Controller *John Chiang*
California State Controller's Office

June 10, 2013 | Summary Analysis | Volume 7, Issue 6

State Finances in May 2013

May 2013 compared to monthly estimates in the **2013-14 May Revision**	May 2013 monthly totals compared to **May 2012**
Total Revenues: ▲ **$799.1 million (12.4%)**	**Total Revenues:** ▲ **$786.6 million (12.1%)**
Sales Tax: ▲ **$17.8 million (0.6%)**	**Sales Tax:** ▲ **$190.1 million (6.8%)**
Income Tax: ▲ **$596.6 million (20.5%)**	**Income Tax:** ▲ **$532.6 million (17.9%)**
Corporate Tax: ▲ **$22.6 million (8.4%)**	**Corporate Tax:** ▲ **$40.3 million (16.1%)**

Local Governments Highly Dependent Upon State, Federal Revenues

Public finance specialists sometimes refer to "local fiscal capacity" as a way of measuring the discretion a local governing board exercises over its budget. "Capacity" is said to be the difference between locally-owned sources of revenues and local spending. A 2010 study by two Stanford researchers compared

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What the Numbers Tell Us

May was a good month for the State's fiscal coffers, with revenues coming in well ahead of the estimates contained in the Governor's revised budget released last month. All three of the state's principal revenue sources exceeded expectations and total General Fund revenues surpassed projections by close to $800 million or 12.4%. (See accompanying table and Figure 1.)

California's Department of Finance had reduced its estimates of May personal income taxes with the belief that there would be a reduction in total wages because of higher payroll taxes and higher refunds. Actual tax payments on personal income surpassed estimates by nearly $600 million, or 20.5%. Estimated taxes, payments on final returns, and withholdings all exceeded estimates, while refunds were much smaller than expected.

Corporate taxes beat estimates by about $23 million, or 8.4%, despite expectations that various tax credits and legal rulings would dampen receipts. Retail sales taxes were only about $18 million, or 0.6%, above

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What the Numbers Tell Us

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projections, although they were 6.8% higher than the prior year.

Note that the monthly dollar variances versus the May revised budget shown on the previous page match the dollar variances indicated in Table 1 since the revised budget estimates included all of the months through April.

The better-than-expected revenue performance last month reflects the underlying improvement of California's economy with a moderate but generally widespread resuscitation in the job market, a resurgence in housing, and solid advances in the technology sector. However, we caution against reading too much into May's numbers since this month typically accounts for only 7% of the total year's receipts. June's figures will be much more telling since that is a time when the state typically receives a large influx of tax receipts. Using May revision projections, June's 2013 projected revenues of $11.9 billion are 12.2% of the total $98.1 billion anticipated for the 2012-13 fiscal year.

May disbursements exceeded expectations by $678 million, or 15.8%, primarily because of a $1 billion General Fund loan to the Medi-Cal Providers Interim Payment Fund, which has temporarily assumed funding for this program to localities. State operations funding was also higher than anticipated, especially for State universities and colleges. The overage in total tax receipts still exceeded that in total spending, causing the 11-month surplus of receipts over disbursements to reach about $6.3 billion. This was $186 million above the forecasts made last month.

May marked the second consecutive month that the state did not have to borrow from internal sources, although it still owes $7.5 billion in revenue anticipation notes (RANs) to external creditors. As we enter the final month of California's fiscal 2012-13 year, we have seen the positive effects of the economy's revival and the effects of voter-approved tax increases on the State's financial picture. June will provide critical information as to the sustainability of that respite.

Figure 1: May Receipts Exceed Latest Estimates
Percent Variance Over Governor's Revised Budget

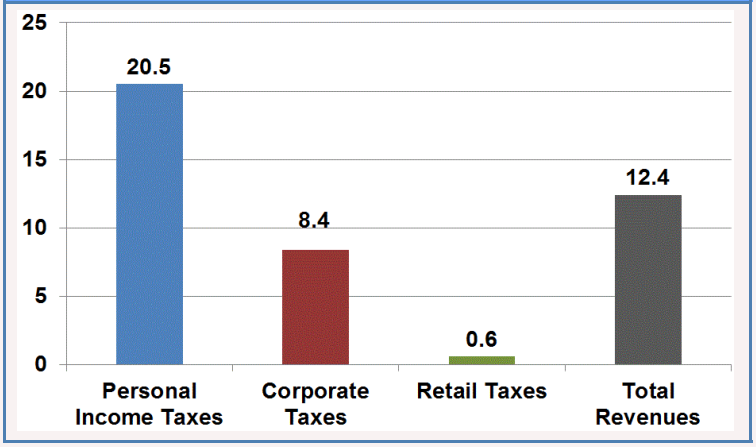

Table 1: General Fund Receipts

July 1, 2012 – May 31, 2013 (in Millions)

Revenue Source	Actual Revenues	2013-14 Governor's May Revision		2011-12 Year-To-Date	
		Estimate	Actual Over (Under)	Actual	Actual Over (Under)
Corporation Tax	$5,507.9	$5,485.3	$22.6	$6,387.1	($879.2)
Personal Income Tax	$59,285	$58,688.4	$596.6	$43,784.7	$15,500.3
Retail Sales and Use Tax	$18,023.2	$18,005.4	$17.8	$17,657.1	$366.1
Other Revenues	$4,137.9	$3,975.7	$162.2	$4,264.4	($126.6)
Total General Fund Revenue	**$86,954**	**$86,154.8**	**$799.1**	**$72,093.3**	**$14,860.7**
Non-Revenue	$2,966.8	$2,902.1	$64.7	$3,882.3	($915.6)
Total General Fund Receipts	$89,920.7	$89,057	$863.8	$75,975.6	$13,945.1

Local Governments Highly Dependent Upon State, Federal Revenues

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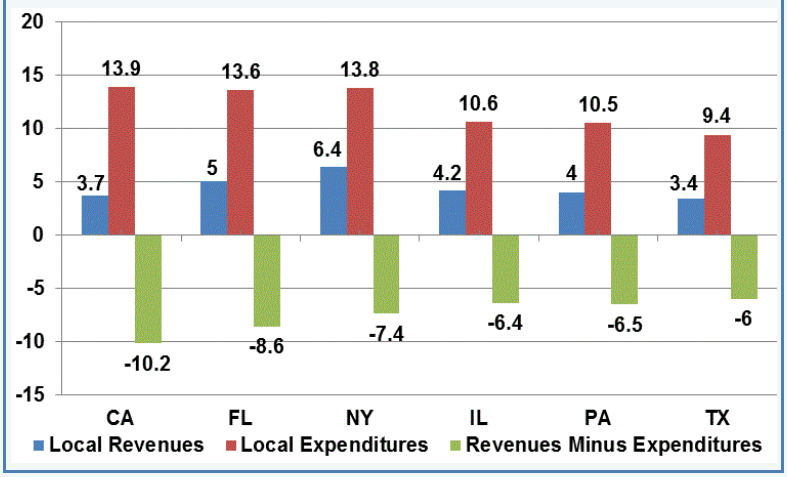
the fiscal capacity of California's local governments with Texas, New York, Florida, Pennsylvania and Illinois. They found that California's governments had significantly lower fiscal capacity than any of the comparison states.

To draw this conclusion, the study used U.S. Census data to first estimate how much local governments spent in each state. To facilitate cross-state comparisons, the researchers indexed the spending to the state's economy, as measured by gross domestic product (GDP). They found that the six states spent between 9.4 percent and 13.9 percent of GDP. Of the six states, local governments in Florida, New York and California had the highest percentage (between 13.7 percent and 13.9 percent). Texas had the lowest spending ratio (9.4 percent). See Figure 2 for a display of local spending.

Figure 2: Comparison of Local Revenues and Expenditures
(By Major State As Percent of 2008 GDP)



The study then measured local revenues. Revenues ranged from lows of 3.4 percent in Texas and 3.7 percent in California to a high of 6.4 percent in New York. The authors noted that state-by-state percentages show that all local governments spent more than they generated within their municipal boundaries. What is striking is the magnitude of the difference between local revenues and expenditures among states. A larger difference implies, according to the Stanford researchers, a greater dependence on sources of other government revenues for managing local budgets.

The difference between expenditures and revenues by state, displayed in Figure 2, show California's local governments to be more dependent on state or federal revenue, with the variance between expenditure and revenue exceeding 10 percent of the state's GDP. Florida has the next highest difference, at about 8.6 percent. Using this measure, California's local governments have significantly less fiscal discretion than municipalities in other states.

Table 2: General Fund Disbursements

July 1, 2012 – May 31, 2013 (in Millions)

Recipient	Actual Disbursements	2013-14 Governor's May Revision		2011-12 Year-To-Date	
		Estimates	Actual Over (Under)	Actual	Actual Over (Under)
Local Assistance	$59,860	$60,184.6	($324.6)	$62,548.8	($2,688.8)
State Operations	$22,062.7	$22,005.9	$56.9	$22,384.1	($321.4)
Other	$1,659.5	$713.5	$946	($133.8)	$1,793.3
Total Disbursements	**$83,582.2**	**$82,904**	**$678.2**	**$84,799.1**	**($1,216.9)**

California Economic Snapshot

New Car Registrations	**358,635** First Quarter 2012	**403,658** First Quarter 2013
Median Home Price (for Single-Family Homes)	**$264,000** In April 2012	**$324,000** In April 2013
Single-Family Home Sales (New and Resale, Houses and Condos)	**38,241** In April 2012	**39,051** In April 2013
New Monthly Mortgage Payment	**$1,010** In April 2012	**$1,157** In April 2013
Payroll Employment (Total Civilian)	**16,508,000** In April 2012	**16,951, 000** In April 2013
Newly Permitted Residential (Single and Multifamily) Units	**3,314** In April 2013	**7,589** In April 2013

Data Sources: New Car Dealers Association, DataQuick, California Employment Development Department, Census Bureau

Incentive-Based Groundwater Conservation Programs May Have Unintended Results

C.-Y. Cynthia Lin, University of California at Davis

The management of groundwater resources is an issue that reaches far and wide; regions around the world are struggling with ways to reign in extraction from aquifers that have been deemed over-exploited, and many of the world's most productive agricultural basins depend almost exclusively on groundwater.

The food we eat, the farmers who produce that food, and the local economies supporting that production are all affected by the availability of groundwater. Worldwide, about 70 percent of water extracted or diverted for consumptive use goes to agriculture, but in many groundwater basins, this proportion can be as high as 95 to 99 percent.

Many of the world's most productive agricultural basins depend on groundwater and have experienced declines in water table levels. In many places, policymakers have attempted to decrease rates of extraction through incentive-based measures. These policies are implemented under the auspices that they will decrease the total consumptive use of groundwater, a key goal of water managers, and are in response to declining aquifer levels that are occurring due to extensive groundwater pumping for irrigation.

Voluntary, incentive-based water conservation programs for irrigated agriculture are often billed as policies where everyone gains. They are politically feasible, farmers are able to install or upgrade their irrigation systems at a reduced cost, resulting in substantial increases in profits, less groundwater is "wasted" through runoff, evaporation, or drift, marginal lands can be profitably retired, and farmers can choose whether to participate. However, such policies can have unintended, even perverse, consequences.

Recent work by my former Ph.D. student Lisa Pfeiffer and I suggests that policies of encouraging the adoption of more efficient irrigation technology may not have the intended effect. Irrigation is said to be "productivity enhancing," meaning it allows the production of higher value crops on previously marginal land. Thus, a policy of subsidizing more efficient irrigation technology can induce a shift away from dry-land crops to irrigated crops. They may also induce the planting of more water-intensive crops on already irrigated land, as by definition, more efficient irrigation increases the amount of water the crop receives per unit extracted.

A similar story emerges when one considers land retirement programs. An example of a land retirement program is the Conservation Reserve Program (CRP) created by the federal government in 1985 to "provide technical and financial assistance to eligible farmers and ranchers to address soil, water, and related natural resource concerns

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The opinions in this article are presented in the spirit of spurring discussion and reflect those of the authors and not necessarily the Controller or his office.

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on their lands in an environmentally beneficial and cost-effective manner." These programs include payments to landowners to retire, leave fallow, or plant non-irrigated crops on their land. Such programs operate on an offer-based contract between the landowner and the coordinating government agency. The contractual relationship is subject to asymmetric information, and adverse selection may arise because the landowner has better information about the opportunity cost of supplying the environmental amenity than does the conservation agent. There is substantial evidence that farmers enroll their least productive, least intensively farmed lands in the programs while receiving payments higher than their opportunity costs, thus accruing rents. It is quite unlikely that an irrigated parcel, which requires considerable investment in a system of irrigation (which, in turn, enhances the productivity of the parcel), will be among a farmer's plots with the lowest opportunity cost and thus enrolled in the program. Enrolling a non-irrigated plot in the CRP program will not have any effect on the amount of irrigation water extracted.

In our study, we focus on incentive-based groundwater conservation policies in Kansas and find that measures taken by the state of Kansas to subsidize a shift toward more efficient irrigation systems have not been effective in reducing groundwater extraction. The subsidized shift toward more efficient irrigation systems has in fact increased extraction through a shift in cropping patterns. Better irrigation systems allow more water-intensive crops to be produced at a higher marginal profit. The farmer has an incentive to both increase irrigated acreage and produce more water-intensive crops. Similarly, land and water conservation and retirement programs have done little to reduce groundwater extraction, although billed as such. Theoretically, we know that because the programs are offer-based, farmers will enroll their least productive land. Our empirical results support this conclusion; we find essentially no effect of land conservation programs on groundwater pumping, which occurs, by definition, on irrigated, and thus, very productive land.

When designing policies, policy-makers need to be wary of any unintended results. Incentive-based groundwater conservation programs are a prime example of a well-meaning policy that may have bad consequences, for they may actually increase rather than decrease groundwater extraction.

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