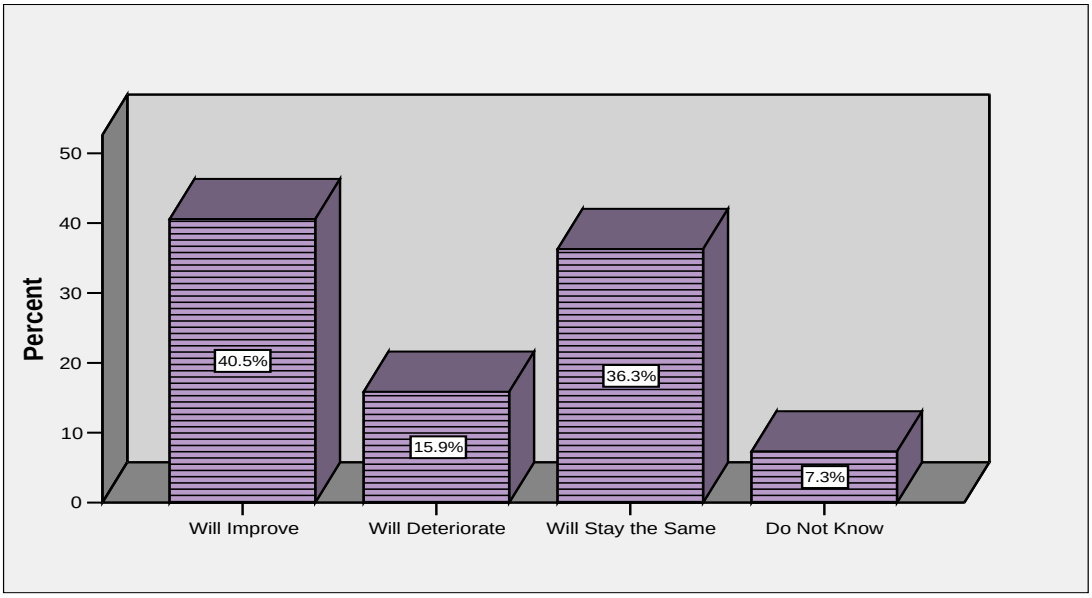
Q17-In the last five years in your industry, within county of your work, the wage level of high paying jobs improved, deteriorated or stayed the same?



Q19-Five years from now in your industry,the overall number of high paying jobs offered, within county of your work, will improve, deteriorate, or stay the same?

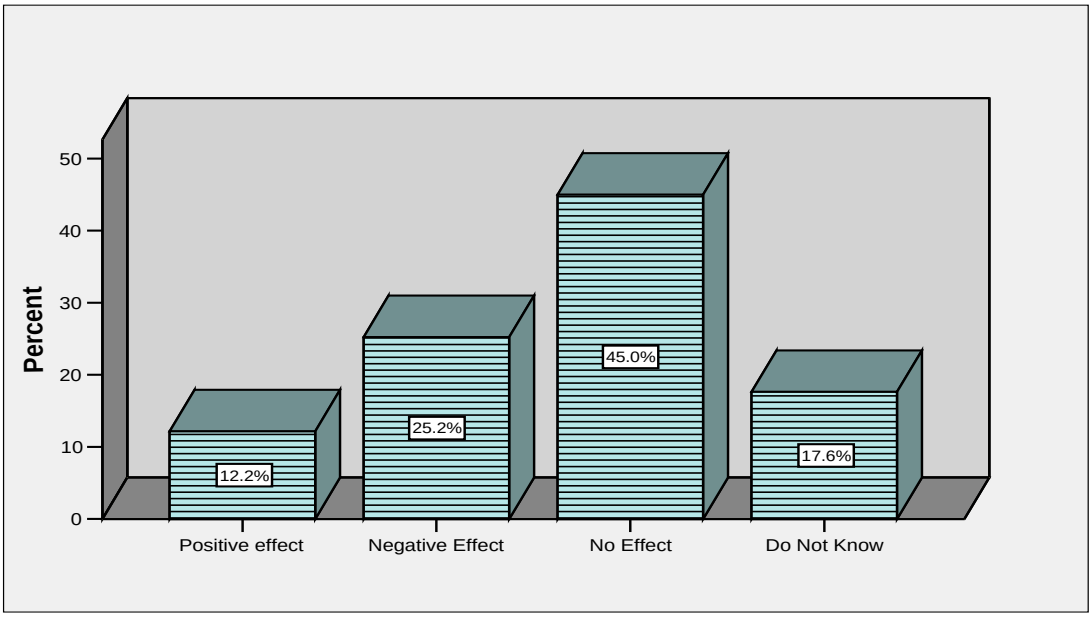


Q20-Five years from now in your industry, the overall wages, within county of your work, will improve, deteriorate or stay the same?

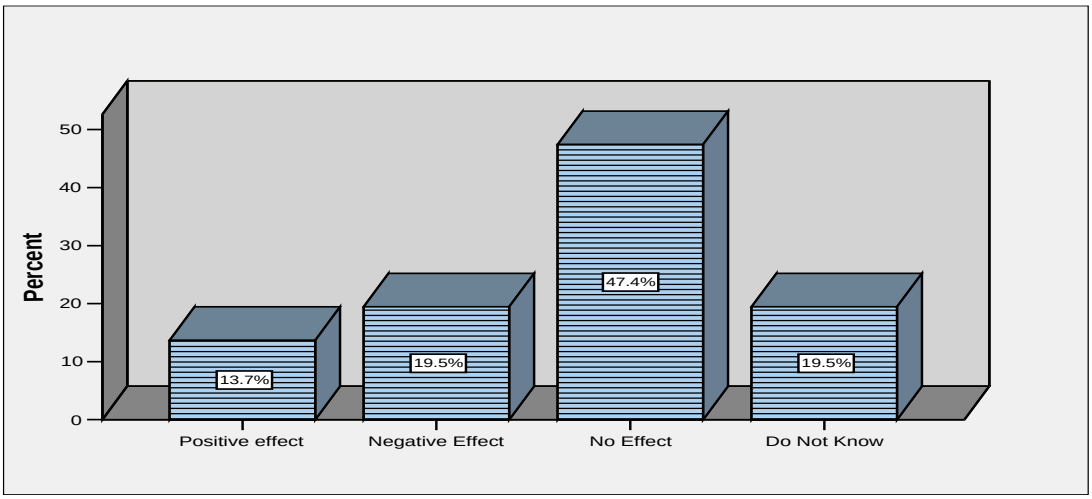


Q21-Five years from now in your industry, the level of wages in the high paying jobs, within county of your work, will improve, deteriorate or will stay the same?

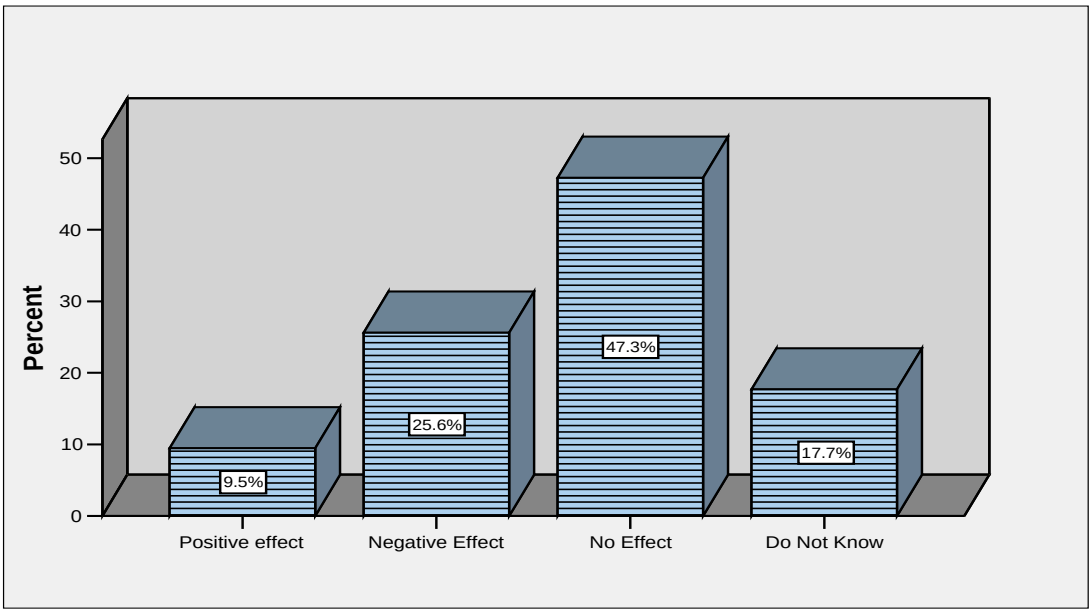
Q22- Possible infuence of outsourcing(globalization) on the overall wages in your industry within the county of your work?



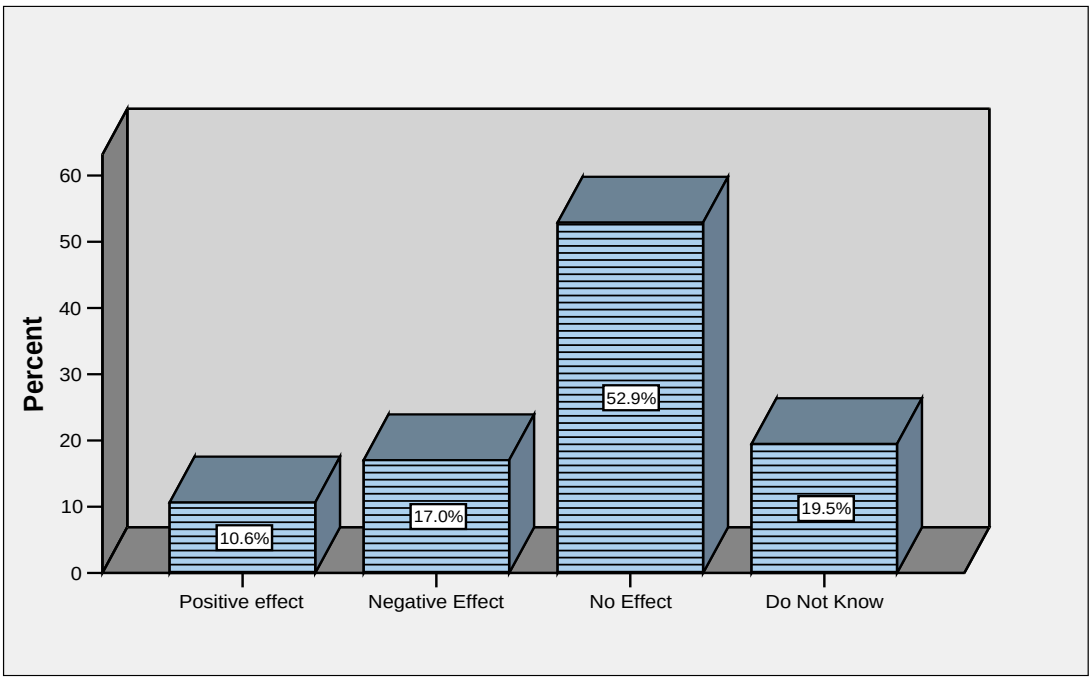
Q23- Possible influence of outsourcing(globalization) on the wage level of high paying jobs in your industry within the county of your work?



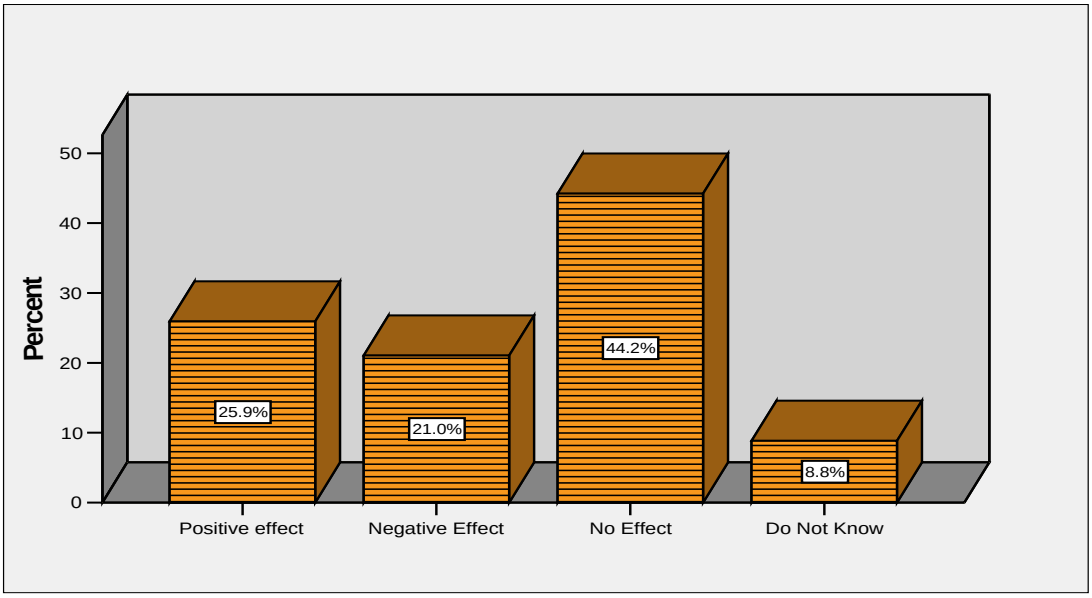
Q24- Possible influence of outsourcing(globalization) on the overall number of jobs offered in your industry within the county of your work?



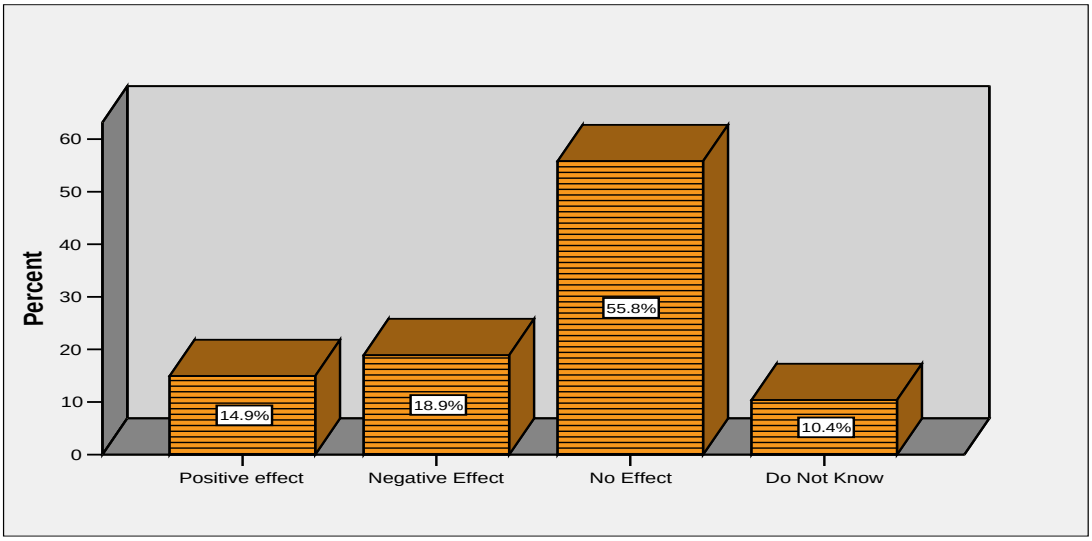
Q25- Possible influence of outsourcing(globalization) on the number of high paying jobs in your industry within the county of your work?



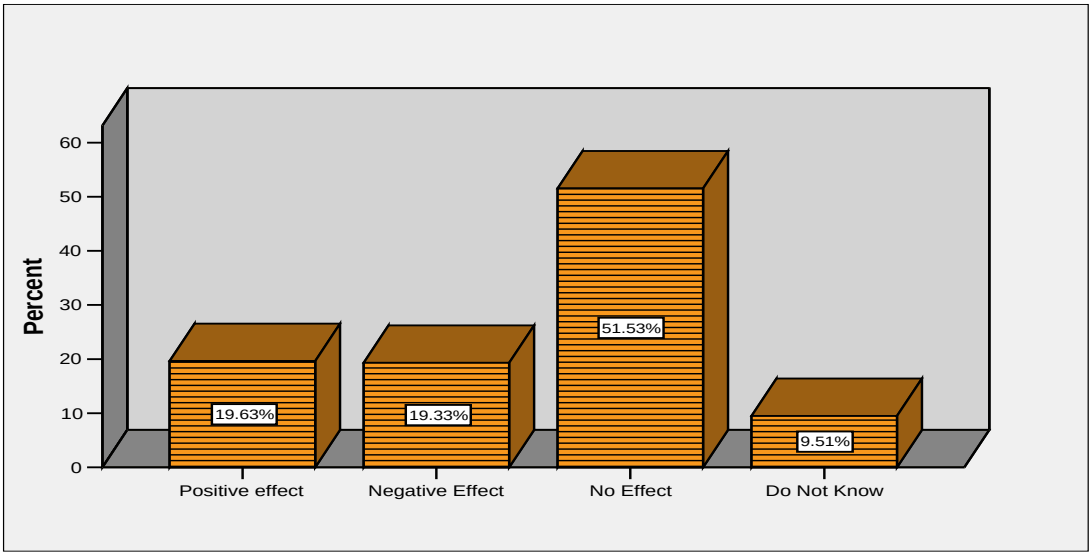
Q26- Possible effect of immigration on the overall wages in your industry within the county of your work?



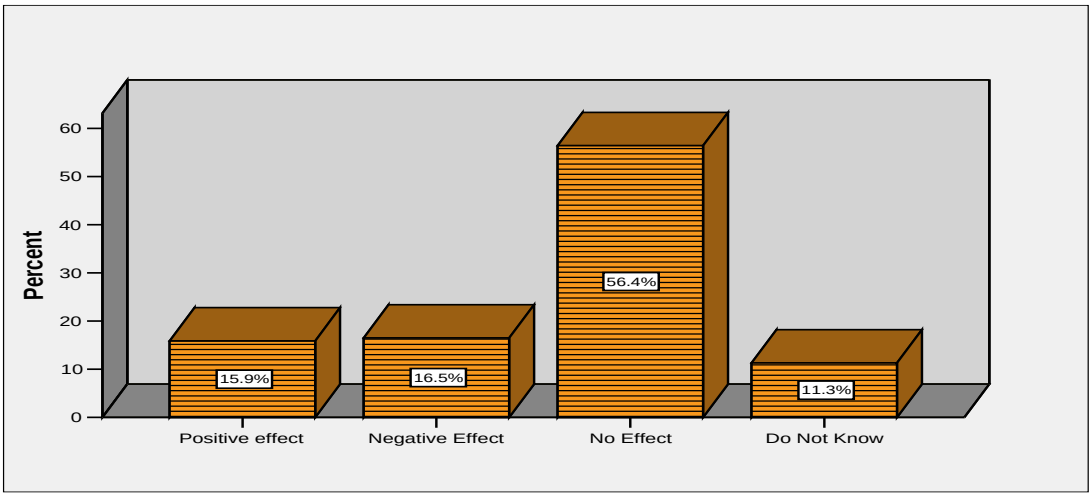
Q27-Possible effect og immigration on the wage level of high paying jobs in your industry within the county of your work?



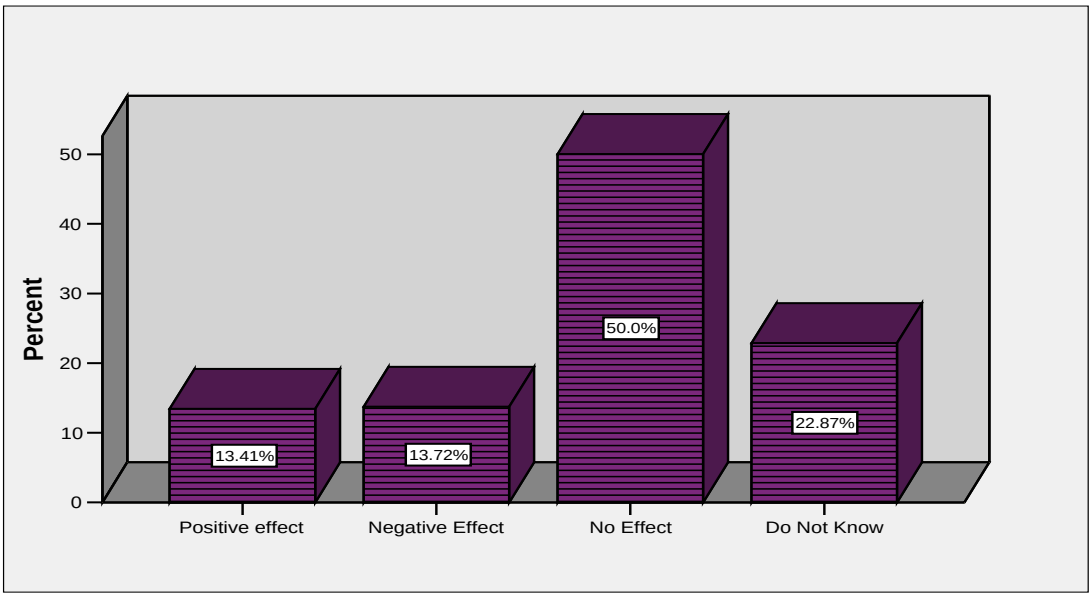
Q28-Possible effect of immigration on the overall number of jobs offered in your industry within the county of your work?



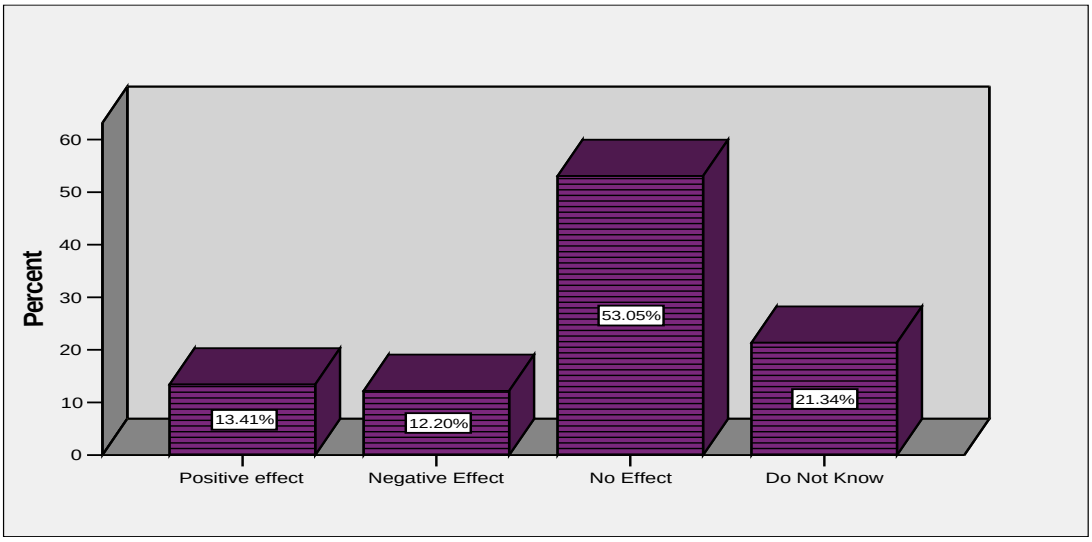
Q29-Possible effect of immigration on the number of high paying jobs in your industry within the county of your work?



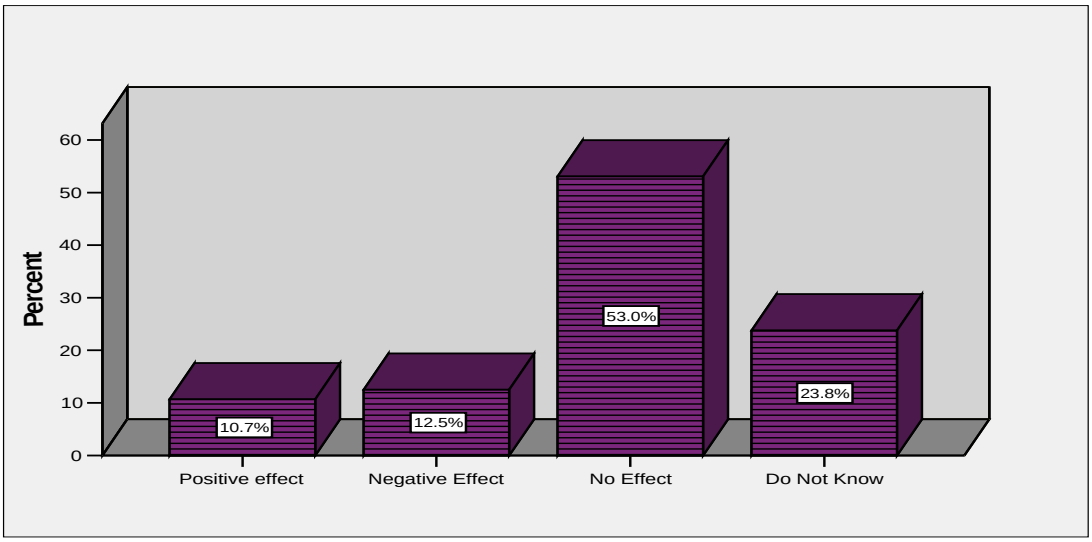
Q30-Possible impact of labor unions on the overall wages in your industry within the county of your work?



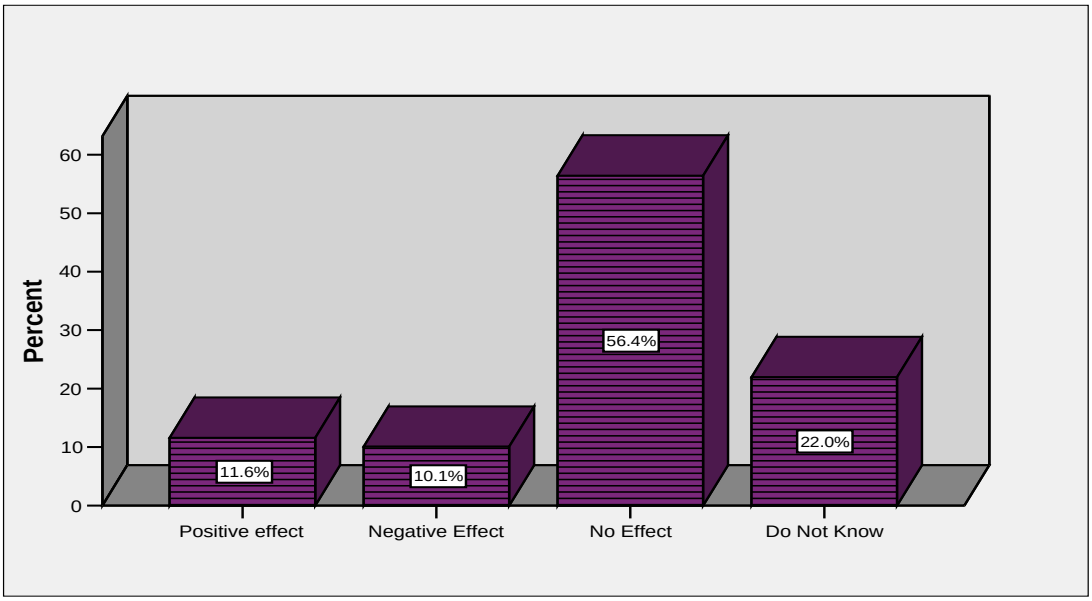
Q31- Possible impact of labor unions on the wage level of high paying jobs in your industry within the county of your work?



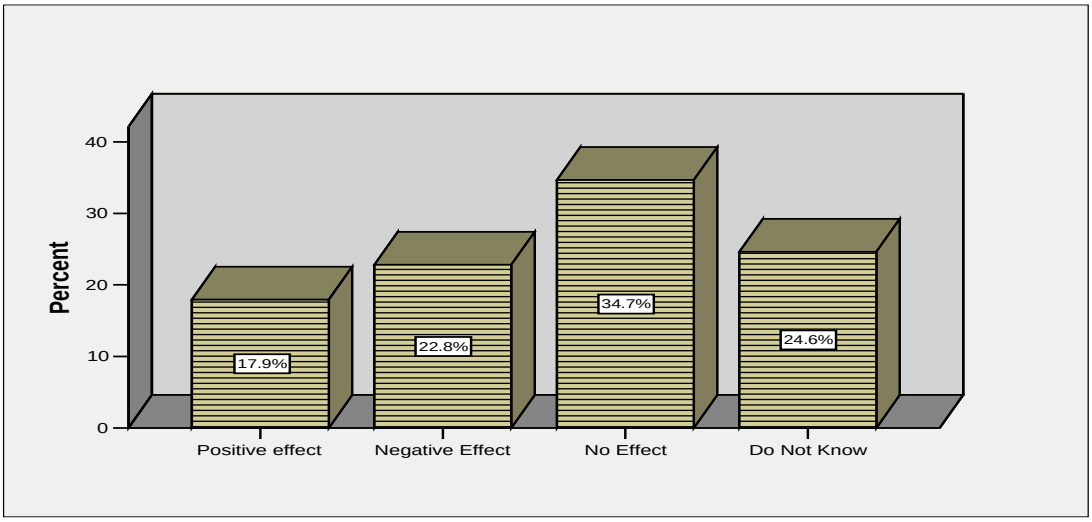
Q32- Possible impact of labor unions on the overall number of jobs offered in your industry within the county of your work?



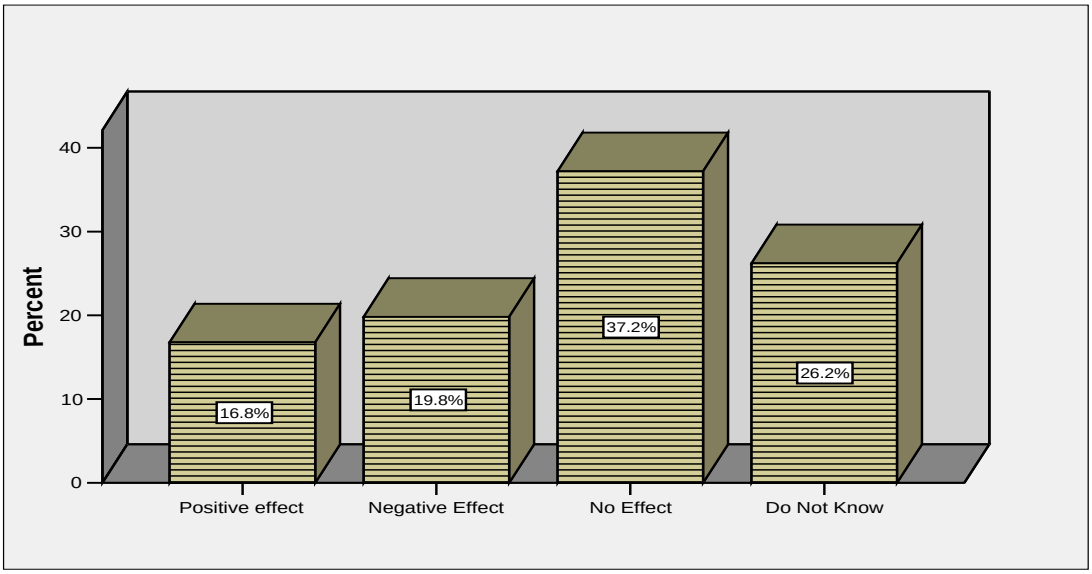
Q33-Possible impact of the labor unions on the number of high paying jobs in your industry within the county of your work?



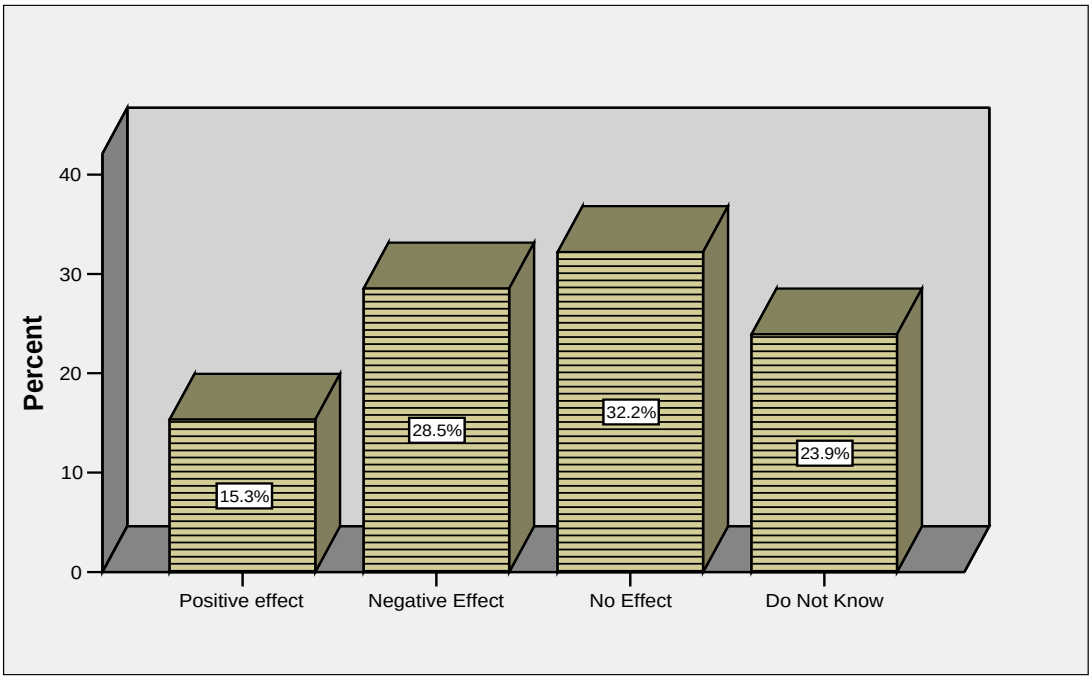
Q34- Impact of changes in the market structure on the overall wages in your industry within the county of your work?



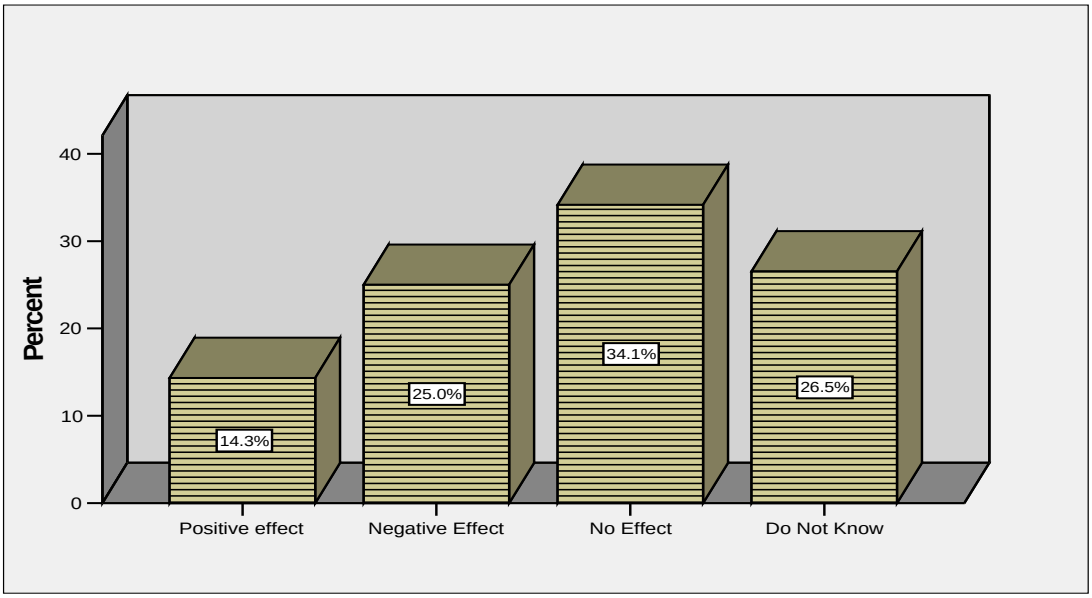
Q35- Impact of changes in market structure on the wage level of high paying jobs in your industry within the county of your work?



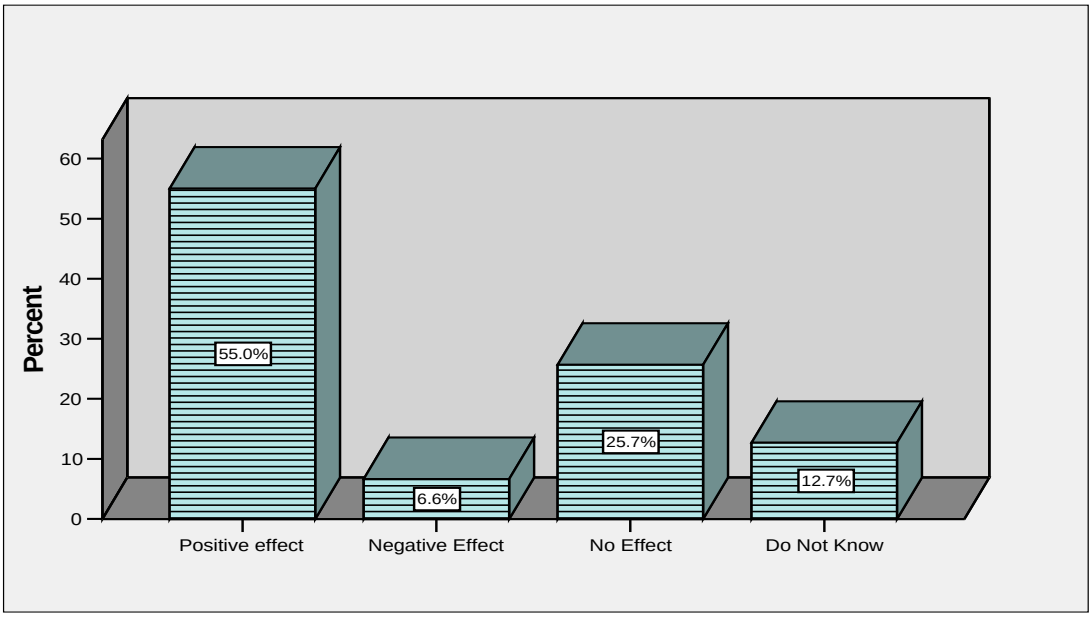
Q36- Imapct of changes in market structure on the overall number of jobs offered in your industry within the county of your work?



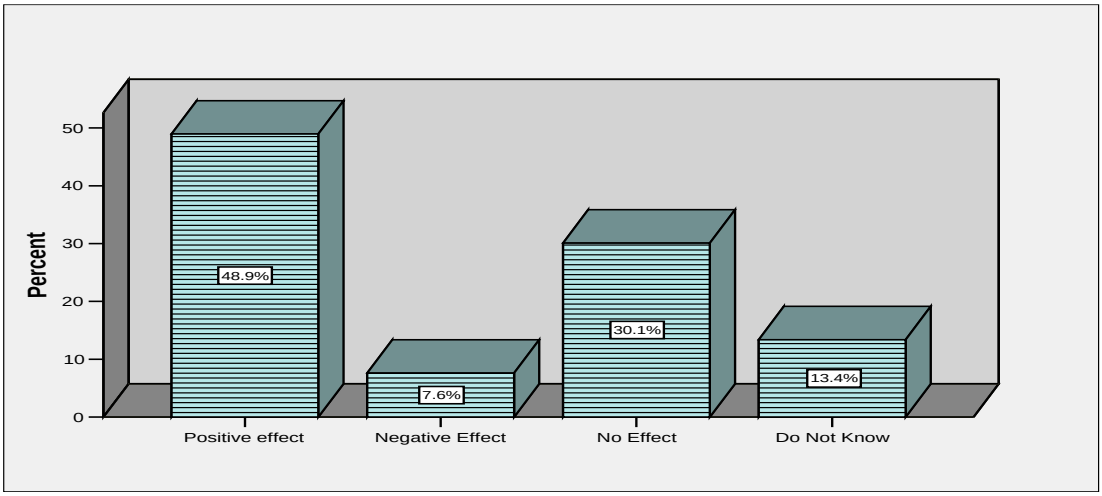
Q37- Impact of changes in the market structure on the number of high paying jobs in your industry within the county of your work?



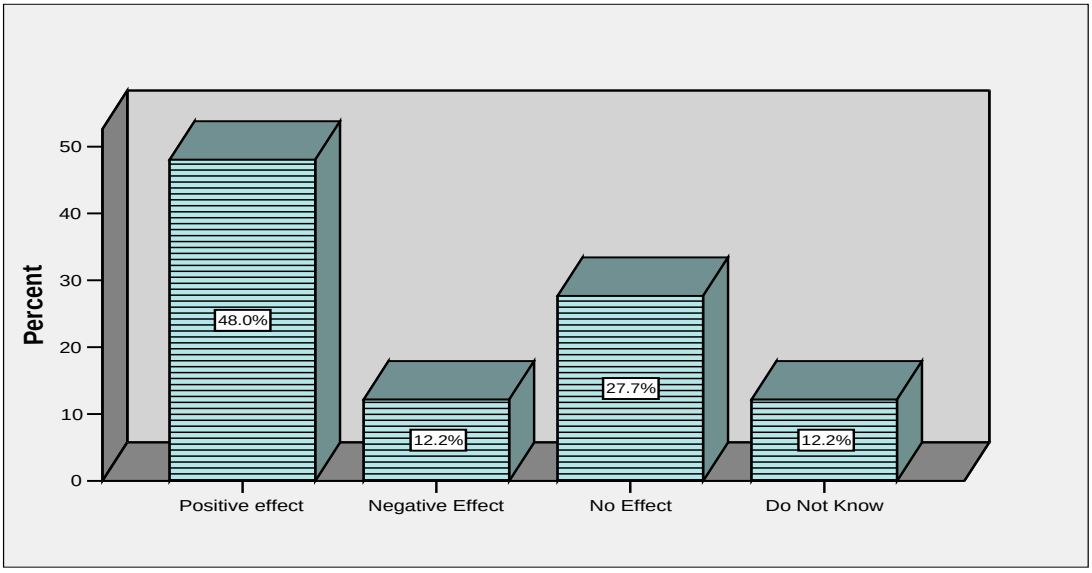
Q38- Impact of ICT (Information/Communication Technology) on the overall wages in your industry within the county of your work?



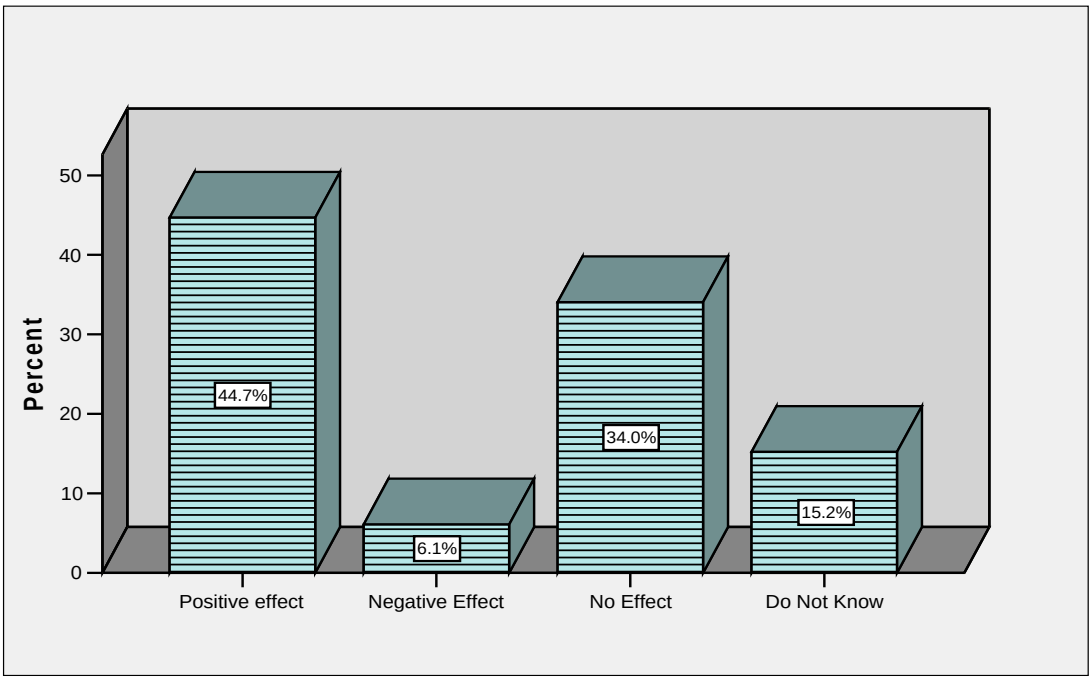
Q39-Impact of ITC on the wage level of high paying jobs in your industry within the county of your work?



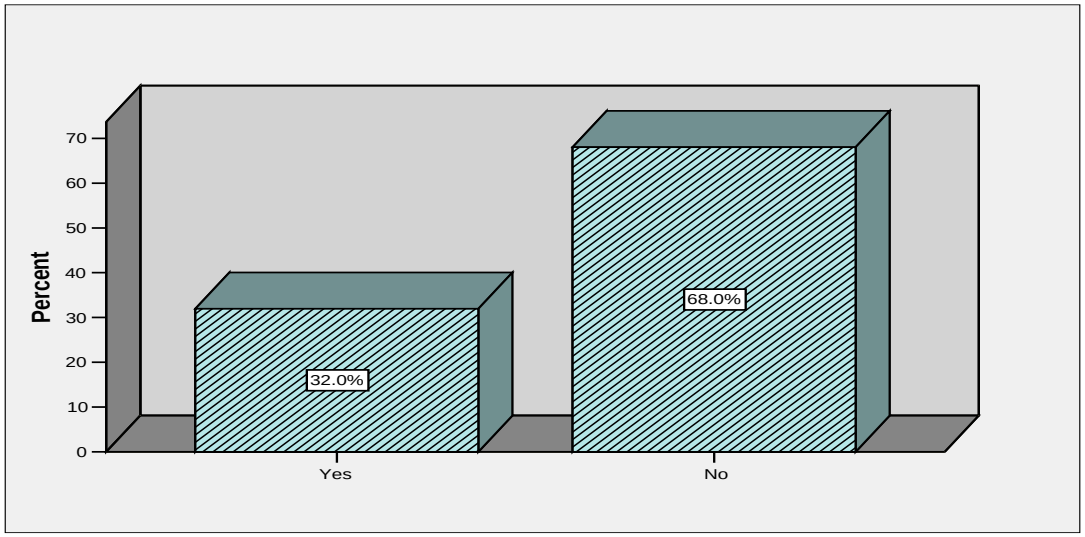
Q40- Impact of ITC on the overall number of jobs offered in your industry within the county of your work?



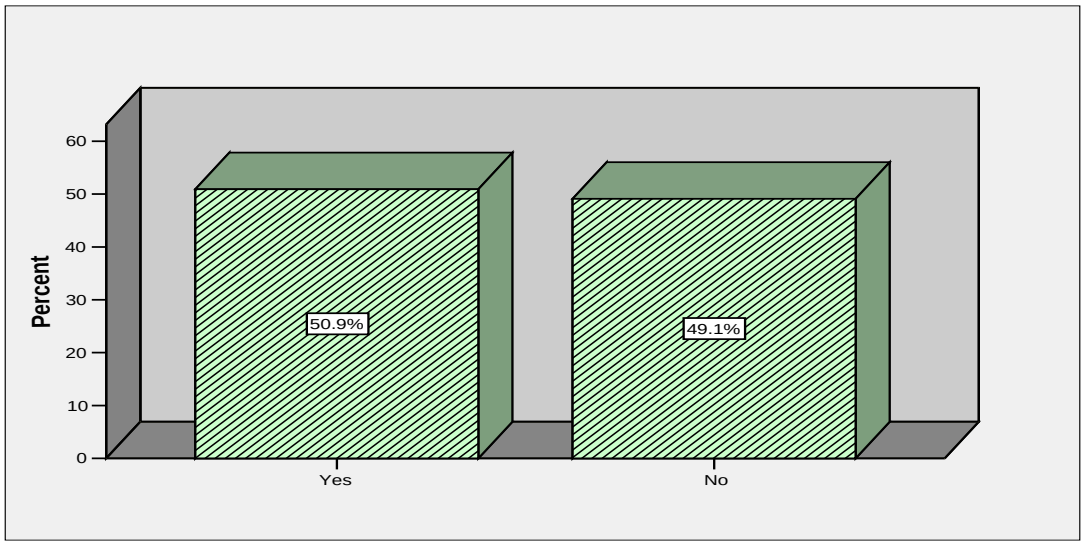
Q41-Impact of ITC on the number of high paying jobs in your industry within the county of your work?



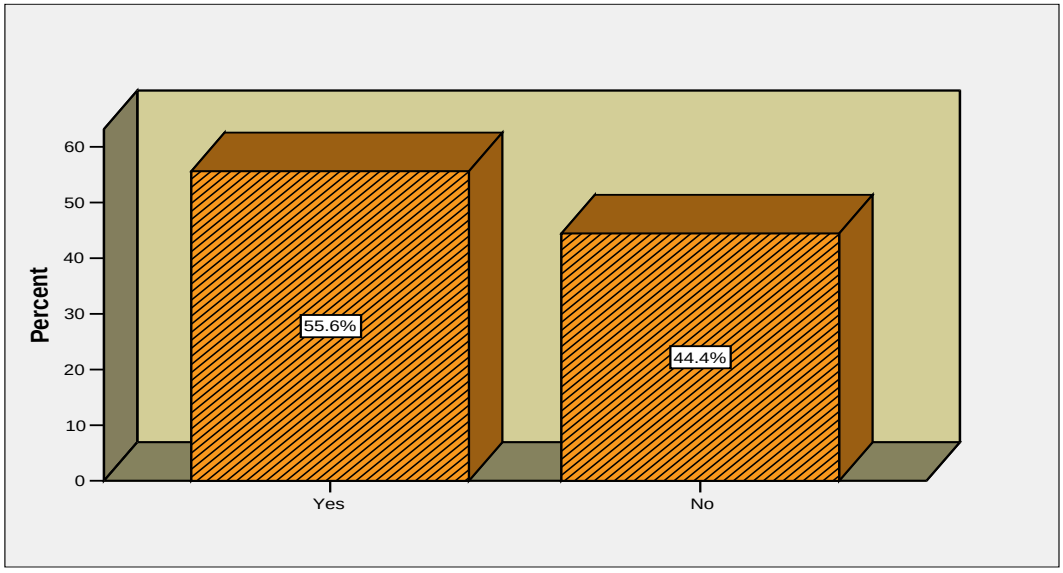
Q42a- In determination of the level of salary/wage within the county of your work, does your industry use the "national level agreement"?



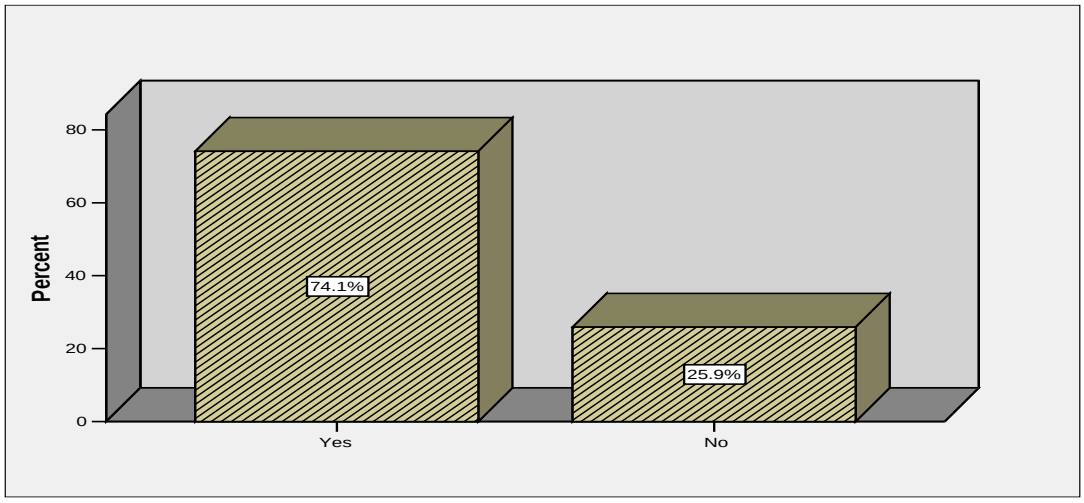
Q42b-In determination of the level of salary/wage within the county of your work, does your industry use the "industry level agreement"?



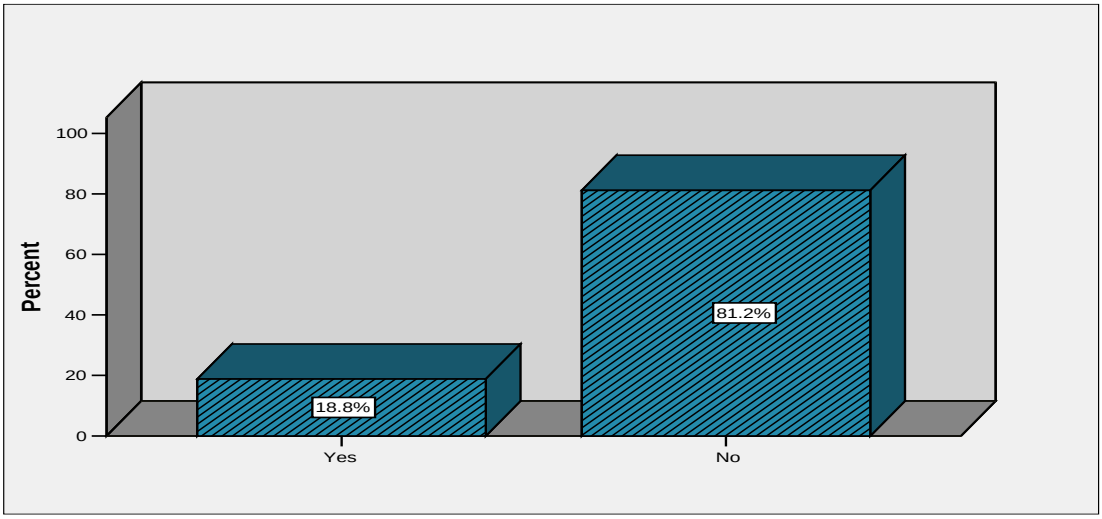
Q42c- In determination of the level of salary/wage within the county of your work, does your industry use the "business level agreement"?



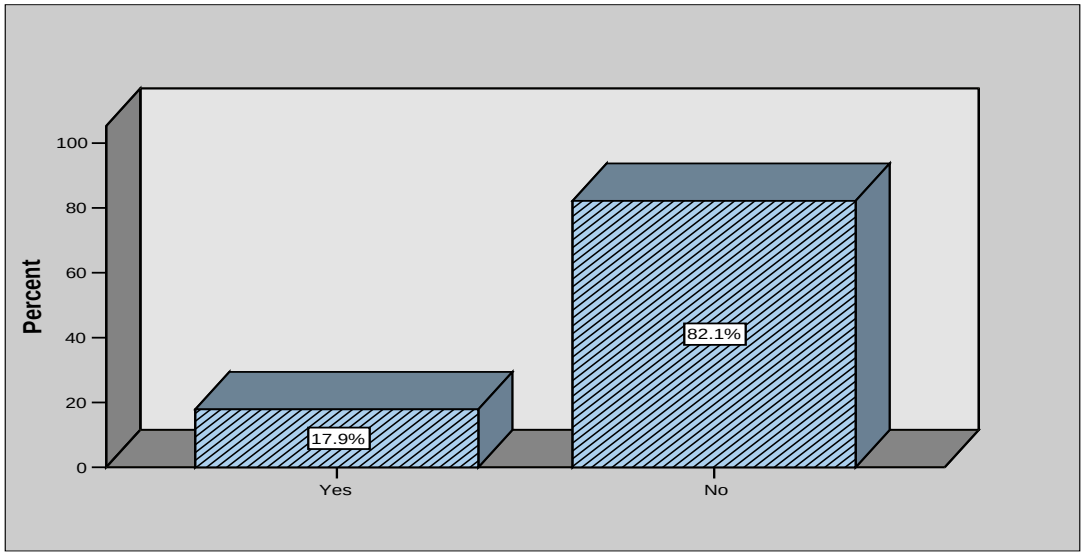
Q42d- In determination of the level of salary/wage within the county of your work, does your industry use the "individual/employee level"?



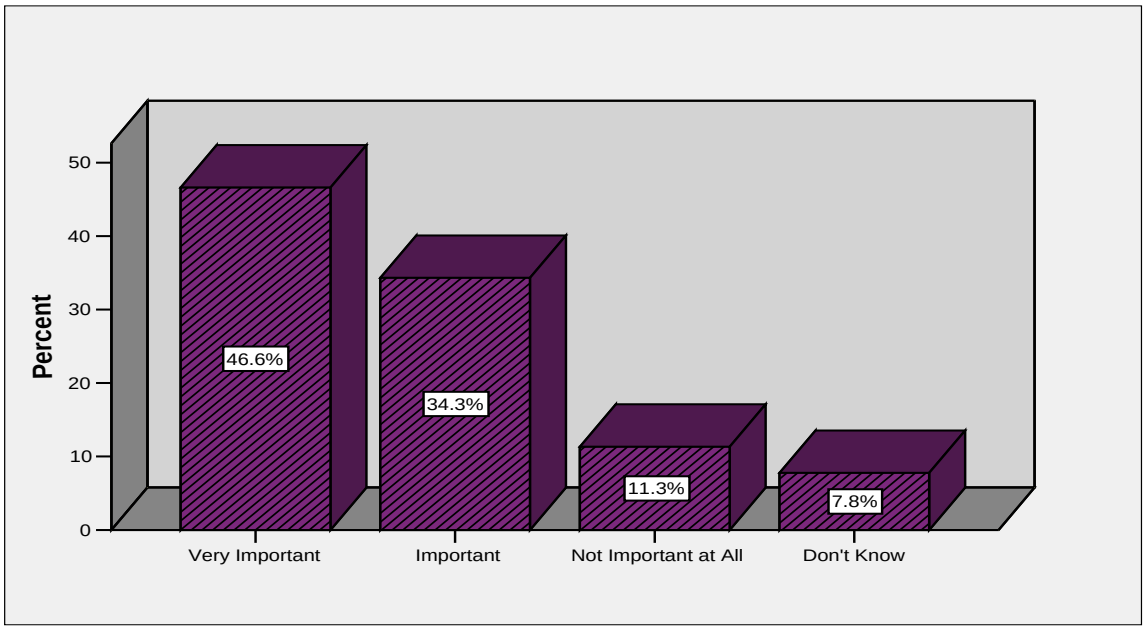
Q42e- In determination of the level of salary/wage within the county of your work, no collective pay agreement is being used.

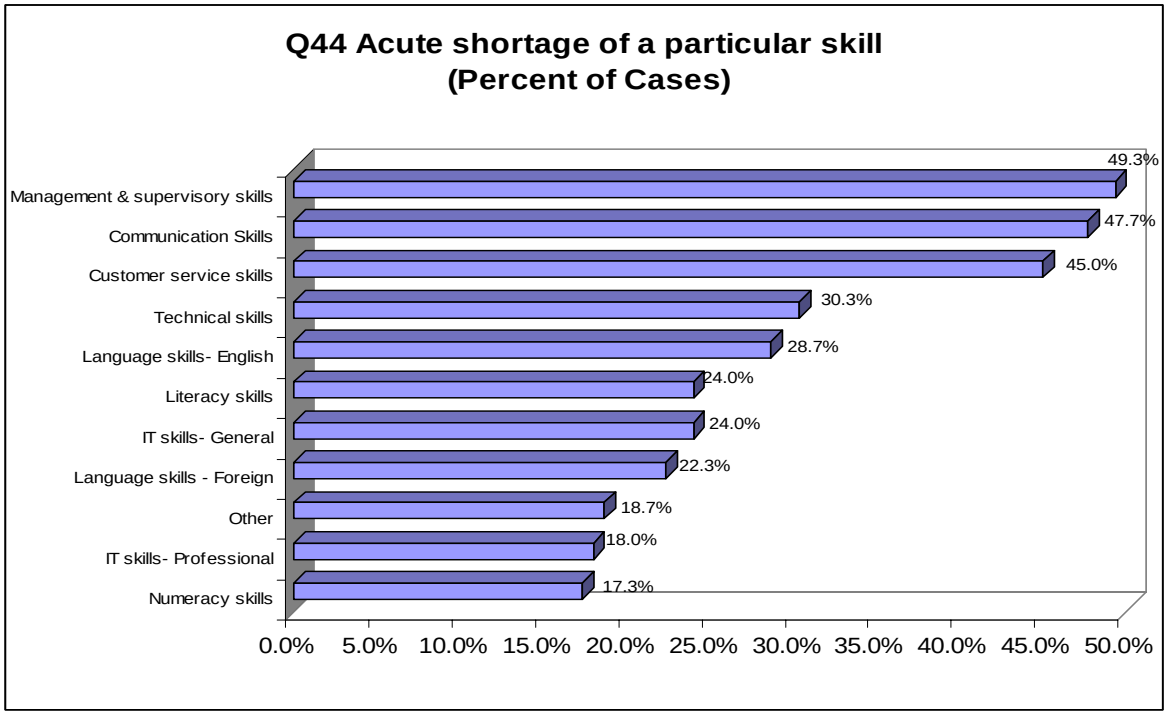


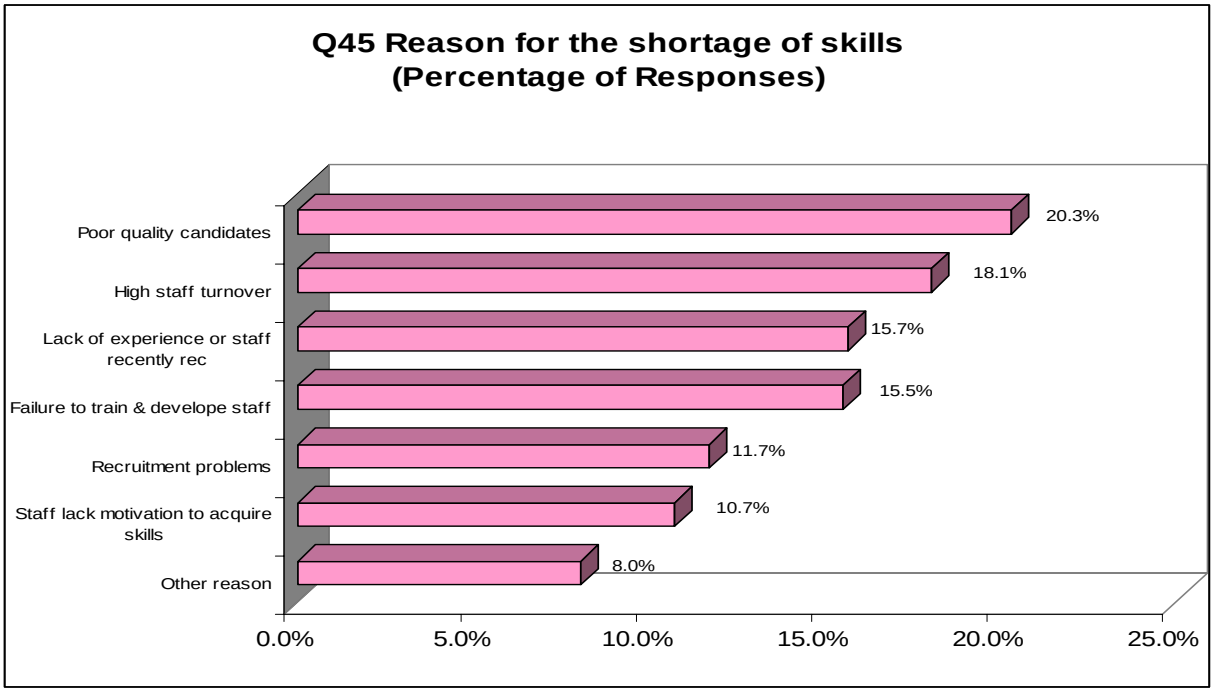
Q42f- In determination of the level of salary/wage within the county of your work, other agreement/procedures are being used.



Q43-How important is the cost of housing in wage/salary determination in your industry within the county of your work?






Q45 Reason for the shortage of skills
(Percentage of Responses)
Poor quality candidates
High staff turnover
Lack of experience or staff recently rec
Failure to train & develope staff
Recruitment problems
Staff lack motivation to acquire skills
Other reason
20.3%
18.1%
15.7%
15.5%
11.7%
10.7%
8.0%
0.0%
5.0%
10.0%
15.0%
20.0%
25.0%

Appendix C

Summary Results of Cross-tabulation of Industry Representatives

Crosstabulation

			Q8a-In general, how would you rate the economy in the county of your work?		
			Good/ Excellent	Fair/Poor	Total
County of Work	Imperial County	Count	15	15	30
			50.0%	50.0%	
	Los Angeles County	Count	121	44	165
			73.3%	26.7%	
	Orange County	Count	60	26	86
			69.8%	30.2%	
	Riverside County	Count	30	19	49
			61.2%	38.8%	
	San Bernandino Count	Count	24	21	45
			53.3%	46.7%	
	Ventura County	Count	29	26	55
			52.7%	47.3%	
	Other	Count	11	4	15
			73.3%	26.7%	
Total		Count	210	122	332

Percentages and totals are based on respondents.

a. Dichotomy group tabulated at value 1.

Crosstabulation

			Q9a-Compared to five years ago, how is the economic condition in the county of your work?			
			Worse/Far Worse	Same	Better/Much Better	Total
County of Work	Imperial County	Count	9	14	4	27
			33.3%	51.9%	14.8%	
	Los Angeles County	Count	65	47	40	152
			42.8%	30.9%	26.3%	
	Orange County	Count	28	34	16	78
			35.9%	43.6%	20.5%	
	Riverside County	Count	18	15	13	46
			39.1%	32.6%	28.3%	
	San Bernandino Count	Count	18	14	10	42
			42.9%	33.3%	23.8%	
	Ventura County	Count	26	9	18	53
			49.1%	17.0%	34.0%	
	Other	Count	4	2	6	12
			33.3%	16.7%	50.0%	
Total		Count	127	101	78	306

Percentages and totals are based on respondents.

a. Dichotomy group tabulated at value 1.

Crosstabulation

			Q10a-Compared to five years ago, do you recruit more, less or about the same number of people from outside Southern California?			
			More	Less	The same	Total
County of Work	Imperial County	Count	8	2	11	21
			38.1%	9.5%	52.4%	
	Los Angeles County	Count	46	21	50	117
			39.3%	17.9%	42.7%	
	Orange County	Count	8	10	41	59
			13.6%	16.9%	69.5%	
	Riverside County	Count	8	3	26	37
			21.6%	8.1%	70.3%	
	San Bernandino Count	Count	9	7	17	33
			27.3%	21.2%	51.5%	
	Ventura County	Count	13	8	22	43
			30.2%	18.6%	51.2%	
	Other	Count	6	0	3	9
			66.7%	.0%	33.3%	
Total		Count	75	44	132	251

Percentages and totals are based on respondents.

a. Dichotomy group tabulated at value 1.

Crosstabulation

			Q11a-Compared to five years ago, would you say that in determing wage level in your industry, the educational attainment has become more important, less important or has the same importance as before?			
			More Important	Less Important	The same Importance	Total
County of Work	Imperial County	Count	15	5	7	27
			55.6%	18.5%	25.9%	
	Los Angeles County	Count	92	18	44	154
			59.7%	11.7%	28.6%	
	Orange County	Count	43	11	28	82
			52.4%	13.4%	34.1%	
	Riverside County	Count	30	2	15	47
			63.8%	4.3%	31.9%	
	San Bernandino Count	Count	29	5	10	44
			65.9%	11.4%	22.7%	
	Ventura County	Count	31	3	14	48
			64.6%	6.3%	29.2%	
	Other	Count	7	1	4	12
			58.3%	8.3%	33.3%	
Total		Count	173	34	104	311

Percentages and totals are based on respondents.

a. Dichotomy group tabulated at value 1.

Crosstabulation

			Q12a-In the next five years, do you expect the overall economy of the county of your work to:			
			Improve	Stay the same	Deteroiate	Total
County of Work	Imperial County	Count	12	5	5	22
			54.5%	22.7%	22.7%	
	Los Angeles County	Count	72	43	30	145
			49.7%	29.7%	20.7%	
	Orange County	Count	38	21	20	79
			48.1%	26.6%	25.3%	
	Riverside County	Count	13	11	20	44
			29.5%	25.0%	45.5%	
	San Bernandino Count	Count	17	13	9	39
			43.6%	33.3%	23.1%	
	Ventura County	Count	22	11	15	48
			45.8%	22.9%	31.3%	
	Other	Count	6	3	3	12
			50.0%	25.0%	25.0%	
Total		Count	135	84	81	300

Percentages and totals are based on respondents.

a. Dichotomy group tabulated at value 1.

Crosstabulation

			Q13a-How satisfied are you with the employment opportunities in the county of your work?		
			Satisfied/ Extremely	Dissatisfied/ Extreme	Total
County of Work	Imperial County	Count	17	11	28
			60.7%	39.3%	
	Los Angeles County	Count	120	30	150
			80.0%	20.0%	
	Orange County	Count	65	15	80
			81.3%	18.8%	
	Riverside County	Count	35	10	45
			77.8%	22.2%	
	San Bernandino Count	Count	27	15	42
			64.3%	35.7%	
	Ventura County	Count	35	15	50
			70.0%	30.0%	
	Other	Count	8	7	15
			53.3%	46.7%	
Total		Count	230	82	312

Percentages and totals are based on respondents.

a. Dichotomy group tabulated at value 1.

Crosstabulation

			Q14a-In the last five years in your industry, within the county of your work, the overall number of jobs offered improved, detoriated or stayed the same?			
			Improved	Deteroiated	Stayed the Same	Total
County of Work	Imperial County	Count	8	5	13	26
			30.8%	19.2%	50.0%	
	Los Angeles County	Count	58	38	53	149
			38.9%	25.5%	35.6%	
	Orange County	Count	34	14	34	82
			41.5%	17.1%	41.5%	
	Riverside County	Count	17	10	20	47
			36.2%	21.3%	42.6%	
	San Bernandino Count	Count	16	11	16	43
			37.2%	25.6%	37.2%	
	Ventura County	Count	14	13	23	50
			28.0%	26.0%	46.0%	
	Other	Count	6	1	5	12
			50.0%	8.3%	41.7%	
Total		Count	114	72	120	306

Percentages and totals are based on respondents.

a. Dichotomy group tabulated at value 1.

Crosstabulation

			Q15a-In the last five years in your industry, within the county of your work, the overall number of high paying jobs offered improved, deteriorated, or stayed the same?			
			Improved	Deteroiated	Stayed the Same	Total
County of Work	Imperial County	Count	6	11	10	27
			22.2%	40.7%	37.0%	
	Los Angeles County	Count	37	60	42	139
			26.6%	43.2%	30.2%	
	Orange County	Count	17	27	28	72
			23.6%	37.5%	38.9%	
	Riverside County	Count	7	21	14	42
			16.7%	50.0%	33.3%	
	San Bernandino Count	Count	10	21	9	40
			25.0%	52.5%	22.5%	
	Ventura County	Count	7	18	25	50
			14.0%	36.0%	50.0%	
	Other	Count	2	3	7	12
			16.7%	25.0%	58.3%	
Total		Count	59	124	106	289

Percentages and totals are based on respondents.

a. Dichotomy group tabulated at value 1.

Crosstabulation

			Q16a-In the last five years in your industry, within the county of your work, the overall wages improved, deteriorated or stayed the same?			
			Improved	Deteroiated	Stayed the Same	Total
County of Work	Imperial County	Count	9	6	13	28
			32.1%	21.4%	46.4%	
	Los Angeles County	Count	65	22	67	154
			42.2%	14.3%	43.5%	
	Orange County	Count	36	11	35	82
			43.9%	13.4%	42.7%	
	Riverside County	Count	23	10	15	48
			47.9%	20.8%	31.3%	
	San Bernandino Count	Count	16	7	21	44
			36.4%	15.9%	47.7%	
	Ventura County	Count	25	14	14	53
			47.2%	26.4%	26.4%	
	Other	Count	5	2	7	14
			35.7%	14.3%	50.0%	
Total		Count	128	55	132	315

Percentages and totals are based on respondents.

a. Dichotomy group tabulated at value 1.

Crosstabulation

			Q17a-In the last five years in your industry, within county of your work, the wage level of high paying jobs improved, deteriorated or stayed the same?			
			Improved	Deteroiated	Stayed the Same	Total
County of Work	Imperial County	Count	9	12	6	27
			33.3%	44.4%	22.2%	
	Los Angeles County	Count	49	40	54	143
			34.3%	28.0%	37.8%	
	Orange County	Count	24	23	30	77
			31.2%	29.9%	39.0%	
	Riverside County	Count	7	19	17	43
			16.3%	44.2%	39.5%	
	San Bernandino Count	Count	12	15	14	41
			29.3%	36.6%	34.1%	
	Ventura County	Count	17	12	23	52
			32.7%	23.1%	44.2%	
	Other	Count	3	3	8	14
			21.4%	21.4%	57.1%	
Total		Count	90	96	108	294

Percentages and totals are based on respondents.

a. Dichotomy group tabulated at value 1.

Crosstabulation

			Q18a-Five years from now in your industry, the overall number of job offered, within county of your work, will improve, deteriorate or will stay the same?			
			Will Improve	Will Deteriorate	Will Stay the Same	Total
County of Work	Imperial County	Count	10	3	12	25
			40.0%	12.0%	48.0%	
	Los Angeles County	Count	77	26	50	153
			50.3%	17.0%	32.7%	
	Orange County	Count	39	18	26	83
			47.0%	21.7%	31.3%	
	Riverside County	Count	16	14	16	46
			34.8%	30.4%	34.8%	
	San Bernandino Count	Count	22	6	15	43
			51.2%	14.0%	34.9%	
	Ventura County	Count	27	15	8	50
			54.0%	30.0%	16.0%	
	Other	Count	7	3	2	12
			58.3%	25.0%	16.7%	
Total		Count	135	69	101	305

Percentages and totals are based on respondents.

a. Dichotomy group tabulated at value 1.

Crosstabulation

			Q19a-Five years from now in your industry,the overall number of high paying jobs offered, within county of your work, will improve, deteriorate, or stay the same?			
			Will Improve	Will Deteriorate	Will Stay the Same	Total
County of Work	Imperial County	Count	9	10	9	28
			32.1%	35.7%	32.1%	
	Los Angeles County	Count	56	33	57	146
			38.4%	22.6%	39.0%	
	Orange County	Count	23	28	28	79
			29.1%	35.4%	35.4%	
	Riverside County	Count	9	22	13	44
			20.5%	50.0%	29.5%	
	San Bernandino Count	Count	16	14	14	44
			36.4%	31.8%	31.8%	
	Ventura County	Count	15	16	18	49
			30.6%	32.7%	36.7%	
	Other	Count	2	4	6	12
			16.7%	33.3%	50.0%	
Total		Count	94	96	106	296

Percentages and totals are based on respondents.

a. Dichotomy group tabulated at value 1.

Crosstabulation

			Q20a-Five years from now in your industry, the overall wages, within county of your work, will improve, deteriorate or stay the same?			
			Will Improve	Will Deteriorate	Will Stay the Same	Total
County of Work	Imperial County	Count	10	4	14	28
			35.7%	14.3%	50.0%	
	Los Angeles County	Count	74	19	53	146
			50.7%	13.0%	36.3%	
	Orange County	Count	34	8	37	79
			43.0%	10.1%	46.8%	
	Riverside County	Count	15	13	15	43
			34.9%	30.2%	34.9%	
	San Bernandino Count	Count	22	3	16	41
			53.7%	7.3%	39.0%	
	Ventura County	Count	28	8	14	50
			56.0%	16.0%	28.0%	
	Other	Count	2	2	8	12
			16.7%	16.7%	66.7%	
Total		Count	133	52	118	303

Percentages and totals are based on respondents.

a. Dichotomy group tabulated at value 1.

Crosstabulation

			Q21-Five years from now in your industry, the level of wages in the high paying jobs, within county of your work, will improve, deteriorate or will stay the same?			
			Will Improve	Will Deteriorate	Will Stay the Same	Total
County of Work	Imperial County	Count	10	9	9	28
			35.7%	32.1%	32.1%	
	Los Angeles County	Count	67	29	42	138
			48.6%	21.0%	30.4%	
	Orange County	Count	32	15	29	76
			42.1%	19.7%	38.2%	
	Riverside County	Count	13	16	14	43
			30.2%	37.2%	32.6%	
	San Bernandino Count	Count	19	10	12	41
			46.3%	24.4%	29.3%	
	Ventura County	Count	22	11	16	49
			44.9%	22.4%	32.7%	
	Other	Count	3	2	7	12
			25.0%	16.7%	58.3%	
Total		Count	118	79	94	291

Percentages and totals are based on respondents.

a. Dichotomy group tabulated at value 1.

Crosstab

			Q8a-In general, how would you rate the economy in the county of your work?		
			Good/ Excellent	Fair/Poor	Total
Q49-What is your highest level of formal education?	High school graduate	Count	10	19	29
			34.5%	65.5%	100.0%
	Some college	Count	33	26	59
			55.9%	44.1%	100.0%
	College degree	Count	82	38	120
			68.3%	31.7%	100.0%
	Some graduate school	Count	32	8	40
			80.0%	20.0%	100.0%
	Graduate degree	Count	44	21	65
			67.7%	32.3%	100.0%
Total		Count	201	112	313
			64.2%	35.8%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	18.483[a]	4	.001
Likelihood Ratio	18.266	4	.001
Linear-by-Linear Association	10.115	1	.001
N of Valid Cases	313		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 10.38.

Crosstab

			Q17a-In the last five years in your industry, within county of your work, the wage level of high paying jobs improved, deteriorated or stayed the same?			
			Improved	Deteroiated	Stayed the Same	Total
Q49-What is your highest level of formal education?	High school graduate	Count	4	13	9	26
			15.4%	50.0%	34.6%	100.0%
	Some college	Count	12	9	26	47
			25.5%	19.1%	55.3%	100.0%
	College degree	Count	36	35	35	106
			34.0%	33.0%	33.0%	100.0%
	Some graduate school	Count	10	15	10	35
			28.6%	42.9%	28.6%	100.0%
	Graduate degree	Count	21	18	23	62
			33.9%	29.0%	37.1%	100.0%
Total		Count	83	90	103	276
			30.1%	32.6%	37.3%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	14.818[a]	8	.063
Likelihood Ratio	14.792	8	.063
Linear-by-Linear Association	2.098	1	.147
N of Valid Cases	276		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.82.

Crosstab

			Q18a-Five years from now in your industry, the overall number of job offered, within county of your work, will improve, deteriorate or will stay the same?			
			Will Improve	Will Deteriorate	Will Stay the Same	Total
Q49-What is your highest level of formal education?	High school graduate	Count	11	4	11	26
			42.3%	15.4%	42.3%	100.0%
	Some college	Count	16	11	28	55
			29.1%	20.0%	50.9%	100.0%
	College degree	Count	50	33	30	113
			44.2%	29.2%	26.5%	100.0%
	Some graduate school	Count	19	9	9	37
			51.4%	24.3%	24.3%	100.0%
	Graduate degree	Count	27	13	17	57
			47.4%	22.8%	29.8%	100.0%
Total		Count	123	70	95	288
			42.7%	24.3%	33.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	14.302[a]	8	.074
Likelihood Ratio	14.012	8	.081
Linear-by-Linear Association	4.546	1	.033
N of Valid Cases	288		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.32.

Crosstab

			Q21-Five years from now in your industry, the level of wages in the high paying jobs, within county of your work, will improve, deteriorate or will stay the same?			
			Will Improve	Will Deteriorate	Will Stay the Same	Total
Q49-What is your highest level of formal education?	High school graduate	Count	5	10	10	25
			20.0%	40.0%	40.0%	100.0%
	Some college	Count	12	16	24	52
			23.1%	30.8%	46.2%	100.0%
	College degree	Count	49	28	29	106
			46.2%	26.4%	27.4%	100.0%
	Some graduate school	Count	17	9	9	35
			48.6%	25.7%	25.7%	100.0%
	Graduate degree	Count	28	12	19	59
			47.5%	20.3%	32.2%	100.0%
Total		Count	111	75	91	277
			40.1%	27.1%	32.9%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	16.245[a]	8	.039
Likelihood Ratio	17.014	8	.030
Linear-by-Linear Association	6.535	1	.011
N of Valid Cases	277		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.77.

Crosstab

			Q8a-In general, how would you rate the economy in the county of your work?		
			Good/ Excellent	Fair/Poor	Total
Q49a-What is your highest level of formal education?	High school graduate/Some college	Count	43	45	88
			48.9%	51.1%	100.0%
	College degree	Count	82	38	120
			68.3%	31.7%	100.0%
	Graduate degree/Some graduate school	Count	76	29	105
			72.4%	27.6%	100.0%
Total		Count	201	112	313
			64.2%	35.8%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	12.958[a]	2	.002
Likelihood Ratio	12.706	2	.002
Linear-by-Linear Association	12.466	1	.000
N of Valid Cases	313		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 31.49.

Crosstab

			Q11a-Compared to five years ago, would you say that in determing wage level in your industry, the educational attainment has become more important, less important or has the same importance as before?			
			More Important	Less Important	The same Importance	Total
Q49a-What is your highest level of formal education?	High school graduate/Some college	Count	26	13	44	83
			31.3%	15.7%	53.0%	100.0%
	College degree	Count	67	11	36	114
			58.8%	9.6%	31.6%	100.0%
	Graduate degree/Some graduate school	Count	70	9	18	97
			72.2%	9.3%	18.6%	100.0%
Total		Count	163	33	98	294
			55.4%	11.2%	33.3%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	31.966[a]	4	.000
Likelihood Ratio	32.792	4	.000
Linear-by-Linear Association	30.683	1	.000
N of Valid Cases	294		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 9.32.

Crosstab

			Q12a-In the next five years, do you expect the overall economy of the county of your work to:			
			Improve	Stay the same	Deteroiate	Total
Q49a-What is your highest level of formal education?	High school graduate/Some college	Count	27	25	27	79
			34.2%	31.6%	34.2%	100.0%
	College degree	Count	46	33	29	108
			42.6%	30.6%	26.9%	100.0%
	Graduate degree/Some graduate school	Count	55	20	23	98
			56.1%	20.4%	23.5%	100.0%
Total		Count	128	78	79	285
			44.9%	27.4%	27.7%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.419[a]	4	.051
Likelihood Ratio	9.484	4	.050
Linear-by-Linear Association	6.380	1	.012
N of Valid Cases	285		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 21.62.

Crosstab

			Q14a-In the last five years in your industry, within the county of your work, the overall number of jobs offered improved, detoriated or stayed the same?			
			Improved	Deteroiated	Stayed the Same	Total
Q49a-What is your highest level of formal education?	High school graduate/Some college	Count	30	11	42	83
			36.1%	13.3%	50.6%	100.0%
	College degree	Count	45	27	36	108
			41.7%	25.0%	33.3%	100.0%
	Graduate degree/Some graduate school	Count	33	27	36	96
			34.4%	28.1%	37.5%	100.0%
Total		Count	108	65	114	287
			37.6%	22.6%	39.7%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.259[a]	4	.055
Likelihood Ratio	9.592	4	.048
Linear-by-Linear Association	1.197	1	.274
N of Valid Cases	287		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 18.80.

Crosstab

			Q18a-Five years from now in your industry, the overall number of job offered, within county of your work, will improve, deteriorate or will stay the same?			
			Will Improve	Will Deteriorate	Will Stay the Same	Total
Q49a-What is your highest level of formal education?	High school graduate/Some college	Count	27	15	39	81
			33.3%	18.5%	48.1%	100.0%
	College degree	Count	50	33	30	113
			44.2%	29.2%	26.5%	100.0%
	Graduate degree/Some graduate school	Count	46	22	26	94
			48.9%	23.4%	27.7%	100.0%
Total		Count	123	70	95	288
			42.7%	24.3%	33.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	12.719[a]	4	.013
Likelihood Ratio	12.292	4	.015
Linear-by-Linear Association	8.496	1	.004
N of Valid Cases	288		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 19.69.

Crosstab

			Q19a-Five years from now in your industry,the overall number of high paying jobs offered, within county of your work, will improve, deteriorate, or stay the same?			
			Will Improve	Will Deteriorate	Will Stay the Same	Total
Q49a-What is your highest level of formal education?	High school graduate/Some college	Count	16	32	27	75
			21.3%	42.7%	36.0%	100.0%
	College degree	Count	37	31	42	110
			33.6%	28.2%	38.2%	100.0%
	Graduate degree/Some graduate school	Count	37	30	30	97
			38.1%	30.9%	30.9%	100.0%
Total		Count	90	93	99	282
			31.9%	33.0%	35.1%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.734[a]	4	.102
Likelihood Ratio	7.886	4	.096
Linear-by-Linear Association	2.869	1	.090
N of Valid Cases	282		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 23.94.

Crosstab

			Q21-Five years from now in your industry, the level of wages in the high paying jobs, within county of your work, will improve, deteriorate or will stay the same?			
			Will Improve	Will Deteriorate	Will Stay the Same	Total
Q49a-What is your highest level of formal education?	High school graduate/Some college	Count	17	26	34	77
			22.1%	33.8%	44.2%	100.0%
	College degree	Count	49	28	29	106
			46.2%	26.4%	27.4%	100.0%
	Graduate degree/Some graduate school	Count	45	21	28	94
			47.9%	22.3%	29.8%	100.0%
Total		Count	111	75	91	277
			40.1%	27.1%	32.9%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	14.957[a]	4	.005
Likelihood Ratio	15.777	4	.003
Linear-by-Linear Association	10.831	1	.001
N of Valid Cases	277		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 20.85.

Crosstab

			Q10a-Compared to five years ago, do you recruit more, less or about the same number of people from outside Southern California?			
			More	Less	The same	Total
Q47a-What is your age category?	Less than 29 years	Count	23	11	10	44
		% within Q47a-What is your age category?	52.3%	25.0%	22.7%	100.0%
	30-49 years	Count	29	18	73	120
		% within Q47a-What is your age category?	24.2%	15.0%	60.8%	100.0%
	50 or more	Count	17	9	43	69
		% within Q47a-What is your age category?	24.6%	13.0%	62.3%	100.0%
Total		Count	69	38	126	233
		% within Q47a-What is your age category?	29.6%	16.3%	54.1%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	21.899[a]	4	.000
Likelihood Ratio	22.508	4	.000
Linear-by-Linear Association	12.560	1	.000
N of Valid Cases	233		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.18.

Crosstab

			Q11a-Compared to five years ago, would you say that in determing wage level in your industry, the educational attainment has become more important, less important or has the same importance as before?			
			More Important	Less Important	The same Importance	Total
Q47a-What is your age category?	Less than 29 years	Count	30	14	13	57
			52.6%	24.6%	22.8%	100.0%
	30-49 years	Count	88	12	54	154
			57.1%	7.8%	35.1%	100.0%
	50 or more	Count	45	7	31	83
			54.2%	8.4%	37.3%	100.0%
Total		Count	163	33	98	294
			55.4%	11.2%	33.3%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13.844[a]	4	.008
Likelihood Ratio	12.005	4	.017
Linear-by-Linear Association	.660	1	.416
N of Valid Cases	294		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.40.

Crosstab

			Q14a-In the last five years in your industry, within the county of your work, the overall number of jobs offered improved, detoriated or stayed the same?			
			Improved	Deteroiated	Stayed the Same	Total
Q47a-What is your age category?	Less than 29 years	Count	24	6	27	57
		% within Q47a-What is your age category?	42.1%	10.5%	47.4%	100.0%
	30-49 years	Count	59	33	58	150
		% within Q47a-What is your age category?	39.3%	22.0%	38.7%	100.0%
	50 or more	Count	25	26	29	80
		% within Q47a-What is your age category?	31.3%	32.5%	36.3%	100.0%
Total		Count	108	65	114	287
		% within Q47a-What is your age category?	37.6%	22.6%	39.7%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.563[a]	4	.048
Likelihood Ratio	10.077	4	.039
Linear-by-Linear Association	.003	1	.960
N of Valid Cases	287		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 12.91.

Crosstab

			Q18a-Five years from now in your industry, the overall number of job offered, within county of your work, will improve, deteriorate or will stay the same?			
			Will Improve	Will Deteriorate	Will Stay the Same	Total
Q47a-What is your age category?	Less than 29 years	Count	35	6	20	61
			57.4%	9.8%	32.8%	100.0%
	30-49 years	Count	62	37	50	149
			41.6%	24.8%	33.6%	100.0%
	50 or more	Count	26	27	25	78
			33.3%	34.6%	32.1%	100.0%
Total		Count	123	70	95	288
			42.7%	24.3%	33.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13.439[a]	4	.009
Likelihood Ratio	14.412	4	.006
Linear-by-Linear Association	2.367	1	.124
N of Valid Cases	288		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 14.83.

Crosstab

			Q19a-Five years from now in your industry,the overall number of high paying jobs offered, within county of your work, will improve, deteriorate, or stay the same?			
			Will Improve	Will Deteriorate	Will Stay the Same	Total
Q47a-What is your age category?	Less than 29 years	Count	25	12	25	62
		% within Q47a-What is your age category?	40.3%	19.4%	40.3%	100.0%
	30-49 years	Count	50	52	44	146
		% within Q47a-What is your age category?	34.2%	35.6%	30.1%	100.0%
	50 or more	Count	15	29	30	74
		% within Q47a-What is your age category?	20.3%	39.2%	40.5%	100.0%
Total		Count	90	93	99	282
		% within Q47a-What is your age category?	31.9%	33.0%	35.1%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.559[a]	4	.021
Likelihood Ratio	12.475	4	.014
Linear-by-Linear Association	2.348	1	.125
N of Valid Cases	282		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 19.79.

Crosstab

			Q20a-Five years from now in your industry, the overall wages, within county of your work, will improve, deteriorate or stay the same?			
			Will Improve	Will Deteriorate	Will Stay the Same	Total
Q47a-What is your age category?	Less than 29 years	Count	34	5	24	63
			54.0%	7.9%	38.1%	100.0%
	30-49 years	Count	70	29	47	146
			47.9%	19.9%	32.2%	100.0%
	50 or more	Count	23	18	39	80
			28.8%	22.5%	48.8%	100.0%
Total		Count	127	52	110	289
			43.9%	18.0%	38.1%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	14.626[a]	4	.006
Likelihood Ratio	15.847	4	.003
Linear-by-Linear Association	6.265	1	.012
N of Valid Cases	289		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 11.34.

Crosstab

			Q21-Five years from now in your industry, the level of wages in the high paying jobs, within county of your work, will improve, deteriorate or will stay the same?			
			Will Improve	Will Deteriorate	Will Stay the Same	Total
Q47a-What is your age category?	Less than 29 years	Count	26	10	22	58
		% within Q47a-What is your age category?	44.8%	17.2%	37.9%	100.0%
	30-49 years	Count	61	44	38	143
		% within Q47a-What is your age category?	42.7%	30.8%	26.6%	100.0%
	50 or more	Count	24	21	31	76
		% within Q47a-What is your age category?	31.6%	27.6%	40.8%	100.0%
Total		Count	111	75	91	277
		% within Q47a-What is your age category?	40.1%	27.1%	32.9%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.364[a]	4	.079
Likelihood Ratio	8.728	4	.068
Linear-by-Linear Association	1.567	1	.211
N of Valid Cases	277		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 15.70.

Q5a-How many years have you been working in the county of your employment?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1-7 Years	127	38.0	39.1	39.1
	8-19 Years	107	32.0	32.9	72.0
	20 or more	91	27.2	28.0	100.0
	Total	325	97.3	100.0	
Missing	System	9	2.7		
Total		334	100.0		

Crosstab

			Q9a-Compared to five years ago, how is the economic condition in the county of your work?			
			Worse/Far Worse	Same	Better/Much Better	Total
Q5a-How many years have you been working in the county of your employment?	1-7 Years	Count	37	32	39	108
			34.3%	29.6%	36.1%	100.0%
	8-19 Years	Count	50	38	13	101
			49.5%	37.6%	12.9%	100.0%
	20 or more	Count	34	29	26	89
			38.2%	32.6%	29.2%	100.0%
Total		Count	121	99	78	298
			40.6%	33.2%	26.2%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	15.404[a]	4	.004
Likelihood Ratio	16.471	4	.002
Linear-by-Linear Association	1.277	1	.258
N of Valid Cases	298		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 23.30.

Crosstab

			Q13a-How satisfied are you with the employment opportunities in the county of your work?		
			Satisfied/ Extremely Satisfied	Dissatisfied/ Extremely dissatisfied	Total
Q5a-How many years have you been working in the county of your employment?	1-7 Years	Count	93	27	120
			77.5%	22.5%	100.0%
	8-19 Years	Count	68	36	104
			65.4%	34.6%	100.0%
	20 or more	Count	64	19	83
			77.1%	22.9%	100.0%
Total		Count	225	82	307
			73.3%	26.7%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.025[a]	2	.081
Likelihood Ratio	4.909	2	.086
Linear-by-Linear Association	.091	1	.763
N of Valid Cases	307		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 22.17.

Crosstab

			Q15a-In the last five years in your industry, within the county of your work, the overall number of high paying jobs offered improved, deteriorated, or stayed the same?			
			Improved	Deteroiated	Stayed the Same	Total
Q5a-How many years have you been working in the county of your employment?	1-7 Years	Count	28	31	43	102
			27.5%	30.4%	42.2%	100.0%
	8-19 Years	Count	17	50	36	103
			16.5%	48.5%	35.0%	100.0%
	20 or more	Count	15	39	25	79
			19.0%	49.4%	31.6%	100.0%
Total		Count	60	120	104	284
			21.1%	42.3%	36.6%	100.0%

Crosstab

			Q8a-In general, how would you rate the economy in the county of your work?		
			Good/ Excellent	Fair/Poor	Total
Business size	"1-20" Employess	Count	62	69	131
			47.3%	52.7%	100.0%
	"21-100" Employess	Count	55	22	77
			71.4%	28.6%	100.0%
	More than 100 employess	Count	88	28	116
			75.9%	24.1%	100.0%
Total		Count	205	119	324
			63.3%	36.7%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	24.447[a]	2	.000
Likelihood Ratio	24.474	2	.000
Linear-by-Linear Association	21.938	1	.000
N of Valid Cases	324		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 28.28.

Crosstab

			Q12a-In the next five years, do you expect the overall economy of the county of your work to:			
			Improve	Stay the same	Deteroiate	Total
Business size	"1-20" Employess	Count	44	35	44	123
			35.8%	28.5%	35.8%	100.0%
	"21-100" Employess	Count	45	14	12	71
			63.4%	19.7%	16.9%	100.0%
	More than 100 employess	Count	42	32	25	99
			42.4%	32.3%	25.3%	100.0%
Total		Count	131	81	81	293
			44.7%	27.6%	27.6%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	16.384[a]	4	.003
Likelihood Ratio	16.284	4	.003
Linear-by-Linear Association	2.903	1	.088
N of Valid Cases	293		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 19.63.

Crosstab

			Q14a-In the last five years in your industry, within the county of your work, the overall number of jobs offered improved, detoriated or stayed the same?			
			Improved	Deteroiated	Stayed the Same	Total
Business size	"1-20" Employess	Count	28	35	58	121
			23.1%	28.9%	47.9%	100.0%
	"21-100" Employess	Count	36	13	24	73
			49.3%	17.8%	32.9%	100.0%
	More than 100 employess	Count	48	23	36	107
			44.9%	21.5%	33.6%	100.0%
Total		Count	112	71	118	301
			37.2%	23.6%	39.2%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	17.630[a]	4	.001
Likelihood Ratio	18.200	4	.001
Linear-by-Linear Association	9.992	1	.002
N of Valid Cases	301		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 17.22.

Crosstab

			Q15a-In the last five years in your industry, within the county of your work, the overall number of high paying jobs offered improved, deteriorated, or stayed the same?			
			Improved	Deteroiated	Stayed the Same	Total
Business size	"1-20" Employess	Count	15	61	36	112
			13.4%	54.5%	32.1%	100.0%
	"21-100" Employess	Count	15	21	31	67
			22.4%	31.3%	46.3%	100.0%
	More than 100 employess	Count	28	42	37	107
			26.2%	39.3%	34.6%	100.0%
Total		Count	58	124	104	286
			20.3%	43.4%	36.4%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	12.879[a]	4	.012
Likelihood Ratio	12.971	4	.011
Linear-by-Linear Association	1.056	1	.304
N of Valid Cases	286		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 13.59.

Crosstab

			Q16a-In the last five years in your industry, within the county of your work, the overall wages improved, deteriorated or stayed the same?			
			Improved	Deteroiated	Stayed the Same	Total
Business size	"1-20" Employess	Count	44	32	48	124
			35.5%	25.8%	38.7%	100.0%
	"21-100" Employess	Count	32	11	32	75
			42.7%	14.7%	42.7%	100.0%
	More than 100 employess	Count	52	11	47	110
			47.3%	10.0%	42.7%	100.0%
Total		Count	128	54	127	309
			41.4%	17.5%	41.1%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.061[a]	4	.026
Likelihood Ratio	11.109	4	.025
Linear-by-Linear Association	.423	1	.515
N of Valid Cases	309		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 13.11.

Crosstab

			Q17a-In the last five years in your industry, within county of your work, the wage level of high paying jobs improved, deteriorated or stayed the same?			
			Improved	Deteroiated	Stayed the Same	Total
Business size	"1-20" Employess	Count	25	51	38	114
			21.9%	44.7%	33.3%	100.0%
	"21-100" Employess	Count	25	14	32	71
			35.2%	19.7%	45.1%	100.0%
	More than 100 employess	Count	38	30	36	104
			36.5%	28.8%	34.6%	100.0%
Total		Count	88	95	106	289
			30.4%	32.9%	36.7%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	15.476[a]	4	.004
Likelihood Ratio	15.743	4	.003
Linear-by-Linear Association	1.418	1	.234
N of Valid Cases	289		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 21.62.

Crosstab

			Q18a-Five years from now in your industry, the overall number of job offered, within county of your work, will improve, deteriorate or will stay the same?			
			Will Improve	Will Deteriorate	Will Stay the Same	Total
Business size	"1-20" Employess	Count	35	35	51	121
			28.9%	28.9%	42.1%	100.0%
	"21-100" Employess	Count	41	10	17	68
			60.3%	14.7%	25.0%	100.0%
	More than 100 employess	Count	57	24	28	109
			52.3%	22.0%	25.7%	100.0%
Total		Count	133	69	96	298
			44.6%	23.2%	32.2%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	22.003[a]	4	.000
Likelihood Ratio	22.572	4	.000
Linear-by-Linear Association	12.463	1	.000
N of Valid Cases	298		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 15.74.

Crosstab

			Q19a-Five years from now in your industry,the overall number of high paying jobs offered, within county of your work, will improve, deteriorate, or stay the same?			
			Will Improve	Will Deteriorate	Will Stay the Same	Total
Business size	"1-20" Employess	Count	24	51	37	112
			21.4%	45.5%	33.0%	100.0%
	"21-100" Employess	Count	28	16	26	70
			40.0%	22.9%	37.1%	100.0%
	More than 100 employess	Count	40	29	39	108
			37.0%	26.9%	36.1%	100.0%
Total		Count	92	96	102	290
			31.7%	33.1%	35.2%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	15.189[a]	4	.004
Likelihood Ratio	15.318	4	.004
Linear-by-Linear Association	1.304	1	.254
N of Valid Cases	290		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 22.21.

Crosstab

			Q20a-Five years from now in your industry, the overall wages, within county of your work, will improve, deteriorate or stay the same?			
			Will Improve	Will Deteriorate	Will Stay the Same	Total
Business size	"1-20" Employess	Count	44	31	46	121
			36.4%	25.6%	38.0%	100.0%
	"21-100" Employess	Count	35	10	26	71
			49.3%	14.1%	36.6%	100.0%
	More than 100 employess	Count	51	10	44	105
			48.6%	9.5%	41.9%	100.0%
Total		Count	130	51	116	297
			43.8%	17.2%	39.1%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.924[a]	4	.018
Likelihood Ratio	12.030	4	.017
Linear-by-Linear Association	.510	1	.475
N of Valid Cases	297		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 12.19.

Crosstab

			Q21-Five years from now in your industry, the level of wages in the high paying jobs, within county of your work, will improve, deteriorate or will stay the same?			
			Will Improve	Will Deteriorate	Will Stay the Same	Total
Business size	"1-20" Employess	Count	34	45	37	116
			29.3%	38.8%	31.9%	100.0%
	"21-100" Employess	Count	33	12	26	71
			46.5%	16.9%	36.6%	100.0%
	More than 100 employess	Count	48	21	30	99
			48.5%	21.2%	30.3%	100.0%
Total		Count	115	78	93	286
			40.2%	27.3%	32.5%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	16.116[a]	4	.003
Likelihood Ratio	16.221	4	.003
Linear-by-Linear Association	3.213	1	.073
N of Valid Cases	286		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 19.36.

Appendix D

Tabulated Results of the Entire Survey

Wage and Job Market Survey
Survey Findings

General Information

Q3-How many years have you been working in this industry? Descriptive Statistics-

	N	Minimum	Maximum	Mean	Std.	Skewness	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
Q3-How many years have you been working in this industry?	334	1.00	42.00	10.1711	7.71573	1.143	.133
Valid N (listwise)	334						

Q5-How many years have you been working in the county of your employment? Descriptive Statistics-

	N	Minimum	Maximum	Mean	Std.	Skewness	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
Q5-How many years have you been working in the county of your employment?	325	1.00	50.00	13.4246	9.94676	.845	.135
Valid N (listwise)	325						

Q6-How many people work in your company? Descriptive Statistics

	N	Minimum	Maximum	Mean	Std.	Skewness	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
Q6-How many people work in your company?	325	2.00	18000.00	551.5262	1622.242	6.037	.135
Valid N (listwise)	325						

7. What is the county of your work? (Please note that this survey focuses on the following six counties)

$Q7 County of work

		Responses		Percent of Cases
		N	Percent	
County of work[a]	Imperial County	30	6.7%	9.0%
	Los Angeles County	165	36.8%	49.5%
	Orange County	87	19.4%	26.1%
	Riverside County	50	11.2%	15.0%
	San Bernandino County	46	10.3%	13.8%
	Ventura County	55	12.3%	16.5%
	Other	15	3.3%	4.5%
Total		448	100.0%	134.5%

a. Dichotomy group tabulated at value 1.

Overall Opinions

The next few questions relate to your overall opinion concerning *the economy of the county of your work.*

8. In general, how would you rate the economy in the county?

	Percentage
Excellent	**9.9**
Good	**53.5**
Fair	**31.2**
Poor	**5.4**

9. Compared to five years ago, how is the economic condition in the county?

	Percentage
Far worse	**6.0**
Worse	**32.0**
Same	**30.2**
Better	**20.1**
Much Better	**3.6**
Don't Know	**8.1**

10. Compared to five years ago, do you recruit more, less or about the same number of people from outside Southern California?

	Percentage
More	**22.7**
Less	**13.3**
The same	**40.3**

Do Not Know	**23.6**

11. Compared to five years ago, would you say that in determining wage level in your industry, the educational attainment has become more important, less important or has the same importance as before?

	Percentage
More Important	**52.6**
Less Important	**10.3**
The same Importance	**31.4**
Do Not Know	**5.7**

12. In the next five years, do you expect the overall economy of the county to:

	Percentage
Improve	**40.4**
Stay the same	**25.1**
Deteriorate	**24.6**
Do Not Know	**9.9**

13. How satisfied are you with the employment opportunities in the county?

	Percentage
Extremely Satisfied	**8.5**
Satisfied	**61.3**
Dissatisfied	**22.1**
Extremely Dissatisfied	**2.7**
Do Not Know	**5.4**

Assessment of Job and Wage Situation

The next few questions deal with your assessment of the job and wages situation in your industry within the county of your work during the last five years.

Would you say that in the last five years in your industry (within the county of your work)	**Improved**	**Deteriorated**	**Stayed the Same**	***Do Not Know***
14. The overall number of jobs offered improved, deteriorated or stayed the same?	**34.4%**	**21.6%**	**35.9%**	**8.1%**
15. The overall number of high-paying jobs offered improved, deteriorated or stayed the same?	**18.1%**	**37.3%**	**31.9%**	**12.7%**
16. The overall wages improved, deteriorated or stayed the same?	**38.6%**	**16.5%**	**39.5%**	**5.4%**
17. The wage level of high-paying jobs improved, deteriorated, or stayed the same?	**27.2%**	**28.7%**	**32.3%**	**11.7%**

The next few questions deal with your forecast of the job and wages situation in <u>your industry</u> within the <u>county of your work</u> during the <u>next five years</u>.

Now looking ahead, do you think that <u>five years from now</u> in your <u>industry</u> (within the <u>county of your work)</u>	**Will Improve**	**Will Deteriorate**	**Will Stay the Same**	***Do Not Know***
18. The overall number of job offered will improve, deteriorate, or will stay the same?	**40.9%**	**21.2%**	**30.6%**	**7.3%**
19. The overall number of high-paying jobs offered will improve, deteriorate, or will stay the same?	**28.5%**	**29.4%**	**32.1%**	**10.0%**
20. The overall wages will improve, deteriorate or will stay the same?	**40.5%**	**15.9%**	**36.3%**	**7.3%**
21. The level of wages in the high-paying jobs will improve, deteriorate, or will stay the same?	**35.8%**	**23.9%**	**28.8%**	**11.5%**

<u>Outsourcing (globalization) and Jobs and Wages</u>

The next few questions deal with the possible effects of outsourcing (globalization) on the wages and number of jobs offered in <u>your industry</u> within the <u>county of your work</u>.

Would you say that <u>outsourcing (globalization)</u> had a positive, negative, or no effect on	**Positive Effect**	**Negative Effect**	**No Effect**	***Do Not Know***
22. The overall wages in your industry within the county of your work?	**12.2%**	**25.2%**	**45.0%**	**17.6%**
23. The wage level of high-paying jobs in your industry within the county of your work?	**13.7%**	**19.5%**	**47.4%**	**19.5%**
24. The overall number of jobs offered in your industry within the county of your work?	**9.5%**	**25.6%**	**47.3%**	**17.7%**
25. The number of high-paying jobs in your industry within the county of your work?	**10.6%**	**17.0%**	**52.9%**	**19.5%**

Immigration and Jobs and Wages

The next few questions deal with the possible effects of immigration on the wages and the number of jobs offered in your industry within the county of your work.

Would you say that immigration had a positive, negative, or no effect on	Positive Effect	Negative Effect	No Effect	*Do Not Know*
26. The overall wages in your industry within the county of your work?	25.9%	21.0%	44.2%	8.8%
27. The wage level of high-paying jobs in your industry within the county of your work?	14.9%	18.9%	55.8%	10.4%
28. The overall number of jobs offered in your industry within the county of your work?	19.6%	19.3%	51.5%	9.5%
29. The number of high-paying jobs in your industry within the county of your work?	15.9%	16.5%	56.4%	11.3%

Impact of Labor Unions on Jobs and Wages

The next few questions deal with the possible impact of the labor unions on the wages and number of jobs offered in your industry within the county of your work.

Would you say that labor unions had a positive, negative, or no effect on	Positive Effect	Negative Effect	No Effect	*Do Not Know*
30. The overall wages in your industry within the county of your work?	13.4%	13.7%	50.0%	22.9%
31. The wage level of high-paying jobs in your industry within the county of your work?	13.4%	12.2%	53.0%	21.3%
32. The overall number of jobs offered in your industry within the county of your work?	10.7%	12.5%	53.0%	23.8%
33. The number of high-paying jobs in your industry within the county of your work?	11.6%	10.1%	56.4%	22.0%

Impact of Change in Market Structure On Jobs and Wages

The next few questions deal with the possible effects of market structure (mergers, acquisitions, consolidations etc.) on the wages and number of jobs offered in your industry within the county of your work.

Would you say that changes in the market structure (mergers, acquisitions, consolidations etc.) had a positive, negative, or no effect on	Positive Effect	Negative Effect	No Effect	*Do Not Know*

34. The overall wages in your industry within the county of your work?	**17.9%**	**22.8%**	**34.7%**	**24.6%**
35. The wage level of high-paying jobs in your industry within the county of your work?	**16.8%**	**19.8%**	**37.2%**	**26.2%**
36. The overall number of jobs offered in your industry within the county of your work?	**15.3%**	**28.5%**	**32.2%**	**23.9%**
37. The number of high-paying jobs in your industry within the county of your work?	**14.3%**	**25.0%**	**34.1%**	**26.5%**

Impact of Information/Communication Technology (ICT) on Jobs and Wages

The next few questions deal with the possible effects of Information/Communication Technology (ICT) on the wages and number of jobs offered in your industry within the county of your work.

Would you say that ICT (Information /Communication Technology) had a positive, negative, or no effect on	**Positive Effect**	**Negative Effect**	**No Effect**	***Do Not Know***
38. The overall wages in your industry within the county of your work?	**55.0%**	**6.6%**	**25.5%**	**12.7%**
39. The wage level of high-paying jobs in your industry within the county of your work?	**48.9%**	**7.6%**	**30.1%**	**13.4%**
40. The overall number of jobs offered in your industry within the county of your work?	**48.0%**	**12.2%**	**27.7%**	**12.2%**
41. The number of high-paying jobs in your industry within the county of your work?	**44.7%**	**6.1%**	**34.0%**	**15.2%**

Shortage of Skills and Wage/Salary Determination

42. What agreements/procedures are used in your industry within the county of your work for salary/wage determination?

	Yes	**No**
National level agreement (i.e. national wage agreement)	**32.0%**	**68.0%**
Industry level agreement	**50.9%**	**49.1%**
Business level agreement	**55.6%**	**44.4%**
Individual/employee level	**74.1%**	**25.9%**
No collective pay agreement exists	**18.8%**	**81.2%**
Other	**17.9%**	**82.1%**

43. How important is the cost of housing in wage/salary determination in <u>your industry</u> within the <u>county of your work</u>?

	Percentage
Very Important	**46.6**
Important	**34.3**
Not Important at All	**11.3**
Don't Know	**7.8**

44. Are there acute shortages of a particular skill in the existing workforce in <u>your industry</u> within <u>the county of your work</u>? *(<u>Please mark all that apply</u>)*

$Q44 Acute shortage of a particular skills

		Responses		Percent of Cases
		N	Percent	
Acute shortage of a particular skills[a]	Communication Skills	143	14.7%	47.7%
	Customer service skills	135	13.8%	45.0%
	IT skills- General	72	7.4%	24.0%
	IT skills- Professional	54	5.5%	18.0%
	Language skills- English	86	8.8%	28.7%
	Language skills - Foreign	67	6.9%	22.3%
	Literacy skills	72	7.4%	24.0%
	Management & supervisory skills	148	15.2%	49.3%
	Numeracy skills	52	5.3%	17.3%
	Technical skills	91	9.3%	30.3%
	Other	56	5.7%	18.7%
Total		976	100.0%	325.3%

a. Dichotomy group tabulated at value 1.

45. Why is there a shortage of these skills in <u>your industry</u> within the <u>county of your work</u>? *(<u>Please mark all that apply</u>)*

$Q45 Reason for the shortage of skills

		Responses		Percent of Cases
		N	Percent	
Reason for the shortage of skills[a]	Staff lack motivation to acquire skills	76	10.7%	25.3%
	Recruitment problems	83	11.7%	27.7%
	Poor quality candidates	144	20.3%	48.0%
	Lack of experience or staff recently rec	111	15.7%	37.0%
	Failure to train & develope staff	110	15.5%	36.7%
	High staff turnover	128	18.1%	42.7%
	Other reason	57	8.0%	19.0%
Total		709	100.0%	236.3%

a. Dichotomy group tabulated at value 1.

<u>Demographics:</u>

46. Gender.

	Percentage
Male	**52.7**
Female	**47.3**

47. What is your age category?

	Percentage
Less than 18 years	**0.0**
19-29 years	**21.3**
30-49 years	**51.3**
50-64 years	**25.8**
65 years or older	**1.6**

48. What is your ethnic background? *(<u>Check only one</u>)*

	Percentage
Caucasian (White)	**56.7**
African American	**10.2**
Hispanic / Latino	**17.8**
Asian	**8.0**
Native American	**1.0**
Pacific Islander	**2.5**
Other	**3.8**

49. What is your highest level of formal education?

	Percentage
High school graduate	**9.2**
Some college	**18.8**
College degree	**38.5**
Some graduate school	**12.7**
Graduate degree	**20.7**

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