



Labor Underutilization Trends in California

This report provides an overview of the Bureau of Labor Statistics Alternative Measures of Labor Underutilization. Labor underutilization rates were analyzed during California's latest business cycle expansion and contraction periods to highlight the trends associated with this dataset. For comparison purposes, state-to-state and national labor underutilization rate analyses are also provided.

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The official unemployment rate published by the Bureau of Labor Statistics (BLS) is criticized by some as being too narrowly defined, understating the hardships faced by workers in a down economy. However, the BLS does calculate and publish Alternative Measures of Labor Underutilization data that account for workers that are not captured by the definition used for the official unemployment rate (total unemployed, as a percent of the civilian labor force). These figures provide a comprehensive view of unemployment and underemployment at the state and national levels and are released on a monthly basis.

The six alternative measures of labor underutilization are derived from the Current Population Survey (CPS) in a designated range from U-1 to U-6. The U-3 and states' official unemployment estimates are measured as the total unemployed as a percent of the civilian labor force. However, the U-3 may differ from the states' official estimates because calculation of the official estimates includes additional inputs (e.g., official jobs count; unemployment insurance claims).

The U-1 and U-2 rates differ from the U-3 since the data is focused on two distinct categories of our state's civilian labor force: 1) persons employed 15 weeks or longer and 2) job losers and persons who completed temporary jobs (see Table 1).

When compared to the U-3, the U-4, U-5, and U-6 rates provide a more robust view of the state's workforce since they are inclusive of discouraged, involuntary part-time, and marginally attached workers. Figures for persons within each of these three categories are not included in the calculation of the U-3 (see Table 1).

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Table 1

Labor Underutilization Definitions		2011 Annual Average	2012 Annual Average	Percentage Point Change
U-1	Persons unemployed 15 weeks or longer, as a percent of the civilian labor force.	7.0%	6.2%	-0.8
U-2	Job losers and persons who completed temporary jobs, as a percent of the civilian labor force.	7.0%	5.8%	-1.2
U-3	Total unemployed, as a percent of the civilian labor force (definition used for the official unemployment rate).	11.6%	10.4%	-1.2
U-4	Total unemployed plus discouraged workers, as a percent of the civilian labor force plus discouraged workers.	12.3%	11.4%	-0.9
U-5	Total unemployed, plus discouraged workers, plus all other marginally attached workers, as a percent of the civilian labor force plus all marginally attached workers.	13.4%	12.2%	-1.2
U-6	Total unemployed, plus all marginally attached workers, plus total employed part time for economic reasons, as a percent of the civilian labor force plus all marginally attached workers.	21.1%	19.3%	-1.8

Marginally attached workers: Persons not in the labor force who want and are available for work, and who have looked for a job sometime in the prior 12 months, but were not counted as unemployed because they had not searched for work in the 4 weeks preceding the survey.

Discouraged workers: Among the marginally attached, discouraged workers were not currently looking for work specifically because they believed no jobs were available for them or there were none for which they would qualify.

Involuntary part-time workers: Persons who indicated that they would like to work full-time, but were working part-time (1 to 34 hours) because of an economic reason, such as their hours were cut back or they were unable to find full-time jobs.

Employed persons: Persons who did any work for pay or profit during the survey reference week; persons who did at least 15 hours of unpaid work in a family-operated enterprise; and persons who were temporarily absent from their regular jobs because of illness, vacation, bad weather, industrial dispute, or various personal reasons.

Unemployed persons: Persons are classified as unemployed if they do not have a job, have actively looked for work in the prior 4 weeks, and are currently available for work. Persons who were not working and were waiting to be recalled to a job from which they had been temporarily laid off are also included as unemployed.

Civilian labor force: The labor force is the sum of employed and unemployed persons.

Source: U.S. Bureau of Labor Statistics (BLS)

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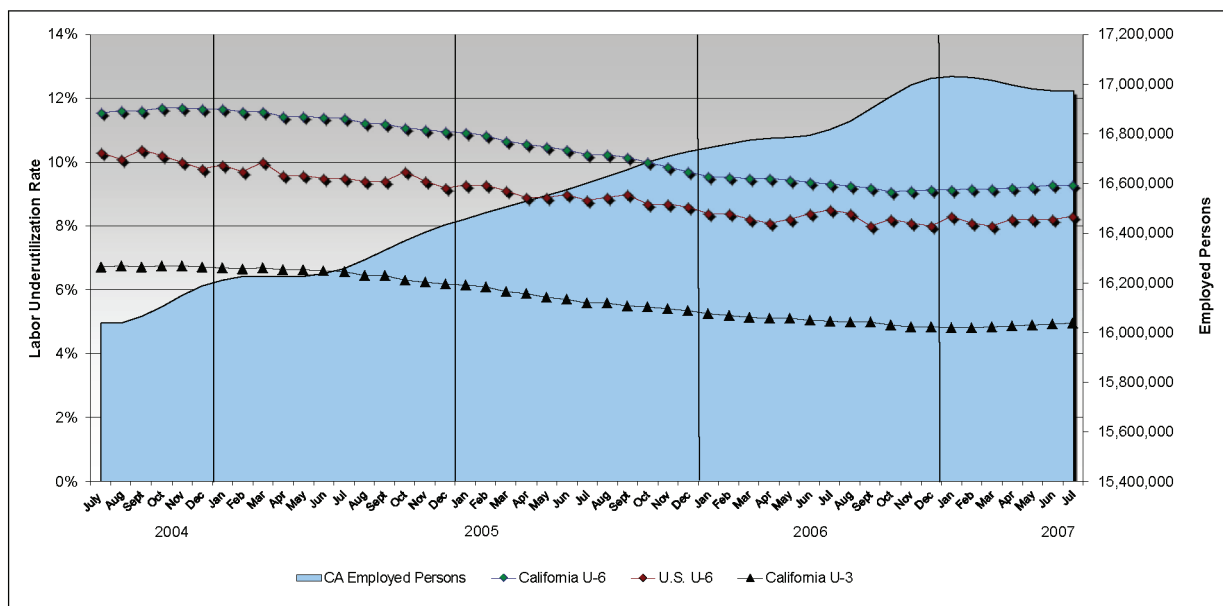
Labor Underutilization in California During The Latest Business Cycle Expansion (July 2003 - July 2007)

Economic expansion periods are generally defined by observable *increases* in real gross domestic product (GDP), real income, industrial production, wholesale-retail sales, and employment. For most of California's July 2003 through July 2007 expansion period, month-to-month decreases in the U-3 and U-6 labor underutilization rates generally coincided with an increase in the number of employed persons (see Figure 1). With the exception of three months (October 2003, November 2006, December 2006), this trend held throughout the 49-month expansion period.

The inverse relationship between declines in labor underutilization rates and increases in the total number of employed persons is statistically significant and may suggest that an increased share of discouraged and/or marginally attached workers acquired jobs as hiring activity increased. This trend may also suggest that an increased share of involuntary part-time workers worked more than 34 hours per week or gained full-time jobs during the state's expansion period.

The nation's U-6 rate was at least 1 percentage point lower than the state's in every month of the expansion period. The largest difference between the two rates occurred in June 2004, when the state's U-6 rate was nearly 2.0 percentage points higher than the national rate. In July 2006, the gap between the state and the nation's U-6 rates narrowed to a period low of 0.8 percentage points. By the close of the expansion, the state's U-6 rate held at 9.3 percent, 1 percentage point higher than the national rate.

Figure 1



Source: California Employment Development Department, U.S. Bureau of Labor Statistics (BLS)

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Labor Underutilization in California During the Latest Business Cycle Contraction (July 2007- December 2009)

Economic contraction periods or recessions are generally defined by measurable decreases in real GDP, real income, industrial production, wholesale-retail sales, and employment. In general, monthly labor underutilization rate (U-3 and U-6) increases negatively correlated with declines in the number of employed persons for most of California's contraction period (see Figure 2). An exception to this trend occurred between July 2007 through January 2008 as the U-3 and U-6 rates steadily increased along with number of employed persons. The positive correlation between increases in the state's monthly employed persons figures and the Conference Board's Present Situation Index (PSI) provide evidence as to why this exception may have occurred.

The PSI measures overall consumer sentiment towards the present economic situation. The index is constructed from survey respondents' appraisals of general business conditions and the availability of jobs in their area. Research suggests the responses to these questions are closely tied to changes in labor market activity (e.g., unemployment rate).¹ In addition, researchers argue that the PSI closely correlates with changes in payroll employment and provide evidence that the index can be used to enhance the predictive power of consumer spending forecasts.²

As labor underutilization rates and the number of employed persons increased from July 2007 to January 2008, the PSI experienced month-to-month declines, but remained at levels comparable to those viewed during the state's expansion period. This trend suggests that job seekers viewed business and employment conditions as favorable, but still struggled to find work and may have stopped looking; pushing labor underutilization rates higher, even as an increased share of job seekers were able to find jobs. Thus the decline in the PSI and month-to-month increases in the state's number of employed over the seven-month period.

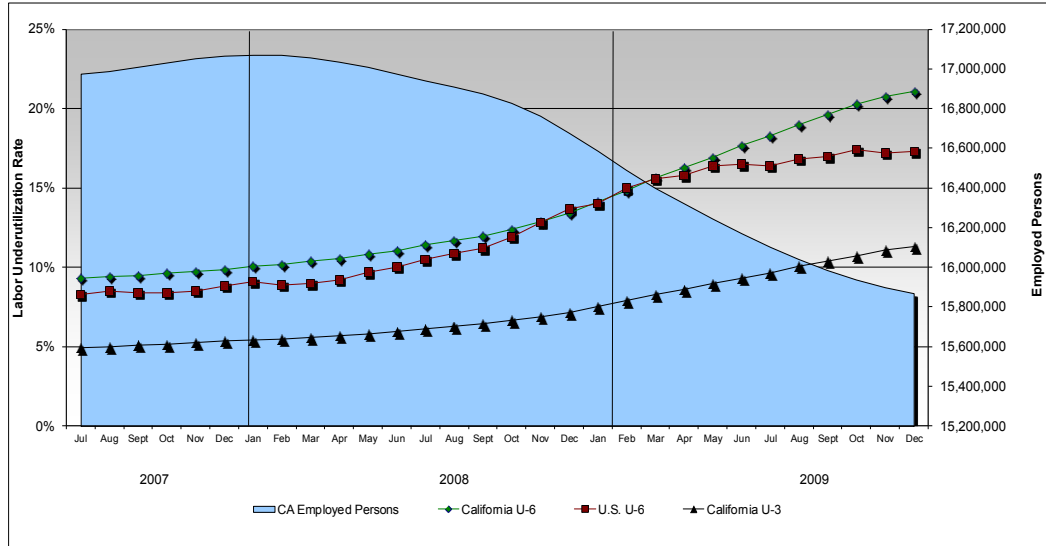
The state's U-3 and U-6 rates experienced month-to-month increases over the entire contraction period (see Figure 2). The level of increase in the state's U-6 was generally higher than the U-3 for most of the period and more than twice as high for most of 2008. The gap between the state's U-6 and U-3 rates widened from 4.0 points in July 2007 to 9.8 percentage points by the end of the contraction period. The inverse relationship between declines in the PSI and increases in U-3 and U-6 labor underutilization rates from July 2007 to December 2009 (see Figure 3) provide evidence as to why this 9.8 percentage point gap occurred.

¹ Bram, Jason and Sydney Ludvigson. "Does Consumer Confidence Forecast Household Expenditure? A Sentiment Index Horse Race". *Economic Policy Review* 4 (1998): 59-78. Web. <<http://www.newyorkfed.org/research/epr/98v04n2/9806bram.html>>.

² Bram and Ludvigson 59-78.

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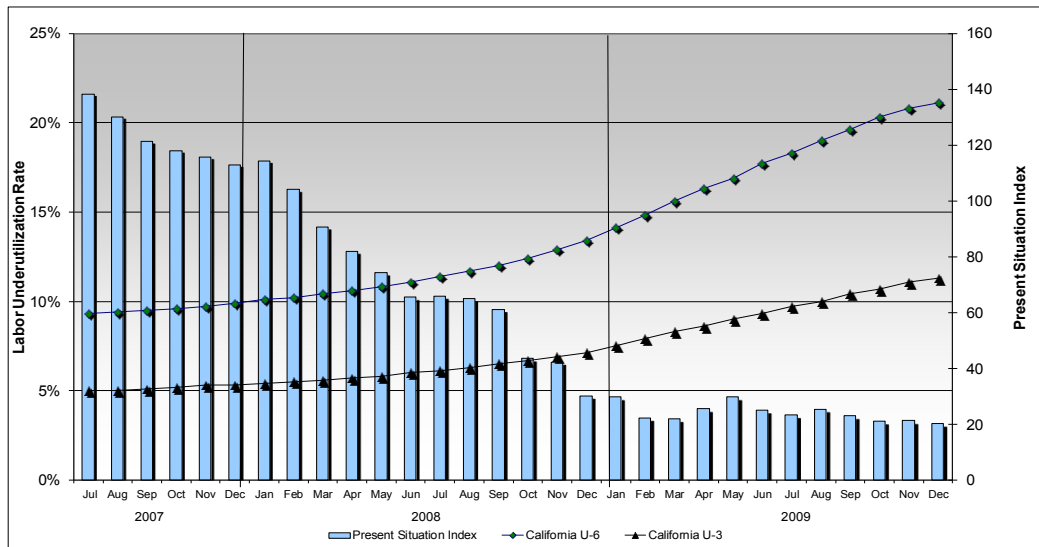
Figure 2



Source: California Employment Development Department, U.S. Bureau of Labor Statistics (BLS)

The nation's U-6 rate was lower than California's for most of the 30-month recession period. Surprisingly the national U-6 rate was slightly higher than the state's in December 2008 and February 2009, a trend that did not occur during the most recent expansion period. By the close of the contraction period, consumers' expectations of current business and employment conditions had waned as the PSI hit a period low of 20.2 points and the state and national U-6 rates more than doubled to 21.1 and 17.3 percent, respectively (see Figure 3).

Figure 3



Source: The Conference Board, U.S. Bureau of Labor Statistics (BLS)

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U-6 Trends: State and National Comparisons

Nationwide comparisons of state annual average U-6 rates found that California, Michigan, and Nevada had the highest rates and Nebraska, North Dakota, and South Dakota the lowest (less than 10 percent) in 2012. In the given year, Nevada was the only state with an annual U-6 rate that topped 20 percent; exceeding the national average by more than 5 percentage points. The percentage point change in California's U-6 rate from 2008-2012 exceeded the nation's by nearly 2 percentage points. North Dakota's five-year percentage point change was less than half of the nation's on the whole. The 2008-2012 percentage point change in Nevada's U-6 was twice as high as the rates for Nebraska, North Dakota, and South Dakota.

Table 2

	2008	2009	2010	2011	2012	Percentage Point Change 2008-2012
U.S. Annual Average	10.5%	16.2%	16.8%	15.9%	14.7%	4.2%
Nevada*	11.1%	19.2%	22.3%	22.7%	20.3%	9.2%
California	13.4%	21.1%	22.1%	21.1%	19.3%	5.9%
Michigan	15.1%	21.5%	21.3%	18.8%	16.6%	1.5%
North Dakota**	6.1%	8.0%	7.5%	6.6%	6.1%	0.0%
Nebraska	6.1%	9.0%	8.9%	8.9%	8.8%	2.7%
South Dakota	6.1%	9.9%	9.7%	9.3%	8.5%	2.3%
* Highest annual average U-6 in 2012.						
** Lowest annual average U-6 in 2012.						

Source: U.S. Bureau of Labor Statistics (BLS)



State of California
Labor and Workforce Development Agency
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