

Global Credit Portal® RatingsDirect®

June 11, 2012

Anatomy Of A State Budget Deficit: California's \$15.7 Billion Problem

Primary Credit Analyst:

Gabriel Petek, CFA, San Francisco (1) 415-371-5042; gabriel_petek@standardandpoors.com

Secondary Contact:

Dave G Hitchcock, New York (1) 212-438-2022; david_hitchcock@standardandpoors.com

Table Of Contents

Current Deficit Has One-Time And Structural Components

The Tax Structure Is Outdated

Will The Governor's Tax Initiative Mend The Misalignment?

Pension And Retiree Health Care Liabilities Could Lead to Long-Term Fiscal Pressure

Policymakers' Near-To-Medium Term Decisions Affect Future Revenue Health

Notes

Anatomy Of A State Budget Deficit: California's \$15.7 Billion Problem

Although California has a 13% share of the national economy, its budget shortfall represents about 30% of the total deficits faced by the states for the upcoming fiscal year. Unlike the federal government, it is legally required to balance its budget each year when it enacts its spending plan. But a legal mandate alone does not ensure budgetary balance. Even after making large cuts in 2011, California lawmakers are now working to simultaneously close the deficit that emerged mid-fiscal year in 2012 and the state-projected deficit for fiscal year 2013. Together, these amount to a projected budget gap of \$15.7 billion. Even for the largest state in the nation, Standard & Poor's Ratings Services thinks the magnitude of California's budget deficit stands out.

Overview

- California faces a \$15.7 billion combined budget deficit going into fiscal year 2013.
- Revenue has been growing slowly and has become more volatile.
- Spending as a share of the economy is lower than at any time in the past 39 years.
- We believe the state's budget problems can ultimately be traced to a tax system that hasn't kept up with changes in the economy.

California's current budget dilemma is nothing new. In fact, in our view, whether the state has had a genuinely balanced budget at any point in the past decade or more is debatable. But despite California's recurring budget problems being the subject of considerable news and analytic coverage, we believe their origins are not well understood.

A complex maze of constitutional and statutory provisions governing California's budget process seems to contribute to misconceptions about the state's finances, in our view. Some observers blame the state's fiscal morass on over-spending, large pension and retirement liabilities, or an excessive tax burden, which theoretically could weaken its economic climate. Whether the state's handling of these areas is appropriate public policy is different from the question of whether the state's approach in these areas contributed to its current fiscal position. As for the state's broader credit quality, we see a long-term source of credit pressure coming from retirement liabilities. But, in our view, retirement liabilities have contributed little if anything to California's current budget problems. Spending and taxes relative to the state's economy also do not appear to be causing the recent fiscal imbalance when viewed over the past several decades. Instead, we find that revenue generated by the state's tax system has been growing at a slower rate in recent decades while becoming more volatile. During the same years, the general fund has become the source of payment for an increasing share of the state's educational system as a result of a variety of direct and indirect changes in state law. In our view, it is mostly through these expansions of the general fund's scope of funding responsibility, which we consider particularly inflexible, that spending has contributed to fiscal imbalance. This being said, the reality of California's budgetary framework and revenue outlook suggests to us that significant additional—and, in our view, achievable--spending cuts will be necessary for budgetary balance to occur in fiscal year 2013.

California's consistent inability to balance its budget has, in our view, material credit implications that go beyond the struggle to comply with its constitutional mandate. We believe the state's cash flow crises in recent years are

most illustrative of this. However, notwithstanding the periodic liquidity shortfalls in California, budget balance is far from the sole determinant of credit ratings for U.S. states. Even when faced with rapidly declining revenue collection trends, such as in fiscal year 2009 as a result of the Great Recession, credit quality among the states has, in our view, generally proved to be very resilient. This remains true despite numerous examples of states struggling with fiscal imbalance for extended periods. Many states retain what we consider strong or even very strong credit quality, and 48 states' debt ratings are in the 'AA' category or higher, not least because they enjoy sovereign status in a number of areas important to fiscal policy. Notably, states can increase taxes and cut back on spending in order to create the budget capacity to fund debt service or other obligations. We believe that states facing budget deficits find these same kinds of adjustments are generally necessary to restore fiscal balance--unless they realize higher-than-expected revenue growth. Implementing fiscal austerity, however, often involves difficult policy decisions. We believe that making such decisions also usually requires that a requisite number of lawmakers have the political will to take actions that may be at odds with the positions taken by various stakeholders in the process.

California's constitution requires a supermajority (two-thirds) agreement among legislators to increase taxes or to make cuts to significant areas of the budget. Reaching this level of consensus has proved an increasingly difficult threshold in recent budget cycles. These institutional impediments to fiscal management weaken our view of the state's credit profile and are key contributors to the state's relatively low rating.

At times, we have seen political difficulties concerning the budget contribute to situations in which the state has had insufficient cash to fund all of its obligations. Yet other factors, such as the legal priority given to debt service, proactive cash management, the structure of California's debt maturity profile--including an absence of swaps or excessive variable rate debt exposure and its vast economic base--help to partially offset the weaker budget performance and governmental framework factors. The stronger factors in the state's overall credit profile, therefore, help preserve our view that the state has a strong capacity to repay its debt according to its terms, which is reflected in our 'A-' general obligation bond rating. California's rating is low, however, among the states and reflects our view that its budgetary performance--one of the five broad analytic factors we consider in evaluating state credit quality--is especially weak.

Current Deficit Has One-Time And Structural Components

While California's constitution requires lawmakers to enact a balanced budget, it does not also require that the state end the fiscal year in budgetary balance. However, any imbalance that emerges within the fiscal year and is not eliminated before the year ends must be resolved in the budget that gets enacted for the ensuing fiscal year. As fiscal year 2013 approaches, this carry-in, or accumulated deficit, contributes \$7.6 billion to California's total projected \$15.7 billion budget deficit. The remaining \$8.1 billion shortfall is the state's structural deficit. The Department of Finance (DOF) measures the state's recurring, or structural budget deficit, as spending that is both required by existing law and in excess of projected revenues.

In May, the DOF announced that the state's projected budget deficit through the end of fiscal year 2013 grew by \$6.5 billion compared with its January estimate. The DOF attributes \$4.3 billion of the increased deficit to reduced anticipated revenues relative to the revenue forecast put forward by the governor in January 2012. Another \$2.4 billion is from the automatic increase in state spending for education pursuant to Proposition 98 given the projected percentage change in revenues between fiscal years 2012 and 2013. About \$1.7 billion is due to cuts that had been signed into law but were subsequently blocked by federal administrators or courts. The combined \$8.4 billion

increase in the projected deficit was then partially offset by \$1.9 billion due to lower-than-expected caseloads.

The DOF's dissection of the deficit and the Legislative Analyst's Office's (LAO) view is that \$7.6 billion, or 48% of the total budget shortfall, represents a previously accumulated deficit from fiscal year 2012. The LAO describes this portion of the state's fiscal gap as inherently one-time in nature, warranting the use of nonrecurring, deficit-closing measures for this portion of the budget solutions. This interpretation is consistent with our view, and we estimate that, of the governor's total deficit-closing proposals, 51% are recurring.

Three years after the Great Recession technically ended, California's economy remains depressed and its revenue recovery sluggish. Sustained high unemployment and low tax collection have put pressure on both the revenue and spending side of the budget. One result of a difficult economic and political environment is that, in the end, not all of the enacted solutions for fiscal year 2012 were realized as savings. The mid-fiscal year deficit that emerged in 2012 was not especially surprising to us and, in fact, not long after the state's budget was enacted, we identified about \$8.3 billion in measures that we believed were at risk of failing to perform as assumed (see the note analysis on California published Sept. 1, 2011 on RatingsDirect on the Global Credit Portal). However, the fact that portions of the deficit solutions faltered for a variety of reasons does not negate the remaining structural progress achieved in the budget. According to the state, \$10.5 billion of the \$16.0 billion in cuts made last year were ongoing. We estimate that absent those cuts (net of those that have been rejected by the federal administrators or the courts), the state currently would be facing a shortfall of almost \$25 billion, similar to the \$27 billion gap it confronted last year.

The Tax Structure Is Outdated

The deficits of the past two years fail to adequately characterize California's deeper fiscal problems, however. In our view, these can be traced to a dysfunctional tax revenue system. Total tax revenues generated by the state's tax regime are volatile and insufficient for its current level of spending. But we don't see the state's existing spending level as the key source of its budget distress. In fact, the state is currently spending less as a share of its economy than it has at any point in the past 39 years. Furthermore, the problems with California's tax structure have only become worse in the past 12 to 14 years.

During the past several decades, but especially since the 1990s, California's economy evolved to one more heavily based on services rather than retail sales. But the overall system of taxation has remained largely unchanged. The sales and use tax (SUT) continues to apply only to tangible consumer goods and ignores services, despite the fundamentally different economy. The SUT, therefore, levies no tax on transactions in the state's more rapidly growing service economy. Furthermore, the rise of internet shopping has eroded the SUT revenue yielded by the remaining retail segment of the economy. Instead, the state's ability to reap additional tax revenue from any economic value generated in the service and intellectual capital sectors, such as high technology, hinges on whether these activities result in increased taxpayer incomes. The net effect of these changes is that the state's general fund has come to rely more on personal income tax (PIT) revenues and, correspondingly, less on its SUT revenues (see chart 1).

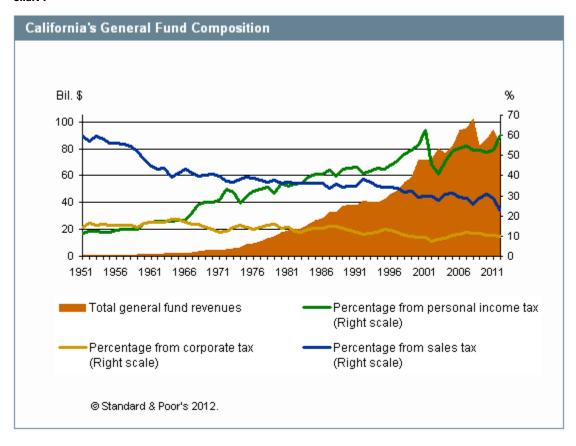
Total personal income on which the PIT is levied has also become much more concentrated among the state's highest earners, reflecting broader socio-economic trends observed nationally as well as the particularly high incomes earned in the high technology and some service sectors. As of 2010, the portion of total adjusted gross income accounted for by the top 1% of PIT filers had more than doubled to 21.3% from the 8.8% earned by the

top 1.05% of PIT filers in the 1979 tax year.(1) We can infer from these data that in 2010, when the PIT accounted for 51.5% of total general fund revenue, the state relied on the top 1% of taxpayers for 11% of general fund revenues. In 1979, the top 1.05% of taxpayers funded just 2.7% of general fund revenue.

The governor's revised budget proposal for fiscal year 2013 would rely on PIT for 63% of total general fund revenue. Applying the recent income distribution rates would imply that the portion of total general fund revenue from the top 1% of income earners would increase in fiscal 2013 to 13% or more. Sales and use tax, as a source of revenue, has moved in the other direction: it would equal 22% of general fund revenues in fiscal year 2013 (assuming the one-fourth cent SUT increase sought by the governor), down from 38% in 1979.

Economic benefits from the high-technology sector also appear to us to come at the cost of strikingly higher revenue volatility, which coincided with the dot-com booom in the late 1990s. That period, followed by bubble conditions in the housing market, led to a surge of capital gains as a share of income in the state. Windfall revenues from surging capital gains income are unpredictable, but as the state has lurched from one budget crisis to the next, lawmakers have typically spent these gains on recurring expenses. Income tax revenue from capital gains as a share of general fund revenues ranged from 3.0% to 14.8% between 2000 and 2010. In his revised budget proposal, the governor reduced the forecast for capital gains income and assumes essentially no growth in the equity markets for the duration of the calendar year. Although the tempered outlook could make the new revenue forecast more accurate, compared with earlier forecasts, it now includes additional revenue assumed from the recent Facebook initial public offering (IPO). The Facebook-related revenue in the forecast boosts state revenues by \$1.5 billion to \$1.9 billion, contingent on the outcome of the November 2012 tax initiative. But this revenue is also subject to capital market uncertainties. While setting aside any such revenue in a reserve may comport with a theoretical best practice, we believe that the politics of doing so might be impractical if it required spending cuts beyond those already deemed severe by policymakers. On balance, California's software and biotechnology fields attract significant investment, including, for the fourth year in a row, more venture capital investment than all other states combined. Therefore, we believe the high-technology sector benefits the state's long-term credit quality, but the greater reliance on high-income earners that it brings exposes the general fund to the vagaries of the capital markets.

Chart 1



The state's tax system is yielding relatively less revenue

The numbers suggest to us that, at least in recent years, California's deficits are the result of a deficient revenue system more than excessive spending. Spending trends have generally remained contained in our view even as voters and policymakers, especially through a key executive action in 2003, have expanded the scope of general fund responsibility for funding public sector services during the past three decades.

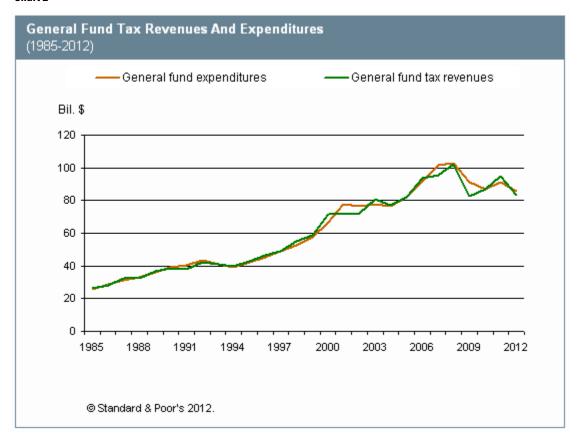
In our view, three generalizations that make California's revenue structure less amenable to keeping its books balanced characterize its revenue performance since around 1950:

- Tax revenue growth has consistently slowed over time;
- As a share of total income earned in the state, the tax structure yields a declining share of tax revenue; and
- Annual changes in state tax revenue are increasingly volatile.

Average annual state tax revenue growth from 1950 through fiscal year 2012 is 8.24%. But the average rate of growth since 1985 is lower, at 4.37%, and lower still, at 1.21% when measured since 2000. And the declining revenue growth rates are not just a function of a more slowly growing economy although the pace of annual increases of total personal income is also decelerating. Overall, between 1951 and 2012, total personal income growth averaged 7.53% but is much slower, on average, in recent years. Since 2000, personal income growth has only averaged 3.76% per year, which is down from an average of 5.26% since 1985. Against this more slowly expanding tax base, the tax system is yielding relatively less revenue. Since 2000, annual general fund tax revenues have averaged 5.84% of personal income compared with 5.92% in the span between 1985 and 2012.

Tax revenue trends have also become significantly more volatile. The standard deviation of the annual rate of change in general fund tax revenue since 1950 through fiscal year 2012 is 8.59%. However, since 1985 and since 2000, the standard deviation has increased to 9.01% and 10.79%, respectively. A systematic decoupling of revenue and spending trends beginning in the late 1990s, around the time of the rise of the dot-com industry, is evident visually, but can also be verified statistically (see chart 2).

Chart 2



Our calculations of the coefficient of variation (a statistical measure that normalizes dispersion relative to the mean for a series of data) show that the variability of annual revenue growth has increased substantially--especially since 2000 (see table). On a mean-adjusted basis, the annual revenue growth trends have been almost 8.6 times as volatile since 2000 than when measured over the entire period from 1951 through 2012. Revenue trends are more than 4.3 times as volatile since 2000 than from 1985 through 2012 overall.

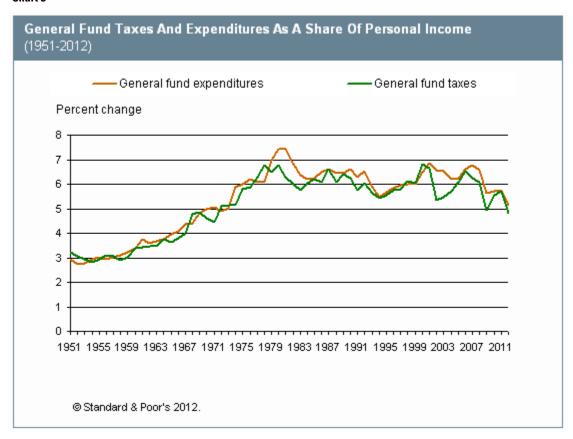
California's Expenditure And Revenue Growth						
	Compound annual growth rate (%)	Standard deviation	Coefficient of variation			
General fund tax revenues						
Average annual growth (1951-2012)	8.24	8.59	1.04			
Average annual growth (1985-2012)	4.37	9.01	2.06			
Average annual growth (2000-2012)	1.21	10.79	8.92			
General fund expenditures						
Average annual growth (1951-2012)	8.52	7.70	0.90			

California's Expenditure And Revenue Growth (cont.)				
Average annual growth (1985-2012)	4.57	7.12	1.56	
Average annual growth (2000-2012)	2.16	8.31	3.85	

General fund spending growth has somewhat outpaced revenue growth, increasing at a rate of 8.52% per year, on average, since fiscal year 1951. However, similar to the revenue pattern, the average annual growth rate has been steadily declining. Measured since 1985 and since 2000, general fund spending increases have averaged 4.57% and 2.16%, respectively. State spending as a share of total personal income is 5.35% when measured since 1951 whereas in 2012, spending is at 5.13% according to DOF estimates.

The noticeable upward shift in general fund revenue and spending as a share of total personal income in the late 1970s reflects Proposition 13, which voters passed in 1978, which consolidated the funding for more public sector services at the state level (see chart 3). Because of this, general fund spending is higher, on average at 6.20% of total spending since 1985, in a post-Proposition 13 setting. When measured since 2001, state spending as a share of personal income is somewhat higher still, at 6.24%, partially reflecting the recession-driven contraction of the state economy in 2009, which caused personal income to decline that year. The somewhat higher spending rate in recent years also reflects that, in 2003, the general fund burden for funding education expanded further when the then-governor lowered the motor vehicle license fee (MVLF) rate.

Chart 3



Frequent budget adjustments and policy changes that shift responsibility for various functions among the levels of

government complicate assessing state spending trends. In fiscal 2001, formula-driven recurring spending on education increased in response to the strong revenue growth in 2000 and 2001. Large one-time outlays in fiscal year 2001 (primarily for capital projects) increased spending that year above the trend line. Conversely, in the aftermath of the early 1990s recession, the state reduced general fund spending by redirecting some local property tax revenues to schools at the expense of other local agencies. Similarly, facing large budget deficits in fiscal year 2010, the state achieved considerable one-time general fund relief through a voter-approved borrowing of local funds. The latter of these examples reduced general fund spending for that fiscal year, but actually increased the state's liabilities and did not do anything to reduce the structural level of state spending.

Most recently, general fund spending in fiscal year 2012 was curtailed by 6.1% to its lowest level compared with any time since fiscal year 1973: 5.13% of the state's total income. However, even this spending reduction was insufficient to bring about budget balance. In part, this is because tax revenues as estimated by the DOF equal just 4.84% of total personal income in 2012, lower than in any year since 1971. Compared with general fund spending adjustments in other years, however, most of the 2012 cutbacks were structural. And while the governor's revised budget proposal for fiscal year 2013 would have general fund spending grow by 5.6%, a significant portion of the higher spending level is due to the liability generated in 2009 when the state essentially debt-financed part of its fiscal year 2010 budget deficit. Were it not for the repayment of this debt and if the increase in education funding were allowed to be held flat, the general fund spending, as proposed, would decline by 2.8% in fiscal year 2013.

From a practical standpoint, cutting spending is not straightforward for approximately two-thirds of the state's budget. One result of this is that in recent years cuts have tended to concentrate heavily in areas that lack legal protection or that have fewer federal consent requirements. Among these are the state's higher education system and its welfare program (CalWORKs). Part of the governor's strategy includes realigning to county governments the delivery of some health and human service programs and public safety functions that the counties can fulfill at a lower cost than the state. Although the governor's tax initiative would constitutionally protect the shifting some state general fund revenue (\$5.9 billion in fiscal year 2013) to the local governments, in addition to the operational efficiencies, it also achieves state savings by lowering the revenue base used for the required education funding calculation. Legislation that dissolved the state's local redevelopment agencies also eliminated the general fund's subsidization of their activities. The DOF estimates around \$1.8 billion in general fund savings as a result of this change, although the LAO has warned that it believes the actual general fund benefit could be up to \$900 million less.

Will The Governor's Tax Initiative Mend The Misalignment?

The governor's tax initiative is an emergency measure of sorts. Even assuming voters approve the tax increase, the governor projects that general fund revenues in fiscal year 2013 would be 6.7% below the peak they reached five years earlier, in fiscal year 2008. Before accounting for any of the governor's revenue proposals that would accrue back to fiscal year 2012, general fund revenue, at \$83.2 billion for the current year, is on track to be almost 19% below what it was five years ago. And, while they have not fixed the state's fiscal alignment, lawmakers have responded to the weak revenue environment with what we consider to be aggressive spending reductions. The DOF's fiscal year 2012 estimate of general fund spending of \$87.6 billion, before enactment of any of the governor's currently proposed cuts, is 15% below spending in 2008 on a budgetary basis. While these outright spending cuts have been insufficient to bring about budgetary balance, they stand in stark contrast to the state's earlier spending trajectory. In the fall of 2008, the LAO projected that general fund spending was on course to surpass \$117 billion

in fiscal year 2012--which would have been 25% higher than what the DOF now estimates the state will actually spend. Nor has spending shifted to other non-general funds. Total state spending from all funds was above 8% in 1990 and 2000 compared with 7.9% (estimated by the DOF) for fiscal year 2012. This is even as the state has grappled with the upward pressures on social service-related spending brought on by the Great Recession, only a portion of which was covered by the now-expired federal stimulus funds. The spending reduction would be somewhat larger still if the legislature were to enact the cuts included in the governor's revised spending plan.

The governor's tax initiative would temporarily increase income tax rates on the state's high-income earners and would raise the statewide SUT by one-fourth of a cent. Most of the projected revenue increase (93%) would come from the higher income taxes. By boosting total tax revenues, the governor's initiative would alleviate to some degree the budget pressure from the slowing revenue growth. On the other hand, by relying on high-income earners that generate a greater share of their overall income from capital gains, the tax initiative would likely exaggerate the volatility of the state's revenue base. To the extent policymakers used any breathing space afforded by the additional temporary revenue to pursue structural tax reforms, we think the tax initiative could ultimately be beneficial to the state's credit quality. If no reforms were undertaken during this period, the underlying deficit would presumably reemerge once the temporary tax rates expire. Under this scenario, we believe any general fund relief derived from the temporary tax increase could wind up being a missed opportunity.

The DOF projects that through fiscal year 2013 there would be about \$5.6 billion of benefit to the general fund if voters approve the governor's tax initiative--after netting out the constitutionally required increase in funding for education brought about by the higher revenue base. In our view, the amount of anticipated general fund benefit from the tax increase, should it be approved, is significant because it approximates the amount of the recurring structural fiscal deficit that was locked into place in 2003. Shortly after assuming office, then-Governor Arnold Schwarzenegger rescinded the restoration of the state's 2% MVLF rate that had been put into effect several months prior. In so doing, the governor lowered the MVLF rate back to 0.65% and with it, the level of MVLF revenue that flowed to local governments. A redirection of property taxes in lieu of MVLF revenue subsequently replaced local governments' lost revenue. This diversion of property taxes automatically increases the state general fund contribution for education as mandated by the constitution under Proposition 98. The state estimates that this will cost the general fund \$6 billion in fiscal year 2013.

A greater portion of overall governmental services in California, in this case for education, are thus funded from the volatile PIT instead of the relatively more stable property tax revenue.

Pension And Retiree Health Care Liabilities Could Lead to Long-Term Fiscal Pressure

The state's pension liabilities, while large, contribute little if anything to its current budget predicament. This should not be interpreted to mean that we do not consider these liabilities in the state's debt ratings, however. Indeed, the state's debt and liability profile score encompasses our views of the state's management of both pension and other postemployment benefit (OPEB) liabilities and is an important input to the state's rating. But, as in almost all cases, these liabilities represent long-term credit factors.

California's pensions are a negative credit factor especially to the extent that the state regularly underfunds, on an actuarial basis, one of its two major pension systems (the California State Teachers' Retirement System, CalSTRS). The systematic underfunding of CalSTRS is a byproduct of the state's statutory funding formula. Increasing the

annual contributions would result in additional budgetary strain to the state's general fund but would strengthen the CalSTRS' long-term solvency. However, the CalSTRS board projects that it will have sufficient assets to pay benefits for "... at least the next 30 years..." (2) So, in view of the state's more pressing fiscal imbalances that have immediate policy and cash flow implications, we believe insufficient political will exists to alter the state's funding practices regarding these liabilities.

Similarly, the state's growing and actuarially unfunded OPEB liability negatively affects its debt and liability score under our rating methodology. Although we consider current contributions for pension and OPEBs to be manageable on a budgetary basis, we view the state's practice of regularly underfunding these liabilities from an actuarial perspective as potentially leading to increased longer-term fiscal problems. Overall, we believe it is important to recognize these liabilities as a source of long term credit pressure of relatively little consequence to the current year budget problem.

Policymakers' Near-To-Medium Term Decisions Affect Future Revenue Health

California is in a difficult fiscal situation. In our view, its revenue system has structural problems, but the urgency of its budget and cash situation necessitate that policymakers focus their attention on making spending cuts. Apart from a resurgent economic-driven change, we believe that the only realistic near-term potential for increased tax revenues under consideration is the governor's tax initiative, which would exaggerate the state's revenue reliance on a portion of the taxpayer base we already consider concentrated. The automatic trigger cuts in the governor's budget proposal are important to the fiscal year 2013 budget because voters won't decide on the temporary tax increase until after the start of the fiscal year. And, even if they are approved, the bulk of the increased revenue won't be realized until later in the fiscal year, which contributes to our expectation that the state may seek a larger intrayear cash flow borrowing for 2013 than in prior years.

These caveats notwithstanding, we believe the recent structural progress is real. Depending on actual economic performance relative to forecast and despite noting some policy differences compared with the DOF's calculation of the Proposition 98 funding requirement for education, the LAO recently confirmed its view that the state has a realistic chance to achieve structural budget balance within a few years.

We anticipate the state's credit quality being linked to the decisions of policymakers in the near-to-medium term. In the near term, structural improvements to the state's fiscal alignment made in 2011 offer potential for incremental credit quality strengthening, in our view. But we believe that, for the adjustments to pay off in this way, more progress is necessary given the still very large baseline budget gaps. If voters approve the governor's tax initiative, fiscal pressure will be somewhat less severe while the temporary increase in tax rates is in effect. We believe this scenario open a window of opportunity for policymakers to address the deeper structural flaws with the state's revenue system.

Notes

- (1) California Franchise Tax Board. Revenue Estimating Exhibits (May 2012), Exhibit A-10, p. 3 and the 1980 California Franchise Tax Board Annual Report, p. 36.
- (2) CalSTRS. "Comprehensive Funding Strategy History of Board Discussions About the Unfunded Actuarial Obligation (Funding Gap)."

Copyright © 2012 by Standard & Poor's Financial Services LLC. All rights reserved.

No content (including ratings, credit-related analyses and data, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of Standard & Poor's Financial Services LLC or its affiliates (collectively, S&P). The Content shall not be used for any unlawful or unauthorized purposes. S&P and any third-party providers, as well as their directors, officers, shareholders, employees or agents (collectively S&P Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Parties are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, for the results obtained from the use of the Content, or for the security or maintenance of any data input by the user. The Content is provided on an "as is" basis. S&P PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED, OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Parties be liable to any party for any direct, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related and other analyses, including ratings, and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact. S&P's opinions, analyses, and rating acknowledgment decisions (described below) are not recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P does not act as a fiduciary or an investment advisor except where registered as such. While S&P has obtained information from sources it believes to be reliable, S&P does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives.

To the extent that regulatory authorities allow a rating agency to acknowledge in one jurisdiction a rating issued in another jurisdiction for certain regulatory purposes, S&P reserves the right to assign, withdraw, or suspend such acknowledgement at any time and in its sole discretion. S&P Parties disclaim any duty whatsoever arising out of the assignment, withdrawal, or suspension of an acknowledgment as well as any liability for any damage alleged to have been suffered on account thereof.

S&P keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P may have information that is not available to other S&P business units. S&P has established policies and procedures to maintain the confidentiality of certain nonpublic information received in connection with each analytical process.

S&P may receive compensation for its ratings and certain analyses, normally from issuers or underwriters of securities or from obligors. S&P reserves the right to disseminate its opinions and analyses. S&P's public ratings and analyses are made available on its Web sites, www.standardandpoors.com (free of charge), and www.ratingsdirect.com and www.globalcreditportal.com (subscription), and may be distributed through other means, including via S&P publications and third-party redistributors. Additional information about our ratings fees is available at www.standardandpoors.com/usratingsfees.

The **McGraw·Hill** Companies