

# Ontario Prosperity Initiative



## Comparing the Debt Burdens OF ONTARIO AND CALIFORNIA

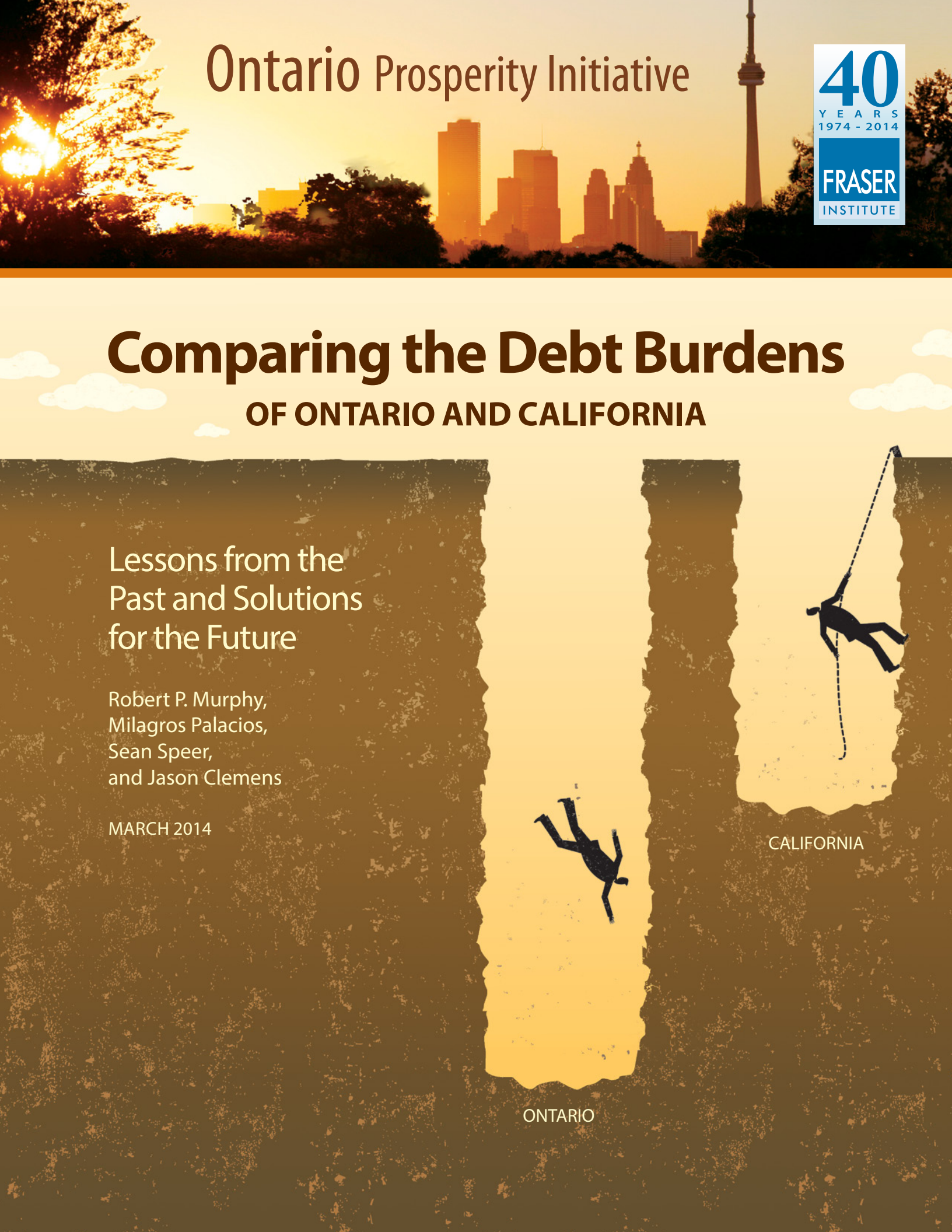
Lessons from the  
Past and Solutions  
for the Future

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ONTARIO

CALIFORNIA





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## Executive summary

By any measure, the province of Ontario is carrying a much worse debt burden than the state of California. To many in the United States and Canada, California represents the epitome of irresponsible government spending coupled with poor cash management. In this context, discovering that Ontario's financial position is far more precarious should serve as a wake-up call to Ontario policy makers and citizens alike.

Citizens understand that in their own affairs, running up large debts can spell financial disaster, even for a household with a large income. Although governments differ from households in important ways, when it comes to the pros and cons of debt they are quite similar. Borrowing money can be a sensible way for governments to cover tax shortfalls during tough economic times, and also to fund durable investment projects such as bridges and roads that will “pay for themselves” in the long run. However, the bigger a government's debt burden becomes, the bigger the drag it imposes on the economy, as a larger fraction of government revenues must be devoted simply to paying interest on the debt. This leaves the government with fewer options in the event of a financial emergency, and a spike in interest rates can cripple a government carrying large amounts of debt.

To get a sense of just how serious Ontario's debt situation is, the paper compares Ontario's indebtedness, across a host of measures, to California's. The infographic (*page v*) summarizes key measures from the study. As it illustrates, Ontario is in much worse financial shape than California. If we consider the outstanding gross amount of debt in the form of government-issued bonds, California (in the most recent year for which the data are available) carried US\$144.8 billion, while Ontario carried CA\$267.5 billion, almost double the amount of California.

Yet this figure *understates* the disparity between the two regions, because California has a much larger economy, and government revenues, than Ontario. The gross debt in the form of bonds is 7.6 percent of California's economy, while it is a whopping 40.9 percent of Ontario's economy. Put differently, as a share of the economy, Ontario's debt is more than five times larger than California's.

An alternative way to examine the level of indebtedness in Ontario and California is on a per-person basis. Ontarians currently owe CA\$20,166 per person compared to US\$3,844 for Californians, which is more than five times the per-person level of debt.

Not surprisingly, given the differences in the debt burden, Ontarians shoulder a much higher cost with respect to servicing their debt. Specifically, 9.2 percent of budget revenues in Ontario are devoted to interest payments, compared to 2.8 percent in California. In other words, Ontarians lose more than three times the amount Californians do simply to service existing debt through interest payments.

Fortunately, no harsh cuts are needed; it will only take restraint in the *growth* of provincial spending in order to put Ontario on the path to financial security. Yet even though the solution is simple, the problem is very real, as recent trends have put Ontario on an unsustainable trajectory of ever-higher debt.

The solution to a government debt problem is the same as it would be for a household: spending must be brought in line with income. Although private citizens can grapple with debt by trying to earn more income, with governments it can be self-defeating to focus on boosting revenue through tax rate hikes, because they will stifle economic growth. Rather, the wisest and most sustainable reform is to restrain spending growth.

If the economy grows at historical trends, calculations show that Ontario can be put back on a solid financial footing if policy makers limit spending growth on actual programs (not counting interest payments on the debt) to four percent per year. This recommendation sounds modest enough, yet in fact it would represent a much tighter leash on spending growth than what Ontario has actually experienced in the last decade.

The Ontario government's current financial trajectory is unsustainable. Serious curbs on spending growth may be uncomfortable in the short run, but they will avert the possibility of a much worse budget crunch down the road. Policy makers and citizens must consider the numbers to understand the severity of the situation.



# Measures of Indebtedness, California vs. Ontario, 2011/12

CALIFORNIA

ONTARIO

**\$144.8**  
billion

Bonded  
Debt  
(gross)

**7.6%**  
of GDP

**\$3,844**  
per  
capita

**2.8%**  
Percent of  
revenue spent  
on interest



**\$267.5**  
billion

Bonded  
Debt  
(gross)

**40.9%**  
of GDP

**\$20,166**  
per  
capita

**9.2%**  
Percent of  
revenue spent  
on interest



Nearly twice as much  
bonded debt





## Introduction

To many in the United States and Canada, the state of California represents the epitome of “big government” liberalism, where generous spending programs are financed by progressive (and steep) income taxes.<sup>1</sup> California suffers from recurring fiscal crises, as it spends too much in the good years and consequently always seems to find itself in a budget crunch in the bad years. Indeed, in the wake of the financial crisis of 2008, there was a genuine concern that California would default on its bonds.<sup>2</sup>

For now, California’s fiscal position has stabilized, driven by cuts in government spending, a tepidly recovering economy, and large income and sales tax hikes approved by the voters in the 2012 elections.<sup>3</sup> Even so, it remains very vulnerable to the next (inevitable) downturn, when we can expect the financial crunch to return in the familiar pattern.

Ironically, even though California represents the “poster child” of U.S. state-level profligacy and financial mismanagement, it is unquestionably in much better shape than the province of Ontario. Regardless of the specific metric used, Ontario is much more indebted, and stands vulnerable to a much worse fiscal crisis, than California. Therefore, if Canadians can recognize the need for California policy makers to get their act together, the imperative is much stronger for those in Ontario.

In this paper we will first compare the debt burdens of California and Ontario, showing that by any metric, Ontario is in worse shape. Then we will briefly summarize the histories through which California and Ontario, respectively, found themselves in such dire fiscal straits. Finally, we will give a theoretical framework for the proper course forward, and tailor it to the specific circumstances of Ontario.

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1. The top state income tax rate in California is currently 13.3 percent, the highest in the United States. For a listing of US state income tax rates as of January 1, 2014, see [http://www.taxadmin.org/fta/rate/ind\\_inc.pdf](http://www.taxadmin.org/fta/rate/ind_inc.pdf). In the 2012/13 budget, 44 percent of total state tax revenues came from the personal income tax; see <http://www.ebudget.ca.gov/2012-13-EN/pdf/Enacted/BudgetSummary/SummaryCharts.pdf>.

2. For media coverage of California’s default scare, see for example Lin (2011) and Blodget (2010).

3. California’s Proposition 30, which raised income taxes on top brackets, is explained by the Franchise Tax Board at [https://www.ftb.ca.gov/professionals/taxnews/2012/December/Article\\_1.shtml](https://www.ftb.ca.gov/professionals/taxnews/2012/December/Article_1.shtml).

## Why do we care about government debt?

Before proceeding to the specifics of California and Ontario, we should step back and address the more fundamental question: *why do we care about a government's level of debt?*

The simple answer is that excessive government debt is undesirable for the same reason as excessive *household* debt: other things equal, the higher the level of debt, then the higher the interest payments necessary to finance (or “service”) the debt. Both for the private household and for the government, a large debt inherited from the past means that some of today’s income must be used *not* to satisfy current needs or wants, but instead to satisfy creditors. If the household or government wants to not merely tread water but to instead climb out of its debt burden, then it must “live below its means” by devoting a greater share of current income to paying down (retiring) the overall level of debt.

These considerations do not mean that debt per se is bad, or that households and governments should routinely avoid it. Indeed, if that *were* the right response, then current debts would pose no practical problem—households and governments could simply default, and not worry about the consequences because they have no intention of ever borrowing again. Ultimately, debt is a tool and should be used constructively and responsibly.

The ability to access credit markets—in other words, the ability to borrow money—is a very useful option for households and governments. It allows them to smooth their expenditures over the course of the business cycle, making the path of their spending less volatile than their income. This desire for a more predictable and stable flow of spending can make it worthwhile to pay the interest costs involved when households and governments decide to go into debt and “live beyond their means” for certain periods.

More generally, taking on debt allows for more flexibility in the timing of expenditures and income, even when the income is stable. An obvious example is a couple taking out a conventional mortgage from a commercial bank in order to buy a house. Such a collateralized loan (i.e., the mortgage) is qualitatively different from the same couple putting a trip to Vegas on their credit card.

Similarly, a government might issue bonds in order to finance the construction of a bridge, the tolls on which will allow the government to eventually retire the bonds and then earn a perpetual net income. This example of “productive debt” is (again) qualitatively different from the same government issuing bonds in order to finance a parade for the public to commemorate a holiday.

Whether debt is classified as “consumptive” or “productive,” it allows the borrower more flexibility in matching up cash flows of expenditures and income. In order to stay on good terms with creditors and keep the option

of future borrowing available, it is important for both households and governments to abide by the terms of their existing debt loads. If either a household or a unit of government falls behind on debt service payments, or (even more drastically) simply repudiates some or all of its debts, creditors in the future will either not lend at all, or will lend only under more onerous terms.

Thus we have come full circle in our discussion: now that we understand the *benefits* of having the option of debt finance, we see why carrying too large a debt is dangerous. To repeat, a large debt siphons away current income that can no longer be used for present consumption or investment, but instead must be diverted to dealing with the consequences of past decisions. If this servicing burden becomes too great, the borrower can default, but then would make future financing more difficult.

Although the dangers of debt may seem obvious to the layperson, some economists believe that focusing on the debt per se is misdiagnosing the problem, and that the *real* issue is the level of government spending. For example, these economists might argue that (to a first approximation) it makes little difference whether a \$100 billion spending bill is financed with higher taxes or through issuing more debt, because in the latter case the taxpayers will end up paying the same amount (measured in present discounted value) over time, as the government taxes them more to service the higher debt.

However, as with households, so too with governments: the ability to pay for current expenditures not solely out of current income, but (partially) through debt finance, can tempt decision makers to “overspend.” It is undeniably more convenient for households to “charge” big-ticket purchases, rather than restricting the budget elsewhere that month, and it is undeniably more politically popular to pay for new spending programs by issuing debt, rather than explicitly raising taxes. Therefore it is misleading (though technically correct) to argue that debt concerns are really subordinate to spending, since attitudes toward debt *affect* the level of spending.

Indeed, it is precisely because of these temptations that people in the private sector may embrace rules such as “Never let the balance on a credit card roll over to the next month,” or perhaps “Never buy a house with a mortgage longer than 15 years.” In an analogous fashion, many governments (including the state of California) have either statutory or even constitutional limits on the issuance of debt.

## Contrasting household with government debt

Although the analogy with households works in many respects, there are some respects in which government debt must be treated differently. First, the government is an institution affecting overlapping generations of individuals over time; many of the voters who approve a deficit-financed spending bill in the year 2015 will be long dead as the young workers in the year 2055 have a portion of their paychecks taken in order to satisfy the bondholders, even though many of these workers weren't even alive when the government originally spent the money. In this context, people sometimes view deficit finance as immoral because it allows the present generation to "pass its bills" on to future citizens.<sup>4</sup>

Another major difference between household and government debt is how it's usually expressed. Household (unsecured) debt is often measured as a percentage of annual income, while government debt is most typically expressed as a percentage of the total economy (Gross Domestic Product or GDP). This is understandable but potentially misleading, because a government's income is not the *entire* income of the economy. Therefore, a better metric to gauge the debt burden of a government is to look at the ratio of its interest expenses to its total tax receipts, because government tax receipts are more analogous to household income than GDP itself.

Finally, there is the important difference that household financial planning lasts only a lifetime, whereas government (in principle) is perpetual. In particular, when analyzing government finances we must explicitly keep in mind that the economy (and hence potential tax receipts) generally grows over time. This can lead to some counterintuitive results.

For example, there is no need for a government to actually run budget surpluses during good times in order to reduce its debt burden. Suppose we start with an economy with \$1 trillion in GDP, and \$500 billion in government debt. Thus the familiar debt/GDP ratio would be 50 percent. Further suppose that in the next year, the economy grows at 10 percent so that GDP is now \$1.1 trillion, while the government runs a budget deficit of \$40 billion. Even though the government piled on more debt in absolute terms, the

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4. Economists often argue over the validity of this line of reasoning, because the future citizens will "owe the debt to themselves." For example, if we suppose that the government bonds end up entirely in the hands of grandchildren who live under the same government, then the interest payments on the debt will simply transfer income from one subset of grandkids to another, which doesn't obviously make the entire "future generation" poorer. Although superficially plausible, this line of argument actually leaves out subtleties that lie beyond the scope of the present paper. Suffice it to say, there is a very legitimate sense in which the government today can shift income forward, away from future generations and into the current generation, through deficit financing and taxes to service the debt. For an intuitive explanation of this mechanism, see Murphy (2012).

debt/GDP ratio would have fallen from 50 percent down to about 49 percent.<sup>5</sup> More generally, the debt/GDP ratio is stabilized so long as the annual budget *deficit* as a share of the economy is the same fraction of the growth rate. For example, to stabilize the debt/GDP ratio at 25 percent, the government must perpetually run budget deficits that are one-quarter as large as the annual growth rate of the economy.

Now that we understand the broader framework of government debt and appreciate its significance to the well-being of citizens, we can turn to the actual magnitudes of the debt burdens facing California and Ontario. In doing so, we will be looking at the *gross bonded debt* figures for the two governments, which (as the name suggests) refers to the total government debt held in the form of bonds issued by the government. In purely Canadian analyses, it is common to use the smaller *net debt* concept—which nets out certain assets held by the government against the gross debt liabilities—but unfortunately US states do not maintain analogous records to make an apples-to-apples comparison. However, when we analyze the interest payments in this paper, this does refer to a “net” concept, because the gross interest payments owed on gross debt are reduced by incoming earnings on government financial assets.<sup>6</sup>

5. Note that the new government debt of \$540 billion divided by the new GDP of \$1.1 trillion works out to 49.1 percent.

6. Specifically, the Public Accounts of Ontario 2011/12 state: “Interest on debt includes: i) interest on outstanding debt net of interest income on investments and loans; ii) amortization of foreign exchange gains or losses; iii) amortization of debt discounts, premiums and commissions; iv) amortization of deferred hedging gains and losses; and v) debt servicing costs and other costs.” See [http://www.fin.gov.on.ca/en/budget/paccts/2012/12\\_arcfs.pdf](http://www.fin.gov.on.ca/en/budget/paccts/2012/12_arcfs.pdf) (page 42).

## Debt burden: California vs. Ontario

The central premise of this paper is that California is actually on a much sounder financial footing than Ontario. **Table 1** presents all of the pertinent information, while **figures 1 and 2** amplify some of the key facts in graphic form.

**Table 1: Measures of indebtedness, California versus Ontario, 2011/12**

	California	Ontario
Bonded debt (gross, billions)	US\$144.8	CA\$267.5
Bonded debt as % of GDP	7.6%	40.9%
Bonded debt per capita	US\$3,844	CA\$20,166
Budget deficit as % of GDP	0.5%	2.0%
Net interest expense as % of GDP	0.4%	2.0%
Net interest expense as % of revenues	2.8%	9.2%
Government revenues as % of GDP	13.0%	16.8%

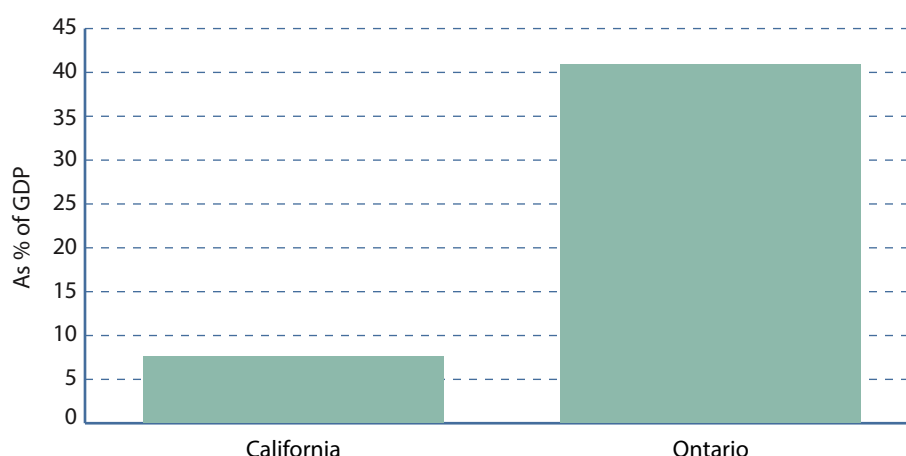
Notes: California budget deficit refers to CAFR differences between total expenditures and revenues, net of Internal Service Funds.

Data for California refer to Fiscal Year ending June 30 of the listed year.

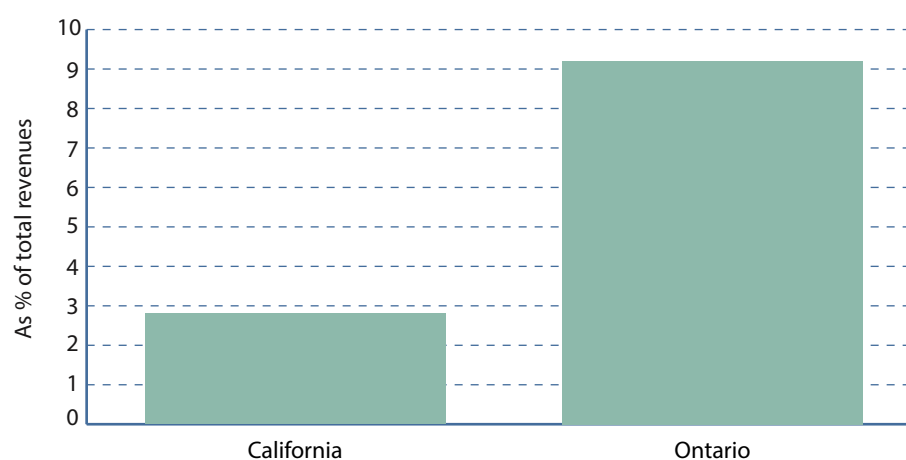
Data for Ontario refer to Fiscal Year ending March 31 of the listed year.

Sources: Ontario, Ministry of Finance (2012); Statistics Canada (2012, 2013); California State Controller's Office (various years); US Department of Commerce, Census Bureau (various years); US Department of Commerce, Bureau of Economic Analysis (various years); calculations by authors.



**Figure 1: Bonded debt (gross) as share of the economy, 2011/12**

Notes and sources: See table 1.

**Figure 2: Net interest expense as share of total revenues, 2011/12**

Notes and sources: See table 1.

In light of our earlier discussion, it should be clear why the data presented in table 1 are so ominous for the residents of Ontario. Even in absolute terms, the gross level of outstanding government debt is higher (CA\$267.5 billion versus US\$144.8 billion).

Yet because California has such a larger population and economy, a more accurate comparison is even more sobering. California's bonded debt per capita works out to US\$3,844 per person, while Ontario's is CA\$20,166. As shares of the economy, California's bonded debt is a mere 7.6 percent, compared to Ontario's 40.9 percent.

Finally, to understand the impact of the debt on a continuing basis for taxpayers, note that 2.8 percent of California state government revenues are

absorbed by servicing the debt, which simply means paying interest on existing debt. Ontario, on the other hand, devotes 9.2 percent of its revenues to this purpose.

As these figures demonstrate, Ontario is in much worse fiscal shape than California. To the extent that California suffers from a (well-deserved) reputation for profligacy, these comparisons should serve as a wake-up call to Ontario residents and policy makers that immediate reforms are needed.

Moreover, in preparation for our ultimate discussion on policy solutions, we note in the final row of table 1 that Ontario already collects a larger fraction of its economy in total revenue (16.8 percent of GDP) than California does (13.0 percent of GDP). Some might argue that this comparison is unfair, because Canadian provinces shoulder a larger share of government duties, vis-à-vis the federal government, than their US state counterparts. Nonetheless, this comparison shows the limits of relying on tax hikes to escape the fiscal hole. Yet before turning to specific policy recommendations, we sketch a brief history of California and Ontario, respectively, to understand how they arrived at their current positions.

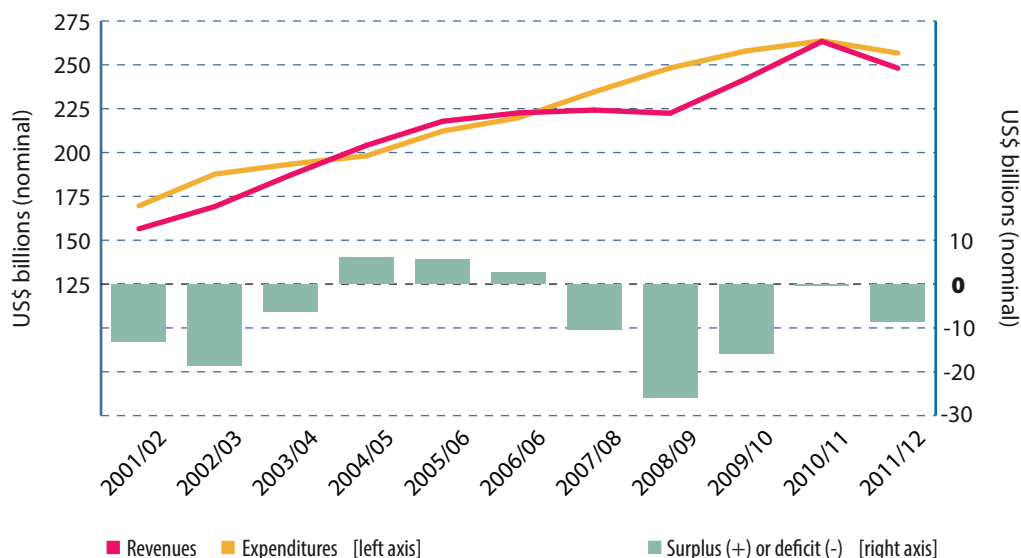
## Understanding California's debt burden

To provide a summary of California's recent fiscal fortunes, in [figure 3](#) we show the revenues, expenditures, and corresponding budget surpluses (or deficits) over the most recent ten-year period for which California state government's Comprehensive Annual Financial Reports (CAFRs) are available.<sup>7</sup> [Figure 4](#) shows the same data expressed as a percentage of California's economy.

As figures 3 and 4 demonstrate, the last decade of California's finances can be broken up into three periods. During the first period, from 2001/02 to 2005/06, revenues grew faster than expenditures, as the economy recovered from the dot-com recession and the housing bubble began taking off. This transformed California's budget deficit into a surplus. Then, in the second period that ran through the end of 2008/09, California revenues plummeted while expenditures soared, due to the collapse of the housing bubble and the ensuing global recession. This middle period saw the return of large budget deficits. Finally, from 2009/10 through the present, a combination of spending cuts, recovering economy, and statutory tax increases stabilized the fiscal situation by delivering a roughly balanced budget.

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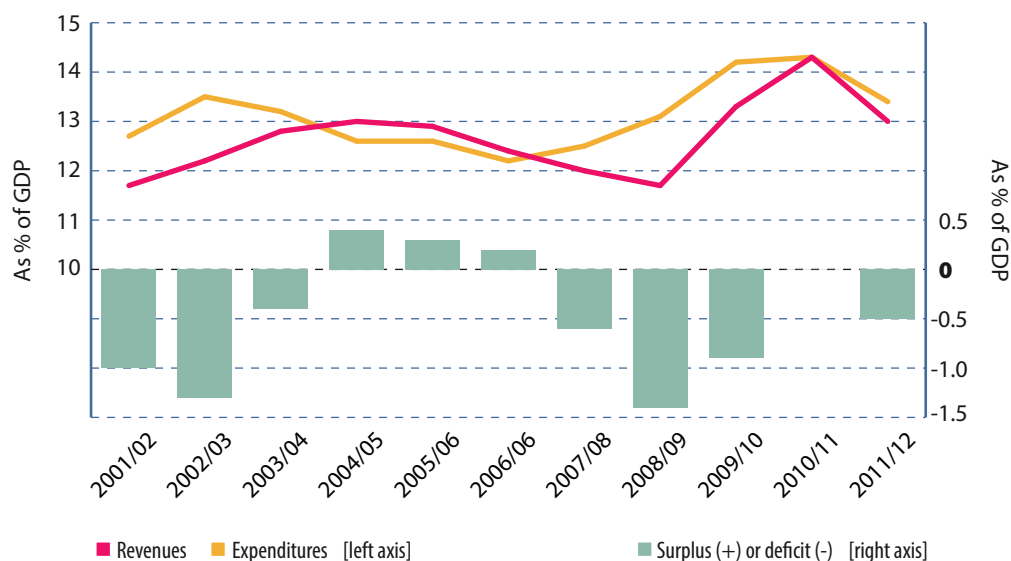
7. In this paper, we use the financial data as compiled in the California state government's Comprehensive Annual Financial Reports because it is the most directly comparable to the debt holdings of the Ontario government. However, the reader should be aware that using this data—and in particular the implied budget surpluses or deficits for a given fiscal year—may not accord with the popular media treatment of California's finances. This is because California has a complex system in which there are three “funds” that handle distinct responsibilities. The General Fund includes discretionary spending, and is the only one subject to the state's constitutional requirement for a balanced budget. California's Special Fund includes the state activities that are funded by specifically earmarked revenue sources. Finally, the Bond Fund covers activities that are financed by general purpose bonds issued by the state. For a more detailed discussion see Clemens, Veldhuis, and Joffe (2013).

**Figure 3: California revenues and expenditures (US\$ billions), 2001/02–2011/12**

Notes: Data refer to Fiscal Year ending June 30 of the listed year.

California budget deficit refers to CAFR differences between total expenditures and revenues, net of Internal Service Funds.

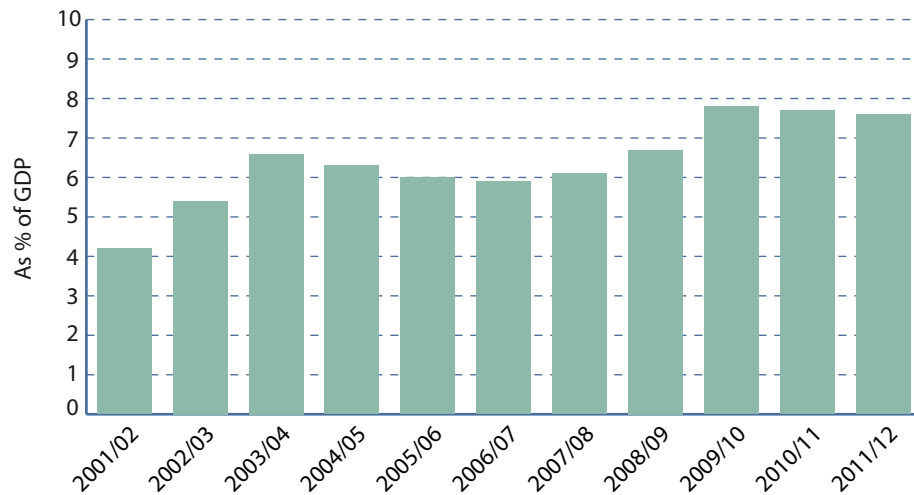
Sources: California State Controller's Office (various years); calculations by authors.

**Figure 4: California revenues and expenditures as share of the economy, 2001/02–2011/12**

Notes: Data refer to Fiscal Year ending June 30 of the listed year.

California budget deficit refers to CAFR differences between total expenditures and revenues, net of Internal Service Funds.

Sources: California State Controller's Office (various years); US Department of Commerce, Bureau of Economic Analysis (various years); calculations by authors.

**Figure 5: California bonded debt as share of state economy, 2001/02–2011/12**

Notes and sources: See figure 4.

In **figure 5** we can see the (sluggish) impact of the changing patterns in revenues and expenditures on the level of gross California debt, as a share of the state economy.

We can see again the three distinct periods in figure 5. In the first period (through 2005/06) the growth in debt turns around and begins shrinking. Then the onset of the recession causes the debt to spike sharply. Finally, the growth in debt has been stabilized by 2009/10, after which it begins to gently recede.

It is worth emphasizing that California's latter turnaround was driven (in part) by unusual spending restraint, including an actual *cut* in the absolute level of spending by \$7.0 billion (about 2.6 percent) from 2010/11 to 2011/12.<sup>8</sup> Moreover, our figures end in 2011/12, and thus completely miss the large tax increases in Proposition 30, which voters approved in the November 2012 elections.

Proposition 30 was strongly supported by Governor Jerry Brown as a progressive measure that would solve California's budget crisis largely through tax hikes on the wealthy. It created three new personal income tax brackets, making the top rate 12.3 percent for those earning \$500,000 or more (\$1 million for married couples). However, in addition to the personal income tax, California also imposes a 1 percent "surcharge" on incomes exceeding \$1 million, making the true top rate 13.3 percent. At this rate, California has by

<sup>8</sup> To reiterate, our figures for revenues and expenditures are derived from the CAFRs, and may not correspond with the popular discussion of "California's budget" for a particular fiscal year.

far the highest personal income tax rate in the United States, with Hawaii in second place (at 11 percent).<sup>9</sup>

However, in addition to raising taxes on the wealthy, Proposition 30 also raised the state sales tax from 7.25 percent to 7.5 percent. The income and sales tax hikes contained in Proposition 30 are designed to be temporary, and were billed as necessary to avoid cuts in education spending. At the time of passage, analysts projected that Prop. 30 will bring in an additional \$30 billion in revenues over its first five years (see Luhby, 2012).

Because our figures above (relying on CAFR data) do not capture the significant tax hikes contained in Proposition 30, we supplement them with **table 2**, which shows the state revenues by category from the last two fiscal years.

**Table 2: California revenues by category (\$US billions, historical), 2011/12 and 2012/13**

	2011/12	2012/13	% change
Personal Income Tax	\$54.0	\$61.6	14.0%
Sales and Use Tax	\$28.7	\$31.0	8.2%
Corporation Tax	\$8.2	\$8.5	3.4%
Other	\$30.1	\$31.8	5.6%
<b>Total</b>	<b>\$121.0</b>	<b>\$132.9</b>	<b>9.8%</b>

Notes: Data refer to Fiscal Year ending June 30 of the listed year.

Data from Enacted 2012/13 Budget.

Tax Receipts Include General Fund and Special Funds.

Sources: California, Department of Finance (2013); calculations by authors.

9. For a listing of U.S. state income tax rates as of January 1, 2014, see [http://www.taxadmin.org/fta/rate/ind\\_inc.pdf](http://www.taxadmin.org/fta/rate/ind_inc.pdf).



As table 2 shows, FY2012/13 (which ran through June 30, 2013) saw a 14.0 percent increase in personal income tax receipts over the previous year, and a 9.8 percent increase in overall revenues in combined General and Special Funds.

It is largely through this surge in revenue, and the earlier budget cuts, that the media has been reporting that California has escaped, at least for now, from what appeared to be fiscal disaster. As we mentioned in the [Introduction](#) of this paper, after the shock of the financial crisis and ensuing recession, there was genuine concern—running into 2011—that the state of California would default on its bonds (e.g., Lin, 2011; Blodget, 2010). Indeed, many analysts speculated in 2010 that the Federal Reserve would begin buying California municipal bonds to quell a financial panic, in much the same way that the European Central Bank intervened to purchase sovereign bonds from euro-area governments that were in crisis (see Melloy, 2010).

Although California has quieted talk of default for now, the figures above show that it is hardly out of the woods. Its steeply progressive tax code makes California's tax revenues extremely volatile. This "revenue rollercoaster" exacerbates the boom-bust cycle of the underlying economy.<sup>10</sup> Jacking up tax rates on "the rich" may have provided short-term relief, but such policies run the risk of killing the goose that lays the golden eggs. In the final section of this paper we will argue on both theoretical and empirical grounds that spending restraint is the key to restoring fiscal sanity.

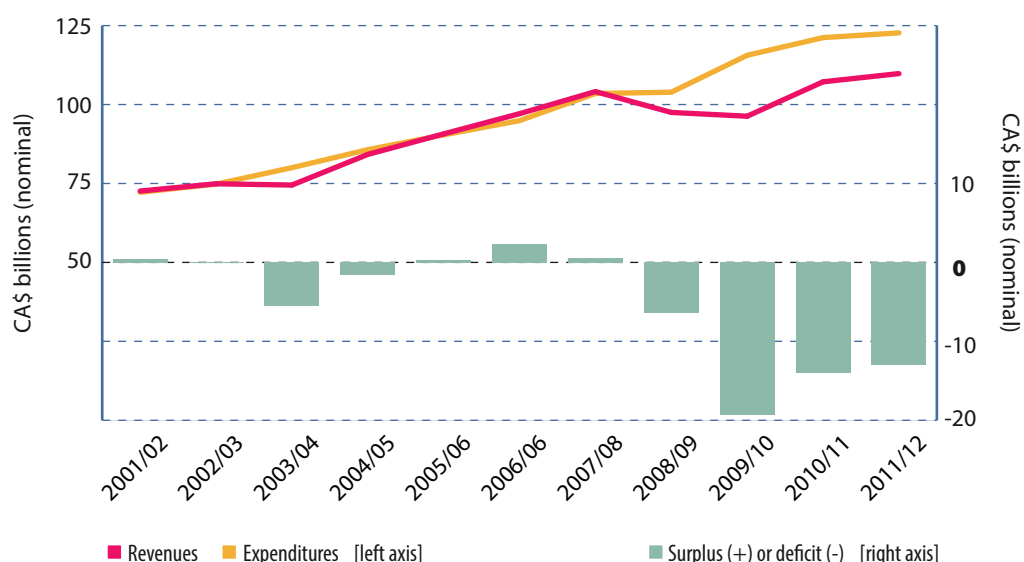
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<sup>10</sup>. For a comprehensive analysis of California's volatile tax code, see Murphy and McQuillan (2008).

## Understanding Ontario's debt burden

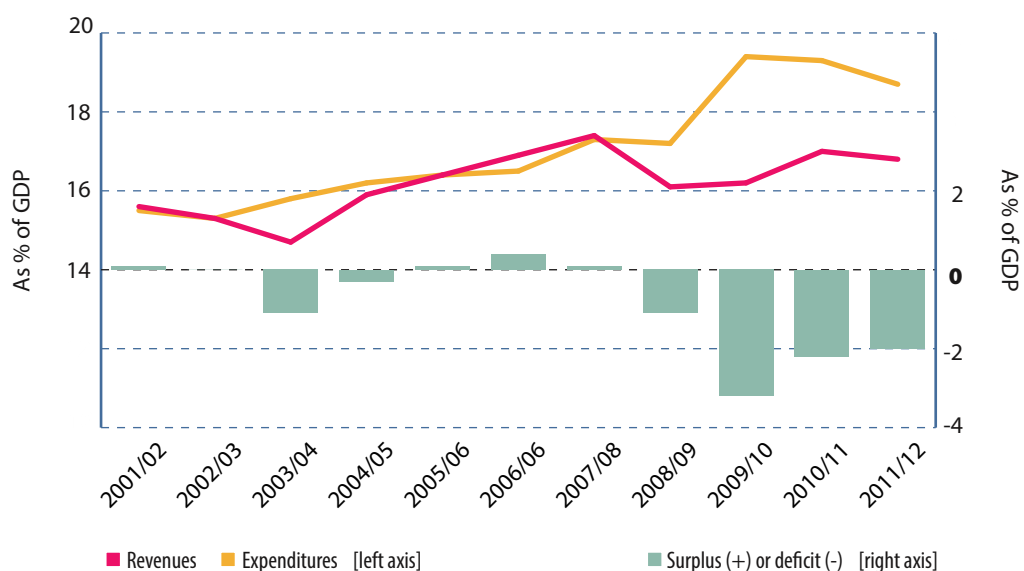
As bad as California's fiscal situation is, Ontario's is relatively worse. As with California, we will outline the fiscal history since the previous recession.

As **figures 6 and 7** illustrate, Ontario's fiscal trajectory followed a comparable course to that of California: the deficits in the early 2000s eventually turned to (modest) surpluses, only to be shattered with the onset of what has become known as the Great Recession later in the decade. The recession reduced tax receipts, and led the government to increase spending on both social assistance programs and infrastructure spending (which included the bailouts of the auto sector) (see Kneebone and Gres, 2013). Yet as with California, Ontario also pulled back from the abyss, with deficits moderating in both absolute terms and as a share of the economy after their peak in 2009/10.

**Figure 6: Ontario revenues and expenditures (CA\$ billions), 2001/02–2011/12**

Notes: Data refer to Fiscal Year ending March 31 of the listed year.

Source: Ontario, Ministry of Finance (2012).

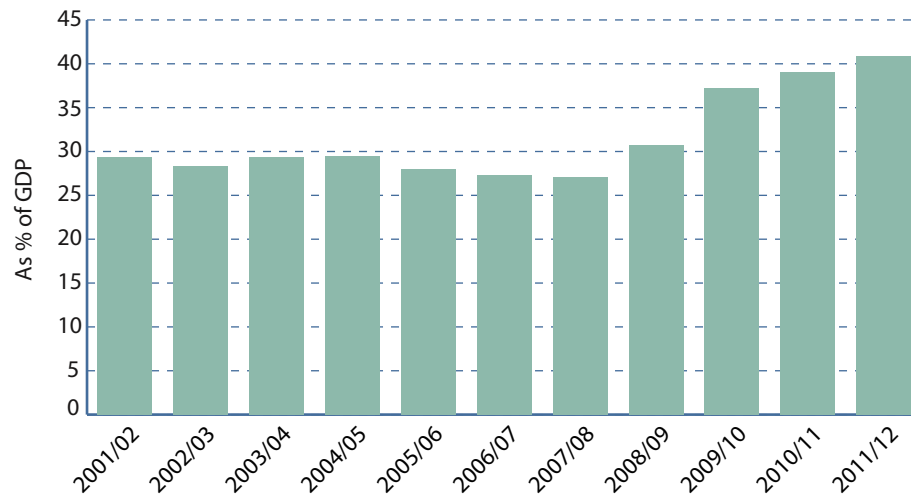
**Figure 7: Ontario revenues and expenditures as share of the economy, 2001/02–2011/12**

Note: Data refer to Fiscal Year ending March 31 of the listed year.

Sources: Ontario, Ministry of Finance (2012); calculations by authors.

However, even though the general pattern is similar between California and Ontario, there are some crucial differences. For example, over the period analyzed, total provincial government spending in Ontario has been steadily increasing from one year to the next. More important, the *level* of Ontario's outstanding debt was (and remains) much higher than California's, and continued to grow throughout 2011/12 ([figure 8](#)).

**Figure 8: Ontario bonded debt as share of provincial economy, 2001/02–2011/12**

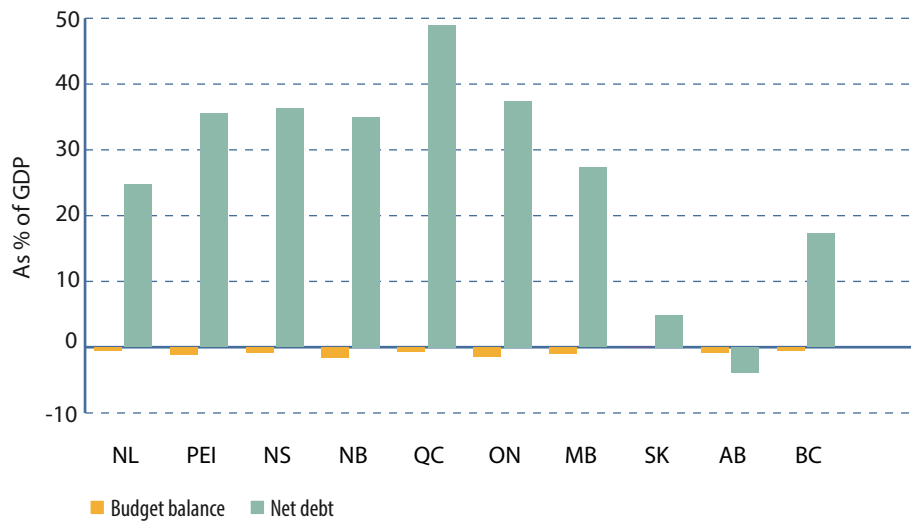


Notes and sources: See figure 7.

Thus, not only does Ontario have a bonded (gross) debt more than quadruple the relative size of California's in terms of debt to GDP, but it hasn't even managed to stabilize its growth. Policymakers in California have engaged in much more painful decisions to contain their indebtedness, even though objectively they were in a much better position than Ontario currently is.

It is true that there are different responsibilities for provincial versus state governments in the federal systems of Canada versus the United States, and in some respects it might be unfair to compare Ontario with California as we have done. However, this is no excuse for Ontario. As we show in [figure 9](#), Ontario is arguably in the worst fiscal shape among its fellow provinces, as well.

**Figure 9: Budget balance and net debt as share of economy, by province, 2012**



Sources: Provincial Public Accounts 2012/13; Statistics Canada (2012); calculations by authors.

Using the latest data available for Canadian provinces, 2012/13, Ontario has the second-highest *net* (not gross) debt, as a share of its provincial economy, in Canada, second only to Quebec.<sup>11</sup> However, although Quebec has a much higher net debt (49 percent) compared to Ontario (37.4 percent), at least as of 2012/13 Quebec's annual budget deficit was only half as large—0.7 percent compared to Ontario's 1.4 percent. With government finances, the challenge is merely to get annual spending in line with tax receipts; running a balanced budget (or even a modest string of deficits) will then yield a steadily shrinking debt/GDP ratio, as the economy naturally grows over time. In the 2012/13 fiscal period, only New Brunswick had a worse deficit (1.6 percent of GDP) than Ontario, underscoring the fragility of Ontario's financial situation.

As with a household, so too with a government: the specific manifestation of a burgeoning debt problem is the rising share of current income needed to service the debt. In figure 2, we have seen that 9.2 percent of Ontario's revenues are devoted to net interest payments, a figure more than triple California's. Indeed, Ontario's budget analysts project that from 2012/13 to 2015/16, net interest payments will represent the fastest growing expense for the provincial government, growing at 5.5 percent annually—more than twice the projected rate of health care expenditures.<sup>12</sup>

11. Data for Canadian provinces are available for the fiscal year 2012/13. Data presented for Ontario in figure 9 might differ from previous figures since the comparison made between Ontario and California is up to 2011/12.

12. See [http://www.fin.gov.on.ca/en/budget/ontariobudgets/2013/papers\\_all.pdf](http://www.fin.gov.on.ca/en/budget/ontariobudgets/2013/papers_all.pdf), page 209.

## Suggestions for the future

Having established Ontario's precarious fiscal position, the obvious question is what to do about it. Fortunately, the answer is also obvious (if not convenient). Ontario policy makers need to rein in their budget deficits, ideally running budget surpluses, so that the debt/GDP ratio falls significantly. A much lower debt will allow for a perpetually lower tax burden, and it will also give a larger "cushion" for Ontario policy makers when the next recession hits.

As with households, so too with governments: the way to reduce budget deficits (even turning them into outright surpluses) is to increase revenues and/or reduce spending. However, there is a fundamental difference between households and governments that changes the weight we should put on these two potential strategies to deficit reduction. If a household decides to earn more income, the methods involved are (presumably!) voluntary; the members of the household produce more in the private sector, in order to earn more from willing consumers of their services. Thus the household's decision to boost its income goes hand-in-hand with *higher* measured economic output, with the only real loss being the amount of leisure enjoyed by members of the household. The whole enterprise is a positive-sum game.

In contrast, when a unit of government decides to boost its income through tax hikes, this directly translates into less (after-tax) income for the private sector, and it is even potentially revenue reducing for the government if the higher rates slow down economic growth enough via incentive and distortion effects. For 2013, the combined marginal income tax rate in Ontario was a whopping 49.53 percent for the highest bracket, and it was still a hefty 20 percent even at the lowest bracket.<sup>13</sup> In this context, raising tax rates even more, in an attempt to extract more revenue with which to reduce budget deficits, will be self-defeating. By reducing the attractiveness of earning additional income, high marginal tax rates mean that the total social cost of raising an additional \$1 of revenue for the government is far higher than simply \$1 in lost private-sector income.

There is a wealth of empirical literature backing up the claim that marginal tax rates can significantly impact long-run economic growth. For

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13. See Murphy, Clemens, and Veldhuis (2013) for details.



example, Padovano and Galli (2002) used data for 23 OECD countries over a period of decades to estimate that an increase of ten percentage points in marginal tax rates decreased the annual rate of economic growth by 0.23 percentage points. One of the strongest findings—published in the prestigious *American Economic Review*—comes from Christina Romer and co-author David Romer. In a 2010 paper that developed a new measure of fiscal shocks, the Romers classified every major tax-change episode from the US postwar period and concluded that “an exogenous tax increase of one percent of GDP lowers real GDP by roughly three percent” (Romer and Romer, 2010).

Indeed, such is the power of supply-side policy changes that there are several historical examples of what has been termed “expansionary austerity,” in which countries reduced deficits and enjoyed a strong economic rebound. In its June 2010 bulletin, the European Central Bank (ECB) devoted a section to five case studies of what it called “fiscal consolidation” in euro-area countries. The ECB authors argued that Ireland, the Netherlands, and Finland all achieved much lower debt/GDP ratios even while improving their economies. The ECB authors explain that fiscal consolidations based on *spending reform*, rather than on tax increases, are more conducive to economic growth.<sup>14</sup>

At the federal level, Canada itself provides an excellent example of how to quickly turn around a deteriorating debt situation without hurting the economy.<sup>15</sup> By the mid-1990s, the Canadian federal government had been running deficits for two decades, with one-third of federal revenue being absorbed by interest payments. Indeed, the situation was so bad that a *Wall Street Journal* editorial on January 12, 1995 declared that Canada “... has now become an honorary member of the Third World in the unmanageability of its debt problem ...”

Yet Canadians swiftly solved the crisis with serious reforms, including absolute spending cuts and then subsequent restraint in spending growth. From 1995/96 to 1997/98, total federal government spending fell by more than seven percent, while the budget deficit of \$30 billion (3.6 percent of GDP) was transformed into an almost \$3 billion surplus. Canada’s federal government would go on to run 11 consecutive budget surpluses, causing the debt/GDP ratio to drop sharply from 71.2 percent in 1996/97 to 32.9 percent in 2007/08.<sup>16</sup>

A similar option is available, and necessary, for Ontario. The good news is that the path to fiscal responsibility doesn’t involve draconian cuts. Indeed, in a recent analysis, Kneebone and Gres (2013) estimated that Ontario’s finances would be restored to a sound foundation if the province merely

14. See European Central Bank (2010). Discussion of fiscal consolidation begins on page 83.

15. The discussion of Canada’s fiscal turnaround draws on Crowley, Murphy, and Veldhuis (2012).

16. Data from Crowley, Murphy, and Veldhuis (2012) as well as Public Accounts of Canada.

limited spending on programs (i.e., not counting interest payments) to grow at 4 percent per year. Even accounting for population growth and historical rates of price inflation, this cap would still allow an *increase* of 0.8 percent in spending in per-capita real terms annually. We should acknowledge that currently Ontario is *projected* to have program spending growth rates well within this range, with growth rates that steadily decrease and even turn negative in a few years.<sup>17</sup> If these projections became reality, of course Ontario's debt problem would steadily improve. Yet these projections represent an extreme departure from recent trends; Kneebone and Gres document that "during the 10 years prior to the onset of recession," program spending on health grew at 7.2 percent annually, spending on education and training grew at a whopping 10 percent annually, spending on social services grew at 3.4 percent, and all other program spending grew at 6.2 percent (Kneebone and Gres, 2013: 31). Thus, Kneebone and Gres' proposal to limit program spending growth to 4 percent per year is an aggressive goal but realistic, as contrasted with the extremely implausible projections in the current budget framework.

Ontario suffers from an excessive debt burden. On any metric, it is in far worse shape than the state of California, which (rightly) has a reputation itself for fiscal irresponsibility. As with households, so too with provinces: the deeper the hole into which policy makers dig, the more painful will be the eventual correction. By acting sooner rather than later, Ontario can turn around its position, as both theory and (Canadian) history demonstrate. Merely limiting the *rate of increase* in provincial spending should be sufficient to gradually reduce the level of Ontario's debt relative to its economic base, which will allow Ontario to back away from the precipice that it is now in danger of tumbling over.

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17. Specifically, program spending is projected to grow 3.0 percent in 2013/14, 1.2 percent in 2014/15, 0.3 percent in 2015/16, -0.1 percent in 2016/17, and -0.7 percent in 2017/18 (Ontario, Ministry of Finance, 2013 Budget; calculations by authors).

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