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California Drought Dries Up Agriculture, but Tax Revenues Keep Flowing

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The current, third-year of drought in California (A1 stable) will not have a material adverse affect on the credit profile of the state or on local governments. While the economies of a few, agriculturally-dependent cities and counties will suffer, we do not expect any material deterioration of the finances of those local governments.

» We do not believe the current drought will have a material adverse impact on the state or local governments. However, if the drought persists in its current severity for several years, the state's and local governments' economies and finances would feel the pressure.

» The drought will negatively affect the few local economies heavily reliant on agriculture, but the impact on municipal finances will be limited.

» The drought will not adversely affect the state's credit.

Our analysis of the drought to date factors in the mitigation measures that the state is implementing and efforts that we expect federal, local and state governments, as well as businesses and residents, to take. On the state level, after declaring a drought emergency in January, California Governor Jerry Brown signed a number of new water preservation measures into effect in late April. The April order waives elements of the California Environmental Quality Act and the state water code as California enters its dry, fire-prone summer months. The Governor's May Revision includes an additional $142 million of General Fund spending related to the drought.

Extended duration and greater severity of drought could alter forecast

Our analysis in this report reflects the drought to date. If drought conditions continue for another year or two at the same severity, the state's agriculturally concentrated regions will be highly challenged financially and economically. A persisting drought would make it increasingly difficult for farmers to utilize short-term measures to address water supply issues and could lead to significantly larger losses in farm income and employment. For a city or county with a large agricultural base, a prolonged drought could lead to material revenue losses.

Third year of drought unlikely to impair finances of most local governments

The current drought's economic effects will mainly occur in counties with high concentrations of agricultural production and jobs—mostly in California's Central Valley. In counties less exposed to the agricultural sector, counties may curtail water supplies and increase the price per unit of water, but sufficient supplies will remain to meet most needs and water costs will still be only a modest component of most business and household budgets.

The state's agricultural industry is a modestly sized component of the state's overall economy, thereby limiting its overall impact on the state.

The current drought is also not likely to materially reduce revenues for most cities and counties, even those with agricultural concentration. City and county "general" revenues come primarily from property and sales taxes. Fluctuations in property tax revenues generally lag the economy, and any material declines in property taxes from the drought would not occur immediately. Short-term reductions in farm income and employment likely would not have a significant effect on property tax receipts, although we could see a moderate increase in payment delinquencies. Even with elevated delinquencies, many cities would still not be impacted due to their participation in the Teeter Plan, a program where counties distribute to participating local governments their full property tax levy in exchange for the county receiving any future penalties and interest on the delinquent taxes.

The top five counties by gross agricultural production value accounted for nearly half of the state's agricultural production in 2012 (see Exhibit 1).

EXHIBIT 1

Five counties account for 48% of California's $55 billion in agricultural production

	Issuer Rating/Outlook	Agricultural Production Value, 2012 ($ in billions)	Agricultural Employment as % of Total (2012)[1]	Unemployment Rate (Feb. 2014)	Poverty Rate (2012)
Fresno	Unrated	$6.6	14.5%	13.5%	24.8%
Kern	A1 (Lease Revenue)	$6.2	18.4%	12.5%	22.5%
Tulare	Aa2	$6.2	23.5%	15.1%	24.8%
Monterey	Aa2	$4.1	28.0%	13.1%	16.1%
Merced	Aa3 stable	$3.3	-	16.1%	24.6%
California	A1 stable	$55.4	2.7%	8.5%	15.3%

1 No data available for Merced County in 2012

Sources: Moody's Investors Service, US Bureau of Economic Analysis, CA Department of Food and Agriculture, CA Employment Development Department, US Bureau of Labor Statistics, US Census Bureau

Even in these counties with high agricultural employment concentration, the relatively low proportion of total wages and salaries generated by the agricultural industry will lessen the negative economic effect of the drought (see Exhibit 2). For example, while 28% of Monterey County's employment was in the agricultural sector in 2012, only 7% of total resident earnings came directly from agriculture. Similar relationships exist for other agricultural counties.

EXHIBIT 2

Even in agriculture-centered counties, farm wages and salaries are moderate contributors to total earnings

	2012 Earnings, All Sectors ($000)	2012 Earnings, Farm Sector ($000)	Farm Earnings as % of Total
Merced	4,759,379	798,035	17%
Tulare	8,994,972	1,449,277	16%
Kern	22,173,434	2,192,340	10%
Fresno	21,644,000	1,812,625	8%
Monterey	12,085,650	888,916	7%
California	1,273,106,194	15,397,106	1%

Source: Bureau of Economic Analysis, Moody's Investors Service

Sales taxes are generally a modest share of total general tax revenues generated in agricultural areas. They are, however, vulnerable to near-term declines from reduced agricultural earnings. Again though, agricultural wages and salaries are generally a modest share of a county's total income base, so the sales tax impact is likely to be limited, even in agriculturally concentrated areas. Additionally, state and federal government drought aid, crop insurance payments, unemployment insurance compensation, and public assistance programs will help offset the economic and revenue losses from the drought.

In part due to the lower wages and seasonality of agricultural jobs, the state's agriculturally concentrated counties tend to have high unemployment and poverty rates and lower, average wealth levels, even in the absence of a drought. This third year of drought is unlikely to change the long-term economic outlook for these counties. It will, however, place additional economic pressure on these areas until water supplies return to normal levels.

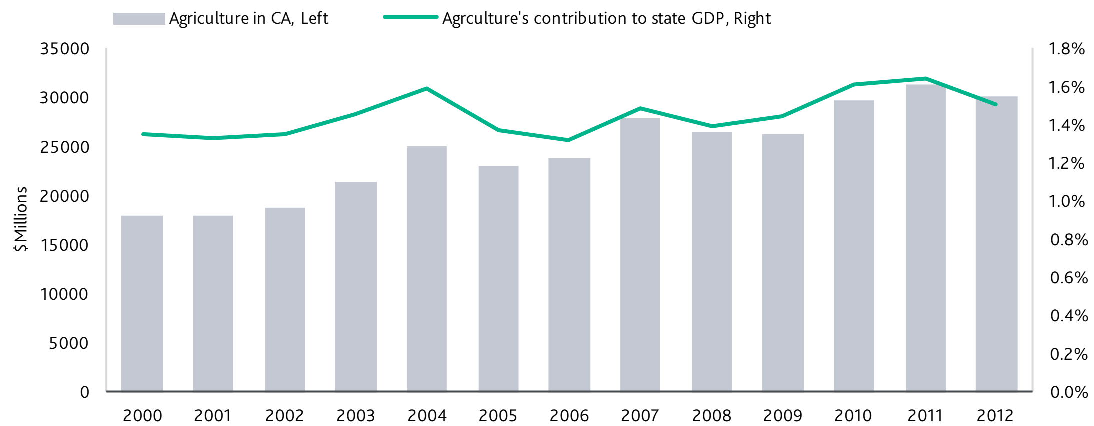
In response to the current water supply issues, farmers are faced with either leaving large portions of farmland fallow, pumping high cost groundwater, if available, or pursuing other supply alternatives, of which there are very few, particularly in the near-term. The increased cost of water will likely result in lower farm income, even if the prices for crops rise. However, as indicated earlier, the lost farm income is not likely to translate into a significant loss of government revenue for cities and counties.

The drought is not likely to hurt the state's economy

Although California is one of the country's largest agricultural regions and accounts for substantial, if not entire, portions of certain crops, the current drought will not weigh heavily on the state's economy because agriculture comprises just a small proportion of the state's total economy. Agriculture contributed 1.5% of the state's GDP in 2012 (see Exhibit 3). The construction industry contributed twice the amount (3%), and the information and high-tech sector contributed 7% to the state's GDP.[1]

EXHIBIT 3

Agriculture contributes less than 2% of California's GDP

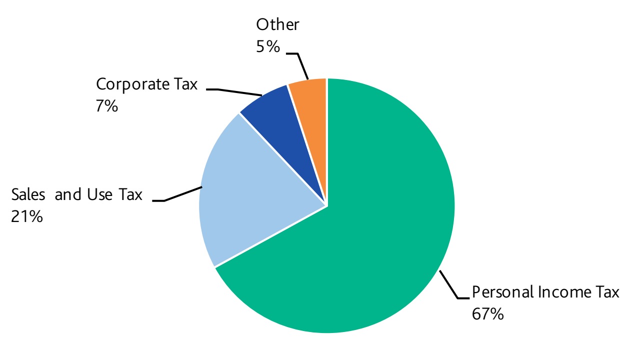


Source: Bureau of Economic Analysis

Agriculture also makes up a very small portion of the state's revenues. Most of the state's revenues come from personal income taxes (see Exhibit 4), and a large portion of the personal income tax revenue depends on bonus payouts and capital gains from stock sales and housing sales. Capital gains taxes alone make up 12% of the state's total revenue (see Exhibit 5). Income in the agriculture sector is relatively low, and the impact of the drought on state revenues is likely to be dwarfed by changes or trends in the finance, housing or technology sectors.

EXHIBIT 4

California revenues are highly reliant on personal income taxes

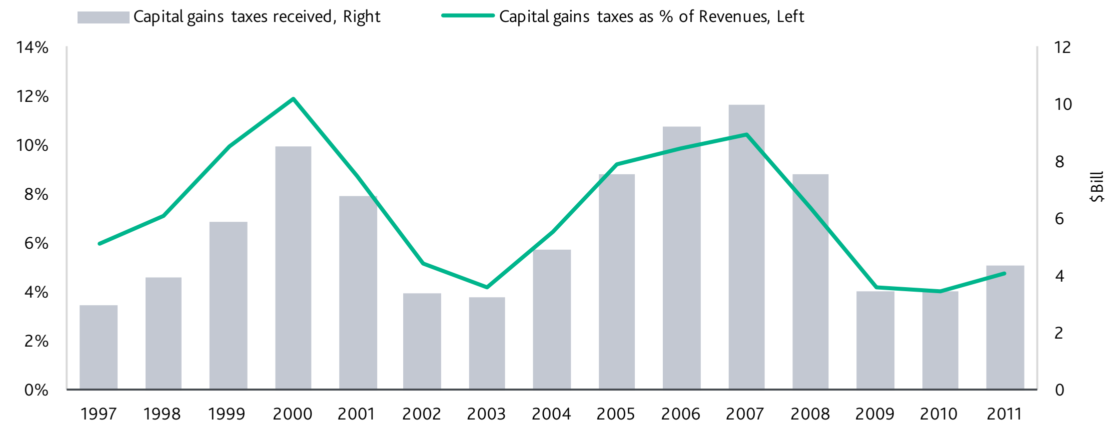


Source: California CAFR, 2013

[1] Source: Bureau of Economic Analysis, 2012 data

EXHIBIT 5

Capital gains taxes make up as much as 12% of CA's revenues



Source: Legislative Analyst's Office

Similarly, the unemployment base of the state should be minimally affected. A University of California at Davis study estimates that the agricultural industry lost 21,000 jobs between 2007 and 2009. While we expect these numbers to be significantly higher in this drought cycle, given its relative severity, elevated job losses would likely still represent a small share of the state's 17.2 million workforce. Even at double the number of lost jobs (42,000), only slightly more than one-quarter of 1% of the labor force would be directly affected.

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