



STATE BOARD OF EQUALIZATION ECONOMIC PERSPECTIVE

Summary of Recent Economic Developments
Publication 329

May 2008

❖ Perspectives on Gasoline Prices

In our February Economic Perspective we analyzed some of the impacts of rising gasoline prices. This edition continues that discussion. First we will summarize a recent Congressional Budget Office (CBO) publication that reports detailed results of measuring California drivers' responses to higher gasoline prices.¹ Then we will illustrate how a new U.S. Census Bureau web page provides data that is used to rank per capita sales for states using purchases from gasoline stations as an example.

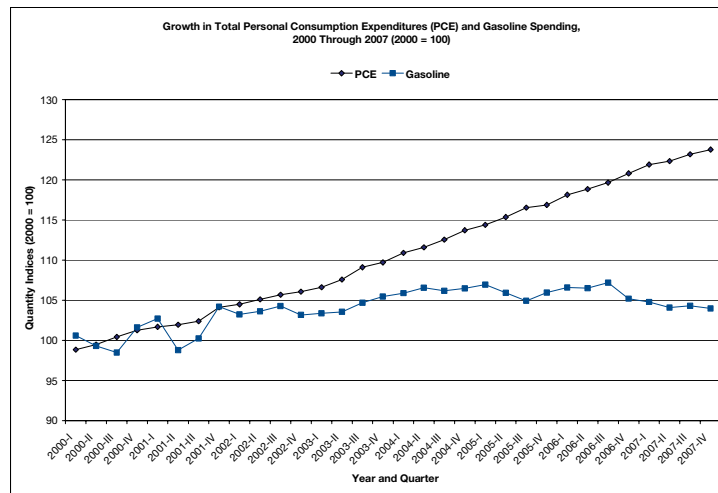
U.S. Gas Consumption Falling

The CBO report notes that real gasoline

prices increased 100 percent from early 2003 through October of 2007. Economic data show that consumers have been responding to these higher prices by reducing gas consumption, although the reductions have been relatively small. Updating data cited by the CBO through the fourth quarter of 2007 indicate that U.S. gasoline consumption has declined in 9 of the last 11 quarters compared to purchases the year before. As shown in the chart, this trend is in sharp contrast to overall consumer spending which has steadily risen over this time period.²

California Freeway Trip Data

The CBO report analyzed data on trip frequencies and speeds on 13 freeways located throughout California from 2003 to 2006. Many of the freeways CBO studied run parallel to rail transit systems, so it was possible to discern the effects of gasoline prices on daily vehicle flow in the presence or absence of an accessible rail transit alternative to driving. CBO's study also took into account the time of day, day of the week, season, road characteristics, and other factors that influence the way motorists drive. The following quotes summarize the CBO's findings from the freeway trips analyses.



¹Effects of Gasoline Prices on Driving Behavior and Vehicle Markets, Congressional Budget Office, January 2008. www.cbo.gov/ftpdocs/88xx/doc8893/01-14-GasolinePrices.pdf

²The measures used in the chart are quantity indices from the U.S. Bureau of Economic Analysis, where both personal consumption spending and gasoline spending are indexed to equal 100 in 2000.

Fewer Trips and Lower Speeds

"Freeway motorists have adjusted to higher prices by making fewer trips and by driving more slowly. On weekdays in the study period, for every 50 cent increase in the price of gasoline, the number of freeway trips

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declined by about 0.7 percent in areas where rail transit is a nearby substitute for driving; transit ridership on the corresponding rail systems increased by a commensurate amount. Median speeds on uncongested freeways declined by about three-quarters of a mile per hour for every 50 cents the price of gasoline has increased since 2003.

Weekday Traffic Declines

“On average, over all locations, the price of gasoline in a given week had a negligible effect on the volume of weekend traffic, but on weekdays, higher gasoline prices had a small but statistically significant effect. A 20 percent increase in price, or 50 cents if the base price is \$2.50 per gallon, would reduce weekday freeway traffic by an average of 0.4 percent. The effect would occur entirely in the response at rail-accessible freeway locations. At those places, a 20 percent price increase would reduce weekday traffic by an average of 0.69 percent. That result is strongly statistically significant, although it amounts only to about 730 fewer vehicles out of an average of more than 106,000 vehicles per weekday at those locations. Gasoline prices did not affect weekend traffic volume at any of the locations, nor did they affect weekday traffic counts where rail commuting was not an option.”

Vehicle Sales and Price Impacts

The CBO also analyzed data on U.S. sales of new and used vehicles. They found that after increasing steadily for more than 20 years, the market share of light trucks (including sport-utility vehicles and minivans), relative to all new passenger vehicles, began to decline in 2004. Used car prices were also affected by higher gas prices. The average prices for larger, less-fuel-efficient models have declined over the past five years as average prices for the most-fuel-efficient automobiles have risen.

State Gas Sales Per Capita Rankings

Another question regarding the impacts of rising gasoline prices is this: how does California compare to other states in gasoline consumption? A new U.S. Census Bureau web page, Top-Ranked States by Industry, provides data from the 2002 Economic Census that answers this question.³ Per capita gasoline station sales for all 50 states were downloaded from this web page and converted into percentages of the U.S. average, and are shown in the accompanying table.

California Sales Rank Below Average

The data show that California per capita gasoline station sales were 77 percent of the U.S. average in 2002, and ranked as the 46th state. These data imply that compared with most states, Californians have suffered relatively fewer economic effects from higher gasoline prices on average. In contrast to California, Wyoming gasoline station sales were 242 percent of the U.S. average in 2002. At the other extreme, New York ranked as the 50th state in gasoline station sales per capita at 57 percent of average, while the District of Columbia had even lower gas station sales, only 34 percent of the U.S. average.

Additional State Rankings Data

While gasoline station sales are used to illustrate the state rankings data that can be found on this web page, the Census Bureau notes that data are available for production and consumption of a wide variety of specific goods and services. As an example, the Census Bureau notes that California has annual shipments of \$17 per capita in tortillas, more than any other state.

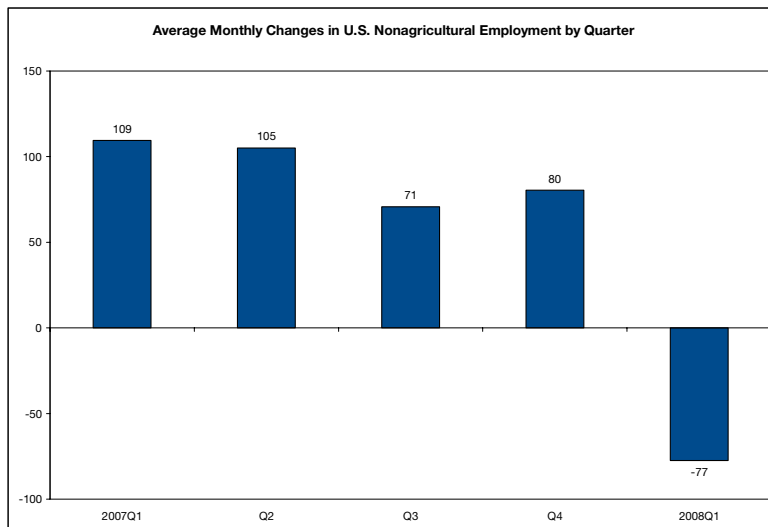
³U.S. Census Bureau, www.census.gov/econ/census/topstates.html

RANK	STATE	PERCENT OF U.S. AVERAGE PER		RANK	STATE	PERCENT OF U.S. AVERAGE PER	
		CAPITA GAS STATION SALES	SALES			CAPITA GAS STATION SALES	SALES
1	Wyoming	242%		27	Alabama	111%	
2	North Dakota	185%		28	Tennessee	111%	
3	South Dakota	171%		29	Utah	109%	
4	Montana	155%		30	Texas	108%	
5	Vermont	150%		31	Ohio	106%	
6	Iowa	144%		32	Arizona	105%	
7	Missouri	140%		33	Nevada	103%	
8	Nebraska	140%		34	Michigan	101%	
9	Maine	134%		n.a.	U.S. Average	100%	
10	West Virginia	132%		35	Colorado	98%	
11	Indiana	132%		36	Florida	94%	
12	South Carolina	131%		37	Alaska	92%	
13	New Mexico	131%		38	Delaware	92%	
14	Mississippi	130%		39	Pennsylvania	91%	
15	Kentucky	130%		40	Maryland	88%	
16	Arkansas	129%		41	Connecticut	86%	
17	Minnesota	127%		42	Illinois	82%	
18	Wisconsin	127%		43	Oregon	82%	
19	Virginia	125%		44	Massachusetts	81%	
20	Oklahoma	125%		45	Washington	81%	
21	New Hampshire	123%		46	California	77%	
22	Idaho	120%		47	Hawaii	73%	
23	Georgia	118%		48	Rhode Island	71%	
24	North Carolina	116%		49	New Jersey	68%	
25	Kansas	114%		50	New York	57%	
26	Louisiana	112%		51	District of Columbia	34%	

❖ U.S. Economic Developments

Slowing Growth in Late 2007

Turning to recent trends, U.S. economic growth slowed in late 2007 and early 2008.



Differences in monthly nonagricultural jobs abruptly changed from modest growth in late 2007 to declines in the first quarter of 2008. Growth in nonagricultural employment averaged 175,000 jobs per month in 2006, when the economy was relatively strong. Jobs growth slowed to an average of 107,000 jobs per month in the first half of 2007 and 76,000 in last half of 2007.

As shown in the chart, nonagricultural employment jobs declined by an average of 77,000 jobs per month in the first quarter of 2008.

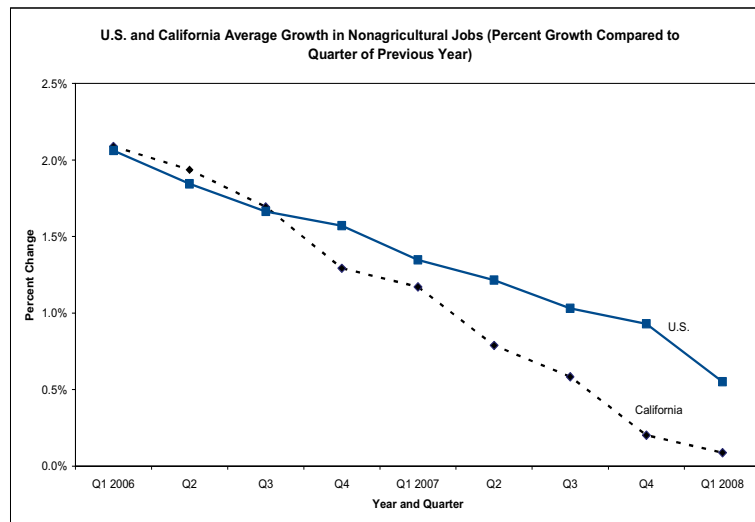
The U.S. unemployment rate rose from an average of 4.5 percent in the first quarter 2007 to 4.9 percent in the first quarter of 2008. Real GDP increased by 0.6 percent in the first quarter.

❖ California Economic Developments

U.S. and California Growth Slow Throughout 2007

One of the most comprehensive indicators of economic well being available for states on a timely basis is nonagricultural payroll employment. As shown in the chart, quarterly

nonagricultural payroll employment growth in both the U.S. and California have slowed dramatically in 2007 compared to the same quarters of 2006. California growth was above the U.S. in the first half of 2006, but fell below the U.S. in late 2006 and has remained lower in 2007 and through the first quarter of 2008. The most recent quarter shows that U.S. nonagricultural employment rose 0.6 percent, while California nonagricultural employment inched up 0.1 percent.



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Taxpayers' Rights Advocate: 888-324-2798

To contact your Board Member, see www.boe.ca.gov/submenus/boardmembers.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