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CSU Bakersfield

Kern Economic Journal

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2016 Second Quarter

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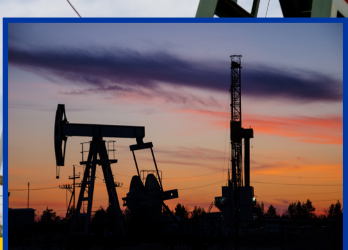

Low Oil Prices and Welfare Programs: The Case of Kern County

The Educational Dilemma Facing Kern County

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KERN ECONOMIC JOURNAL is a quarterly publication (February, May, August, November) of California State University, Bakersfield. Its purpose is to track local trends and analyze regional, national, and global issues that affect the economic well-being of Kern County. The journal provides useful information and data that can help the community make informed economic decisions. Sources of funding for this journal include university contributions and sponsorship and subscription fees.

Editorial and analytical articles on important local, regional, national, and international issues and trends are invited for consideration of publication in the journal. Articles (not exceeding 800 words in length) must be submitted to the Managing Editor in electric copy. Individual authors are responsible for the views and research results.

Contact Information
Dr. Richard S. Gearhart, rgearhart1@csub.edu, 661-654-3962
Dr. Nyakundi M. Michieka, nmichieka@csub.edu, 661-654-2465

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Kern Economic Journal

Inside this Issue:

Economy at a Glance!

2016 Third Quarter
by Dr. Richard S. Gearhart III and
Dr. Nyakundi M. Michieka

National Economy[1]

The United States Gross domestic product grew by 1.4 percent in the third quarter of 2016. Real GDP increased largely because of an increase in consumer spending on services, mainly accounted for by increases in spending on housing, utilities, and healthcare. Spending on durable goods particularly motor vehicles and parts increased. The Bureau of Economic Analysis also reports that exports increased, more specifically foods, feeds, beverages and industrial supplies and materials. Furthermore, private inventory investment increased along with government spending and business investment.

Real disposable personal income, which is adjusted for inflation and taxes, increased by a 2.2 percent in the third quarter of 2016, after increasing 2.1 percent in the second quarter. Increases happened in the later part of the year, as March saw a majority of the increase. In the third quarter, personal saving as a percentage of real disposable income was 5.7 percent which was similar to that in the second quarter. The BEA also reported that prices of energy goods increased while food prices decreased. Overall, gross domestic purchases prices increased 1.8 percent in the third quarter after increasing 2.0 percent in the previous quarter.

The Conference Board's Index of Leading Economic Indicators – a measure of future economic activity – increased slightly, to 124.4 in September of 2016, after falling 0.2 percent in August (and rising by 0.5 percent in July). The Board reports that Housing permits, unemployment insurance claims and the interest rate contributed to the rise of the index in September. Overall, the growth rate suggests that the economy should continue expanding at a moderate rate through to early 2017. On the other hand, the University of Michigan's Consumer Sentiment Index decreased from 93.5 in June 2016 to 87.2 in October 2016. There was month-to-month variation in the outlook, as the index was 90.0 in July of 2016 and 91.2 in September, hinting that economic uncertainty is still a worry.

State Economy[2]

In California, the unemployment rate remained stable at 5.3 percent. Among counties, San Francisco (3.3 percent), Santa Clara (3.8 percent), San Luis

1 U.S. economic numbers were obtained from the Bureau of Economic Analysis "U.S. Economy at a Glance". This is found at http://www.bea.gov/newsreleases/glance.htm. The information for the Index of Leading Economic Indicators is found at https://www.conference-board.org/data/bcicountry.cfm?cid=1. The University of Michigan Consumer Sentiment Index is found at http://www.sca.isr.umich.edu/tables.html.

2 The California economic numbers were obtained from the Bureau of Labor Statistics "Local Area Unemployment Statistics Map". This is found at http://data.bls.gov/map/MapToolServlet.

Obispo (4.2 percent), Orange (4.1 percent), San Diego (4.7 percent), Los Angeles (5.2 percent), had unemployment rates below the state average. In contrast, Sacramento (5.4 percent), Riverside (6.5 percent), San Joaquin (7.5), Fresno (8.3 percent), Kings (8.3 percent), and Kern (9.2 percent) had unemployment rates above the state average. These estimates are similar to those obtained in the last quarter.

The state's civilian labor force gained 159,500 members, where 109,833 secured paying jobs (employed) and 49,700 fewer were left jobless (unemployed). While nonfarm industries hired 89,800 more workers, farming enterprises employed 6,233 fewer workers. A wide range of industries added jobs, including goods producing, manufacturing, information, financial activities, education and health services, leisure and hospitality, and government. However, jobs were lost in mining and logging.

Local Economy

Both employment and unemployment in Bakersfield went up in the third quarter, increasing by 6,500 and 7,967 respectively. The slump in employment in the oil industry continued, with estimates reporting 467 fewer workers in oil and gas extraction drilling, in addition to the 600 reported in the second quarter. Conversely, the construction and manufacturing sectors added jobs, while the service sector experienced a loss of 3,467 jobs after experiencing gains in the second quarter. The service sector may gain jobs in the upcoming holiday season. The arts, entertainment and recreation sector added 100 jobs while the accommodation and food services added 33.

The rate of unemployment ranged from 4.6 percent in Inyokern to 20.1 percent in California City. No city in Kern County experienced an increase in the unemployment rate.

In Bakersfield, 9.8 percent of persons in the labor force are unemployed, which was a 0.6 percent decline in unemployment in the previous quarter. Unemployment rate has been declining since the first quarter of 2016, indicating that the stagnated oil prices have been accompanied by an increase in employment in Kern County. This indicates that despite the losses in employment in the oil and gas sector, other sectors such as the service, manufacturing are increasing employment and not feeling the adverse effects of low oil prices.

The median price of a house in Kern County decreased by $1,147 to $208,583 after reaching 210,000 (the highest since 2008) in the previous quarter. Decreased prices indicate that demand has been decreasing, which is usually the case in the third and fourth quarter of every year. Nonetheless, 3,512 houses were sold in the third quarter, which was 89 houses more than those sold compared to the second quarter. Additionally, 60 less permits for construction of new privately-owned dwelling units were issued this quarter. The overall number of permits has been declining over the last four quarters.

The weighted price index for the five publicly traded companies doing business in Kern County (Sierra Bancorp, Tejon Ranch Company, Chevron Corporation U.S., Granite Construction, and Wells Fargo Company) decreased from 103.1 in the second quarter of 2016 to 100.1 in the third quarter of 2016. The average "close" prices in the third quarter for the "market-movers" was mixed, despite the stagnated oil prices. Chevron and Sierra Bancorp gained 2.2, 0.2 percentage points, respectively, while Tejon, Granite, Wells Fargo experienced a 14.8, 0.9, 3.8 percentage decrease in share prices.

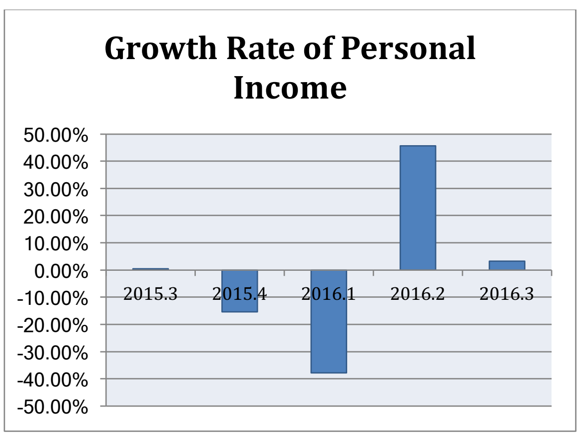
With the continued stagnation in oil prices, gas prices decreased slightly, down $0.15 since the last quarter and averaging $2.74 a gallon. The unit price of California's Class III milk also increased, after a prolonged downswing over the last four quarters. The price rose from $13.12 in the second quarter to $13.81 in the third quarter of 2016. Though the price that farmers received had increased substantially since the fourth quarter of 2015, it was slightly negated by a 4.94 point decrease, dropping from 93.77 to 88.83, inferring that farmers were worse off in the third quarter compared to the second quarter.

Tracking Kern's Economy[1]

by Dr. Richard S. Gearhart III and
Dr. Nyakundi M. Michieka

Growth of Personal Income – Our estimates indicate that Kern County's personal income totaled $32.06 billion in the third quarter of 2016. This amount indicates a 3.24% increase in personal income from the second quarter, or an overall increase in personal income of roughly $250 million. This comes with a price of oil in the mid $40s' and a potential for more layoffs later this year.

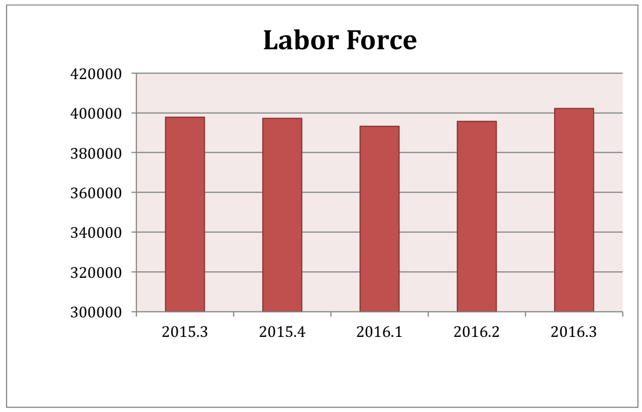
This increase was driven solely by increases in labor income (increasing by $500 million), where falling property income **(decreasing by $10 million)** and business profit income (decreasing by slightly under $250 million) offset the large increases in labor income. Though this speaks to continued cost increases for many businesses (because of water prices and labor prices), these are not being passed through to workers as of yet, and growing diversification in Kern County's economy means that workers are more able to move from sectors where employment is falling (oil) to sectors where employment may be rising over time (service, healthcare).



Labor Market

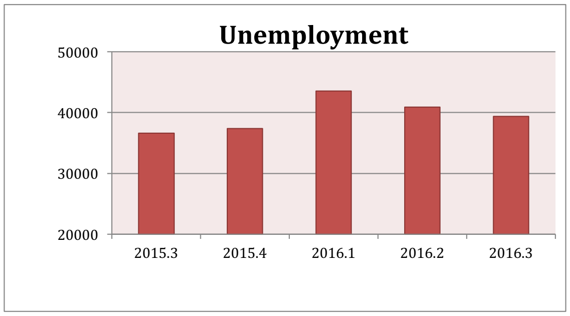
We adjust published data in three ways. Firstly, we averaged monthly data to calculate quarterly data. Secondly, we recalculated quarterly data to take into account workers employed in the "informal" market (i.e., self-employed labor and those who work outside their county of residence). Finally, we adjusted quarterly data for the effects of seasonal variations.

Labor Force - The civilian labor force increased by 6,500 members from 395,633 in the second quarter of 2016 to 402,133 in the third quarter of 2016. More importantly, 4,267 more labor force members were available for work this quarter relative to the third quarter of 2015.

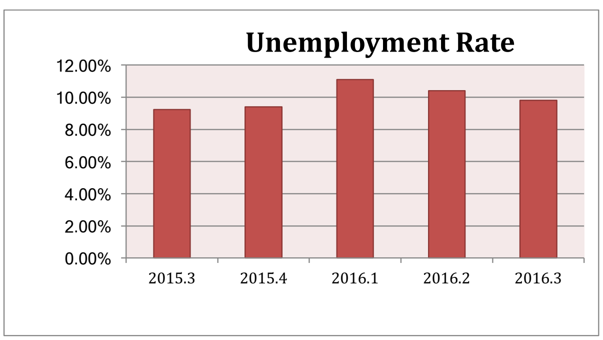


Employment – In the third quarter of 2016, Kern County hired 7,967 more workers as total employment increased from 354,733 in the second quarter of 2016 to 362,700 in the third quarter of 2016. Overall, this indicates that some of the long-term oil impacts may be lessening. The number of added jobs in the second quarter was 5,133 compared to the 7,967 added this quarter. Furthermore, 1,467 more workers are working this quarter than in the third quarter of 2015. However, these employment changes may represent purely seasonal movements in agriculture and service-related industries.

Unemployment – Meanwhile, 1,500 fewer workers were unemployed, as the number of jobless workers decreased from 40,900 to 39,400. Unfortunately, it appears as if unemployment has remained higher than desirable, as 2,800 more workers are unemployed this quarter, as compared to the third quarter of 2016.



Unemployment Rate – Fortunately, Kern County's unemployment rate decreased by 0.6 percentage points, from 10.4 percent to 9.8 percent in the third quarter of 2016. This highlights that Kern County's economy is diversifying away from oil, indicating increased employment in non-oil sectors. However, the unemployment rate still remains high relative to four quarters ago, as it is 0.6 percentage points higher than the third quarter of 2015.



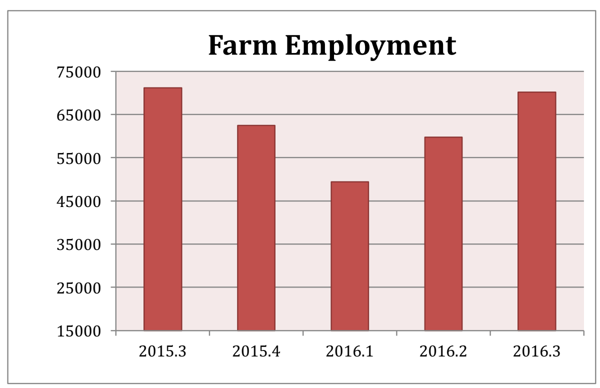
The rate of unemployment varied considerably across cities. Among cities shown below, the unemployment rate varied between 4.6 percent in Inyokern to 20.1 percent in California City. As in the second quarter, no city experienced an increase in the unemployment rate. The largest decreas was experienced by California City, which saw a 2.33-percentage point decrease in the unemployment rate. In Bakersfield, the rate of unemployment was 8.73 percent.

Unemployment Rate of Cities

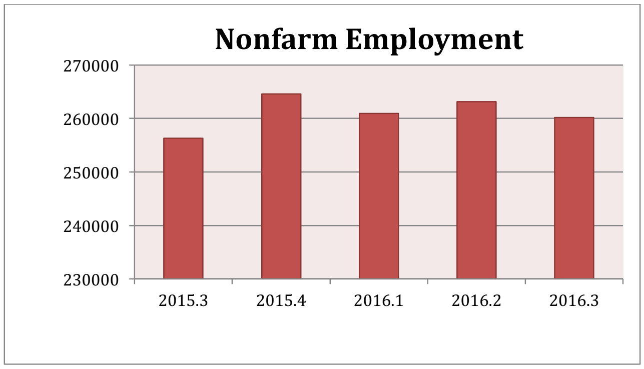
Location	Unemployment Rate (%)	Location	Unemployment Rate (%)
Inyokern	4.6	Bakersfield	8.73
Taft	6.37	Arvin	11.4
Lamont	6.53	Delano	11.73
Ridgecrest	6.6	Oildale	12.63
Tehachapi	7.47	Wasco	12.97
Frazier Park	7.6	McFarland	15.2
Rosamond	8.13	Edwards	17.0
Shafter	8.4	Mojave	17.7
Lake Isabella	8.43	California City	20.1

Note: City-level data are not adjusted for seasonality and "informal" market workers.

Farm Employment – In the third quarter of 2016, Kern County hired 10,467 more farm workers. As a result, farm employment increased from 59,733 to 70,200. Compared to the third quarter of 2015, 933 fewer farmworkers were hired, hinting that the prolonged drought and low oil prices could be exerting influence in the agricultural sector. This large increase in farm employment, however, explains much of the increase in total employment in Kern County, highlighting difficulties when looking at purely aggregated data.



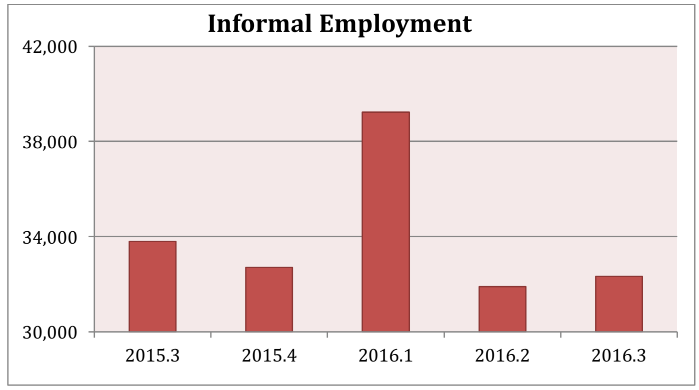
Nonfarm Employment –Local nonfarm industries employed 2,933 less workers this quarter. Hence, the number of nonfarm workers decreased from 263,100 to 260,167. Interestingly, nonfarm industries hired 3,867 more workers than in the third quarter of 2015. This highlights overall growth in Kern County, even with continued drought and oil price pressures.



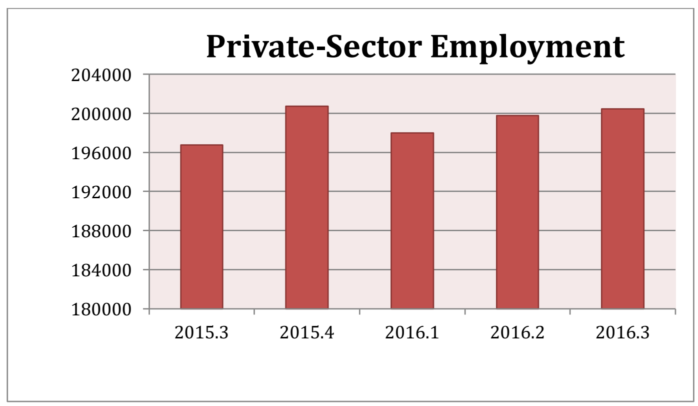
In Bakersfield, total non-farm employment was down 2,933 compared to the second quarter, with the biggest losses felt in oil and gas extraction, where 467 fewer workers were employed in the third quarter of 2016. Meanwhile, the construction and manufacturing sectors added 567 and 133 jobs respectively, while the service sector experienced a loss of 3,467 jobs. The arts, entertainment and recreation sector added 100 jobs while accommodation and food services added 33. This large decrease in the service sector is worrisome, as it may hint that businesses are starting to accommodate increased wage pressures from the new minimum wage law by slight decreases in employment.

Informal Employment - Informal employment is the difference between total employment and industry employment. It accounts for self-employed workers and workers employed outside their county of residence. In the third quarter of 2016, the number of informal workers increased by 433 from 31,900 to 32,333, which is a turnaround from the previous quarter where it was the lowest level since 2003. Similarly, 1,467 fewer informal workers were hired this quarter relative to the third quarter of last year.

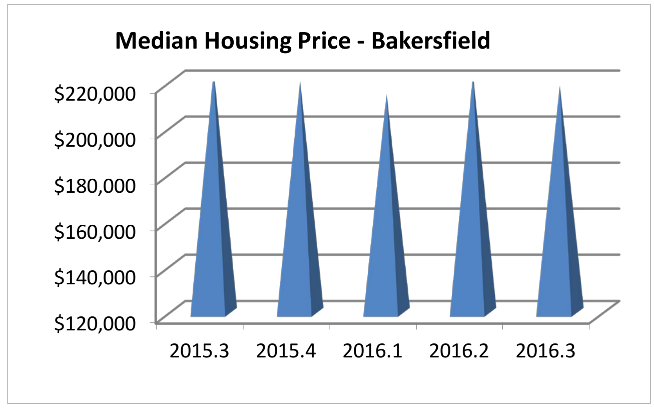
This is a good sign. Growth in jobs in the informal sector jobs indicates that the unemployment rate could be decreasing as workers who cannot get jobs in the formal sector are finding employment, and are still accumulating skills in the labor force.



Private-Sector Employment - Nonfarm employment is comprised of private-sector employment and public-sector employment. In the third quarter of 2016, private companies hired 700 more workers as their employment increased from 199,767 to 200,467. This sector employed 3,700 more workers during this quarter than four quarters ago. This highlights the continued growth of the private sector in Kern County.

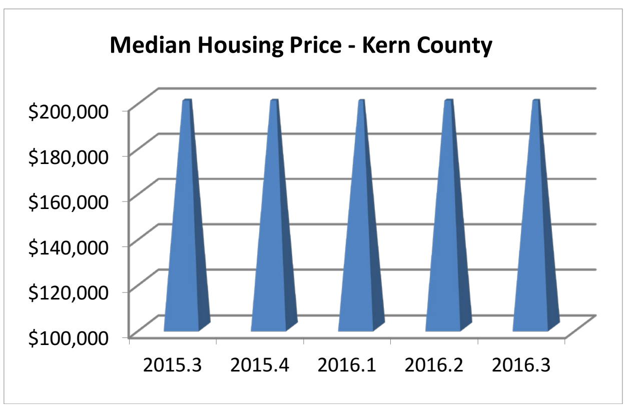


Public-Sector Employment – The public sector consists of federal, state, and local government agencies. The local government labor market includes county and city agencies and public education. In the third quarter of 2016, government agencies employed 3,633 fewer workers as their employment decreased from 63,333 to 59,700. The estimates are very similar to those in the third quarter of 2015, where agencies employed 59,533. These are the lowest estimates in 2016. Overall, public sector employment seems to be well insulated from changes in oil prices in Kern County.



Housing Market

Housing Price - In the third quarter of 2016, Kern County's housing prices decreased by $1,417, which is a drop from the change between the previous two quarters ($12,083). The median sales price for all residential units increased from $210,000 in the second quarter of 2016 to $208,583 in the third quarter of 2016, which is a slight drop from the median price of $210,000 experienced in the second quarter (and highest since 2008).

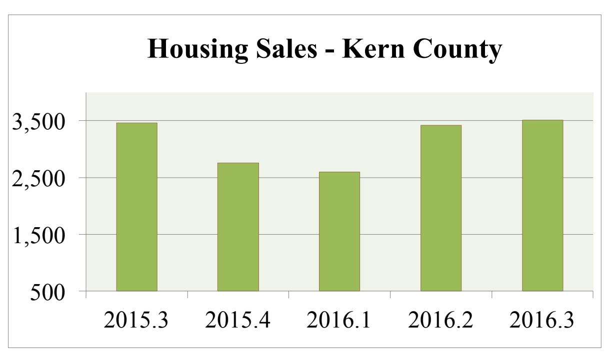


With the continued decline in oil and gas extraction workers this quarter, the median housing price in Bakersfield depreciated by $4,792 or 2.15 percent, from the second quarter of 2016. To date, the city's median sales price has appreciated $6,500 (or 2.9 percent) since the third quarter of 2015.

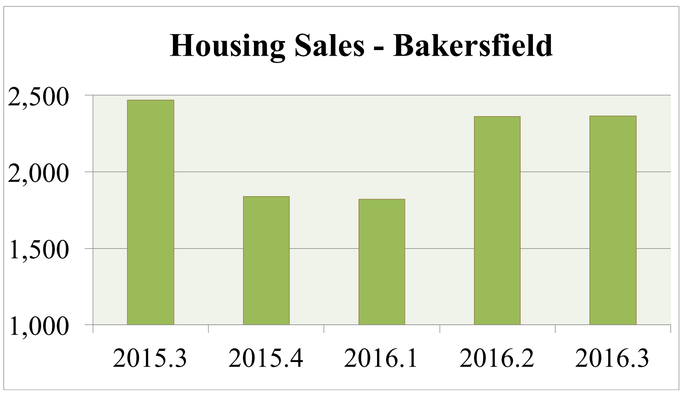
Housing prices varied across the county. Within the previous four quarters (2015 third quarter to 2016 third quarter), the median sales price appreciated in all the major cities of Kern County, except in Bakersfield and Delano, where houses were $6,500 and $11,767 less, respectively. In dollar value, Rosamond had the largest appreciation of $45,083.33. These large annual increases in housing prices in many cities in Kern County likely showcase improved economic activity in neighboring regions.

Location	Median Price 2016.3	Median Price 2015.3	Price Change 2015.3 to 2016.3	% Price Change 2015.3 to 2016.3
Kern County	$208,583.33	$206,000	2,583.33	1.3
Bakersfield	$218,333.33	$224,833	-6,500	-2.9
California City	$115,900	$87,917	27,983.33	31.8
Delano	$164,400	$176,167	11,766.67	-6.7
Ridgecrest	$188,750	$150,417	38,333.33	25.5
Rosamond	$233,750	$188,667	45,083.33	23.9
Taft	$101,750	$99,017	2,733.33	2.6
Tehachapi	$242,500	$223,333	19,166.67	8.6

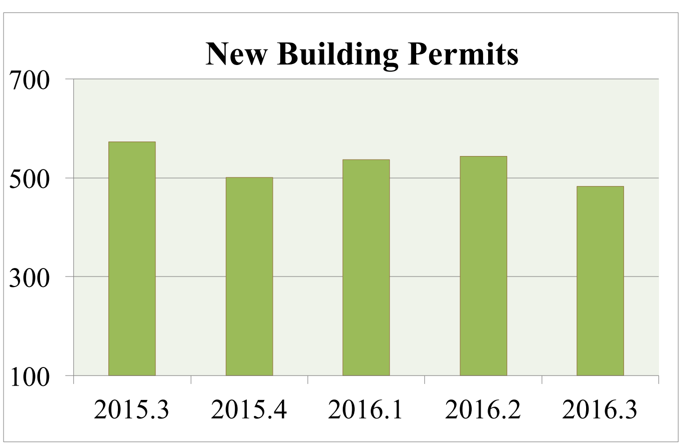
Housing Sales – A total of 89 more houses were sold in the third quarter of 2016 compared to the 827 increase in number sold between the first and second quarter. A total of 3,512 houses were sold, compared to the 3,423 sold in the second quarter. This decrease in the rate of sale of houses may have contributed to the decline in housing prices. Compared to four quarters ago, only 48 more units were sold.



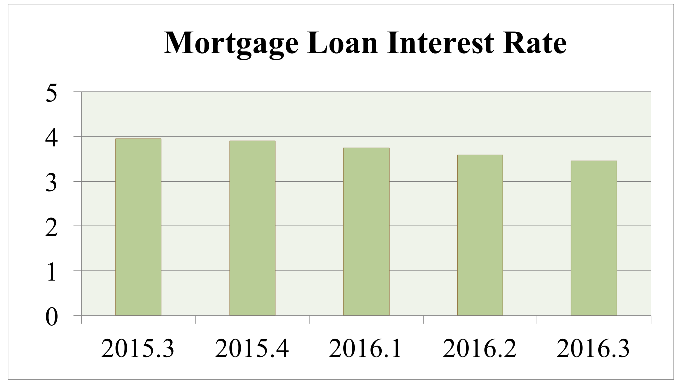
In the second quarter, 2,361 units were sold in Bakersfield compared to the 2,367 sold in the third quarter. Thus only 6 more residential units were purchased in Bakersfield in the third quarter, compared to the second quarter. This number (2,367) is less than the 2,468 units sold in the third quarter of 2015 revealing that 101 less houses were sold this quarter compared to the same quarter in 2015. Historical patterns indicate that sales are set to decline for the next two quarters, then increase in the second and third quarter of 2017. Furthermore, data suggests that housing sales decline during the holiday seasons.



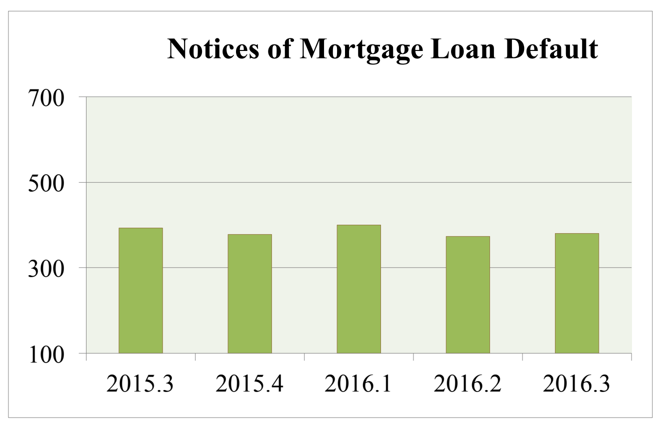
New Building Permits – In the third quarter of 2016, Kern County issued 60 less permits for construction of new privately-owned dwelling units compared to the second quarter of 2016, issuing 483 total permits. The county issued 573 four quarters ago, showing a decrease in new building permits on an annual basis. The data shows that the decline in issuing permits that began after the second quarter of 2015 is continuing.



Mortgage Interest Rate – In the third quarter of 2016, the interest rate on thirty-year conventional mortgage loans decreased from 3.59 percent to 3.45 percent, in the face of continued uncertainty as to whether the Federal Reserve will raise rates. Four quarters ago, the mortgage loan interest rate was 3.95 percent, highlighting that there is a continued decline in interest rates. The interest rates are the lowest we have seen since the third quarter of 2013.



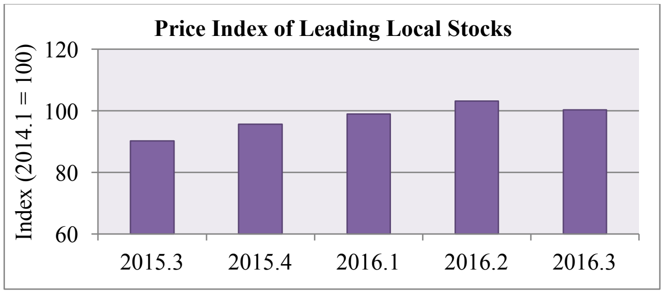
Housing Foreclosure Activity –
The foreclosure activity for the first time increased, following a 10-year overall decrease in foreclosure activity. The number of new foreclosures increased slightly from the second quarter of 2016, to 380 foreclosures compared to 373 in the former period. The number of default notices is 13 units lower than what it was four quarters ago. This is could be a sign of the spillover effects of the decreasing number of workers in the oil and gas sector.



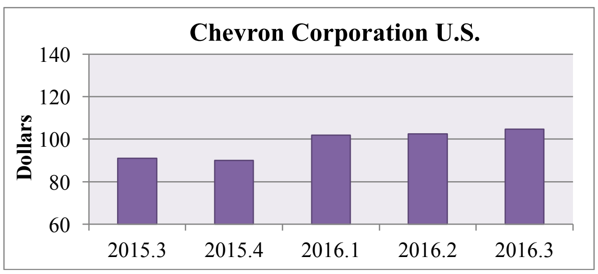
Stock Market

In the third quarter of 2016, the composite price index (2014.1=100) of the five publically traded companies doing business in Kern County went back to its 2014 level – a 2.8 percent decrease (or a decrease from 103.1 to 100.3). The index is 11.3 percentage points higher than that of four quarters ago.

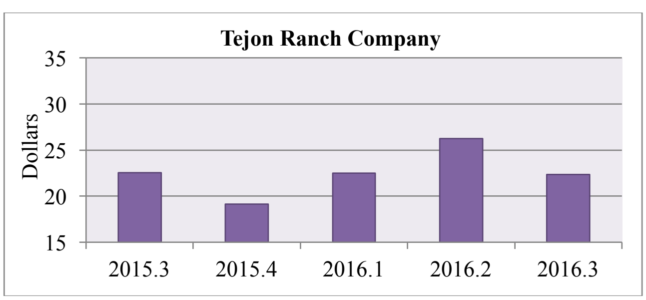
Average "close" prices were measured for five local market-movers: Chevron Corporation U.S., Tejon Ranch Company, Granite Construction, Wells Fargo Company, and Sierra Bancorp.



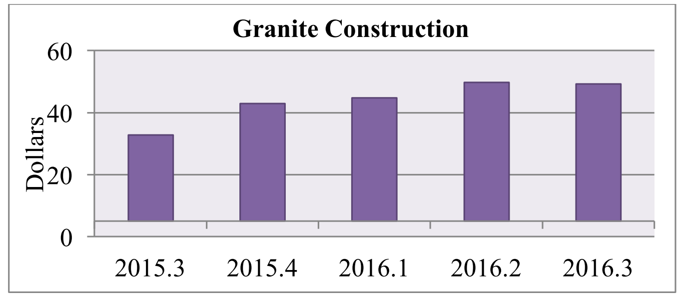
Chevron Corporation U.S.: CVX gained $2.29 (or 2.2 percent) per share as its price increased from $102.47 to $104.76. Relative to the third quarter of 2015, CVX was up $13.84 (or 15.2 percent).



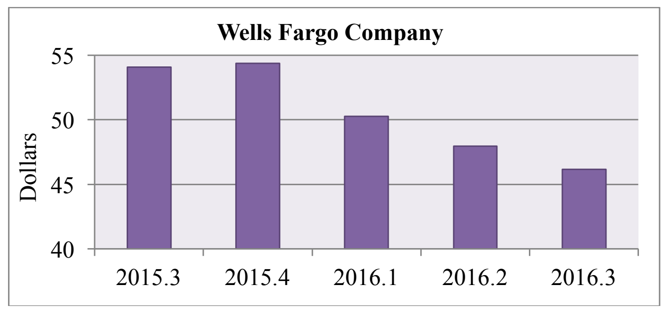
Tejon Ranch Company: TRC lost $3.88 (or 14.8 percent) per share as its stock price increased from $26.23 to $22.35. Similarly, TRC was down $0.18 (or 0.8 percent) relative to the third quarter of 2015.



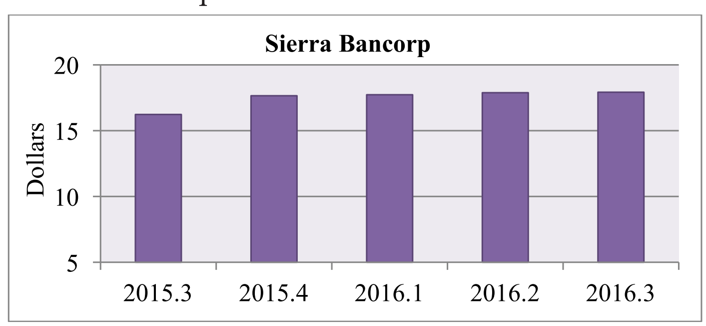
Granite Construction: GVA lost $0.46 (or 0.9 percent) per share as its stock price increased from $49.78 to 49.32. Conversely, GVA has increased $16.50 (or 50.3 percent) since the third quarter of 2015.



Wells Fargo Company: WFC lost $1.81 (or 3.8 percent) per share as its stock price decreased from $47.96 to $46.15. Relative to one year ago, WFC was down $7.93 (or 14.7 percent).

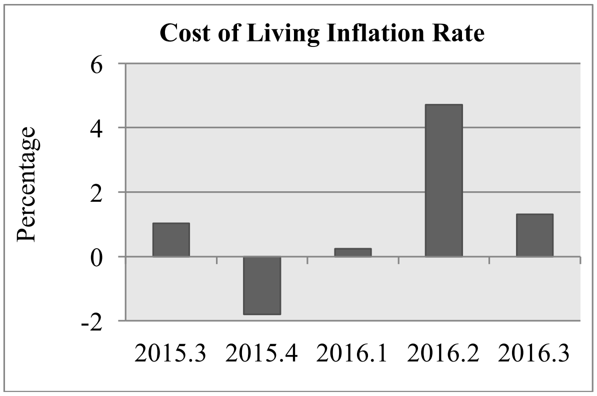


Sierra Bancorp: BSRR gained $0.04 (or 0.2 percent) per share as its price increased from $17.88 to $17.92. Similarly, BSRR has gained $1.71 (or 10.5 percent) since the third quarter of 2015.

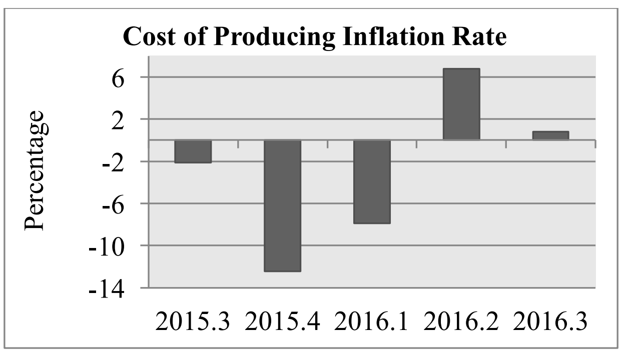


Inflation

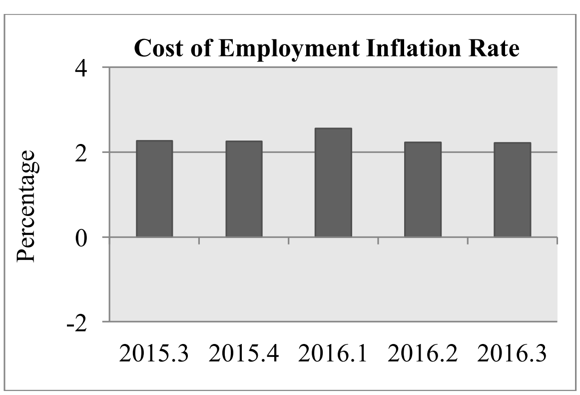
Cost of Living –In the third quarter of 2016, the Consumer Price Index for all urban areas (1982-84 = 100) did not change much, increasing from 240.18 to 240.97. As a result, inflation for the cost of living went up 0.33 percent. The cost of living inflation rate was 1.3 percent last quarter compared to 1.0 percent a year ago.



Cost of Production – The Producer Price Index for all commodities (1982 =100) increased from 185.23 to 185.60. As a result, the cost of production increased at an annual rate of 0.2 percent. The cost of production inflation rate was 0.8 percent last quarter and -2.13 percent four quarters ago.

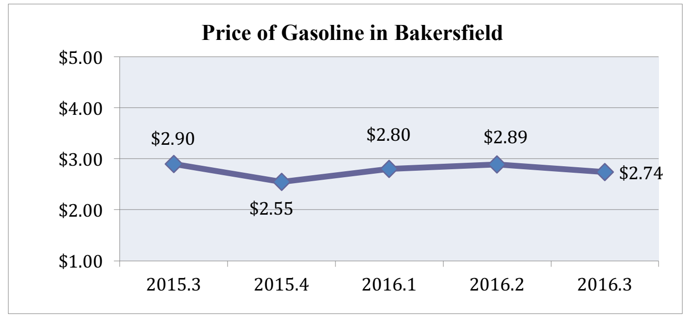


Cost of Employment - The Employment Cost Index (December 2005 = 100) for all civilian workers increased from 126.70 to 127.40. As a result, the cost of employment grew at an annual rate of 2.21 percent. The cost of employment inflation rate was 2.22 percent in the second quarter and 2.26 percent in the third quarter of 2015.

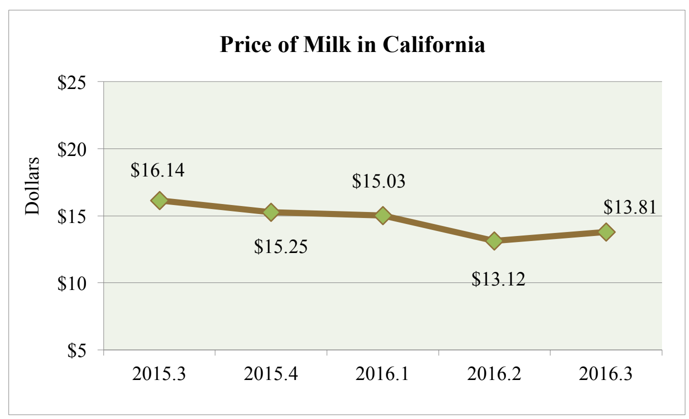


Commodity Prices

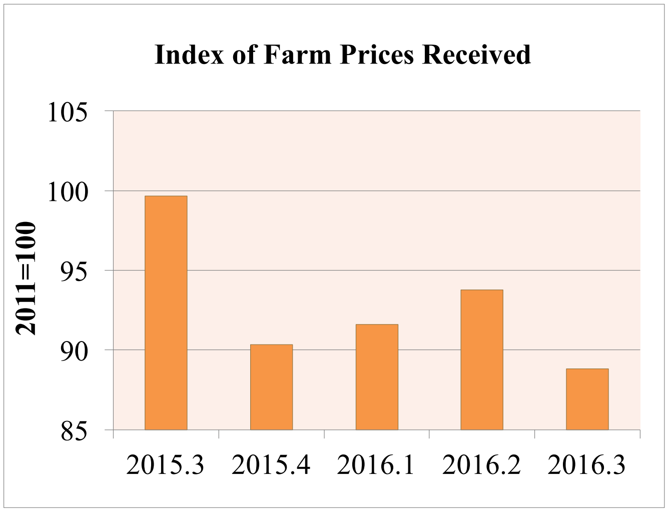
Price of Gasoline - In the Bakersfield metropolitan area, the average retail price of regular gasoline decreased $0.15 per gallon from $2.89 to $2.74. Compared with the third quarter of last year, the average gasoline price was down $0.16 or 5.5 percent.



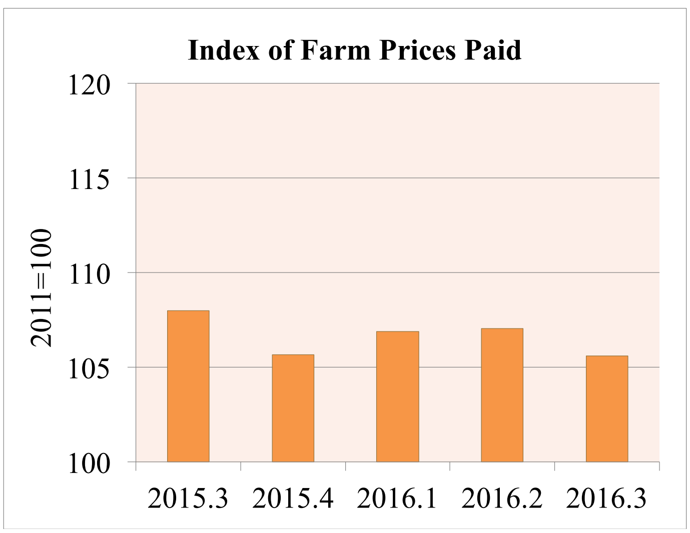
Price of Milk – The unit price of California's Class III milk rose after falling for the last four quarters. Price increased by $0.69, (or 5.3 percent) from $13.12 to $13.81. Prices are where they used to be in the first and second quarter of 2010, before they increased to a high of $22.82 in the third quarter of 2014 and declining thereafter. Prices are 14.4 less compared to last year (or down $2.33).



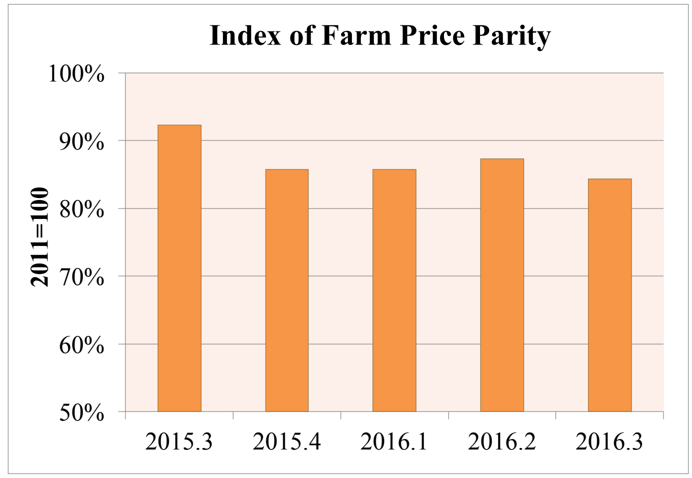
Farm Prices – In the third quarter of 2016, the national Index of Prices Received by Farmers for all farm products (2011 = 100) decreased 4.94 points from 93.77 to 88.83, compared to an index of 99.67 four quarters ago.



Meanwhile, the national Index of Prices Paid by Farmers for commodities, services, interest, taxes, wages, and rents decreased slightly by 1.47 points to reach 105.6. The index was 108 points four quarters ago.



We measure the Index of Farm Price Parity as the ratio Index of Prices Received to the Index of Prices Paid. In the third quarter of 2016, the gap between prices paid and prices received widened slightly, as the Index of Farm Price Parity decreased to 84.3 percent. Four quarters ago, the price ratio was 92.3 percent.



[1] Source - Online databases: labormarketinfo.edd.ca.gov, bakersfieldgasprices.com, dqnews.com, economagic.com, bea.gov, bls.com, gpoaccess.gov, dairy.nu, msn.com, census.gov, kerndata.com, and bry.com

Featured Article:

Low Oil Prices and Welfare Programs: The Case of Kern County

Dr. Nyakundi M. Michieka
Assistant Professor of Economics
California State University, Bakersfield

Introduction

Protracted oil-price decreases are generally accompanied by economic regression, and may have far reaching consequences on the economy. The recent drop in oil prices was accompanied by a 4,000 decrease in employment in the oil and gas industry in Kern County. The industry, which employed 12,400 in June 2014 employed 8,400 persons in August 2016 during which oil prices declined by $61. Studies have shown that one oil job supports 2-3 jobs in non-oil industries. This implies that the job losses experienced in the oil industry, due to low prices, have far-reaching consequences in the labor market, where the unemployment rate could grow due to losses in other industries apart from oil alone. These changes impose costs on programs which, for example, provide a safety net for the unemployed or those with low income. Consequently, changes in oil prices may affect welfare programs which may witness an increase in participation due to low oil prices.

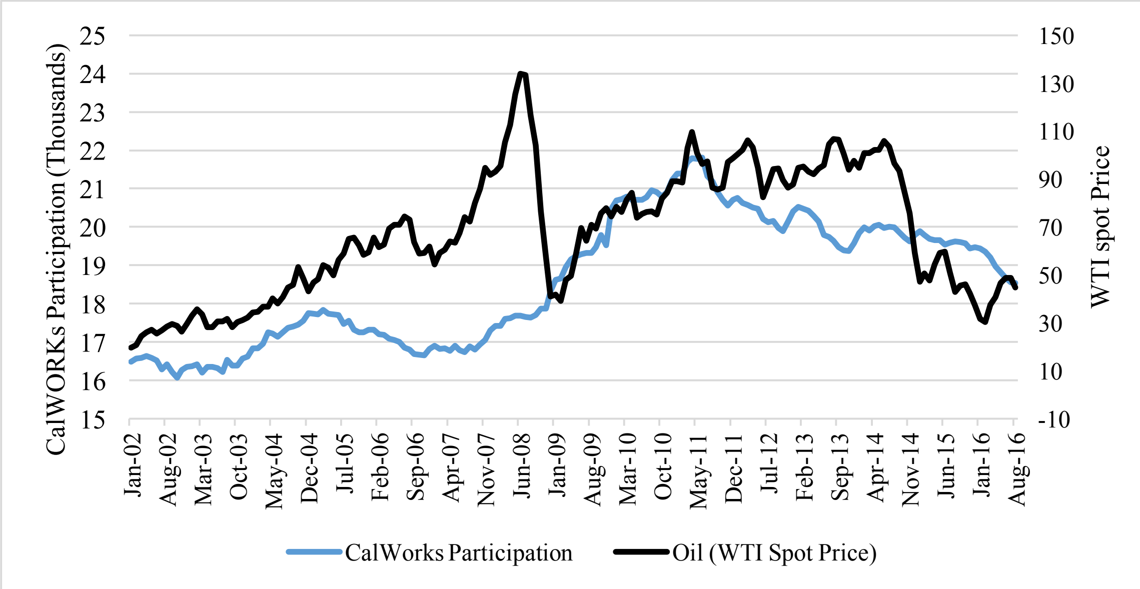
It is against this backdrop that this paper seeks to investigate whether any such connection exists. The analysis is conducted in the following manner: data on welfare programs is collected and analyzed using graphs and a comparison of growth rates. Average growth rates in welfare program participation in the 12 months preceding an oil price decrease are compared to growth rates during the price decrease and after the decrease.

Analysis

This analysis will focus on two welfare programs, CalFresh and CalWORKs. CalFresh, also known as the California Food Assistance Program (CFAP), is a welfare program which offers nutrition assistance to eligible low income individuals and households. Benefits are issued monthly, with food purchased at markets and food stores using an Electronic Benefit Transfer (EBT) card. Federally, the program is referred to as the Supplemental Nutrition Assistance Program (SNAP) (California Department of Social Services 2016). CalWORKs is a welfare program that gives cash aid and services to eligible California families in need. Those eligible to receive help are families with little or no cash needing food, housing, or clothing. Recipients receive money each month to pay for the services (California Department of Social Services 2016).

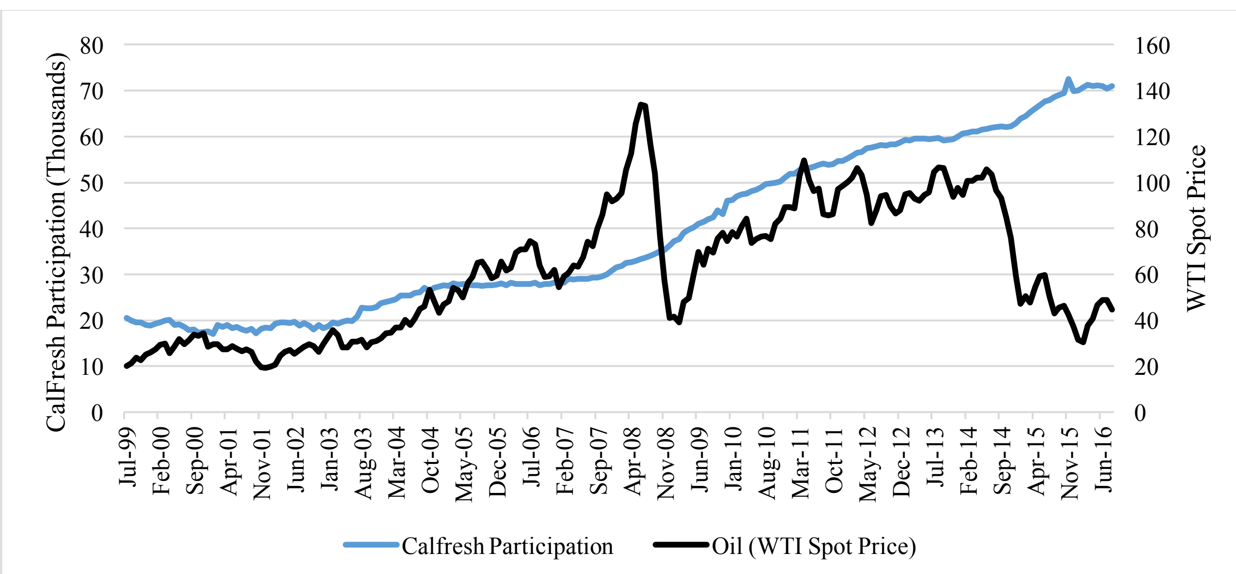
In June 2016, there were 470,121 cases receiving cash grants in California, and 18,666, or 3.9%, in Kern County. Los Angeles County had the most recipients at 147,755 while Alpine County only reported 2 cases. The most recent data reported 18,548 recipients of cash grants in Kern County in August 2016. In August 2016, there were 2,089,008 CalFresh recipients in California, with 70,997 (or 8% of Kern County's population) from Kern. Los Angeles County had the most participants at 555,559. The movements between oil prices and welfare programs is illustrated in figures (1) and (2).

Figure 1: CalWORKs Participation and Oil Prices in Kern County



The period between December 2004 and September 2006 how that CalWORKs participation declined when oil prices increased. The two series increase concomitantly between January 2009 and May 2011 then diverge between May 2011 and November 2014. The spread widens between February 2013 and November 2014. Recently, oil prices and CalWORKs participation have been declining. This implies that the economy is improving with lower participation in Kern have been declining. This decrease in participation implies that Kern County's economy is improving despite the low oil prices. Moreover, CalWORKs participation has been steadily declining since May 2011.

Figure 2: CalFresh Participation and Oil Prices in Kern County



On the other hand, CalFresh participation tends to increase despite swings in oil prices. The rate of participation has been increasing despite the price declines that occurred in late 2008 and mid 2014.

Table 1 illustrates the average rate of growth, 12 months before, 12 months during, and 12 months after a significant oil price decline. Two periods are assessed in this analysis:

	Before	During[1]	After	Before	During[2]	After
Oil Price Change ($)		-64.24			-45.97	
Oil Prices Growth	5.44%	-2.96%	0.92%	0.90%	-3.48%	-1.40%
Average Growth in CalFresh	1.03%	1.69%	1.40%	0.24%	0.73%	0.36%
Average Growth in CalWORKs	0.41%	0.67%	0.58%	-0.08%	-0.20%	-0.37%

[1] June 2008 – July 2009
[2] June 2014 - July 2015

Between June 2008 and July 2009, oil prices dropped by $64.24, or 47.98%, during which the rate of growth in CalFresh and CalWORKs participation increased. The year before oil prices declined (May 2007 – May 2008), growth in CalFresh participation grew at an average of 1.03% before increasing at an average rate of 1.69% between June 2008 and June 2009 as oil prices declined. Subsequently, CalFresh participation growth rate increased at a slower rate between July 2009 and July 2010. A similar scenario was observed in CalWORKs participation with the growth rate increasing at an average of 0.67% during the oil price decline and uptake slowing down following the slump.

During the second oil price decline which began in June 2014, participation in the CalFresh program increased while participation in CalWORKs declined. The rate of CalFresh participation increased during the oil price decline at an average rate of 0.73%. The periods before and after experienced a growth rate of 0.24% and 0.36% respectively. Surprisingly, CalWORKs participation declined during that period. Even more, the rate at which it declined increased during the slump in oil prices. It is important to note that the first period was a recession period which implies that there was a significant decline in economic activity which suppressed employment in other areas.

Conclusion

The analysis presents several interesting findings. First, changes in oil prices exacerbate the rate at which participation is increasing or decreasing in welfare programs. Secondly, the CalFresh participation growth rate in Kern County is more sensitive to changing oil prices than CalWORKs. Figure 1 also illustrates that the participation growth rate in CalWORKs has been on a steady decline since May 2011, indicating that it tends to move with the overall economy.

References

California Department of Social Services (2016). CA 237 CW - CalWORKs Cash Grant Caseload Movement Report http://www.cdss.ca.gov/research/PG281.htm.

California Department of Social Services (2016). DFA 256 - Food Stamp Program Participation and Benefit Issuance Report. http://www.dss.cahwnet.gov/research/PG352.htm.

The Educational Dilemma Facing Kern County

Dr. Richard S. Gearheart
Assistant Professor of Economics
California State University, Bakersfield

An educated, vibrant labor market is vital to the long-term growth and success of any economy. However, Kern County faces a variety of hurdles in terms of the levels and types of education for its domestic workforce. Throughout history, education (in economic parlance, human capital) has been the vital driver for long-term economic growth. In fact, the keys to success for many developed economies have been mandates for primary education provided by the state.

Not only does an educated workforce drive domestic economic growth, as education is positively correlated with productivity, but it attracts new companies to the area to take advantage of the labor force. Silicon Valley thrives because it attracts (and educates) its workforce superbly. Kern County faces a number of issues that will inhibit long-term economic growth unless a paradigm is shifted. These are: (1) a workforce where a substantial minority of individuals have less than a high school education and where college graduates are a small fraction of the workforce; (2) the types of jobs incentivize different types of human capital accumulation (skills and training), rather than education; and (3) critical thinking skills are falling.

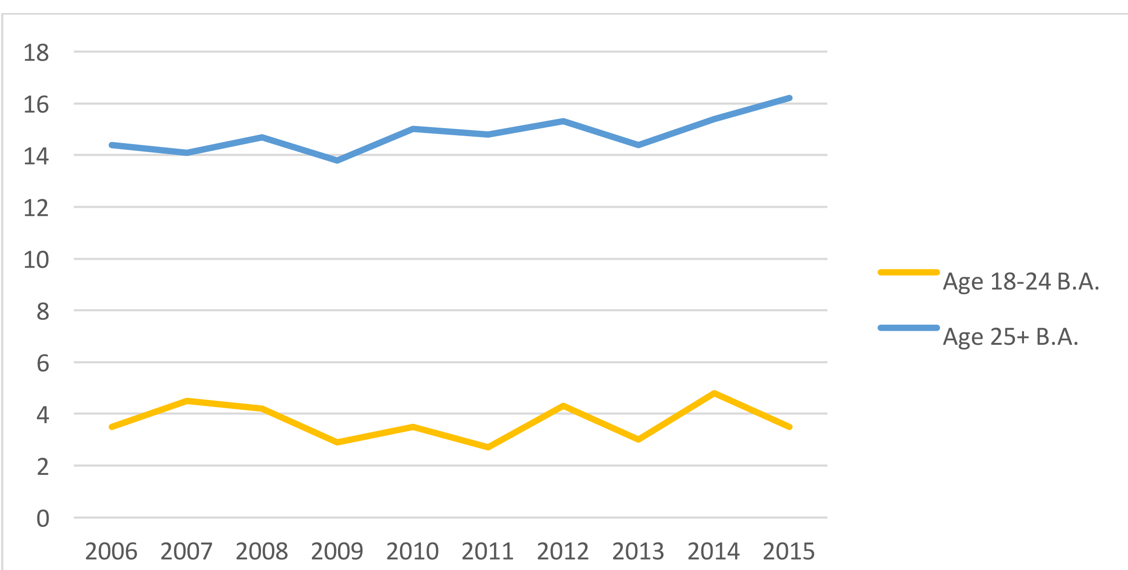
All of these highlight challenges that we will face in the future.

Educational Attainment:

In Kern County, about a quarter of individuals have less than a high school education (nearly half of Hispanics over the age of 25 do not have a high school education). In fact, in 2015, more than 1 in 4 Whites in Kern County do not have a high school diploma (over the age of 25), an increase from 1 in 5 a decade ago.

During this time, though there has been an increase in the fraction of individuals age 25 and above that are earning a Bachelor's degree, as shown in Figure 1 below:

Figure 1: Fraction of Individuals with at Least a B.A.



However, as can be seen, there has been almost no change, in the past decade, of the fraction of individuals aged 18-24 that are graduating with a B.A. One of the issues with this trend is that young individuals who do obtain a B.A. may move elsewhere, outside of Kern County, when they graduate, meaning that the domestic investment in these potential workers is lost to other counties. One thing that does bode well is that these younger individuals may be “boomeranging”; the increase in individuals over the age of 25 with a B.A. may, in fact, be a function of these individuals realizing the benefits of Kern County to raise their families.

Types of Jobs:

Kern County is notable for its prevalence of labor-intensive, traditionally “blue collar” jobs: oil, mining, construction, maintenance, manufacturing, and agriculture. These types of jobs often pay well, especially to youths who have little responsibilities for bills. For instance, the mean hourly wage for all construction workers, in 2015, was $24.33 an hour; an average annual income of $50,606. Derrick operators, in 2015, earned $59,764 on average, while rotary drill operators earned $84,259 on average. Though there are a limited number of these jobs, young individuals often do not see the long-term value of an education, and place much value on immediate (and potentially large) incomes.

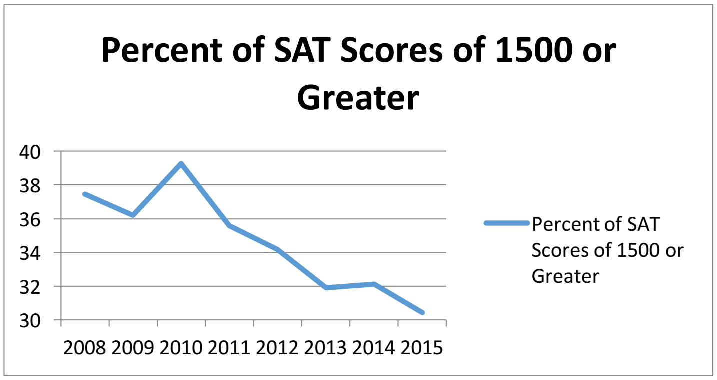
It is imperative to re-focus young individuals on the benefits available to obtaining degrees, skills, or training. In Kern County alone, an individual will earn $1.1 million MORE in lifetime income as a college graduate than a high school graduate. There are tremendous opportunities for STEM students in Kern County, as well as in the banking and financial and healthcare sectors, often that require college degrees (or, at the least, a high school diploma or its equivalent). Refocusing students away from yearning for the shiny new toys that an immediate job can get, we need to focus students on the growth industries where Kern County is currently thriving.
Critical Thinking Skills

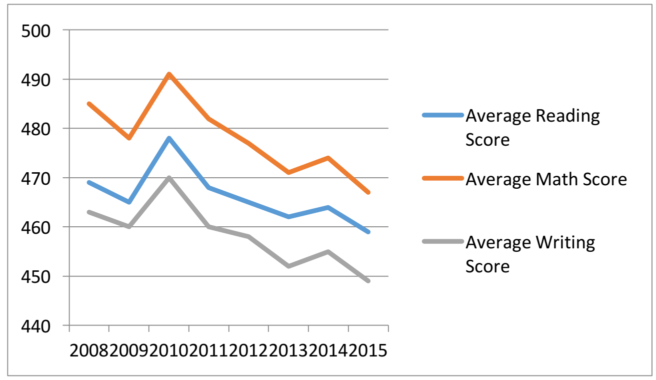
Much angst has been shed regarding “Common Core” standards in public schooling, where many are teaching towards a test, rather than thinking. Many believe that this moves students towards rote memorization of facts rather than understanding ways to think, allowing students to innovate and self-educate.

Unfortunately, tests that do take into account critical thinking, such as the SAT’s have seen a decrease in test scores in Kern County since 2008. As shown in Figure 2, not only have the percentage of tests that score at least

1,500 on the SAT (which is deemed an "acceptable" score) fallen, but each individual component (reading, math, and writing) has fallen as well:

Figure 2: SAT Scores





If we cannot get students to think critically about many vital issues, Kern County will lag in terms of innovation, limiting long-term economic growth.

All of these highlight the tremendous educational issues and opportunities facing Kern County. We start from a lower educational base than many other counties (even comparable ones), but given the unique attributes of Kern County, quality public policy and private nudges can drive economic growth much higher than anticipated. Kern County has in abundance what many other California counties desire: cheap land and motivated workers. We have all the opportunities to succeed spectacularly, but we need to pass on the right message to our children.

NOTE: All data, except for wages and SAT scores, are obtained from the Census American Fact Finder (https://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t). SAT scores were obtained at http://data1.cde.ca.gov/dataquest/.

CSU Bakersfield
School of Business and Public Administration

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