BUDGET 2012 AND THE PUBLIC SECTOR'S CONTRIBUTION TO ONTARIO'S ECONOMY

Prepared for:

Ontario Public Service Employees Union
100 Lesmill Road
Toronto, ON M3B 3P8

Prepared by:

The Centre for Spatial Economics
336 Bronte Street South, Unit 221
Milton, ON L9T 7W6

C4SE
THE CENTRE FOR SPATIAL ECONOMICS

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About this Study

This study was prepared for the Ontario Public Service Employees Union (OPSEU). OPSEU represents about 125,000 workers in Ontario. Its members include provincial public service employees, college faculty and support staff, health care workers, social services workers, justice system workers, workers at the Municipal Property Assessment Corporation and the LCBO, and many others across a variety of sectors of the economy. For more information please go to www.opseu.org.

The study was conducted by Robin Somerville, Director, of the Centre for Spatial Economics (C_4SE). The C_4SE monitors, analyzes and forecasts economic and demographic change throughout Canada at virtually all levels of geography. It also prepares customized studies on the economic, industrial and community impacts of various fiscal and other policy changes, and develops customized impact and projection models for in-house client use. C_4SE provides economic models, analysis and forecasts for eight provincial governments, including the Government of Ontario. For more information please go to www.c4se.com.

Executive Summary

Ontario faces serious fiscal and economic challenges over the next decade. The province's traditional strengths have been sapped by a variety of global challenges while its relative lack of natural resource wealth has relegated it to "have not" status for the first time since Confederation. This paper reviewed the role of the public sector in the running and development of the province's economy. It found that the public sector is largely responsible for the health and vitality of the economic foundations that are the principal drivers of success for a region's private sector industry clusters. The public sector cannot be viewed in isolation: public sector excellence is integral to private sector success.

An examination of the contribution of the public sector to the province's economy led to two key findings:

- The economic contribution of incremental public sector spending exceeds that of the private sector. Despite the common assertion that private sector spending is "better" than public sector spending the opposite appears to be true. But does this really mean that public sector spending is better than private sector spending? No, but it does mean that each sector has a role to play in the economy.
- Cuts in public sector spending when compared with equivalent increases in taxes lead to similar changes in the province's fiscal position but cuts in government spending lead to Gross Domestic Product (GDP) and employment losses that exceed those from higher taxes.

Public sector spending is clearly of consequence to the economy and reduced public sector spending will have real implications for economic growth. The implications of these findings can be seen in the economic consequences of the measures taken in Budget 2012. While the budget measures achieve their objective of balancing the budget by 2017-18, the economic consequences are significant. In particular they:

- Subtract as much as 0.7% in 2014 and 0.6% in 2015 from real GDP growth in Ontario.
- Reduce employment by 105,000 people in 2015 with 65,000 coming from the public sector and the remaining 40,000 from the private sector.

If the province needs to have an adult conversation about spending, then it also needs to have a similar conversation about revenue and taxation. While the ability to tax is not without limits, raising taxes rather than cutting spending imposes lower costs on society in terms of reduced jobs and GDP while achieving the government's objective of reducing the deficit. A review of alternative policy options to determine the optimal policy mix is beyond the scope of this research. However, arbitrarily restricting policy choice by refusing to consider tax increases leads to the conclusion that another policy mix, including tax increases, could have reduced the economic impact of the restraint introduced in Budget 2012.

Public sector spending delivers needed services and, when done right, is a vital catalyst for current and future economic growth. Public sector excellence achieved through best practices in service delivery and high productivity is essential to Ontario's economic prosperity and must be the goal of public policy.

The Public Sector Challenge

Ontario faces serious fiscal and economic challenges over the next decade. The province's traditional strengths have been sapped by a variety of global challenges while its relative lack of natural resource wealth has relegated it to "have not" status for the first time since Confederation. These challenges, while not universally accepted, are defined in the report prepared by the Commission on the Reform of Ontario's Public Services (commonly referred to as the Drummond Report).[1]

Yet the Drummond report also notes that:

> *"...spending is neither out of control nor wildly excessive. Ontario runs one of the lowest-cost provincial governments in Canada relative to its GDP and has done so for decades." [p.5]*[2]
>
> *"Nothing we have found suggests that Ontario's public sector is less efficient than public sectors elsewhere." [p.131]*

The Drummond report goes on to recommend that:

> *"The best public service would* ***focus on outcomes, not inputs****. Is a program delivering the objective? Is it doing so efficiently? How much is it costing? A top public service would not set multiple objectives that mix outcomes and inputs, like restricting the number of full-time employees. It would give managers the flexibility to do the job best within their budget." [p.133]*

To move forward, the province must either increase revenues either through higher taxes and/or economic growth or reduce spending in order to avert a potentially catastrophic accumulation of debt. The Drummond Report noted that additional economic growth could reduce the need for some fiscal adjustment but that the global economic environment makes this possibility, if not remote, then unlikely. The Drummond Commission's mandate precluded the possibility of considering new taxes or tax increases to reduce the fiscal challenge so the entire weight of achieving a balanced budget in the Commission's Report fell on reducing public expenditure. The government of Ontario, however, faces no such constraint and can choose an optimal policy mix that may involve tax increases, expenditure reductions or a delay in achieving a balanced budget.

Reducing public expenditure involves cuts to public services. These public services are provided by workers throughout the province and make a significant contribution to the provincial economy. This paper focuses on the contribution made by the public sector to the provincial economy and will demonstrate that the public sector does not operate in isolation but is an integral – even vital – component of a healthy economy.

[1] "Public Service for Ontarians: A Path to Sustainability and Excellence" 2012, Commission on the Reform of Ontario's Public Services.

[2] This was reiterated in the 2012 Ontario Budget. Per capita program spending in Ontario is 11 per cent lower than the average for the other nine provinces.

Defining the Public Sector

This study was prepared for the Ontario Public Service Employees Union (OPSEU). OPSEU represents a wide range of public service workers throughout Ontario. Their members include provincial public service employees, college faculty and support staff, health care workers, social services workers, justice system workers, workers at the Municipal Property Assessment Corporation and the LCBO, and many others across a variety of sectors of the economy.

The public sector, however, extends beyond the workplaces represented by OPSEU. Public sector workers are critical to: generating and transmitting electricity; maintaining our roads, sewers and water supply; teaching our children and healing the sick; and keeping our homes and streets safe – so much that is taken for granted in a modern, well run state. The true contribution to our economy and society of these critical jobs cannot be assessed in a report of this length. This report can only begin to relay the importance of a productive public sector to the health of the overall economy.

From a statistical perspective, it is not possible to accurately assess the contribution that each of the groups represented by OPSEU make to the provincial economy. We have defined the public sector to include federal, provincial and municipal public service employees (public administration), education services, health care and social services and the utilities sector. When possible, the segments of each of these sectors that fall outside the public funding model or public sector control - such as private schools, dental offices, and the distribution and delivery of natural gas - have been excluded.[3]

The Public Sector Employment Challenge

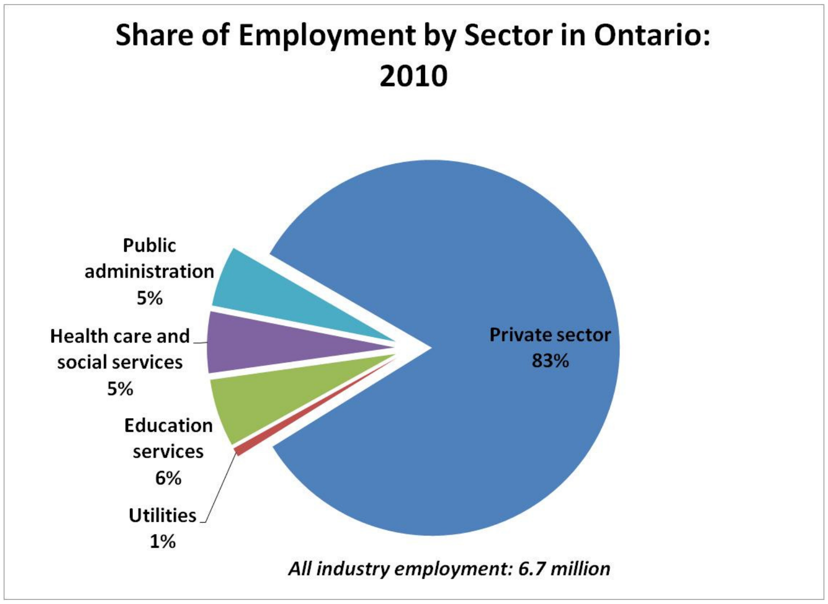
There are over one million public sector employees in Ontario. In 2010, the public sector accounted for 17% of total employment in the province (see Figure 1). The public education sector is the largest of the sectors included in the public sector for this study, just larger than both the public health and social service sector and public administration sectors. The utilities sector is the smallest of the four, accounting for just 1% of employment in Ontario.

The rise in value of the Canadian dollar over the last decade along with growing competition from China and other competitor nations have led to a period of relative stagnation in private sector employment in Ontario – with declines in manufacturing sector employment being the primary culprit. Figure 2 shows that total private sector employment has risen just 10% from its level in 2000. Public sector employment growth since 2000 at 37% (or an average annual growth rate of 2.9%) has, however, been relatively robust. It is this difference in growth that has led critics to contend that the size of the public service is no longer sustainable and must be reduced – or its growth curtailed – to ensure that Ontario does not run the risk of its public debt exceeding the province's ability to pay for it.

Over the longer term, public sector employment growth tends to cycle around private sector growth and has provided a measure of counter-cyclical growth during recessions. In addition, public sector

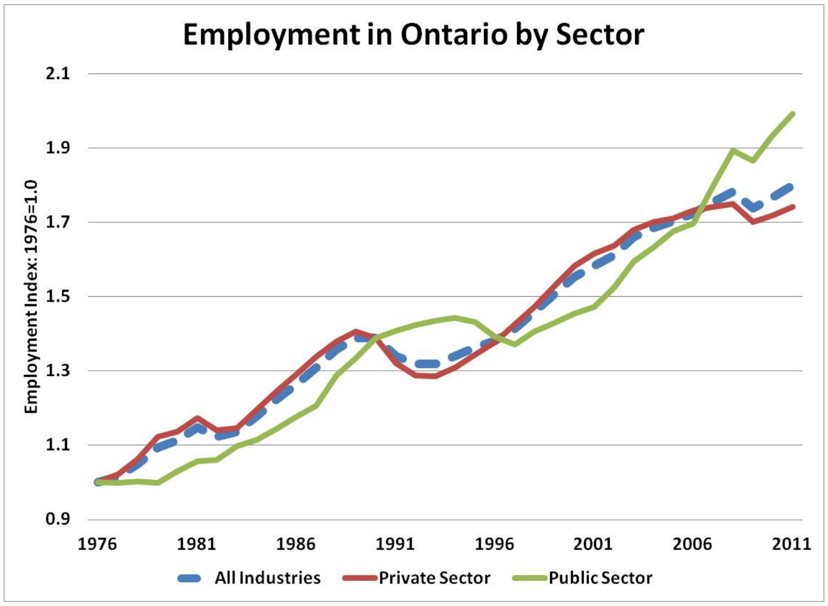
[3]Most of these adjustments to industry coverage were made to the System of National Accounts Labour Productivity data (matrix 383-0009) with the exception of the utilities sector. No adjustments to industry coverage were, however, possible for the Labour Force Survey data (matrix 282-0088) and no adjustments were made to the 2006 Census data.

advocates contend that the last decade was a period of "catch-up" following an extended period in the 1990s when successive governments cut back sharply on both public sector employment and wages.



Source: Statistics Canada, Cansim matrix 383-0009, author's calculations

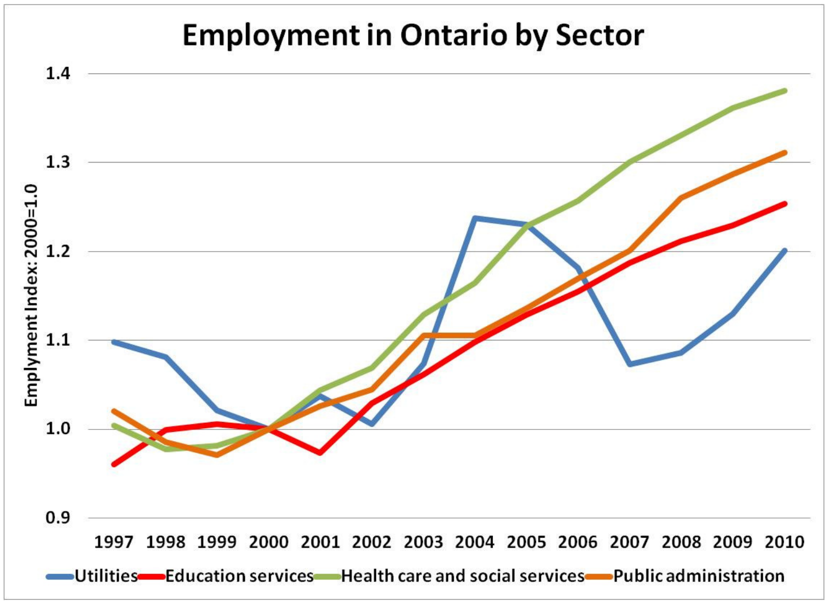
Figure 1



Source: Statistics Canada, Cansim matrix 282-0088, author's calculations

Figure 2

Employment trends within the public sector vary (see Figure 3) with the health care and social services sector leading the pack and the relatively small and volatile utilities sector experiencing the slowest growth since 2000. Employment across all four components of the public sector, however, grew faster than the private sector over the last decade.



Source: Statistics Canada, Cansim matrix 383-0009, author's calculations

Figure 3

The Public Sector Wage Challenge

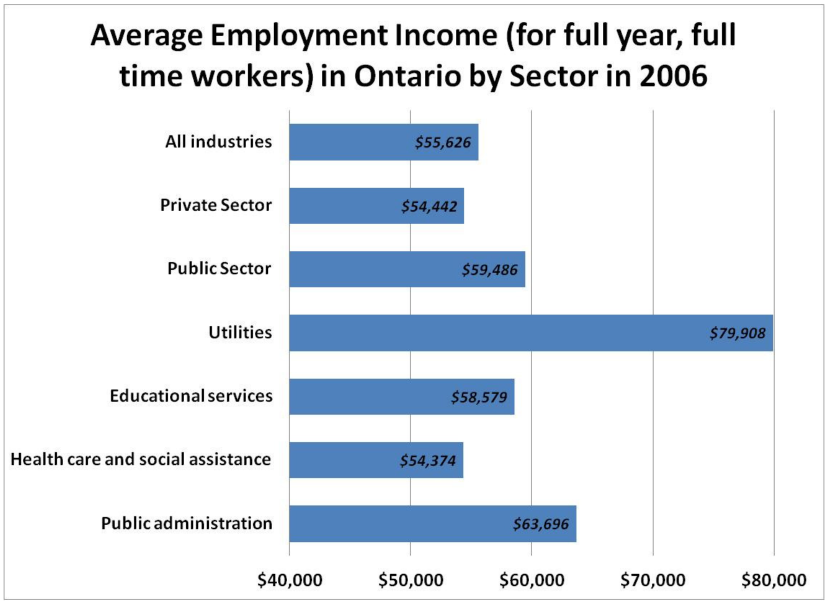
Overall, workers in the public sector in Ontario are more likely to work in occupations with higher rates of pay than are workers in the private sector. Average full year pay for persons who work full time in 2006 was 9% higher in the public sector than the private sector, although average wages within the public sector show considerable variation: from a high of almost $80,000 for utility sector workers down to $54,000 for health care and social services workers which is equivalent to the private sector average wage (see Figure 4).[4]

Several studies have examined possible reasons for this wage differential, but the most salient reasons for the difference appear to be due to the difference in educational attainment and experience between workers in the public and private sectors. The energy sector, for example, employs large numbers of professional engineers and skilled tradespeople; public health care employs most of the province's university- and college-educated doctors, nurses, technologists, and therapists; social services employ trained social workers, psychologists, and counselors; in the classroom, public school teachers and college and university faculty have university qualifications. The category of "public administration" employs a wide variety of highly educated workers as well, from probation officers monitoring convicted offenders to hydrogeologists protecting drinking water.

Figure 5 shows that just 20% of private sector workers have a university degree in Ontario compared with 41% of public sector workers and that 33% of private sector workers have a post secondary diploma, certificate or degree below the bachelors level in Ontario compared with 38% of public sector

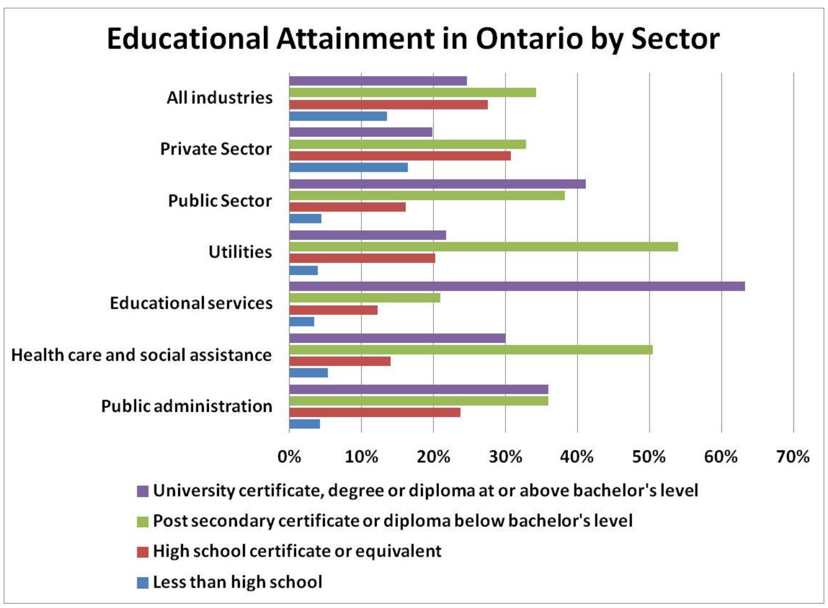
[4] There is, of course, also significant variation in the average wage across sectors within the private sector. Wages across industries in the private sectors also reflect differences in educational attainment.

workers. While the high level of education for public sector workers is unsurprising, Ontario's real challenge is to raise the level of educational attainment for a broader segment of the population.



Source: Statistics Canada, 2006 Census

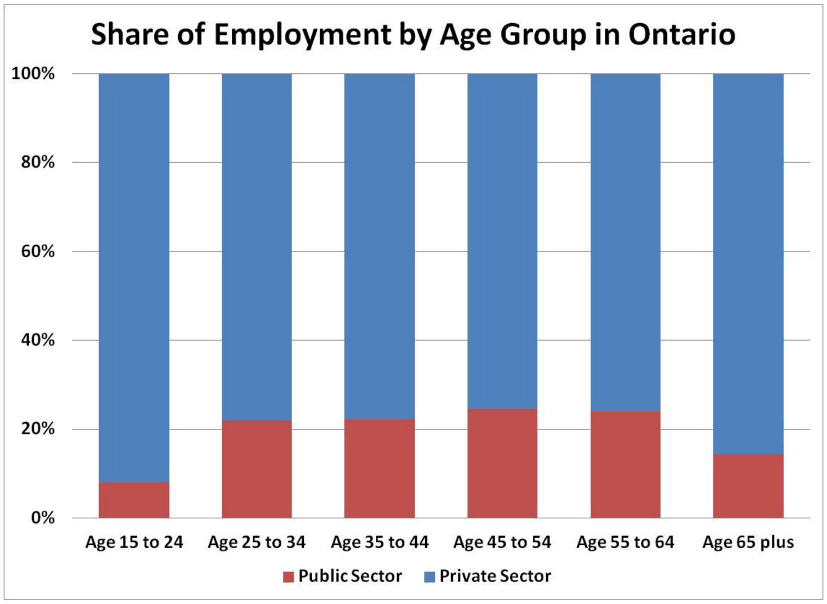
Figure 4



Source: Statistics Canada, 2006 Census

Figure 5

Another factor contributing to the wage differential is the age and experience of the workforce. Figure 6 shows that about 24% of workers between the ages of 25 and 64 work in the public sector while just 9% of workers under 25 work in the public sector. The private sector average wage is, therefore, reduced by the high proportion of workers age 15-24, earning relatively low incomes, that are employed in the private sector rather than the public sector.



Source: Statistics Canada, 2006 Census

Figure 6

After accounting for higher education and more experience, wages in the public sector are comparable to those in the private sector. However, should they be less? One argument for reducing public sector wages is the level of job security enjoyed by public sector workers, but public sector job security is a rare commodity in the current economic environment where public sector workers also face lay-offs and job uncertainty. A second criticism is that public sector benefits – pensions, health, and other – are higher than those available for most workers in the private sector. The Drummond report argued for a reduction in public sector benefits. Others, however, argue that pension and health benefits should be enhanced for all segments of the population with reforms, for example, to the Canada Pension Plan or the creation of a national pharmacare program. This report does not take a position on these issues. Private and public sector wage and benefit levels are relevant to this study because they help determine the impact on the Ontario economy of public sector layoffs and wage restraint.

Role of the Public Sector in Economic Development

What is the role of the public sector in economic development? Some critics argue that it has no role and that any possible benefit from spending in the form of government assistance will be negated by the taxes raised to finance that spending. Other theorists, however, acknowledge the essential role of public services and public infrastructure in facilitating productive activity throughout the economy. For example, in the 1990s a theory of economic development was developed and popularized by Professor Michael E. Porter of the Institute for Strategy and Competitiveness, Harvard Business School. Porter's industry cluster-based theory defined a clear role for public services in providing the foundations essential for economic growth in a region. Over the last twenty years cluster theory has been used to develop strategies to enhance the performance and competitiveness of regional economies around the world.[5]

What are Clusters?

A cluster is a geographically proximate group of interconnected companies and associated institutions in a particular field, including product producers, service providers, suppliers, universities, and trade associations. Clusters arise out of the linkages or externalities that span across industries in a particular location.

How do Clusters Generate Wealth?

In the early 1990s Porter developed an analysis of how firms compete.[6] It viewed productivity as being determined by the interplay of three broad influences: a nation's political, legal and macroeconomic context; the quality of the microeconomic business environment; and the sophistication of company operations and strategy.

Stable political and legal institutions combined with a sound macroeconomic context featuring low inflation, low and stable interest rates and a taxation policy favourable to savings and investment create an environment in which competitiveness is possible. However, a favourable macroeconomic context only creates the potential. Wealth is actually created by the microeconomic foundations of competitiveness: the workers, firms, markets and associated institutions in which competition actually takes place.

The quality of the microeconomic business environment is a function of four interrelated features captured in what is frequently referred to as Porter's "diamond model" (Figure 7) which was first introduced in "The Competitive Advantage of Nations" in 1990. Porter shows how these four features work together in a self-reinforcing dynamic to drive the clustering of competitive industries that are highly effective because they serve markets outside their local area and are able to grow through trade.

[5] The Toronto Board of Trade, for example, hosted a summit anchored by Dr. Porter titled: **Shifting into High Gear: What Does it Take to Realize the Toronto Region's Full Competitive Potential?** in March 2012.

[6] Porter, Michael E. The Competitive Advantage of Nations. New York, 1990.

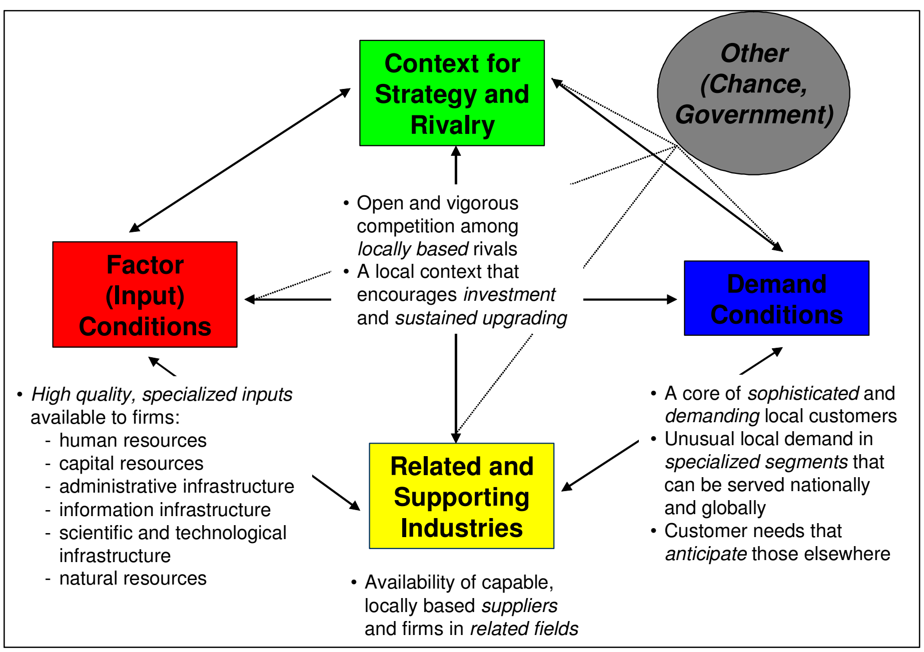
A favourable microeconomic business environment is one that creates pressure for firms to continuously upgrade the source and sophistication of their advantage and at the same time supports the upgrading process with the appropriate factor inputs and supporting institutions. The combination of pressure and support is created by the interaction of the features shown in the diamond model.

Pressure for upgrading is supplied by *demand conditions* featuring sophisticated and demanding customers, whose demands spur local firms to innovate in order to upgrade their product/service offerings. Particularly valuable is customer pressure that anticipates the nature of demand elsewhere in the world.

Beneficial pressure is also supplied by a *context for firm strategy and rivalry* that causes local competitors to feel the need to continuously seek unique and better ways to meet the needs of customers. Such a context typically requires active rivalry among firms competing in the same jurisdiction.

Support for upgrading is provided by the abundant supply of *factor (input) conditions*, including basic factors such as natural resources and capital resources, as well as advanced and specialized factors such as scientific infrastructure and pools of specialized labour. As countries become more advanced, the quality of their microeconomic business environments is increasingly determined by advanced and specialized factors (e.g. research universities) rather than basic factors (e.g. raw material supply) because the basic factors can be readily purchased from abroad.

Porter's Diamond Model



Source: Claas Van der Linde (2003).

Figure 7

Finally, support for upgrading is enhanced by the presence of high quality *related and supporting industries*. Clusters of such industries can help competing firms innovate and create more unique ways of meeting customer needs without needing to make all the investments themselves.

The four features work together in a self-reinforcing dynamic to drive the clustering of industries. The presence of demanding and sophisticated customers encourages the formation of multiple local rivals. The presence of a number of local rivals encourages the local establishment and growth of supplier industries and other related industries. The presence of local rivals and supplier industries spurs the creation of specialized local infrastructure and educational institutions. These in turn help the local rivals innovate and upgrade their capacity to serve the local customers even better, spurring even more sophisticated demand.

The Economic Foundations of a Cluster Driven Economy

Industry cluster competitiveness is not only derived from the concentration of related industries, suppliers and services in a region, but also from access to highly specialized economic inputs that are, in large part, provided by the public sector. These resources, often referred to as "economic infrastructure" or "foundations" include institutions that:

- foster the development of a work force with relevant, adaptable skills
- regulate and encourage appropriate access to finance
- foster and facilitate access to technology
- provide and maintain necessary infrastructure
- establish a regulatory and business climate that fosters growth
- set the conditions to ensure that Ontario provides its residents with an exceptional quality of life

It is clear that the role of the public sector in establishing and encouraging the conditions for successful and innovative clusters is complex and wide reaching. Economic research has evaluated the importance of each of the drivers of cluster competitiveness from the diamond model and found that factor conditions were the most important determinant of competitiveness followed by demand conditions, related and supporting industries and, finally, other reasons, including chance, isolated individual entrepreneurs, and early mover advantages.[7]

However, while the macroeconomic context and the microeconomic business climate create the conditions for prosperity, ultimately companies need to take advantage of these conditions to make sophisticated choices consistent with innovation, upgrading and competitiveness.

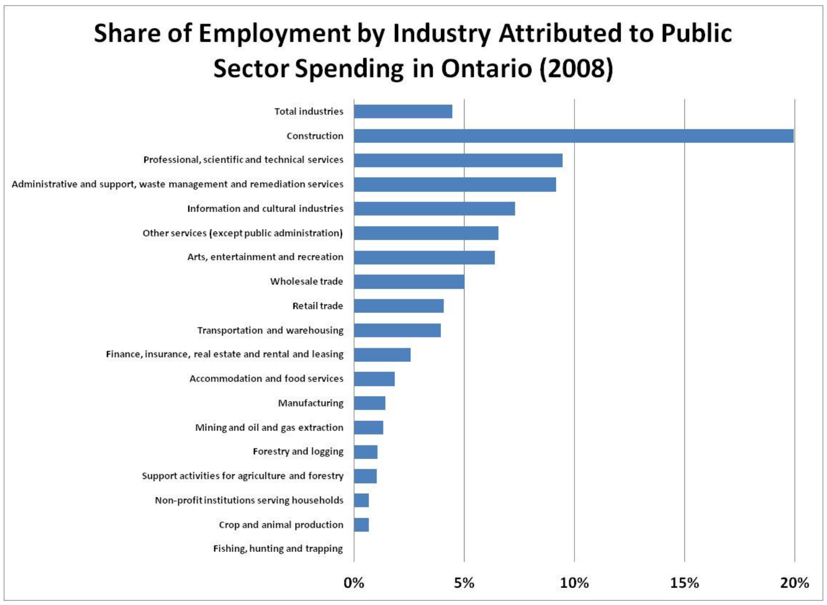
[7] Van der Linde, Claas. "The Demography of Clusters – Findings from the Cluster Meta-Study." In Bröcker. J., D. Dohse and R. Soltwedel (eds.) Innovation Clusters and Interregional Competition. Berlin, Heidelberg, New York: Springer-Verlag, Berlin, Heidelberg, New York 2003, p. 130-149.

The Public Sector's Contribution to Ontario's Economy

This chapter examines the contribution the public sector makes to Ontario's economy by assessing the economic consequences of a variety of public policy options. The analysis employs a variety of statistical techniques and economic models that provide an admittedly incomplete assessment of the true contribution of the public sector to Ontario's economy.

Where Does the Money Go?

To begin our understanding of the public sector's contribution to the Ontario economy we look at the direct consequences of public sector spending on the production of goods and services in various Ontario industries. An analysis of Statistics Canada's input-output database for Ontario[8] reveals that $0.36 of every dollar of public sector spending on operations is used to purchase goods or services from the private sector.[9] Figure 8 captures the proportion of employment across private sector industries in Ontario that can be directly attributed to spending by the public sector. Unsurprisingly, the construction industry is the principal beneficiary with 20% of all jobs in that sector tied to public sector spending.[10]



Source: Statistics Canada, 2008 Ontario S-level input-output database, author's calculations

Figure 8

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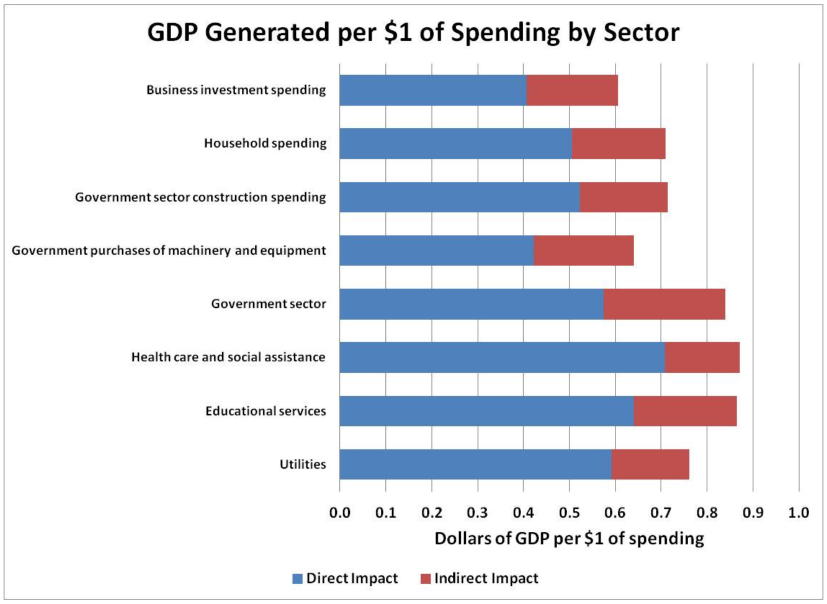
8 An input-output database provides a detailed accounting of the sales and purchases made by each industry in the economy.

9 The remainder goes to labour, purchases of goods and services from other parts of the public sector, net indirect taxes and subsidies and depreciation of assets. The Drummond report estimates that "labour costs amount to about half of all program spending" (p.384).

10 It should be noted that this analysis understates the full impact of public sector spending because it only includes direct purchases made by the public sector. It excludes the spending that arises from government transfers to both businesses (subsidies and other support) and households through a variety of income support programs.

Public versus Private Spending

Further manipulation of the input-output database can also reveal the value of output (i.e. value added or GDP) generated by a dollar of spending that arises in various sectors of the economy. Figure 9 [11] shows that the value added generated in Ontario for a dollar of spending in both the education sector and the health care and social service sector is $0.87. Spending by the government sector for daily operations adds $0.84 while government purchases of machinery and equipment adds $0.64 and on construction adds $0.71.



Source: Statistics Canada, 2008 Ontario S-level input-output database, author's calculations

Figure 9

Why does a dollar of spending not add a dollar - or more - of GDP to the provincial economy? The overall impact of a dollar of spending is less than a dollar because each of these sectors buys goods and services produced outside Ontario. This effect is referred to as "import leakage" and is the reason why the impact of a dollar of spending by private households is just $0.71[12] and business investment on plant and equipment is $0.61.

Many critics assert that private sector spending is "better" than public sector spending. The information in Figure 9 suggests that the opposite is the case: the ultimate impact on provincial GDP of a dollar of public sector spending is actually higher than for a dollar of private sector spending. But does this really mean that public sector spending is better than private sector spending? No! Each sector - consistent with Porter's theory of industry clusters - has a role to play in the economy. It is evident, however, that public sector spending is clearly of consequence to the economy. Cuts in public sector spending will have real implications for economic growth.

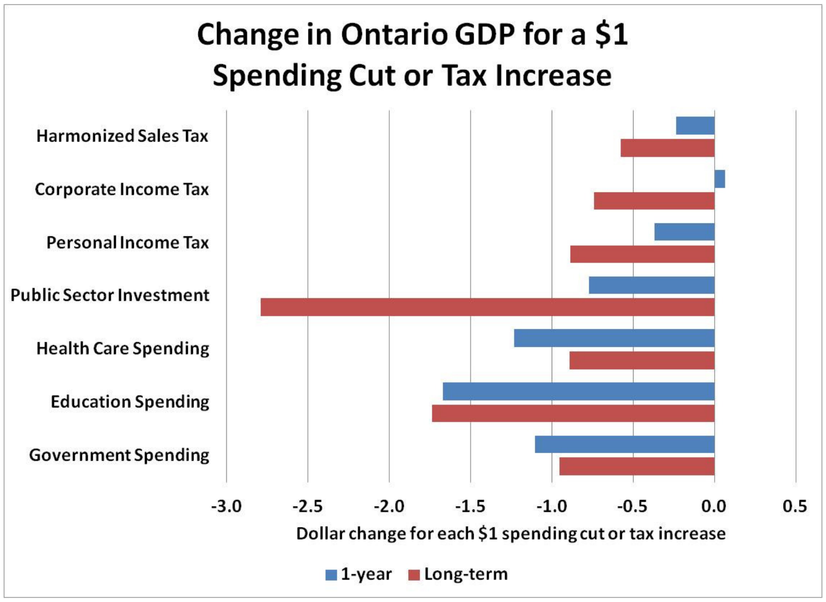
[11] The direct impact measures the activity for businesses that benefit from the original spending while the indirect benefit extends to businesses that supplied goods or services used to produce the items purchased in the original round of spending.

[12] This category included private consumption spending as well as spending on new residential construction.

Tax or Spend? Public Policy Options

A more comprehensive assessment of the consequences of public policy choices can be achieved by using the C_4SE's Provincial Economic Modeling System.[13] Figure 10 through Figure 13 show the consequences to the Ontario economy of a variety of spending cuts or tax increases.

In particular, we have focused on cuts in health care spending, education spending, government spending on operations and public sector investment spending. The impact of these spending cuts are compared to the broader economic effects of equivalent increases in tax revenues from the harmonized sales tax (HST), corporate income taxes, and personal income taxes.



Source: The Centre for Spatial Economics, Provincial Economic Modeling System

Figure 10

The short-term (1 year) and long-term (average of the following 30 years) impacts on Ontario's GDP of each spending cut and tax increase are shown in Figure 10. A permanent cut in government spending of a dollar reduces Ontario's GDP by just over a dollar in the first year and by a little under a dollar over the long-term. This impact is larger than the impact shown in Figure 9 because it includes not only the direct and indirect impact but also the induced or spin-off impacts that arise from the spending, and re-spending, of incomes earned by businesses and households as a result of the direct and indirect business-to-business sales. A cut to education spending reduces GDP by about $1.70 in both the short- and long-run while a cut in health care spending reduces GDP by $1.20 in the short-term and by $0.90 in the long-run.

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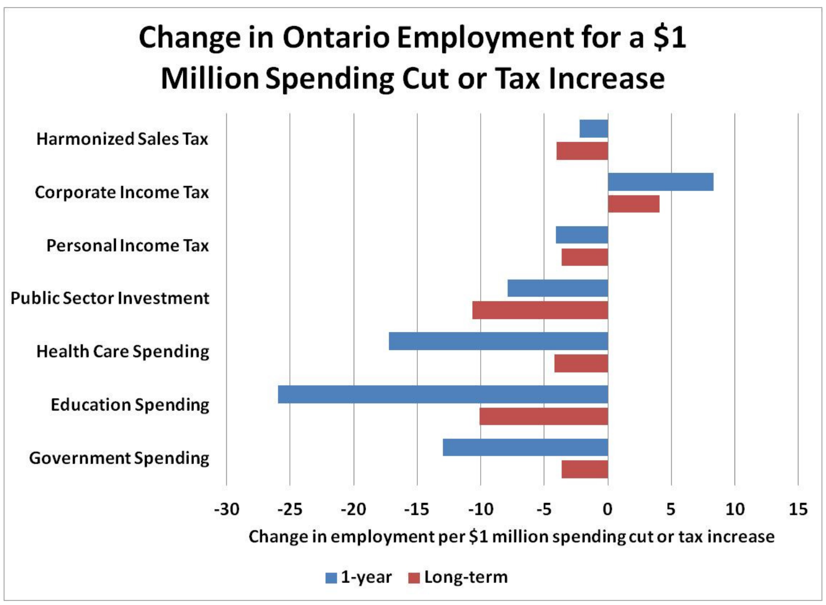
[13] The Centre for Spatial Economics Provincial Modeling System is a dynamic, multi-sector, regional economic model of Canada. It includes a bottom-up set of macroeconomic models for the provinces, the territories and the rest of the world. The national model links economic activity in one region with activity in the other regions through trade. The provincial models include detailed income and expenditure categories and demographic and labour market information. The purpose of the modeling system is to produce medium-to-long-term projections of the provincial economies and to conduct simulation studies that require industry and demographic detail.

Cutting public sector investment spending[14] has a smaller short-run impact, $0.80, due to import leakages but a much larger long-term impact: $2.80. This large long-run impact is due to the C_4SE model's assumption that any new capital put in place will be maintained and replaced as it wears out.

The reduction in GDP from spending cuts is uniformly greater than the impact on GDP from any of the tax increases considered in this study. A one dollar increase in personal income taxes reduces Ontario's GDP by $0.40 in the short-term and $0.90 in the long-run while the HST reduces GDP by $0.20 in the short-term and $0.60 in the long-run. Tax increases reduce personal or corporate incomes which, in turn, reduce both spending and savings and thus have a smaller negative impact on GDP than spending reductions which are not split between spending and savings. A one dollar increase in corporate income taxes, however, raises Ontario's GDP $0.07 in the short-term while lowering it $0.70 in the long-run. The reason for the short-term increase in GDP as a result of higher corporate income taxes is due to a shift towards the use of workers rather than machines to produce goods and services because the cost of labour has fallen relative to the cost of capital and, in the short-run, the incomes earned by those workers boost the economy while the demand for imported machinery and equipment falls.



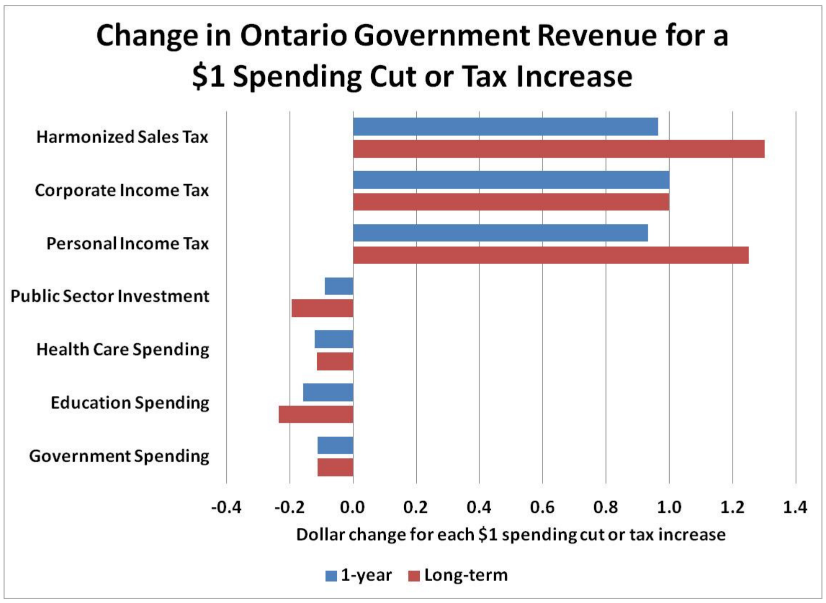
Source: The Centre for Spatial Economics, Provincial Economic Modeling System

Figure 11

Figure 11 shows the impact of these policy options on employment in Ontario. The impacts have been scaled to show the change in employment per $1 million spending cut or tax increase. The impact on employment follows the same general pattern as that seen for the change in GDP in Figure 10. It is interesting to note, however, that the long-run impact on employment of an increase in corporate income taxes remains positive despite the drop in GDP. This is a result of business continuing to use more labour relative to capital than they would have without the tax increase.

[14] This includes spending on roads, bridges and buildings as well as government vehicles, equipment, furniture and fixtures.

The results in Figure 10 and Figure 11 clearly show that tax increases impose smaller costs on the economy in terms of both GDP and employment than equivalent cuts in public sector spending. This raises the question: why not raise taxes and hold the line on public sector spending? There are limits to the amount that taxes can be raised before disincentives to work and contribute to the economy (at least the legal economy) eliminate the benefit of raising taxes rather than cutting spending. In addition, it is important for governments to set a level of public spending growth that is consistent with the ability of the economy to pay for it, otherwise tax rates must continue to rise - resulting in the perils mentioned previously - or large deficits will eventually force a dramatic adjustment in public finances. However, it is important to balance these considerations with an understanding of the public sector's role in the economy - a strong economy includes a strong public sector.

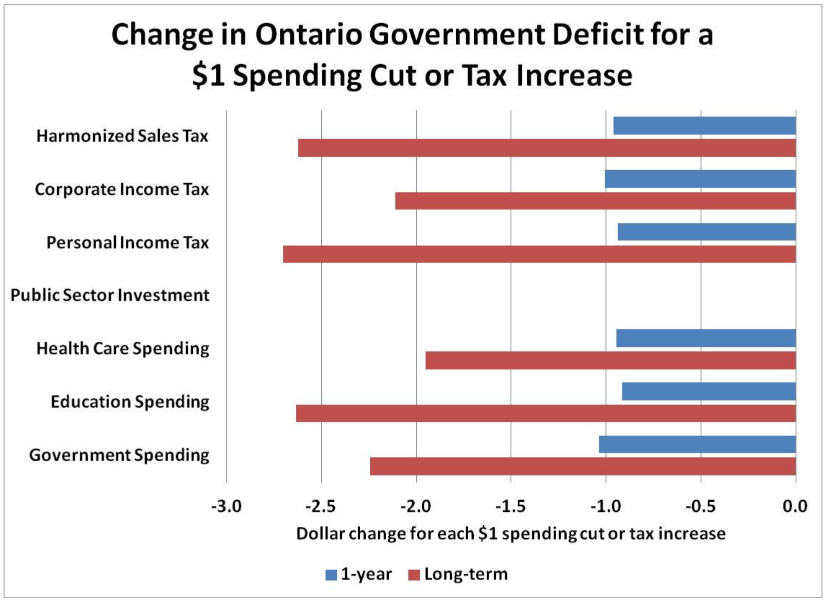


Source: The Centre for Spatial Economics, Provincial Economic Modeling System

Figure 12

An increase in tax rates leads, not surprisingly, to an increase in provincial tax revenues. Figure 12 shows that a one dollar increase in personal income taxes raises Ontario government revenues by $0.93 in the short-term and $1.25 in the long-run. Results for the HST are $0.96 in the short-run and $1.30 in the long-run while the corporate income tax raises $1.00 in both the short-term and long-run.[15] The short-run increases in tax revenue are either at or below a dollar because of the slight reduction in economic activity that occurs as a result of higher taxes. The reduction in economic activity is what explains the fall in Ontario government tax revenue that accompanies a cut in public sector spending. At least $0.10 and as much as $0.20 of each dollar of reduced public sector spending is offset by reduced provincial government revenue.

[15] The increase in revenue from corporate income taxes may be overstated due to corporate reallocation of income to lower tax jurisdictions; the impact of which is not captured by the C_4SE model.



Source: The Centre for Spatial Economics, Provincial Economic Modeling System

Figure 13

The government's bottom line is the impact that the spending cuts and tax increases have on Ontario's deficit. The change in the deficit in each scenario is due to the changes in spending and the changes in tax revenue (shown in Figure 12). Figure 13 shows that the short-term impact on the deficit is very similar for nearly all the spending cuts and tax increases.[16] The biggest impact is for a one dollar cut in government spending ($1.04) and the smallest is for a cut in education spending ($0.92).

The long-run impacts on the deficit are significantly greater than the short-run impacts for all the tax and spending scenarios. The permanent changes weaken the economy in all the tax and spending scenarios which discourages in-migration and encourages out-migration to other parts of Canada. The decline in population reduces the need for some government spending beyond that imposed by the scenarios. So, net spending continues to fall which reduces the province's debt and, therefore, reduces the interest payments on that debt over time . Over the long-run, the biggest impact on the deficit across all the tax and spending scenarios is for an increase in personal income taxes ($2.70) while the smallest is for cutting health care spending ($1.95). Neither spending cuts nor tax increases are necessarily better in terms of their ability to lower the province's deficit.

This chapter has provided a partial assessment of the contribution the public sector makes to Ontario's economy by benchmarking various types of expenditure cuts against possible tax increases. The analysis is only a partial assessment because it has not evaluated:

[16] The public sector investment cut's impact on the Ontario government deficit is not shown because the C_4SE model allocates public investment spending across all three levels of government rather than to just the provincial government. The model, therefore, does not provide an accurate assessment of the impact on the provincial deficit.

- the broader benefits of public education on the quality of the province's labour force and on improved public safety and health outcomes
- the broader benefits of a legal and regulatory system that promotes and protects the economic and social wellbeing of Ontario residents
- the broader benefits of law enforcement and public safety
- the broader benefits of public access to health care and other social services
- the impact of government transfers either to businesses or people
- the economic benefits to all sectors of the economy of public infrastructure after it is built

The statistical techniques and economic models used, while incomplete, provide insight on policy options available to the government and show that various cuts in public sector spending when compared with equivalent increases in taxes lead to similar changes in the province's fiscal position, but cuts in government spending lead to GDP and employment losses that exceed those from higher taxes.

The Hidden Costs of Budget 2012

If implemented, Budget 2012 will achieve the government's objective of balancing the budget by 2017-18. Over the next three years, the budget will reduce spending by $17.7 billion, increase revenues by $4.4 billion and reduce spending on interest payments by $1.2 billion (Table 1). These sound like large numbers - and they are. The direct impact of these fiscal actions as a share of the provincial economy (nominal GDP) is about 0.3% in 2012-13, 1.0% the following year and 1.3% in 2014-15. This level of restraint warrants the label of an "austerity budget".

Table 1

Summary of the 2012 Ontario Budget

	2012-13	2013-14	2014-15	3-year impact
Expense Measures	(2.0)	(5.3)	(10.4)	(17.7)
Revenue Measures	0.3	1.4	2.7	4.4
Direct Impact of Fiscal Actions	2.3	6.7	13.1	22.1
Interest on Debt Expense Avoided	0.1	0.3	0.8	1.2
Improvement in the Deficit	**2.4**	**7.0**	**13.9**	**23.3**

Source: Table 1.7, 2012 Ontario Budget, Ontario Ministry of Finance

The Ministry of Finance expects relatively weak economic growth in 2012 which limits employment growth and leaves the unemployment rate at 7.7%. The situation is, however, expected to improve over the next few years with GDP growth of more than 2% and enough job creation to lead to continuous reductions in the unemployment rate (see Table 2).

Table 2

Details of the Ontario Economic Outlook

	2012	2013	2014	2015
Nominal Gross Domestic Product ($billions)	659.9	687.0	715.9	746.6
Real Gross Domestic Product Growth	1.7	2.2	2.4	2.5
Job Creation (000s)	59	89	103	108
Unemployment Rate (Per Cent)	7.7	7.4	7.0	6.7

Source: Table 2.9, 2012 Ontario Budget, Ontario Ministry of Finance

The previous chapters of this paper have reviewed the role of the public sector in economic development and the degree to which activity in one part of the economy affects other parts of the economy. The public sector cannot be viewed in isolation. Policy choices matter. It should not, therefore, come as a major surprise that an "austerity budget" will lead to a reduction in provincial GDP and employment. This chapter again uses the C_4SE's Provincial Economic Modeling System to evaluate the measures announced in Budget 2012.

Table 3 shows the impact of Budget 2012 on Ontario's economy.[17] The budget measures will reduce Ontario's real GDP growth over the next four years – by as much as 0.7% in 2014 and 0.6% in 2015 –

[17] The measures in Table 3 refer to the difference in annual activity arising from the implementation of the budget measures. In principle, the impacts shown in Table 3 could be subtracted from the levels shown in Table 2 to describe the economy as it would have been without Budget 2012. For example, economic growth of 2.4% in 2014 and 2.5% in 2015 could have been 3.1% in each year without the measures announced in Budget 2012.

before a cyclical rebound takes hold in 2017.[18] Lower economic growth reduces employment by over 100,000 people in 2015 and raises the unemployment rate by 0.9 per cent in that year. Ontario's weaker economy discourages in-migration and encourages out-migration to other parts of Canada. The decline in population reduces household spending and the demand for new housing but also reduces the need for some government spending. By 2015, budget measures will have reduced the size of the economy by over $20 billion a year - which reduces provincial government tax revenue by between $2 billion and $2.5 billion a year.

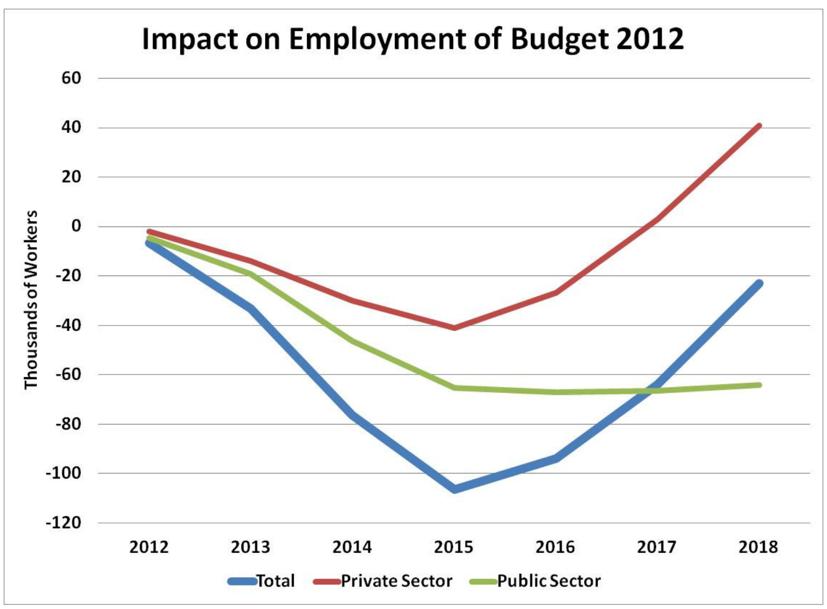
Table 3

Economic Impact of Budget 2012

	2012	2013	2014	2015	2016	2017	2018
Nominal Gross Domestic Product ($billions)	-0.8	-5.3	-13.5	-21.6	-24.9	-25.2	-23.9
Real Gross Domestic Product Growth	-0.1	-0.4	-0.7	-0.6	0.0	0.3	0.4
Population (000s)	-1	-8	-24	-43	-54	-53	-46
Job Creation (000s)	-7	-33	-76	-106	-94	-64	-23
Unemployment Rate (Per Cent)	0.1	0.3	0.7	0.9	0.8	0.5	0.1

Source: The Centre for Spatial Economics, Provincial Economic Modeling System

In the first three years following this budget, both public and private sector employment in Ontario will fall. Within the private sector, the construction industry will be hit hardest by public sector restraint, reduced business investment and reduced new home construction. After 2015, private sector employment recovers, led by gains in the manufacturing sector, but public sector employment is permanently reduced by about 65,000 workers.



Source: The Centre for Spatial Economics, Provincial Economic Modeling System

Figure 14

[18] The cyclical rebound arises from the eventual impact of lower interest rates, a depreciation of the Canadian dollar, lower wage rates, reduced unit labour costs and improved competitiveness.

Concluding Remarks

Budget 2012 achieves its goal of balancing the budget but the economic consequences of the budget measures are significant. This paper has demonstrated that public policy choices matter, so this budget leaves us with at least two questions that should be asked:

> *Is the pain now worth it? Will today's sacrifice reduce the likelihood of an even more dramatic contraction in the future?*
>
> *Are the policy choices made in Budget 2012 the best available or could different choices have met the government's balanced budget objective at a lower cost to society?*

The answer to the first question depends on your perspective and the extent to which you believe that inaction would lead to significant consequences. While not unanimous, there is broad agreement that the provincial government needs to improve its fiscal position. Some have argued that the measures taken will not yield results fast enough or that they could be undermined by future decisions while others have pointed to the perils of acting too quickly and inflicting even more harm to the economy. This leads us to the second question.

If the province needs to have an adult conversation about spending, then it also needs to have a similar conversation about revenue and taxation. While the ability to tax is not without limits, raising taxes rather than cutting spending imposes lower costs on society in terms of reduced jobs and GDP while achieving the government’s objective of reducing the deficit. A review of alternative policy options to determine the optimal policy mix is beyond the scope of this research. However, arbitrarily restricting policy choice by refusing to consider tax increases leads to the conclusion that another policy mix, including tax increases, could have reduced the economic impact of the restraint introduced in Budget 2012.

Public sector spending delivers needed services and, when done right, is a vital catalyst for current and future economic growth. The public sector is largely responsible for the health and vitality of the economic foundations that are the principal drivers of success for a region's industry clusters. The public sector cannot be viewed in isolation: public sector excellence is integral to private sector success.

The Drummond report contends that the objective of public sector reform is not to control inputs (i.e. spending) but instead to ensure that the outcomes (i.e. results of the spending) are the best that can be achieved. Public sector excellence achieved through best practices in service delivery and high productivity is essential to Ontario’s economic prosperity and must be the goal of public policy.

THE CENTRE FOR SPATIAL ECONOMICS

336 Bronte Street South, Unit 221
Milton, Ontario L9T 7W6
t. 905-878-8292
www.c4se.com