State Board of Equalization

ECONOMIC PERSPECTIVE

Summary of Recent Economic Developments
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Retail Taxable Sales and Income

Consumption Closely Related to Income

A well established axiom in economics is that proportions of income spent on consumption tend to decline as incomes increase. On average, households with higher incomes spend smaller proportions of their incomes (and therefore, by definition, save larger proportions) than households with lower incomes.

County Retail Taxable Sales to Personal Income Ratios

The Board of Equalization publishes retail taxable sales (sales mostly made to households) by county for all 58 counties in California, for more information please visit *www.boe.ca.gov/news/tsalescont.htm*. To what extent do county retail taxable sales and personal income data show declining proportions of spending as incomes increase? One way to measure the income to spending relationship is to calculate the ratio of retail taxable sales to personal income (which we will call RTS ratios in this discussion) for the state and counties. County RTS ratios can then be grouped according to county proportions of statewide average per capita personal income. In theory we would expect the relatively low-income counties to have high RTS ratios and the relatively high-income counties to have low RTS ratios.

In 2007 the California RTS ratio averaged 25 percent. Californians spent about 25 percent of their income on taxable goods. County RTS ratios varied widely in 2007, ranging from a low of 12 percent in Mariposa County to a high of 41 percent in Imperial County. County per capita personal incomes also varied widely. Kings county per capita personal income was 56 percent, the state average in 2007, the lowest of any county. At the opposite extreme, Marin County personal income was 219 percent of the state average.

Ten Lowest-Income Counties

To the extent that counties follow the general income-consumption relationship, we should see evidence most clearly for the extremely low and high-income counties. Table 1 shows the 2007 RTS ratios for the ten lowest-income counties in California. Per capita incomes for these counties averaged only 60 percent of the state average. As shown in the table, the income-spending relationships for these ten counties varied widely. Some low-income counties, such as Imperial and Tehama, had very high RTS ratios, as expected, at 41 percent and 38 percent respectively, both well above the state average of 25 percent. However, some of these low-income counties had RTS ratios well below the state average, running

Table 1

County Per Capita Income as a Percent of the California Average and Retail Taxable Sales to Personal Income Ratios For the *Ten Lowest* Per Capita Income Counties in 2007

County	2007 County Per Capita Income as a Percentage of the California Average	2007 County Retail Taxable Sales to Personal Income Ratio
Kings	56%	28%
Lassen	56%	23%
Del Norte	57%	23%
Imperial	57%	41%
Madera	58%	27%
Trinity	58%	14%
Yuba	59%	18%
Tehama	59%	38%
Merced	60%	30%
Tulare	62%	31%
Averages For The Ten Lowest-income Counties	***60%***	***30%***
California	***100%***	***25%***

counter to expectations. Examples are Trinity County, with an RTS of 14 percent, and Yuba County, with an RTS of 18 percent. Some reasons for such variation include differences in geographic proximity to retailers in neighboring counties, uneven population densities within counties, and unknown commuting patterns.

Despite the exceptions, when grouped together, the RTS ratio for all ten counties combined followed theoretical expectations, averaging 30 percent of income, well above the 25 percent average for the entire state (see bottom of Table 1).

Ten Highest-Income Counties

Table 2 shows the RTS ratios for the ten highest-income counties in California. Per capita income for these counties averaged 135 percent of the state average. Nine of the ten counties had RTS ratios below the state average, as expected. When grouped together, the RTS ratio for all ten counties combined again followed theoretical expectations, averaging 21 percent, well below the 25 percent average for the entire state.

Table 2

County Per Capita Income as a Percent of the California Average and Retail Taxable Sales to Personal Income Ratios For the *Ten Highest* Per Capita Income Counties in 2007

County	2007 County Per Capita Income as a Percentage of the California Average	2007 County Retail Taxable Sales to Personal Income Ratio
Marin	219%	15%
San Mateo	172%	18%
San Francisco	171%	18%
Santa Clara	144%	20%
Contra Costa	133%	18%
Napa	123%	22%
Orange	121%	26%
Alameda	116%	22%
Santa Cruz	116%	20%
Santa Barbara	113%	23%
Averages For The Ten Highest-income Counties	***135%***	***21%***
California	***100%***	***25%***

38 Middle-Income Counties

Table 3 shows the RTS ratios for the middle 38 counties ranked by per capita income. Per capita incomes for these counties averaged 89 percent of the state average. The RTS ratio for these counties combined averaged 28 percent, again following economic theory.

Table 3

County Per Capita Income as a Percent of the California Average and Retail Taxable Sales to Personal Income Ratios For the *Middle 38* Per Capita Income Counties in 2007

County	2007 County Per Capita Income as a Percentage of the California Average	2007 County Retail Taxable Sales to Personal Income Ratio
Glenn	62%	27%
Sierra	65%	13%
Kern	65%	35%
Modoc	67%	21%
San Bernardino	67%	38%
Fresno	67%	35%
San Joaquin	69%	34%
Stanislaus	69%	35%
Mariposa	70%	12%
Siskiyou	71%	27%
Riverside	71%	35%
Butte	71%	32%
Sutter	71%	40%
Lake	72%	21%
Humboldt	72%	32%
Colusa	73%	27%
Calaveras	75%	14%
Shasta	78%	35%
Mendocino	78%	34%
Tuolumne	78%	26%
Amador	80%	29%
Inyo	81%	39%
Alpine	82%	21%
Yolo	83%	27%
San Benito	83%	17%
Plumas	84%	20%
Sacramento	87%	28%
Solano	89%	29%
San Luis Obispo	91%	31%
Los Angeles	95%	25%
Mono	95%	34%
Monterey	99%	24%
Nevada	102%	21%
San Diego	106%	26%
Placer	109%	37%
Ventura	109%	24%
El Dorado	109%	16%
Sonoma	111%	25%
Averages For The Middle 38 per capita-income Counties	***89%***	***28%***
California	***100%***	***25%***

Summary of Taxable Sales to Income Relationships

Table 4 summarizes these results. As incomes in the three county groups rises from 60 percent to 89 percent to 135 percent of the state average, the RTS ratios decline from 30 percent to 28 percent to 21 percent. On average, for every ten percent increase in income as a proportion of the state average, the RTS declines by about 1.2 percent.

Table 4

Summary of Income Percentages and Retail Taxable Sales Ratios For the Three Groups of Counties

2007	Ten Lowest Per Capita Income Counties	Middle 38 Per Capita Income Counties	Ten Highest Per Capita Income Counties
Personal Income Per Capita as a Percentage of the California Average	60%	89%	135%
Retail Taxable Sales to Personal Income Ratios	30%	28%	21%
Shares of California Population	4%	70%	27%

Applications of RTS Ratios

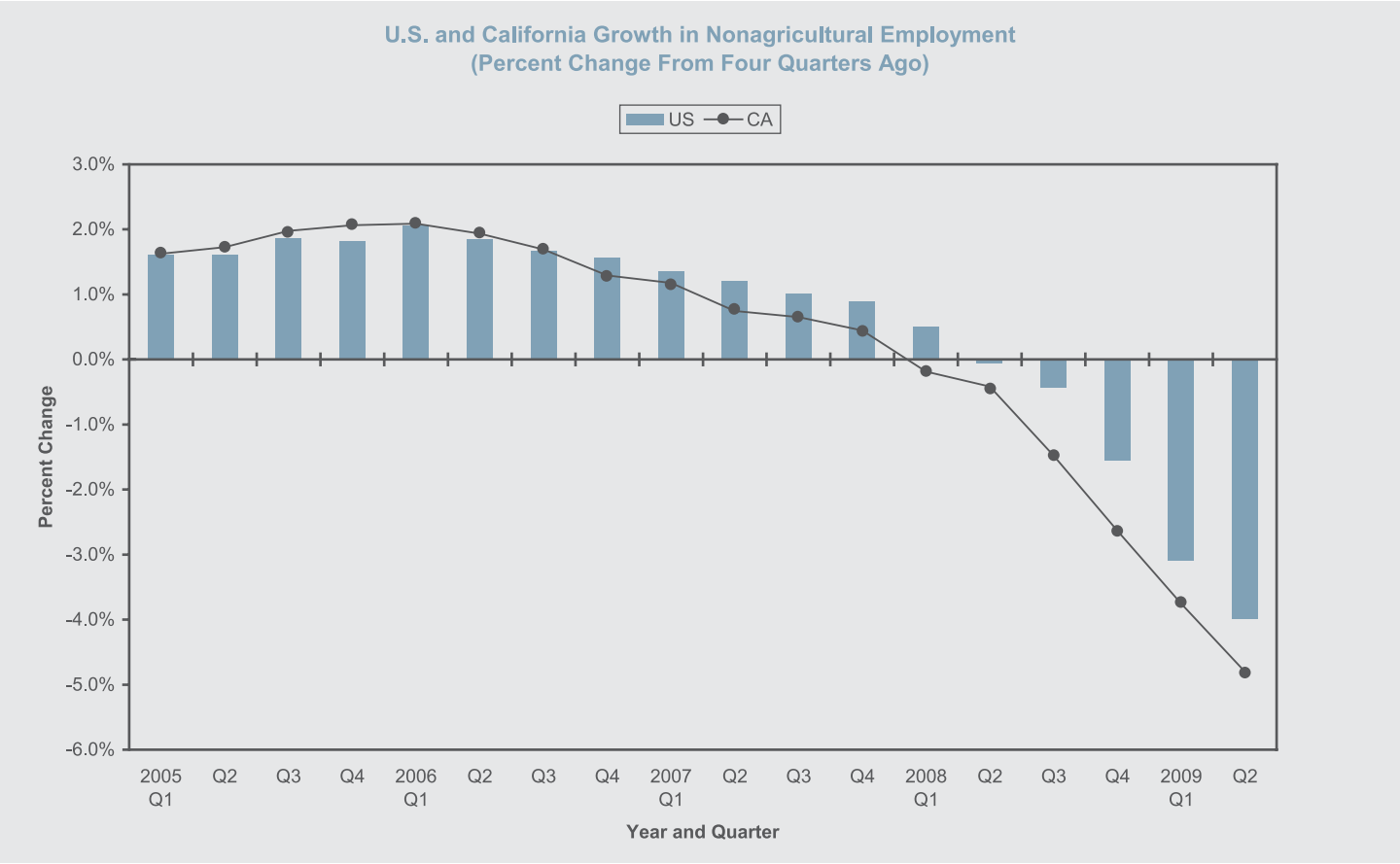
These data can be used to quantify the degree to which various income groups are most impacted by changes in state tax policies. For example, in April 2009 the sales and use tax rate increased by one percentage point. Impacts by income group can be estimated using the data discussed above along with per capita income data.

Recent California and U.S. Employment Growth Trends

Turning to recent trends in the overall economy, available data indicate that both the U.S. and California economies remained mired in deep recession during the first half of 2009. One of the most comprehensive indicators of economic well-being available for states on a timely basis is nonagricultural payroll employment.

Most Job Losses Since 1946

As shown in the chart on the next page, the California economy has underperformed the U.S. economy, as measured by growth in nonagricultural employment, since late 2006. The recession, which started in December 2007, accelerated rapidly for both the U.S. and California economies since the middle of 2008. Not only did the recession worsen, but over the past four quarters the California underperformance relative to the nation as a whole has widened. In the second quarter of 2009, nonagricultural employment was close to five percent less than it was in the second quarter of 2008. California nonagricultural employment has not decreased by this much in any one quarter since 1946.



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www.boe.ca.gov/news/epcont.htm

Taxpayers' Rights Advocate:
888-324-2798

To contact your Board Member, see
www.boe.ca.gov/members/board.htm

Online Resources

For more information about topics covered in this issue, please visit any of the websites listed below.

California Department of Finance
www.dof.ca.gov

California Employment Development Department (EDD), *Labor Market Conditions in California*
www.labormarketinfo.edd.ca.gov

Federal Reserve Bank of Philadelphia, *Survey of Professional Forecasters*
www.phil.frb.org/econ/spf/index.html

National Association for Business Economists
www.nabe.com

U.S. Bureau of Economic Analysis
www.bea.gov

U.S. Bureau of Labor Statistics
www.bls.gov/cpi/

U.S. Census Bureau
www.census.gov