

Assessing Economic Development in Fresno, Maricopa, Riverside, San Bernardino and Washoe Counties: A Comparative Study

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EXECUTIVE SUMMARY

This report collects and analyzes relevant data tracking and comparing the economic development performance of Fresno, Maricopa, Riverside, San Bernardino and Washoe counties. Data interpretation and analysis contribute to identify and understand relative weaknesses and strengths of the Fresno region when compared to the regions under examination. Key findings of the report include:

- Although frequently Fresno County is considered a region of rapid population growth, for the last 10 years, all other counties under examination have seen their populations grow even more rapidly.
- The unemployment rate in Fresno County has not only being significantly higher than in the compared counties, but it has also exceeded the one for the U.S. by an annual average of 7.1 percentage points for the last 15 years.
- While in the Phoenix-Mesa-Scottsdale, Metropolitan Statistical Area (MSA) employment grew by more than 460% in the last 35 years, in the Fresno, MSA employment grew by less than 240% for the same period.
- Employees in the Fresno, MSA show the lowest average employee income. In 2004, average employee income for Fresno, MSA represented only 80% of the same indicator for the U.S. This relationship has basically been the same all throughout the last 3 and half decades.
- Unemployed workers are significantly more costly in Fresno, MSA than in any other region, including the U.S. In 2004 for example, the per capita unemployment insurance transfer in Fresno, MSA was \$476 while it only was \$101 in the Phoenix-Mesa-Scottsdale, MSA.
- Wages for the business and financial operations occupations are the most rapidly growing in Fresno and Riverside-San Bernardino, MSA (both in California), while wages in these occupations in the other MSAs are growing but only at half the speed.
- While showing signs of improvement, California counties exhibit the highest incidence of population with low educational levels. Fresno County in 2005 for example, shows the highest percentage for those with less than 9th grade. Similarly, California counties exhibit the lowest incidence of population with high educational levels. In 2005, San Bernardino and Fresno Counties show the lowest rate for those with a bachelor's degree.

- Fresno, MSA exhibits the largest percentage of immigrants, moving from either a different county in California or from a different state, with less than a high school degree. At the same time Fresno, MSA shows the lowest percentage of immigrants with some college or a college degree.
- Entrepreneurial vitality of Fresno County is not as strong as in any other county being compared. Not only the number of companies is not growing as fast, but also the number of small business is diminishing.
- Fresno is the only county among the compared counties in this report that does not host a single Fortune 1000 companies.
- Although Fresno is not the MSA with the fewest number of commercial banks and thrift institutions, it is the county with the lowest level of total deposits.
- The number of loans as well as the amount of the loans to small businesses by commercial banks in Fresno, have grown at significantly lower rates in the last 3 years. From 2003 to 2005, the number of loans in Fresno grew 12.8% while the average growth rate in all other MSAs combined was 53.3%, which was more than 4 times higher.
- The City of Fresno generates the lowest sales tax revenue per capita (\$148.65), which compared with Reno (\$367.23) or San Bernardino (\$345.38) seems quite low.
- Sales tax revenue in Fresno is only 31.2% of the total tax revenue, where the sales tax is 7.975%. Remarkably, the City of San Bernardino, with a sales tax of 7.75%, generates almost as much tax revenue as the City of Fresno with less than half the population.
- Fresno is the city that spends less in per capita terms in public safety amounting to only \$215 per person, which again compared to say Phoenix (\$344) or Reno (\$278) seems significantly low. However, at the same time, the police budget line represents 57.2% of total expenditures in Fresno, which is the highest percentage in all cities.
- The incidence of poverty in the Fresno, MSA is significantly higher than in any other MSA under investigation. For example, the poverty rate in Fresno, MSA (20.67%) is more than twice the poverty rate in Reno-Sparks, MSA (10.31%), which is noteworthy.
- Fresno, MSA shows the highest percentage of families making less than \$25,000, and also the lowest percentage of families making more than \$100,000 per year.

I. Introduction

Over the last couple of decades, two fundamental trends have shaped the quest for regional economic development. First, responsibility for economic development has substantially shifted from federal to regional and local institutions. Today, practically every state, county and even metropolitan area across the country has significantly expanded the size and scope of economic development programs. Second, increasing global integration and rapid technological change have produced new emerging patterns of specialization among nations, regions and cities. These new paths are the result of a “natural” development progression that typically involves relative shifts of resources and output from agriculture to unskilled-labor-intensive manufacturing, to high value-added manufacturing goods and services. Perhaps the most important consequence of these two shaping forces, at least at the regional level, is that the pursuit of economic development has produced a highly competitive environment to attract the best and the brightest resources capable to generate wealth and prosperity in a given region. Therefore, institutions responsible for regional economic development have not only implemented creative policies and programs to foster growth and progress, but constantly must compete for investment with their counterparts, located in either neighbor or distant regions, by offering financial and other incentives to business to locate and expand in the area.

One such institution is the Economic Development Corporation (EDC) serving Fresno County which, as most comparable agencies around the country, is a major instrument in attracting scarce resources and valuable assets –in this case to Fresno County. According to reports by EDC staff members, EDC’s main competition comes from three nearby and similar organizations: the Economic Development Authority of Western Nevada (EDAWN), which serves major cities located in Washoe County, the Greater Phoenix Economic Council (GPEC), which serves major cities located in Maricopa County, and the Inland Empire Economic Partnership (IEPP), which serves major cities located in San Bernardino and Riverside Counties. Understanding the nature of this competition is vital to the EDC’s mission since, obviously, companies considering Fresno County as a potential location but that ultimately locate in Maricopa, Riverside, San Bernardino or Washoe County do not contribute to the economic development of Fresno County.

I.1 Purpose of This Study

The main goal of this report is to collect and analyze relevant data in order to track and compare the economic development performance of Fresno, Maricopa, Riverside, San Bernardino and Washoe counties, as well as their main cities, which ultimately reflects, at least partially, the success of their respective institutions (EDC, GPEC, IEPP and EDAWN) responsible for fostering economic development. The report does not attempt to find explanations for the differences in economic development across the selected regions. Similarly, it does not attempt to find solutions to expedite economic development in Fresno County so it can catch up to competing regions or to maintain leadership among rival counties.

However, data interpretation and analysis will contribute to identify and understand relative weaknesses and strengths of the regions under examination, which ultimately will translate into valuable information for the EDC and its mission. Furthermore, gathering and examining data on the economic development performance for Fresno County in particular, will also contribute to a better understanding of the effectiveness of economic development policies designed and implemented by local institutions.

I.2 Scope and Methodology

The regions under analysis and most of the indicators reported were suggested by EDC. Since data availability varies depending on the geographical unit, information is presented and examined at either the county, MSA or city level. Also, some data are only available for particular periods of time –either because it is not collected or because is not reported. A major effort was devoted to collect accurate and up to date information for most indicators. A similar effort was made to gather data as far back in time as possible.

The regions examined include Fresno, Maricopa, Riverside, San Bernardino and Washoe counties. When available, the analysis focuses on the regional economy at the Metropolitan Statistical Area (MSA) level. Therefore, some sections of the report also include Fresno, MSA, Riverside-San Bernardino-Ontario, MSA (also known as Inland Empire), Phoenix-Mesa-Scottsdale, MSA, and Reno-Sparks, MSA. Likewise and when appropriate, the assessment includes the major cities in each county, namely Fresno, Phoenix, Reno, Riverside, and San Bernardino.

Most data are presented in summarized form using charts, tables and graphics with their corresponding explanation and interpretation. The analysis mostly relies on unsophisticated tools and concepts such as averages, growth rates and correlation coefficients, but it is based on solid economic principles. In order to facilitate the reader the correct interpretation of data, brief explanations of basic economic concepts is provided when needed.

The report is organized into six sections which follow the main areas suggested by EDC. These sections are: general economic data by geographical unit; labor market and educational attainment; growth and concentration by industry; local government finances; poverty and public assistance; and banking conditions. The underlying assumption of this report is that the selected indicators belonging to each of the aforementioned sections are valuable and useful tools in measuring and tracking the overall quality of life and comparing regional economic development performance.

II. General Data by County and by City

The information contained in this section is mainly intended to provide some perspective to the analysis presented in the following sections. Assessing and comparing the economic development performance across diverse regional units requires taking into account their differences in population size as well as other general but defining characteristics. Table 1 below shows selected characteristics by county and also by the main cities in each of the counties under examination.

Table 1: General Characteristics

Selected Data by County	COUNTY				
	Fresno	Riverside	San Bernardino	Washoe	Maricopa
Population, 2005 estimate	877,584	1,946,419	1,963,535	389,872	3,635,528
Population, % change, April 2000 to July 2005	9.8%	26.0%	14.9%	14.8%	18.3%
Population, % change, 1990 to 2000	19.8%	32.0%	20.5%	33.3%	44.8%
Persons under 18 years old, percent, 2004	30.6%	28.5%	30.8%	25.0%	27.7%
Persons 65 years old and over, percent, 2004	9.7%	11.6%	8.2%	11.0%	11.1%
White persons, percent, 2004	81.4%	84.9%	80.7%	88.0%	89.3%
Black persons, percent, 2004	5.7%	6.5%	9.6%	2.4%	4.2%
Persons of Hispanic / Latino origin, percent, 2004	46.1%	39.8%	43.5%	19.4%	28.3%
Foreign born persons, percent, 2000	21.1%	19.0%	18.6%	14.1%	14.4%
Mean travel time to work (minutes), 2000	22.2	31.2	31.0	19.2	26.1
Land area, 2000 (square miles)	5,963	7,207	20,052	6,342	9,203
Persons per square mile, 2000	134.1	214.4	85.2	53.5	333.8
Selected Data by Main City in Each County	MAIN CITY				
	Fresno	Riverside	San Bernardino	Reno	Phoenix
Population, 2005 estimate	477,251	294,059	204,552	204,478	1,377,980
Population as % of County population	54.4%	15.1%	10.4%	52.4%	37.9%
Poverty Rate 2005, Population 25+	17.6%	11.0%	22.2%	9.2%	12.1%
Unemployment Rate, 2005	8.5%	8.2%	10.9%	4.6%	6.1%
Median value owner-occupied housing units, 2005	\$242,500	\$369,900	\$243,400	\$319,400	\$184,300
Home Ownership Rate, 2005	50.2%	56.1%	53.4%	45.9%	59.3%

SOURCE: U.S. Census Bureau, American Community Survey and USA Counties

Among the several salient facts that can be derived from the numbers, the following stand out. First, although frequently Fresno County is considered a region of rapid population growth, for the last 10 years, all other counties have seen their populations grow more rapidly. Maricopa County in particular, almost doubled its population in a decade. Second, along with San Bernardino County, population in Fresno County seems to be younger than in other counties, as indicated by the high percentage of people under 18 years old and the low percentage of people older than 65. Third, Fresno County shows the largest concentration and persons of Hispanic/Latino origin and also of foreign born persons. Fourth, although Fresno County ranks third with regard to population density, it is the smallest county in terms of land area. Fifth, when comparing the size of the population in the main city relative to the population in the county, Fresno City shows the largest percentage with 54.4%. Finally, along with San Bernardino City, poverty rate in Fresno City is significantly higher than in Riverside, Reno or Phoenix.

III. Labor Market Trends and Educational Attainment

This section deals with basic information regarding labor market conditions, as well as with the skill and scholary levels of the population in the compared regions. Before addressing unemployment and other labor market indicators, it is perhaps important to define the regional labor markets under analysis. Since commuting clearly plays an important role in any definition of a local labor market as it affects the articulation of labor supply and demand, any operational definition of labor markets has to rely on commuting data. Consequently, based on county-to-county worker flows data, Table 2 below shows how self-contained the labor markets in the counties under examination are. Most regional economists accept a cutoff rate of 75% for the ratio of workers working in a given county who reside in the same county for labor market to be designated as of ‘independent’ status. So, with the exception of the Inland Empire counties, all other counties can be considered ‘independent’ labor markets. This means that more than 75% of the labor force employed in Washoe, Fresno and especially in Maricopa, also resides in each of these counties. It is worth noticing that while Riverside and San Bernardino rely on the labor force of other counties (neighbor to them most likely), a large percentage of the workers residing in Riverside and San Bernardino work in other counties as well. These facts indicate that these two counties are part of a larger labor market which includes counties not examined on this report.

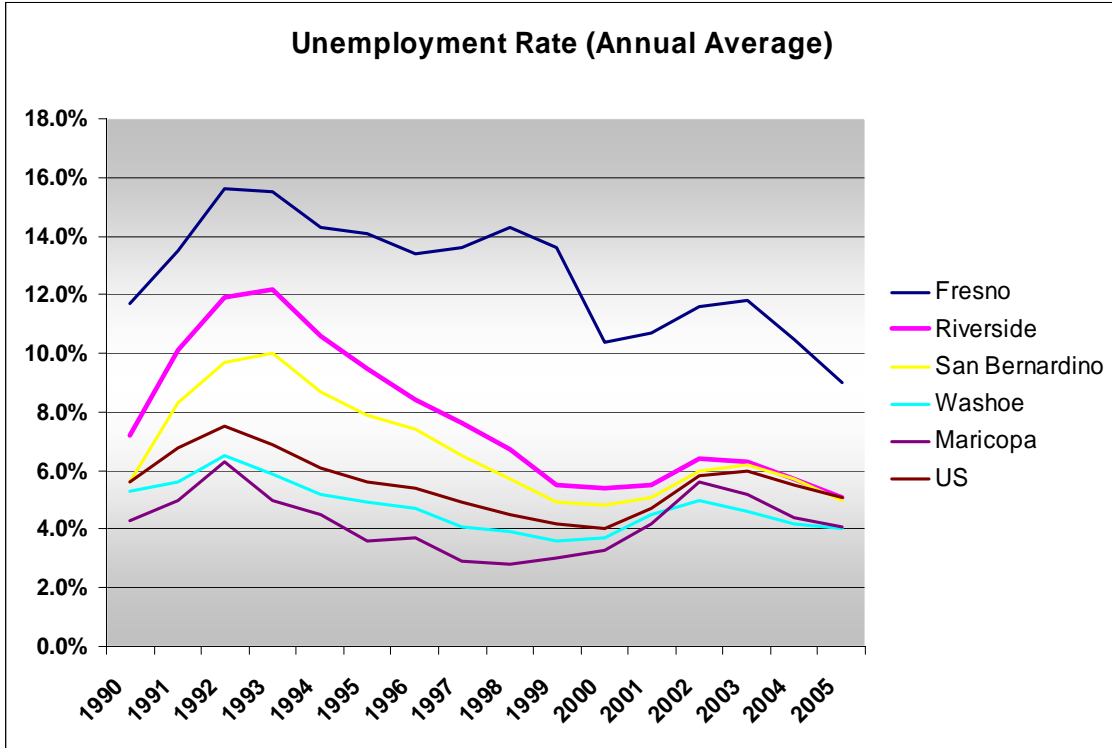
Table 2: County to County Flows: 2005

	FRESNO	MARICOPA	RIVERSIDE	SAN BERNARDINO	WASHOE
% of Workers working in County with Residence in Same County	85.3%	95.4%	62.0%	58.6%	88.4%
% of Workers working in County with Residence in Other Counties	7.9%	2.9%	12.2%	15.4%	7.6%
% of Workers working in other Counties with Residence in this County	6.8%	1.7%	25.8%	26.0%	4.0%

SOURCE: County-To-County Worker Flow Files, 2000 U.S. Census Bureau

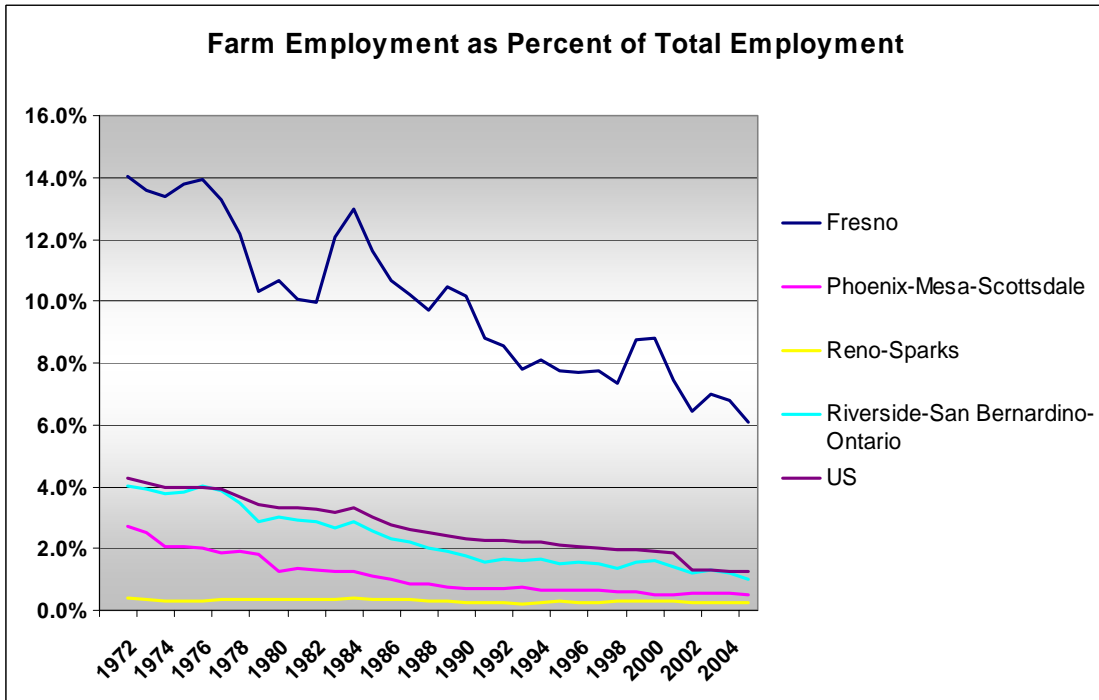
Arguably, unemployment and the duration of unemployment are the most widely used indicators to gauge the health of the labor market. While the unemployment rate measures the average individual’s risk of being unemployed, the duration measures the severity of unemployment. A long spell of unemployment is likely to have a much more severe impact on the economic –and even psychological- conditions of the worker than a spell of short duration. Figure 1 below shows the unemployment rate by county for the last 15 years. Clearly and despite the apparent reduction in the differences across counties in the last few years, the high and chronic unemployment rate in Fresno County is striking. The unemployment rate in Fresno County has not only being significantly higher than in the compared counties, but it has also exceeded the one for the U.S. by an annual average of 7.1 percentage points for the last 15 years. As reported in the literature, a long period of unemployment has deleterious effects in the individual’s human capital as skills deteriorate from lack of use. Furthermore, a long-lasting period of unemployment may work as a negative signal of the worker’s productivity to potential employers. So, the chronically high unemployment rate in Fresno County is not only a symptom of the poor health of the regional labor market, but also can act as a deterrent to business investment.

Figure 1: Unemployment Rate by County: 1990-2005



SOURCES: California Employment Development Department, Arizona's Department of Economic Security, Nevada Department of Employment

Figure 2: Farm Employment by MSA: 1970-2004

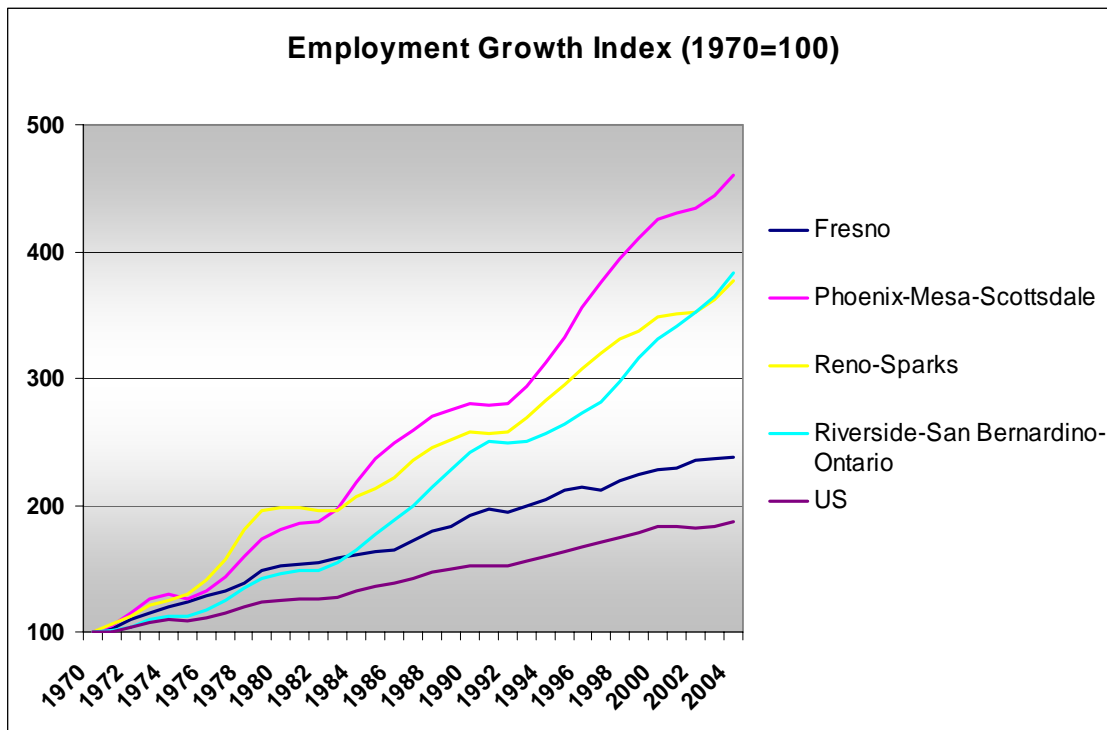


SOURCE: REIS, Bureau of Economic Analysis

A particularly reasonable and well-accepted explanation for the poor health of the labor market in Fresno County, is its heavy reliance on the agricultural sector and its seasonal nature. While determining whether this or alternative explanations better explain the high and chronic unemployment rates in Fresno falls beyond the scope of this report, it is worth noticing that indeed, there seems to be a positive correlation between the share of employment in agriculture and the unemployment rate. Figure 2 above shows farm employment by MSA as a percentage of total employment for the last 35 years. Notice that at least for the last 15 years, at the same time that both Washoe and Maricopa counties show unemployment rates below the one of the U.S., they also show a share in farm employment below the one of the U.S.¹ Exactly the opposite is true for Fresno County. The case of the Inland Empire is different since these counties show unemployment rates below the rate for the U.S. and shares in farm employment that also lower than the rate for the U.S. Clearly, these facts seem to indicate that unemployment rates are caused by many factors, not only by a large share in farm employment.

Another frequently used labor market indicator is employment, particularly the growth in the number of people employed. Figure 3 below shows the employment growth index by MSA for the last 35 years. Although employment in the 4 MSAs grew faster than in the U.S., the differences among them are substantial. For example, notice that

Figure 3: Employment Growth Index by MSA



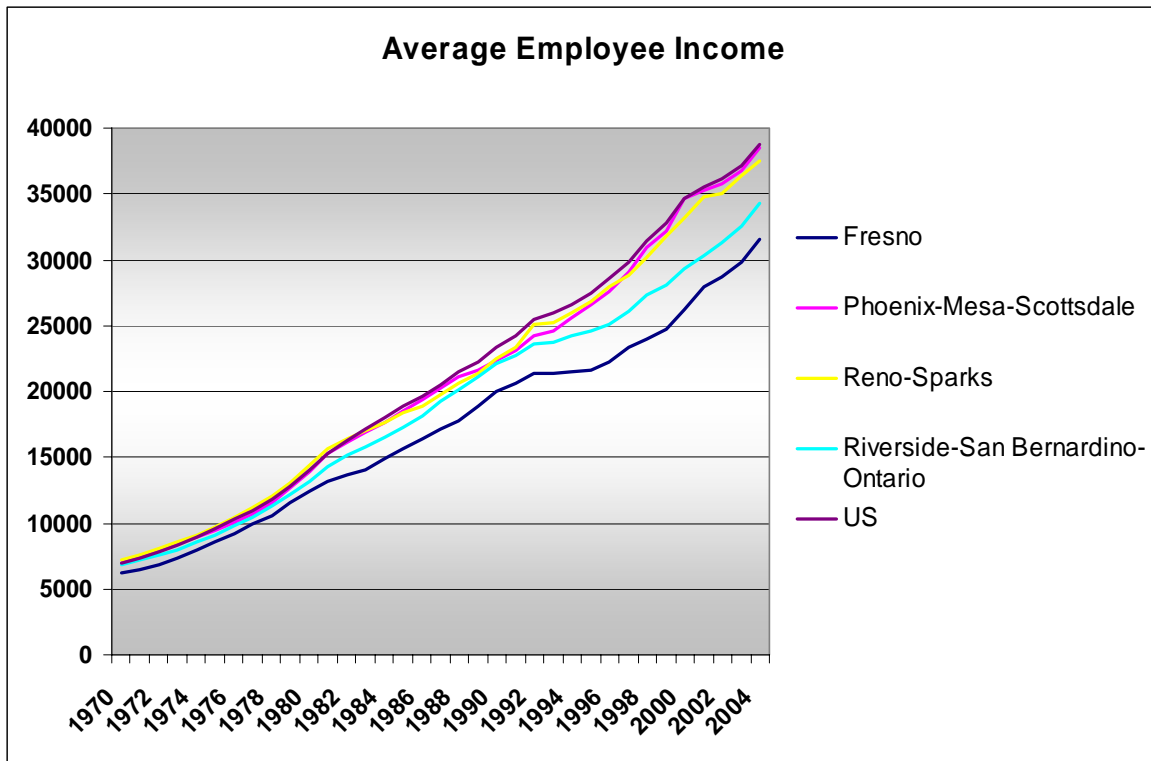
SOURCE: REIS, Bureau of Economic Analysis

¹ The indicators are not directly comparable since MSA are not the same as counties, but since MSAs include the counties under examination and given the availability of data, it is assumed that the comparison is valid.

while in the Phoenix-Mesa-Scottsdale, MSA employment grew by more than 460% in the last 35 years, in the Fresno, MSA employment grew by less than 240% for the same period. Also notice that sometime after the early 1990s recession, employment started growing faster in the Phoenix-Mesa-Scottsdale, Reno-Sparks and Riverside-San Bernardino, MSAs (indicating a speedy recovery), but not in Fresno, MSA, where employment kept growing around the same rate than the whole nation.

Obviously, when thinking about gauging economic development, the number of employed workers is perhaps as important as their income. Figure 4 below shows the average employee income by MSA for the last 35 years in current dollars. This indicator is calculated by simply dividing wage and salary disbursements by wage and salary employment. Notice that interestingly, all four MSAs show average employee income below the one for the U.S. for practically the entire period, which means that at least in terms of pure wage and salary, all four regions do not pay as well as other regions in the U.S. Another point worth mentioning is that employees in Fresno, MSA show the lowest average employee income. In 2004, average employee income for Fresno, MSA represented only 80% of the same indicator for the U.S. This relationship has basically been the same all throughout the last 3 and half decades.

Figure 4: Average Employee Income by MSA: 1970-2004

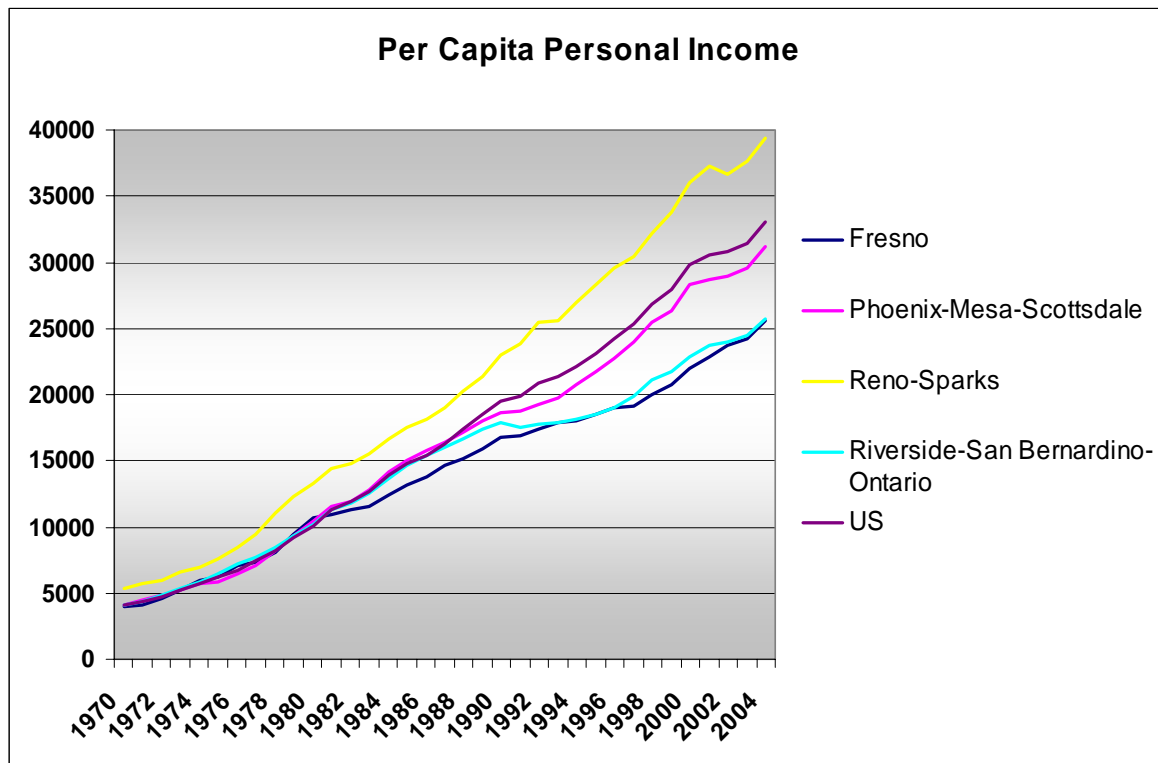


SOURCE: REIS, Bureau of Economic Analysis

An alternative and more comprehensive income indicator is personal income, which is the income received by all persons from all sources. That is, personal income is the sum of net earnings by place of residence, rental income of persons, personal

dividend income, personal interest income, and personal current transfer receipts.² Personal income is measured before the deduction of personal income taxes and other personal taxes and is reported in current dollars. Figure 5 below shows the per capita personal income by MSA for the last 35 years. Similar to the previous indicator –with the exception of the Reno-Sparks, MSA- this one shows that the regions under examination are below the nation as a whole. Once again, Fresno, MSA -and also Riverside-San Bernardino-Ontario, MSA- seems to be significantly lagging behind the national trend. In 2004, per capita personal income for Fresno, MSA represented only 77% of the same indicator for the U.S.

Figure 5: Per Capita Personal Income by MSA: 1970-2004

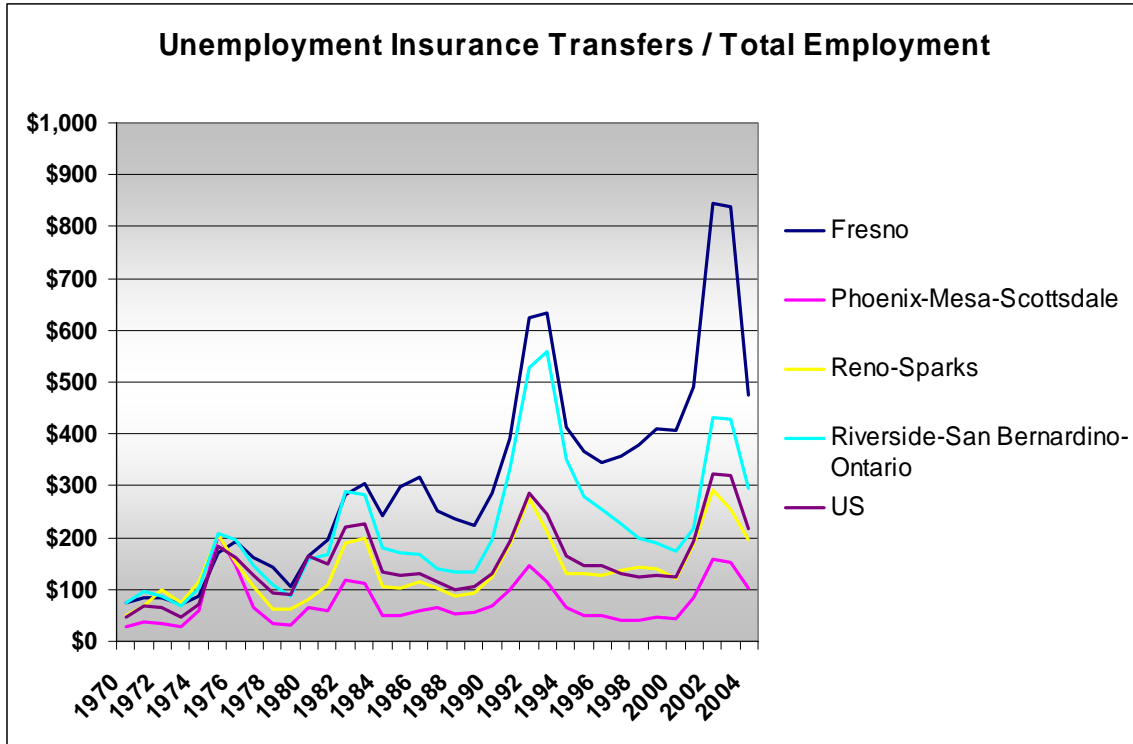


SOURCE: REIS, Bureau of Economic Analysis

Given the high incidence of unemployment and low income in all the regions under examination, perhaps it would be helpful to explore how costly are workers in terms of supplemental income. Figure 6 below shows per capita unemployment insurance (UI) transfers by MSA for the last 35 years. Before briefly discussing the numbers, it is worth mentioning that the UI is a federal-state program created to provide partial wage replacement to unemployed workers to ensure that at least some of life's necessities such as food, shelter and clothing can be met while looking for work, and that employers finance the UI program by tax contributions.

² Net earnings is earnings by place of work (the sum of wage and salary disbursements, supplements to wages and salaries, and proprietors' income) less contributions for government social insurance.

Figure 6: Unemployment Insurance Transfers Per Capita by MSA: 1970-2004



SOURCE: REIS, Bureau of Economic Analysis

The figure shows that in average, unemployed workers are significantly more costly in Fresno, MSA than in any other region, including the U.S. In 2004 for example, the per capita unemployment insurance transfer in Fresno, MSA was \$476 while it was only \$101 in the Phoenix-Mesa-Scottsdale, MSA. It is important to draw attention to the fact that while the UI program is intended to benefit the individual, it can also produce benefits for the local community. The reason is that payments made directly to the individual, for the most part, are spent in the local community, which helps sustain the economic well being of local businesses.

So far, all labor market indicators presented show trends at a high level of aggregation. Perhaps it would be helpful to also look at more specific segments of labor market activity. Table 3 below shows hourly wage by occupations by MSA for 2000 and 2005, as well as the hourly wage growth rate for the period, shown in the gray shaded column. A few interesting observations can be made. First, wages for the business and financial operations occupations are the most rapidly growing in Fresno and Riverside-San Bernardino, MSA (both in California), while wages in the other MSAs are growing but only at half the speed. Second, in all MSAs wages for the health care practitioner and technical occupations are among the 5 fastest growing, way ahead of legal services. Third, wages for transportation and material moving, similar to community and social services, are among the slowest growing in Fresno, MSA, which contrast with wages growth in the same occupations for both, the Phoenix-Mesa-Scottsdale, MSA and the Reno-Sparks, MSA which show faster wage growth rates. Finally, in 2005 legal and

management occupations are the highest paid on an hourly basis, while the food preparation and serving related occupations are the lowest paid in all MSAs. This last observation is consistent with classical labor theory according to which most productive workers should also receive higher wage rates.

Table 3: Hourly Wage by Occupations (\$) by MSA: 2000-2005

Occupation (SOC Code)	Fresno, MSA Hourly Mean Wage			San Bernardino, Riverside Ontario, MSA Hourly Mean Wage		
	2000	2005	2000-05	2000	2005	2000-05
	Management	32.17	38.39	19.3%	33.26	41.61
Business and Financial Operations	19.92	26.71	34.1%	21.25	27.71	30.4%
Computer and Mathematical	21.79	27.7	27.1%	23.45	29.56	26.1%
Architecture and Engineering	24.05	29.72	23.6%	25.78	28.93	12.2%
Life, Physical, and Social Science	22.62	25.56	13.0%	23.68	28.42	20.0%
Community and Social Services	19.08	20.13	5.5%	18.93	21.12	11.6%
Legal	31.36	36.43	16.2%	35.02	42.71	22.0%
Arts, Design, Entertainment, Sports, and Media	15.73	19.35	23.0%	15.59	19.2	23.2%
Healthcare Practitioner and Technical	24.17	32.4	34.1%	24.04	31.05	29.2%
Healthcare Support	9.85	11.64	18.2%	10.71	12.58	17.5%
Protective Service	18.24	19.4	6.4%	16.44	19.45	18.3%
Food Preparation and Serving Related	7.61	8.58	12.7%	7.73	8.95	15.8%
Building and Grounds Cleaning, Maintenance	8.97	11.26	25.5%	9.67	11.55	19.4%
Personal Care and Service	8.97	10.79	20.3%	9.91	10.23	3.2%
Sales and Related	12.23	15.08	23.3%	13.06	15.06	15.3%
Office and Administrative Support	12.39	14.03	13.2%	12.69	14.35	13.1%
Farming, Fishing, and Forestry	7.04	8.18	16.2%	7.65	9.43	23.3%
Construction and Extraction	16.00	18.81	17.6%	17.24	19.16	11.1%
Installation, Maintenance, and Repair	15.88	17.82	12.2%	15.99	18.7	16.9%
Production	11.30	12.45	10.2%	11.65	12.69	8.9%
Transportation and Material Moving	11.13	12.15	9.2%	11.77	13.52	14.9%

Occupation (SOC Code)	Phoenix-Mesa Scottsdale, MSA Hourly Mean Wage			Reno-Sparks, MSA Hourly Mean Wage		
	2000	2005	2000-05	2000	2005	2000-05
	Management	32.44	38.85	19.8%	31.68	40.57
Business and Financial Operations	22.4	25.8	15.2%	20.69	25.59	23.7%
Computer and Mathematical	28.63	28.86	0.8%	20.56	28.11	36.7%
Architecture and Engineering	24.97	30.21	21.0%	23.21	26.49	14.1%
Life, Physical, and Social Science	20.94	25.06	19.7%	21.58	27.16	25.9%
Community and Social Services	14.94	17.31	15.9%	17.77	20.9	17.6%
Legal	29.9	35.8	19.7%	37.23	42.52	14.2%
Arts, Design, Entertainment, Sports, and Media	17.97	18.79	4.6%	15.82	22.08	39.6%
Healthcare Practitioner and Technical	22.16	28.93	30.6%	26.87	33.52	24.7%
Healthcare Support	9.9	11.76	18.8%	11.61	13.4	15.4%
Protective Service	14.83	16.2	9.2%	15.95	16.3	2.2%
Food Preparation and Serving Related	7.5	8.66	15.5%	7.42	8.55	15.2%
Building and Grounds Cleaning, Maintenance	8.49	9.45	11.3%	8.74	10.29	17.7%
Personal Care and Service	9.01	12.61	40.0%	9.01	10.2	13.2%
Sales and Related	14.18	15.69	10.6%	13.19	15.3	16.0%
Office and Administrative Support	12.27	13.89	13.2%	12.46	13.93	11.8%
Farming, Fishing, and Forestry	8.63	8.43	-2.3%	NA	11.7	NA
Construction and Extraction	14.35	15.8	10.1%	18.59	18.82	1.2%
Installation, Maintenance, and Repair	15.82	18.14	14.7%	17.34	18.27	5.4%
Production	11.92	13.25	11.2%	12.28	14.6	18.9%
Transportation and Material Moving	12.3	14.62	18.9%	11.98	13.99	16.8%

SOURCE: Occupational Employment Statistics (OES), Bureau of Labor Economics

Transitioning to skill and scholary levels of the population, Table 4 below shows the educational attainment by county for the years 2002 and 2005. Notice that while showing signs of improvement, California counties exhibit the highest incidence of population with low educational levels. Fresno County in 2005 for example, shows the highest percentage for those with less than 9th grade. Similarly, California counties exhibit the lowest incidence of population with high educational levels. In 2005, San Bernardino and Fresno Counties show the lowest rate for those with a bachelor's degree.

There are two competing theoretical arguments that predict higher wages for workers with higher schooling levels. First, the human capital premise is based on the idea that education increases productivity which eventually is translated into higher wages. Second, the signaling model premise is based on the idea that education does not need to increase worker's productivity for them to receive higher wages. All that matters is to obtain a high school or a college diploma that works as a signal to potential employers about their qualifications. A high school or a college diploma certifies that the worker is cut out for smart work. However interesting this debate might be, in any case, a large pool of educated workers is more likely to attract business activities that increase the number of available better paid jobs. On this regard as it is shown by the numbers, Fresno County is significantly lagging behind its competing regions, particularly with respect to Maricopa and Washoe Counties, both located outside California.

Table 4: Educational Attainment by County: 2002 and 2005

EDUCATIONAL ATTAINMENT	2002				
	Maricopa	Fresno	Riverside	San Bernardino	Washoe
Less than 9th grade	6.5%	17.8%	8.1%	8.8%	6.0%
9th to 12th grade, no diploma	11.2%	13.0%	13.5%	15.3%	9.4%
High school graduate (includes equivalency)	25.1%	24.0%	28.4%	29.2%	27.1%
Some college, no degree	26.9%	22.1%	27.5%	24.9%	30.1%
Associate degree	6.9%	6.4%	6.9%	6.6%	4.7%
Bachelor's degree	15.8%	11.7%	9.6%	10.3%	16.1%
Graduate or professional degree	7.7%	5.0%	6.0%	4.7%	6.5%
EDUCATIONAL ATTAINMENT	2005				
	Maricopa	Fresno	Riverside	San Bernardino	Washoe
Less than 9th grade	6.8%	15.5%	8.8%	9.1%	5.9%
9th to 12th grade, no diploma	9.6%	12.8%	13.0%	15.0%	8.5%
High school graduate (includes equivalency)	25.5%	23.3%	27.9%	28.1%	29.1%
Some college, no degree	25.5%	23.6%	25.4%	24.8%	25.1%
Associate degree	7.9%	7.5%	7.0%	7.4%	6.7%
Bachelor's degree	16.4%	12.0%	12.1%	10.4%	16.7%
Graduate or professional degree	8.4%	5.4%	5.9%	5.2%	7.9%

SOURCE: U.S. Census Bureau, American Community Survey

Finally, to end this section, the role of migration in the labor market is briefly explored. Migration can have important effects on both the supplying and receiving regions as it frequently alters the age composition, sex ratios, literacy rates, and demography of the affected areas. As it has been documented, economically booming areas usually experience an increase in population, while declining areas experience

population outflows. Table 5 below shows immigration by educational attainment by MSA for 2005. Several notes can be derived from these numbers. First, Fresno is the MSA that showed the least labor mobility in 2005 for all educational levels (86.0% of the population older than 25 years old, reported to have lived in the same house one year ago). Second, Fresno, MSA exhibits the largest percentage of immigrants, moving from either a different county in California or from a different state, with less than a high school degree. At the same time Fresno, MSA shows the lowest percentage of immigrants with some college or a college degree. This implies that in relation to the regions of reference, Fresno, MSA is hosting growing numbers of immigrants with low educational levels. Finally, with the exception of those with a graduate of professional degree moving from other regions in Nevada to the Reno-Sparks, MSA, Fresno is the MSA that exhibits the lowest inflows of workers with a graduate of professional degree, domestically and internationally.

Table 5: Immigration by Educational Attainment by MSA: 2005

	Fresno	Phoenix-Mesa Scottsdale	Reno- Sparks	Riverside- San Bernardino- Ontario
Same house 1 year ago:	425654	1905900	212020	1912259
High School or Less	50.8%	39.7%	42.3%	49.1%
Some College (Associate Degree) or College	46.6%	48.6%	53.0%	42.8%
Graduate or professional degree	6.6%	9.7%	9.5%	6.6%
Moved within same county:	52313	319944	24947	199997
High School or Less	49.4%	44.8%	42.3%	52.2%
Some College (Associate Degree) or College	46.6%	48.6%	53.0%	42.8%
Graduate or professional degree	4.1%	6.6%	4.7%	5.0%
Moved from different county within same state:	11504	28233	5273	124977
High School or Less	55.2%	42.9%	37.2%	49.4%
Some College (Associate Degree) or College	39.9%	49.2%	62.0%	45.0%
Graduate or professional degree	5.0%	8.0%	0.8%	5.6%
Moved from different state:	3634	125249	11043	29567
High School or Less	46.1%	35.4%	37.6%	41.9%
Some College (Associate Degree) or College	43.6%	53.8%	48.7%	48.1%
Graduate or professional degree	10.3%	10.8%	13.7%	10.0%
Moved from abroad:	2098	20489	1160	13215
High School or Less	43.6%	62.5%	35.3%	54.6%
Some College (Associate Degree) or College	51.8%	27.5%	55.3%	39.8%
Graduate or professional degree	4.7%	10.1%	9.4%	5.6%
Same house 1 year ago:	86.0%	79.4%	83.3%	83.9%
Moved within same county:	10.6%	13.3%	9.8%	8.8%
Moved from different county within same state:	2.3%	1.2%	2.1%	5.5%
Moved from different state:	0.7%	5.2%	4.3%	1.3%
Moved from abroad:	0.4%	0.9%	0.5%	0.6%
Total Population 25+	495203	2399815	254443	2280015

SOURCE: U.S. Census Bureau, American Community Survey

IV. Growth and Concentration by Industry

This section identifies the industries that comprise the economic base on each of the five Metropolitan Statistical Areas (MSAs) under study. The economic base technique is grounded in the assumption that the regional economy (MSAs in this case) can be divided into two general sectors. First, the *Basic Sector*, which is the portion of the local economy that almost entirely depends upon external factors. In other words, the basic sector is comprised by local businesses that primarily sell their goods and services to customers outside the MSA. Second, the *Non-basic Sector* which, in contrast, is composed of those firms that depend largely upon local business conditions. For example, a local grocery store sells its goods to local households, businesses, and individuals. Its clientele is locally based and, therefore, its products are consumed locally. The main premise of the model is that external demand for a region's exportable goods and services injects income into the regional economy, augmenting local demand for non-exportable goods and services. Therefore, the model suggests that the growth process will be led by industries that export goods and services beyond regional boundaries (i.e. Non-basic activity depends on basic activity).

Based on this technique, this section presents two indicators that in combination reveal important information about industrial growth and concentration in their respective MSAs. Such indicators are:

A) Location Quotient (LQ): A ratio of the percentage that an industry represents of total employment in the MSA to its percentage statewide. A $LQ = 1$ means that a regional industry has the same concentration at the MSA level than statewide. If the $LQ > 1$, the industry is more concentrated in the MSA than statewide and if the $LQ < 1$, the industry is less concentrated in the MSA than statewide.

B) Shift-Share (SS): A comparison of the growth rate of an industry at the MSA level to the growth rate of the same industry at the state level. Industries that are growing more rapidly in the MSA than in the state are considered to have a competitive advantage locally.

The performance of specific industries in the regional economy is assessed by the combined results produced by these indicators, which allows to classify industries into four distinct categories:

- 1) **Growing Base (which require $LQ > 1$ and $SS > 0$):** Industries in which a MSA has a competitive advantage -in relation to the state in which it is located- which is growing. According to the economic base model, these industries are the source of regional wealth and job creation.
- 2) **Declining Base (which require $LQ > 1$ and $SS < 0$):** Industries that more likely in the past, represented the region's economic base or that a temporary unfavorable trend is having a negative impact on them. Identifying the causes of this decline is vital because job losses in these usually large sectors can affect many workers.

- 3) **Emerging (LQ < 1 and SS > 0)**: Industries growing in terms of employment but whose local concentrations are still relatively low in comparison to the state economy. These so called “infant industries” can have the potential of becoming base industries and with potential to attract other complementary industries.
- 4) **Small Declining (LQ < 1 and SS < 0)**: Industries that lack the long-term viability of becoming base sectors given their low concentration and declining employment.

The following tables present the results of applying this classification methodology to each of the five MSAs under study using NAICS code. The reference region is the state in which the corresponding county is located and the years employed for the calculation are 2001 and 2004, which is the latest available.

Table 6 reports the numbers for Fresno, MSA. The number of industries growing is 16, from which 7 are growing base industries and 9 are emerging industries. Utilities, Construction and Retail Trade are among the growing base industries that outstand, while Manufacturing, Wholesale Trade and some services industries outstand among the emerging industries. It is worth noticing the high number of small declining

Table 6: Industry Classification: Fresno, MSA

EMPLOYMENT BY INDUSTRY	LQ	CALIFORNIA Growth 2001-2004	FRESNO Growth 2001-2004	SS	INDUSTRY CLASSIFICATION
Forestry, fishing, related activities, and other	7.07	-2.5%	-9.5%	-7.0%	Declining Base
Mining	0.49	-2.7%	-23.2%	-20.4%	Small Declining
Utilities	1.20	2.2%	2.2%	0.0%	Growing Base
Construction	1.02	7.9%	20.4%	12.5%	Growing Base
Manufacturing	0.85	-14.1%	-0.4%	13.7%	Emerging
Wholesale trade	0.90	-0.4%	0.9%	1.4%	Emerging
Retail trade	1.01	3.6%	5.1%	1.5%	Growing Base
Transportation and warehousing	0.99	-4.3%	7.9%	12.2%	Emerging
Information	0.44	-11.4%	-12.3%	-1.0%	Small Declining
Finance and insurance	0.79	5.6%	-1.0%	-6.5%	Small Declining
Real estate and rental and leasing	0.68	14.8%	12.1%	-2.8%	Small Declining
Professional and technical services	0.52	0.4%	16.3%	15.9%	Emerging
Management of companies and enterprises	0.77	-18.4%	2.3%	20.7%	Emerging
Administrative and waste services	0.73	4.0%	19.3%	15.2%	Emerging
Educational services	0.59	14.7%	27.3%	12.6%	Emerging
Health care and social assistance	1.12	8.1%	9.4%	1.3%	Growing Base
Arts, entertainment, and recreation	0.49	5.3%	3.3%	-2.0%	Small Declining
Accommodation and food services	0.84	6.0%	-3.5%	-9.4%	Small Declining
Other services, except public administration	0.93	6.3%	3.8%	-2.5%	Small Declining
Government and government enterprises	1.16	1.4%	2.6%	1.2%	Growing Base
Federal, civilian	1.85	-0.6%	0.4%	1.0%	Growing Base
Military	0.32	1.7%	1.9%	0.1%	Emerging
State and local	1.18	1.6%	3.0%	1.4%	Growing Base
State government	0.84	2.6%	14.8%	12.2%	Emerging
Local government	1.27	1.3%	1.0%	-0.3%	Declining Base

SOURCE: Author’s calculations based on REIS, Bureau of Economic Analysis

industries (7 in total), particularly because some of them are services industries, such as Finance and Insurance and Real Estate and Leasing, which could seem counterintuitive when thinking in an expanding economy based on the services sector.

Table 7 reports the numbers for Riverside-San Bernardino-Ontario, MSA. The number of industries in expansion -23- is impressive. 11 are growing base industries and 12 are emerging industries. Although various comments can be made about the truly strong sectors in this MSA (such as Construction and Transportation and Warehousing), it is also interesting to comment on the only 2 industries in decline. Not unexpectedly, the Forestry, Fishing and related activities sector is declining (rapidly) as well as the Military sector. With regard to the large number of emerging industries, it should be emphasized that they represent economic sectors that show recent growth but still don't have a high concentration in this MSA (actually some of them show very low concentration as indicated by the low LQ, such as the Information and State Government sectors). Nevertheless, the economic vitality of the Inland Empire is clearly displayed by these indicators, as well as the widespread expansion across industrial sectors.

Table 7: Industry Classification: Riverside-San Bernardino-Ontario, MSA

EMPLOYMENT BY INDUSTRY	LQ	CALIFORNIA Growth 2001-2004	Riverside San Bernardino Ontario Growth 2001-2004	SS	INDUSTRY CLASSIFICATION
Forestry, fishing, related activities, and other	0.63	-2.5%	-15.0%	-12.5%	Small Declining
Mining	0.71	-2.7%	6.0%	8.8%	Emerging
Utilities	1.14	2.2%	2.6%	0.5%	Growing Base
Construction	1.57	7.9%	22.4%	14.5%	Growing Base
Manufacturing	1.00	-14.1%	1.4%	15.5%	Emerging
Wholesale trade	0.91	-0.4%	11.9%	12.4%	Emerging
Retail trade	1.20	3.6%	14.5%	10.9%	Growing Base
Transportation and warehousing	1.48	-4.3%	19.2%	23.4%	Growing Base
Information	0.39	-11.4%	-5.3%	6.1%	Emerging
Finance and insurance	0.68	5.6%	16.3%	10.7%	Emerging
Real estate and rental and leasing	0.97	14.8%	22.7%	7.9%	Emerging
Professional and technical services	0.53	0.4%	17.5%	17.0%	Emerging
Management of companies and enterprises	0.62	-18.4%	8.3%	26.7%	Emerging
Administrative and waste services	1.17	4.0%	25.3%	21.3%	Growing Base
Educational services	0.64	14.7%	18.0%	3.3%	Emerging
Health care and social assistance	1.04	8.1%	12.0%	3.9%	Growing Base
Arts, entertainment, and recreation	0.70	5.3%	5.8%	0.5%	Emerging
Accommodation and food services	1.03	6.0%	11.8%	5.8%	Growing Base
Other services, except public administration	1.02	6.3%	10.7%	4.4%	Growing Base
Government and government enterprises	1.13	1.4%	5.9%	4.6%	Growing Base
Federal, civilian	0.87	-0.6%	3.6%	4.2%	Emerging
Military	1.20	1.7%	0.3%	-1.4%	Declining Base
State and local	1.15	1.6%	6.8%	5.2%	Growing Base
State government	0.63	2.6%	2.9%	0.3%	Emerging
Local government	1.29	1.3%	7.4%	6.1%	Growing Base

SOURCE: Author's calculations based on REIS, Bureau of Economic Analysis

Table 8 reports the numbers for Phoenix-Mesa-Scottsdale, MSA. The number of industries growing is 16, from which 4 are growing base industries and a striking total of 9 are emerging industries. As explained before, emerging industries represent economic sectors that show recent growth but generally don't have a high concentration. However, in the case of this MSA, some of these "infant industries" have the potential of becoming base industries, for example Retail Trade, Health Care and Social Assistance, Arts, Entertainment and Recreation, and Accommodation and Food Services, all with already relative high concentrations (LQ close to 1) and growing albeit modestly. It is also worth drawing attention to the fact that some traditionally strong and important industrial sectors show signs of decline, namely Construction, Manufacturing and Wholesale Trade. As shown in previous sections, this region is currently experiencing a period of rapid population growth and relatively high flows of immigrants, so perhaps the number in the table simply reflect an adjustment phase where clear paths have not emerged yet.

Table 8: Industry Classification: Phoenix-Mesa-Scottsdale, MSA

EMPLOYMENT BY INDUSTRY	LQ	ARIZONA	Phoenix	SS	INDUSTRY CLASSIFICATION
		Growth 2001-2004	Mesa Scottsdale Growth 2001-2004		
Forestry, fishing, related activities, and other	0.28	-9.3%	-11.7%	-2.4%	Small Declining
Mining	0.52	-4.9%	-2.7%	2.1%	Emerging
Utilities	0.99	4.0%	2.0%	-2.0%	Small Declining
Construction	1.03	10.4%	10.2%	-0.2%	Base Declining
Manufacturing	1.07	-11.4%	-12.9%	-1.6%	Base Declining
Wholesale trade	1.18	0.1%	-0.9%	-1.0%	Base Declining
Retail trade	0.99	8.9%	9.1%	0.2%	Emerging
Transportation and warehousing	1.11	2.9%	3.5%	0.6%	Growing Base
Information	1.07	-9.2%	-12.7%	-3.5%	Base Declining
Finance and insurance	1.21	7.9%	7.1%	-0.9%	Base Declining
Real estate and rental and leasing	1.04	17.5%	18.3%	0.8%	Growing Base
Professional and technical services	1.07	7.0%	5.8%	-1.2%	Base Declining
Management of companies and enterprises	1.24	5.8%	11.0%	5.2%	Growing Base
Administrative and waste services	1.14	7.8%	6.6%	-1.2%	Base Declining
Educational services	1.05	36.5%	41.6%	5.0%	Growing Base
Health care and social assistance	0.94	15.4%	16.5%	1.1%	Emerging
Arts, entertainment, and recreation	0.97	7.6%	8.6%	1.0%	Emerging
Accommodation and food services	0.95	6.1%	6.2%	0.1%	Emerging
Other services, except public administration	0.96	8.8%	9.1%	0.4%	Emerging
Government and government enterprises	0.80	6.1%	10.7%	4.6%	Emerging
Federal, civilian	0.62	5.8%	5.9%	0.1%	Emerging
Military	0.60	2.9%	4.5%	1.6%	Emerging
State and local	0.85	6.4%	11.7%	5.2%	Emerging
State government	0.87	2.2%	15.4%	13.2%	Emerging
Local government	0.85	7.9%	10.5%	2.6%	Emerging

SOURCE: Author's calculations based on REIS, Bureau of Economic Analysis

Table 9 reports the numbers for Reno-Sparks, MSA. The indicators for this MSA reveal quite different results. The number of industries contracting is a striking 20, from which 12 are declining base industries and 8 are small declining industries. Although these numbers may seem surprising, it must be noted that some declining base industries show substantially high relative concentrations such as Manufacturing and Wholesale Trade (both with high LQ) and some small declining industries also show high concentrations. Although the LQ is less than one, this indicator is very close to one for industries such as Finance and Insurance, Real Estate and Rental Leasing, and Government and Government Enterprises. Also interesting, is the fast growth pace of Mining in this MSA, which being an emerging sector, shows the highest growth in employment. Among the growing base industries, the Information and Other Services industrial sectors are noteworthy.

Table 9: Industry Classification: Reno-Sparks, MSA

EMPLOYMENT BY INDUSTRY	LQ	NEVADA	Reno	SS	INDUSTRY CLASSIFICATION
		Growth 2001-2004	Sparks Growth 2001-2004		
Forestry, fishing, related activities, and other	0.93	5.6%	-6.9%	-12.6%	Small Declining
Mining	0.53	4.5%	18.0%	13.5%	Emerging
Utilities	1.00	13.4%	-1.5%	-14.9%	Declining Base
Construction	0.95	26.8%	24.8%	-2.0%	Small Declining
Manufacturing	1.68	6.0%	2.3%	-3.6%	Declining Base
Wholesale trade	1.66	2.0%	-3.0%	-5.0%	Declining Base
Retail trade	1.00	11.7%	8.8%	-2.9%	Declining Base
Transportation and warehousing	1.30	5.1%	2.1%	-3.0%	Declining Base
Information	1.14	-17.6%	-10.9%	6.7%	Growing Base
Finance and insurance	0.97	10.0%	7.9%	-2.1%	Small Declining
Real estate and rental and leasing	0.98	23.1%	21.2%	-1.9%	Small Declining
Professional and technical services	1.13	15.8%	6.1%	-9.7%	Declining Base
Management of companies and enterprises	1.21	24.4%	16.5%	-7.8%	Declining Base
Administrative and waste services	0.96	17.2%	21.8%	4.6%	Emerging
Educational services	1.28	37.3%	18.8%	-18.5%	Declining Base
Health care and social assistance	1.32	16.1%	13.4%	-2.7%	Declining Base
Arts, entertainment, and recreation	1.07	8.7%	0.1%	-8.6%	Declining Base
Accommodation and food services	0.65	3.1%	-7.4%	-10.5%	Small Declining
Other services, except public administration	1.05	11.8%	12.2%	0.4%	Growing Base
Government and government enterprises	0.98	10.8%	9.7%	-1.1%	Small Declining
Federal, civilian	1.13	11.5%	6.2%	-5.3%	Declining Base
Military	0.31	13.5%	9.0%	-4.5%	Small Declining
State and local	1.04	10.4%	10.2%	-0.2%	Declining Base
State government	1.30	10.8%	12.5%	1.7%	Growing Base
Local government	0.94	10.3%	9.2%	-1.0%	Small Declining

SOURCE: Author's calculations based on REIS, Bureau of Economic Analysis

IV. I A Snapshot of Entrepreneurship

As a way to complement the examination of industrial activity, this subsection looks at the number of companies operating in the five counties under study. Table 10 below shows the number of establishments by employment-size class by county for the years 1993, 1997 and 2004. Two salient facts are discussed. First, notice the significant lower rates of growth in Fresno County for the total number of establishments for both periods: from 1993 to 1997 the growth rate was 0.8% for Fresno, while it was 14.8% and 18.7% for Washoe and Maricopa respectively. From 1997 to 2004 the growth rate was 3.5% for Fresno, while it was 27.8% and 19.9% for Riverside and San Bernardino respectively. Second, notice that while the number of establishments of less than 10 workers shrank for Fresno from 1997 to 2004 by 1.2%, it grew by 23.8% in Riverside, 13.5% in San Bernardino, 9.7% in Washoe and 16.3% in Maricopa. Therefore, data seem to suggest that the entrepreneurial vitality of Fresno County is not as strong as in any other county being compared. Not only the number of companies is not growing as fast, but also the number of small business is diminishing. It must be noted however, that the County Business Patterns excludes data on self-employed individuals, employees of private households, railroad employees, agricultural production employees, and most government employees, which means that perhaps these differences are less significant than they appear.

Table 10: Number of Establishments by Employment-size Class by County: Selected Years

1993	1-4	5-9	10-19	20-49	50-99	100-249	250-499	500-999	1000+	TOTAL
County										
Fresno	8,013	3,046	2,049	1,367	402	180	42	13	6	15,118
Riverside	12,608	4,579	2,768	1,915	617	296	56	23	12	22,874
San Bernardino	12,952	5,151	3,299	2,361	781	372	92	26	16	25,050
Washoe	5,119	1,765	1,116	683	213	111	33	12	12	9,064
Maricopa	30,487	11,234	7,146	5,092	1,705	985	222	86	53	57,010
1997	1-4	5-9	10-19	20-49	50-99	100-249	250-499	500-999	1000+	TOTAL
County										
Fresno	8,017	3,070	2,056	1,409	416	197	44	20	5	15,234
Riverside	13,105	4,792	3,006	2,142	726	368	75	29	9	24,252
San Bernardino	13,064	5,159	3,427	2,656	875	445	115	34	16	25,791
Washoe	5,748	2,002	1,297	869	274	149	39	11	16	10,405
Maricopa	35,741	12,719	8,821	6,324	2,214	1,298	341	110	79	67,647
2004	1-4	5-9	10-19	20-49	50-99	100-249	250-499	500-999	1000+	TOTAL
County										
Fresno	7,937	3,019	2,314	1,648	530	231	54	20	9	15,762
Riverside	16,338	5,824	4,001	3,011	1,058	564	123	50	24	30,993
San Bernardino	14,905	5,776	4,209	3,282	1,099	635	165	46	27	30,144
Washoe	6,378	2,124	1,622	1,060	350	196	39	16	14	11,799
Maricopa	42,460	13,893	10,192	7,599	2,846	1,654	445	170	86	79,345

SOURCE: County Business Patterns, U.S. Census Bureau

Finally, it is worth mentioning that Fresno is the only county among the compared counties in this report that does not host a single Fortune 1000 companies. The Fortune 1000 is a ranking of the top 1000 U.S. public corporations as measured by gross revenue and it is generally interpreted to contain the best and most successful businesses in the nation. Table 11 below shows the Fortune 1000 companies by county for 2005. Notice that while 13 Fortune 1000 companies are located in Maricopa County (7 of them in the City of Phoenix alone), only 3 are located in Washoe County (in either Reno or Scottsdale) and only 3 in the Inland Empire.

Table 11: Fortune 1000 Companies by County: 2005 Ranking

Company Name	County	City	Rank	Industry
Avnet	Maricopa	Phoenix	212	Wholesalers: Electronics and Office Equip.
Phelps Dodge	Maricopa	Phoenix	260	Metals
US Airways Group	Maricopa	Tempe	295	Airlines
Allied Waste Industries	Maricopa	Scottsdale	376	Waste Management
PetSmart	Maricopa	Phoenix	518	Specialty Retailers
Giant Industries	Maricopa	Scottsdale	530	Petroleum Refining
Stater Bros. Holdings	San Bernardino	San Bernardino	558	Food & Drug Stores
Insight Enterprises	Maricopa	Tempe	570	Specialty Retailers
Swift Transportation	Maricopa	Phoenix	582	Trucking, Truck Leasing
Pinnacle West Capital	Maricopa	Phoenix	600	Utilities: Gas & Electric
Sierra Pacific Resources	Washoe	Reno	612	Utilities: Gas & Electric
Meritage Homes	Maricopa	Scottsdale	615	Homebuilders
Fleetwood Enterprises	Riverside	Riverside	662	Motor Vehicles & Parts
International Game Technology	Washoe	Reno	717	Industrial & Farm Equipment
Apollo Group, Inc.	Maricopa	Phoenix	750	Education
Amkor Technology	Maricopa	Chandler	778	Semiconductors and Other Electronic Comp.
Amerco	Washoe	Reno	805	Trucking, Truck Leasing
Watson Pharmaceuticals	Riverside	Corona	917	Pharmaceuticals
CSK Auto	Maricopa	Phoenix	933	Specialty Retailers

SOURCE: CNN, FORTUNE

V. Banking Conditions

This section looks at the banking industry, which is the leading financial intermediary in the U.S. Banks main role is to acquire funds from savers and lend them to borrowers, and in this process these financial institutions add value by providing risk-sharing, liquidity and information services. In terms of economic development, banking institutions are among the main providers of capital to fund entrepreneurial efforts in a given region. Table 18 below shows total deposits in FDIC-insured commercial banks by county for selected years. As it is clear, deposits per capita in Fresno are higher than Riverside and San Bernardino (also in California). However, this amount (\$6,730 per person) is significantly lower than Washoe and Maricopa counties. Washoe in particular exhibits impressive growth for the last 15 years during the amount of total deposits has almost quadrupled.

Table 18: Total Deposits and Total Deposits per Capita by County

	Commercial banks (FDIC-insured) - total deposits (\$000)				
	Fresno	Riverside	San Bernardino	Washoe	Maricopa
1990	3,453,392	5,181,627	4,741,564	1,880,667	17,966,225
1995	4,063,688	4,708,651	4,338,547	2,300,437	22,960,869
2000	4,195,432	5,954,414	5,627,960	2,915,854	28,332,151
2004	5,833,000	9,711,000	9,259,000	8,797,000	39,015,000
	Commercial banks (FDIC-insured) - total deposits (\$000) / Population				
	Fresno	Riverside	San Bernardino	Washoe	Maricopa
1990	5,137	4,427	3,299	7,328	8,466
1995	5,422	3,429	2,752	7,739	8,837
2000	5,248	3,853	3,274	8,589	9,222
2004	6,730	5,188	4,820	23,104	11,144

SOURCE: U.S. Counties, U.S. Census Bureau

With regard to the structure in the banking system at the regional level, Table 19 shows selected indicators for 2005 by MSA. Notice that although Fresno is not the MSA with the fewest number of commercial banks and thrift institutions, it is the county with the lowest level of total deposits. Another interesting indicator of the health of the banking system is the degree of concentration. The Herfindahl-Hirschman Index (HHI) is a commonly used method of measuring the concentration of an industry in a particular geographic market. HHI is calculated by squaring the market share of each firm competing in the market and then summing these results. This sum can range from 0 to 10000, with larger numbers signifying more concentrated markets. Thus, if there were only one firm in a market—that is, the firm controlled 100 percent of the market. The U.S. Department of Justice has set forth antitrust guidelines for determining if a market is considered to be unconcentrated (if HHI is less than 1000), moderately concentrated (if HHI is between 1000 and 1800) or highly concentrated (if HHI is larger than 1800). As can be seen on the table, all MSA exhibit some degree of market concentration. Interestingly, Fresno is the MSA with the lowest banking system concentration (the three largest banks control 44.83% of the total deposits in the region). On the other hand,

Washoe is the MSA with the highest banking system concentration where the three largest banks control 71.74% of the total deposits in the region. Indeed, according to the U.S. Department of Justice guidelines, this regional banking structure is classified as highly concentrated.

Table 18: Banking Structure by Banking Market: 2005*

	Fresno	Riverside San Bernardino	Maricopa	Washoe
Commercial Banks	25	29	55	17
Thrift Institutions	4	9	9	2
Total	29	38	64	19
Total Deposits (000)	\$9,286,254	\$13,546,598	\$50,611,816	\$11,123,562
Market Share 3 Largest Banks	44.83%	47.03%	67.78%	71.74%
HHI (Herfindahl-Hirschman Index)	1348	1612	1744	2371

SOURCE: Federal Reserve

* **NOTE:** Fresno Banking Market includes Madera and Tulare, Maricopa Banking Market includes Pinal, and Washoe Banking Market includes Lyon as defined by the Federal Reserve.

Finally, as a way to gauge the capital available for entrepreneurial activities at the regional level, Table 19 shows loans to small business by MSA for 2003 and 2005. The numbers in the table show a striking difference between Fresno, MSA and any other MSA. Notice that the number of loans as well as the amount of the loans in Fresno have grown at significantly lower rates. Loans in Fresno grew 12.8% while the average growth rate in all other MSAs combined was 53.3%, which was more than 4 times higher. The amount of the loans in Fresno grew 4.0% while the average growth rate in all other MSAs combined was 44.7%, which was more than 10 times higher.

Table 19: Small Business Loans by MSA: 2003-2005

Loans to Small Businesses (Gross annual revenue < \$1 million)	Fresno	Riverside-San Bernardino Ontario	Phoenix-Mesa Scottsdale	Reno-Sparks
2003				
# Loans	8,048	28,144	31,516	4,827
Amount (000)	\$226,429	\$660,542	\$942,052	\$122,982
2005				
# Loans	9,078	44,807	47,970	7,173
Amount (000)	\$235,575	\$901,659	\$1,340,600	\$191,008
Loans 2003-2005 Growth	12.8%	59.2%	52.2%	48.6%
Amount 2003-2005 Growth	4.0%	36.5%	42.3%	55.3%

Source: Federal Financial Institutions Examination Council

VI. Local Government Finances

Major services provided by local government such as education, transportation, public safety, among others, are those that most affect city residents on a day-to-day basis. Normally, the city’s accounting system is organized and operated on a “fund basis” under which each fund is a distinct accounting unit. Since the General Fund is the City’s primary operating fund for core services including police, fire, parks, recreation, and street maintenance, the discussion in this section will center on this particular fund. Table 12 below shows the most recent budget numbers for the major cities in each of the counties under examination by major fund groups (when available). As can be seen from the table, Fresno City’s General Fund is the smallest in per capita terms (only \$428.90 per person), which can be an indication of relatively low capacity to generate tax revenue (issue that is tackled in the discussion of the next table).

Given their absolute magnitude, it is also important to draw attention to the Enterprise Fund and Internal Revenue Service Fund which together, make the so-called Proprietary Fund. The Enterprise Fund provides services to other governmental and non-governmental entities such as the airport and the convention center. The Internal Revenue Service Fund provides services to departments within the City such as fleet operating and information services. In per capita terms, the Enterprise Fund for the City of Fresno (\$740.11 per person) ranks second, just after the City of Riverside (\$1,252.91 per person). Likewise, in per capita terms, the Internal Revenue Service Fund for the City of Fresno ranks first with \$219.29 per person, which could indicate costly internal departments.

Table 12: City Budgets by Major Fund: 2006-2007*

	Fresno	Reno	Riverside	San Bernardino	Phoenix
FUND GROUPS					
General Fund	\$204,693,000	\$176,766,175	\$188,785,983	\$122,817,200	\$1,021,516,000
Enterprise	\$353,219,000	\$129,667,257	\$368,431,662	\$23,928,600	\$942,272,000
Special Revenue	\$99,070,900	\$47,780,354	\$46,326,856	\$7,734,600	\$848,608
Capital Projects	\$63,587,800	\$42,458,263	\$40,923,594	\$11,465,100	NA
Internal Service	\$104,660,300	\$39,673,506	\$211,800	\$24,111,300	NA
Debt Service	\$28,072,500	\$23,672,604	\$8,535,617	\$454,900	\$705,485,000
Population (2005)	477,251	204,478	294,059	204,552	1,377,980
General Fund / Population	\$428.90	\$864.48	\$642.00	\$600.42	\$741.31

SOURCE: Finance Departments of Fresno, Reno, Riverside, San Bernardino and Phoenix Cities

* **Note:** 2005-2006 for Riverside

Continuing with the examination of the General Fund, Table 13 below shows the sources of revenue by city. General Fund revenues are composed by taxes, license and permit fees. A few observations are worth mentioning. First, the City of Fresno generates the lowest sales tax revenue per capita (\$148.65), which compared with Reno (\$367.23) or San Bernardino (\$345.38) seems quite low. Second, sales tax revenue in Fresno is only 31.2% of the total tax revenue, where the sales tax is 7.975%. Remarkably, the City of San Bernardino, with a sales tax of 7.75%, generates almost as much tax revenue as the City of Fresno with less than half the population. For comparison purposes, notice that

the sales tax is 7.75% in Riverside, 7.375% in Reno and 8.100% in Phoenix. Third, with respect to property tax which is the second most important source of revenue, Fresno ranks second as a proportion of total tax revenue collected with 22.06%, just after Reno with 24.24%.

Table 13: Sources of Revenue of General Fund: 2006-2007*

	Fresno	Reno	Riverside	San Bernardino	Phoenix
Revenue Source					
Sales Taxes	\$70,946,000	\$75,091,051	\$59,934,000	\$70,649,900	\$442,886,000
Property Taxes	\$50,968,557	\$41,140,416	\$33,256,000	\$25,140,400	\$95,660,000
Utility Users Tax	\$28,582,243	NA	\$22,965,000	\$1,341,000	NA
Charge for Services	\$18,012,984	\$3,809,013	\$14,784,140	\$5,885,400	\$85,796,000
Other Taxes	\$37,981,100	NA	\$8,178,000	NA	\$371,531,000
Licences & Permits	\$18,568,500	\$33,128,992	\$7,038,180	\$9,141,200	\$2,533,000
Misc. Revenues	\$1,756,200	\$12,784,551	\$3,017,700	\$4,043,100	NA
Other Agencies	\$770,400	NA	\$2,653,000	\$5,388,200	NA
Fines and Penalties	\$3,501,200	\$3,763,050	\$2,415,000	\$1,228,000	\$23,110,000
Sales Taxes / Total Revenue	31.2%	45.2%	39.5%	58.1%	44.4%

SOURCE: Finance Departments of Fresno, Reno, Riverside, San Bernardino and Phoenix Cities

* **Note:** 2005-2006 for Riverside

Finally, Table 14 shows the expenditure categories of the General Fund by city. Nor surprisingly, the highest expenditure in all cities is the police department. What is remarkable is the fact that Fresno is the city that spends less in per capita terms amounting to only \$215 per person, which again compared to say Phoenix (\$344) or Reno (\$278) seems significantly low. However, at the same time, notice that the police budget line represents 57.2% of total expenditures in Fresno, which is the highest percentage in all cities. In other words, although public safety in Fresno is quite expensive in relation to total expenditures, the amount of resources in per capita terms devoted to public safety is quite below competing cities. As a final, but perhaps not less important point in this section, notice that the City of Fresno also devotes the smallest amount of resources to community development, either per capita terms or even in absolute terms.

Table 14: General Fund Expenditures: 2006-2007*

	Fresno	Reno	Riverside	San Bernardino	Phoenix
Expenditure Category					
Police	\$102,810,939	\$56,832,137	\$76,651,662	\$55,536,100	\$473,744,400
Fire	\$33,650,596	\$48,970,582	\$36,736,607	\$30,248,000	\$247,297,000
Parks and Recreation	\$18,033,745	NA	\$20,320,997	\$5,794,000	\$115,887,000
Public Works	\$11,712,638	\$12,434,024	\$13,976,582	\$6,098,900	\$29,192,000
Community Development	\$1,301,414	\$1,448,052	\$12,140,233	\$6,311,200	\$22,222,000
General Government	\$12,270,383	\$21,549,246	\$26,822,190	\$23,475,100	\$81,721,280
Police / Total Expenditure	57.2%	40.2%	41.1%	43.6%	48.8%
Police / Population	\$215	\$278	\$261	\$272	\$344

SOURCE: Finance Departments of Fresno, Reno, Riverside, San Bernardino and Phoenix Cities

* **Note:** 2005-2006 for Riverside

VII. Poverty and Public Assistance

Poverty and social exclusion levels in cities around the country are evidence of the failure of economic development to reach the most vulnerable segments of the population. In addition to the typical problems associated with poverty such as high crime rates and the high costs of combating them, high mortality rates, etc., poverty can also negatively impact the productivity of the labor force -with logical negative consequences to business activities- by producing health problems associated with poor nutrition and poor medical care. Furthermore, many of the costs of poverty are psychological. Living in poverty means living with constant fear and stress, the stress of wondering how next months rent and utility bills will be paid is staggering and could be high costly. This section briefly explores poverty and public assistance in the regions under examination.

Table 15 below starts by showing the poverty status of the population by MSA. Clearly, the incidence of poverty in the Fresno, MSA is significantly higher than in any other MSA under investigation. In fact, the poverty rate in Fresno, MSA (20.67%) is more than twice the poverty rate in Reno-Sparks, MSA (10.31%), which is noteworthy. Interestingly, the 2005 MSA rank by poverty rates from highest to lowest poverty, matches the MSA rank by unemployment insurance transfers discussed in section III. Likewise, the 2005 MSA rank by poverty rates from lowest to highest poverty, matches the MSA rank by average employee income.

Table 15: Poverty Status in the Past 12 Months by MSA by Gender: 2005

	Fresno	Phoenix Mesa Scottsdale	Reno-Sparks	Riverside San Bernardino Ontario
Income in the past 12 months below poverty level	176,755	480,557	39,757	502,234
Male:	83,779	215,728	17,173	223,013
Female:	92,976	264,829	22,584	279,221
Income in the past 12 months above poverty level	678,521	3,305,607	345,787	3,304,880
Male:	342,477	1,686,897	177,041	1,667,847
Female:	336,044	1,618,710	168,746	1,637,033
Total Population	855,276	3,786,164	385,544	3,807,114
Poverty Rate	20.67%	12.69%	10.31%	13.19%
Males	9.80%	5.70%	4.45%	5.86%
Females	10.87%	6.99%	5.86%	7.33%

SOURCE: U.S. Census Bureau, American Community Survey

Another dimension of poverty can be captured by looking at the number of families by income level. Table 16 below shows family income by MSA. As it is evident from the numbers, Fresno, MSA shows the highest percentage of families making less than \$25,000, and also the lowest percentage of families making more than \$100,000 per year. Actually, numbers in this table allow building some simple measurements of income inequality. For example, while in Fresno the ratio of the number of families making less than \$10,000 to the number of families making more than \$200,000 is 2.74, the same ratio is only 1.26 in Phoenix-Mesa-Scottsdale, 1.003 in Reno-Sparks and 1.71 in Riverside-San Bernardino-Ontario.

Table 16: Family Income in the Past 12 Months by MSA: 2005

Income	Fresno, CA		Phoenix Mesa Scottsdale		Reno-Sparks		Riverside San Bernardino Ontario	
	Families	% of Total	Families	% of Total	Families	% of Total	Families	% of Total
Less than \$10,000	14,583	7.2%	44,570	4.8%	4,500	4.7%	43,116	4.7%
\$10,000 to \$14,999	10,598	5.3%	30,969	3.3%	2,865	3.0%	33,775	3.7%
\$15,000 to \$24,999	27,435	13.6%	93,227	10.0%	7,707	8.1%	91,131	10.0%
\$25,000 to \$34,999	25,354	12.6%	97,017	10.4%	8,650	9.1%	99,956	11.0%
\$35,000 to \$49,999	28,533	14.1%	149,922	16.0%	15,693	16.4%	136,624	15.0%
\$50,000 to \$74,999	37,235	18.5%	193,935	20.7%	18,966	19.8%	186,036	20.4%
\$75,000 to \$99,999	26,920	13.3%	128,668	13.7%	15,151	15.9%	135,257	14.8%
\$100,000 to \$149,999	19,752	9.8%	122,519	13.1%	13,733	14.4%	125,955	13.8%
\$150,000 to \$199,999	5,969	3.0%	39,817	4.3%	3,821	4.0%	35,375	3.9%
\$200,000 or more	5,303	2.6%	35,149	3.8%	4,484	4.7%	25,096	2.8%
Total Families	201,682	100.0%	935,793	100.0%	95,570	100.0%	912,321	100.0%

SOURCE: U.S. Census Bureau, American Community Survey

This short section ends by looking at the accessibility to social protection and safety nets, which include Supplemental Security Income (SSI), Public Assistance and Food Stamps. SSI is a federal income supplement program funded by general tax revenues (not Social Security taxes) designed to help aged, blind, and disabled people, who have little or no income, which provides cash to meet basic needs for food, clothing, and shelter. Safety nets and social assistance interventions include various forms of cash and in-kind transfer programs that supplement income such as child feeding and vouchers for schooling and housing.

Table 17 below shows various forms of social protection and safety nets by county for the years 2002 and 2005. Not surprisingly, households in Fresno County receive more social assistance than in any other county under comparison in both years. But perhaps more importantly, the percentage of household receiving public assistance grew more rapidly in Fresno County from 2002 to 2005 than in any other county. In fact, in Maricopa County for example, with the exception of Food Stamps, the percentage of households under public assistance diminished.

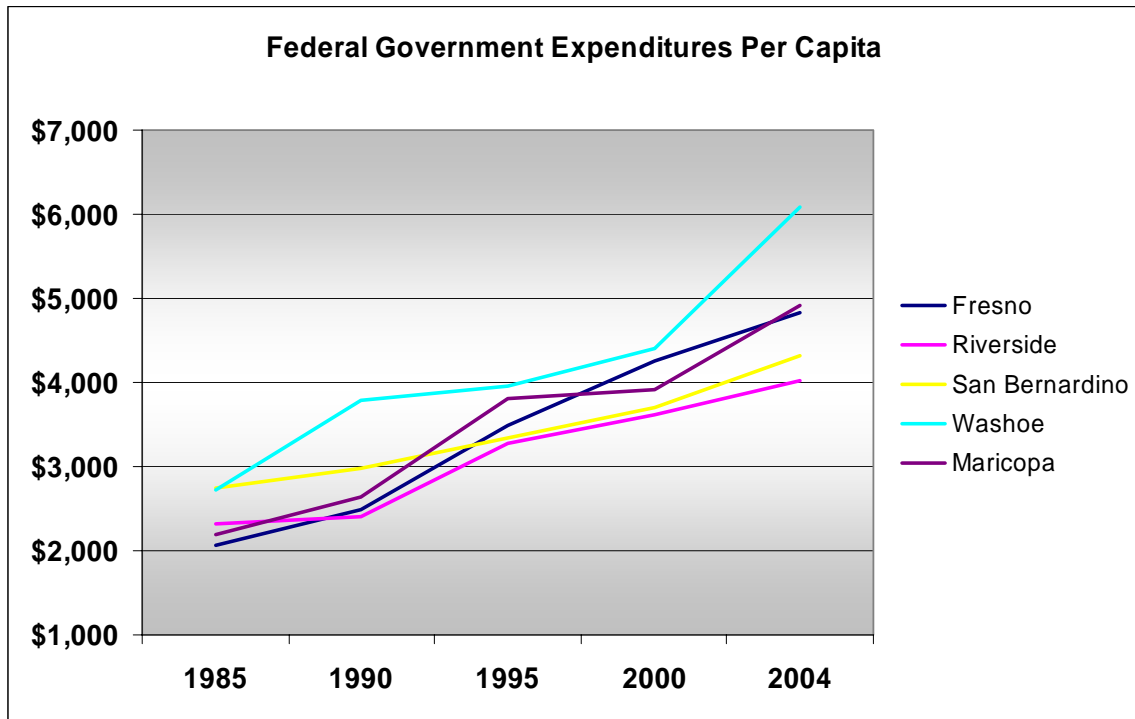
Finally, Figure 7 below displays Federal Government Expenditure per Capita by County. Numbers show that although Fresno is the county that receives the highest amount among counties in California, it ranked third in 2004 after Washoe and Maricopa.

Table 17: Social Protection and Safety Nets by County: 2002 and 2005

	2002				
	Maricopa	Fresno	Riverside	San Bernardino	Washoe
Total Households:	1,213,985	260,904	562,914	552,117	141,820
With Supplemental Security Income (SSI)	2.6%	6.5%	4.5%	3.8%	2.0%
No Supplemental Security Income (SSI)	97.4%	93.5%	95.5%	96.2%	98.0%
Received Food Stamps in the past 12 months	4.6%	11.2%	2.3%	5.8%	2.9%
Did not receive Food Stamps in the past 12 months	95.4%	88.8%	97.7%	94.2%	97.1%
With public assistance income	2.1%	7.4%	2.0%	4.4%	1.0%
No public assistance income	97.9%	92.6%	98.0%	95.6%	99.0%
	2005				
	Maricopa	Fresno	Riverside	San Bernardino	Washoe
Total Households:	1,326,522	274,129	623,711	588,218	153,171
With Supplemental Security Income (SSI)	2.4%	8.0%	3.7%	5.5%	2.3%
No Supplemental Security Income (SSI)	97.6%	92.0%	96.3%	94.5%	97.7%
Received Food Stamps in the past 12 months	5.8%	11.3%	3.2%	6.2%	3.4%
Did not receive Food Stamps in the past 12 months	94.2%	88.7%	96.8%	93.8%	96.6%
With public assistance income	1.8%	6.5%	2.8%	4.7%	1.8%
No public assistance income	98.2%	93.5%	97.2%	95.3%	98.2%

SOURCE: U.S. Census Bureau, American Community Survey

Figure 7: Federal Government Expenditure per Capita by County: Selected Years



SOURCE: US Census Bureau, USA Counties

VIII. Final Remarks

This report collected and analyzed relevant data tracking and comparing the economic development performance of Fresno, Maricopa, Riverside, San Bernardino and Washoe counties. Through data interpretation and examination it was possible to identify and understand some of the relative weaknesses and strengths of the regions under examination. Although the indicators reported fall short of showing a clear picture of the level of economic development in each region, it is clear that there are significant lags between Fresno County and all other counties, particularly those outside California. It is expected that the information contained in this report will translate into valuable information for the EDC and its mission, and it will contribute to a better understanding of the effectiveness of economic development policies designed and implemented by local institutions in Fresno County.

The Researcher

Antonio Avalos is Assistant Professor of Economics at California State University, Fresno since 2003. He earned his Ph.D. in Economics from Oklahoma State University with specialization in Economic Development and International Economics. His areas of expertise also include Regional Economics and Latin American Economic Development.

Professor Avalos has spent several years conducting research on workforce issues. In 1998, he was appointed Herman Kahn Fellow at the Hudson Institute in Indianapolis, Indiana working for the Center for Workforce Development. Professor Avalos assisted the Center in several applied research studies integrating economic development and workforce development at the local level. In 2002, Professor Avalos was selected by a panel of international economists as a visiting scholar at the Andean Corporation of Development in Caracas, Venezuela, where he conducted applied research in international trade, economic development and labor markets in Latin American economies.

Currently, Professor Avalos is investigating the dynamics of the regional economy identifying the forces shaping the Central Valley's economy. His work includes analyzing the changes in work, the workplace, compensation and occupations in recent decades and developing a scenario for the Central Valley regional economy's future.

