A Case of Fiscal Imbalance
The Calgary Experience - att1

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Ivy Zhang, MBA, MA
Corporate Economist

and

Patrick Walters, MA
City Economist

Corporate Economics

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Executive Summary

Purpose of the Study

The paper attempts to answer the question: "Why does The City of Calgary experience financial stress in providing services to Calgarians, even in good economic times?" A short answer is that, Calgary over-contributes to the balance sheets of the federal and provincial governments, leaving the local government[1] with less than adequate revenue to fund its spending responsibilities[2].

Specifically, the study attempts to achieve the following:

- Estimate Calgary's contribution to the fiscal positions of the three orders of government over a 20 year period (1988-2007)[3];
- Assess the existence of an over-contribution[4] situation in Calgary and its causes;
- Discuss the impacts of over-contribution on The City of Calgary's ability to fund growth;
- Propose broad suggestions on how the federal and provincial governments can resolve this issue.

1 Local government includes municipalities and school boards, etc

2 Most urban municipalities face the same fiscal difficulties as Calgary. Municipalities are limited by provincial legislation as to their taxation and revenue raising powers.

3 This period was chosen due to data availability. The latest PEA account includes public financial data for 1981 to 2007.

4 Over-contribution means a significant amount of net fiscal contributions from Calgarians are being distributed to the provincial and federal government, resulting in less than adequate revenue for the municipal government to invest in public infrastructure for the local community.

5 Net contribution = Saving – Capital spending + Capital consumption allowances
Capital consumption allowances = Reserve funds created, not cash outlay at current period

Main Findings

1. **There exists an over-contribution situation in Calgary when the taxes and other payments going to the three orders of government are compared against the benefits received from those orders of government (see the following table):**

Government fiscal positions in Calgary

	1988		2007		1988-2007
	$billion	Share of total	$billion	Share of total	Compound annual growth rate
Total revenue excluding intergovernment transfers	**7.3**	**100%**	**27.4**	**100%**	**7%**
Federal government	3.4	47%	14.0	51%	8%
Provincial government	3.1	43%	11.6	42%	7%
Local government	0.7	10%	1.8	7%	5%
Total expenditure excluding intergovernment transfers	**7.0**	**100%**	**16.3**	**100%**	**5%**
Federal government	2.4	34%	4.2	26%	3%
Provincial government	3.2	46%	8.3	51%	5%
Local government	1.4	20%	3.8	23%	5%
Net contribution[5] excluding intergovernment transfers[6]	**0.7**	**100%**	**12.2**	**100%**	**17%**
Federal government	1.1	164%	9.9	81%	12%
Provincial government	0.1	17%	3.7	31%	20%
Local government	-0.5	-81%	-1.5	-12%	-5%

Sources: Statistics Canada; Corporate Economics

6 Net contribution excluding inter-government transfers represents a government's net fiscal position from a tax payer's perspective. It is the net of a government's total own-source revenue collected from a region's tax payers and the total expenditure the government spent for the same tax payers. If the number is positive, the government collects more from than it gives back to the same tax payers. A negative net contribution means the government spends more for the tax payers than it collects from them.

2. **Calgarians contribute less to their local government in taxes and fees than what is spent by that government. The deficit is met mainly by transfer payments from the provincial government.**
3. **There are impacts of over-contribution on Calgary and the rest of Canadian economy:**
   - Over-contribution results in insufficient infrastructure funding in Calgary, which The City of Calgary addressed by raising its debt rate to one of the highest among big Canadian cities.
   - High debt puts increasing pressures on the municipality to raise property taxes, which exposes local taxpayers to the risk of bearing a higher tax burden.
   - Over-contribution reduces the quality of life, which constrains the local and national economy.
4. **Causes of over-contribution:**
   - The provincial and federal governments have revenue sources that are closely related to economic growth. As a result, they have received most benefit from Alberta's economic booms.
   - The municipality does not have access to growth related taxes such as income and sales taxes. The main source of tax revenue, the property tax, is not growth sensitive which constrains the ability of the local government to raise revenues.
   - There is a mismatch in revenue sources and roles and responsibilities amongst the three orders of government in Canada.
5. **The federal and provincial governments have the fiscal capacity to help cities:**
   - The federal and provincial governments have experienced budget surpluses from the mid-1990s to 2007 fiscal year.
   - Both orders of governments were able to reduce their net financial debts significantly since the mid-1990s. In the case of Alberta, the provincial government paid off all its debt and accumulated a $35 billion surplus by the end of 2007 fiscal year.
   - Although the two orders of government have incurred deficits to help the economy in the 2008-2009 recession, they are expected to return to balanced budgets in a few years.
   - There should not be an increase in taxpayers' tax burdens when evaluating options for additional funding for municipalities, "because there is only one taxpayer".

Conclusion

- Taxpayers in Calgary have been over contributing to the balance sheets of the federal and provincial government over the past two decades.
- Over-contribution has negative impacts on Calgary and the local government. Over-contribution is not sustainable in the long-run - it hurts not only the local economy, but also Alberta and Canada as a whole.
- The Government of Canada and Government of Alberta both have access to growth related sources of revenue and have benefited largely from the long-lasting economic boom. They have the necessary capacity to help fiscally strained cities like Calgary.
- The federal and provincial governments should put more emphasis on promoting economic growth and help big cities for the benefit of the province and the nation.

Report Structure

This paper is divided into six sections:

1. The first is devoted to introducing and organizing the paper.
2. The second section introduces a method[7] for evaluating a city's contribution to the balance sheets of the three orders of government and provides estimates of Calgary's contribution to these governments.
3. The third section states that there is an over-contribution situation in Calgary and then explains the possible causes of this situation.
4. The fourth section describes the direct impacts of over-contribution on The City of Calgary and the indirect impacts on the rest of the province and the country.
5. Section five proposes that the federal and provincial governments should put more emphasis on promoting economic growth and use their fiscal capacity to help cities like Calgary.
6. The sixth section concludes the paper.

7 For the C4SE method, see The Centre for Spatial Economics (July 2005) "The City of Calgary's Contribution to Federal and Provincial Government Balances" for detailed explanations.

1. Introduction

The paper attempts to answer the question, "Why does The City of Calgary experience financial stress in providing services to citizens, even in good economic times?" The general belief is that, in good times The City has the ability to fund municipal services and invest in new infrastructure. In reality, The City of Calgary did not benefit fiscally as much in boom times as the federal and provincial governments did, because it does not have access to growth related or growth sensitive revenue sources[8].

The study examines the Provincial Economic Accounts (PEA)[9] to estimate government revenues and expenditures that flow from and to Calgary. Specifically, the study attempts to achieve the following:

- Estimate the contribution[10] of Calgarians to the balances sheets of the three orders of government over a 20 year period (1988-2007)[11];
- Assess the existence of an over-contribution situation in Calgary and its causes;
- Discuss the impacts of over-contribution on The City of Calgary's ability to fund growth;
- Propose broad suggestions on how the federal and provincial governments can resolve this issue.

This study differs from other studies that have explored the magnitude of over-contribution from citizens in big Canadian cities, as it uses a longer data set to evaluate whether the estimates would change over the course of business cycles. In addition, the study estimates the taxes paid by Calgarians to their local government and the amount that is spent by the government on its citizens. The results show that The City of Calgary's fiscal stress is systemic, as its inability to meet its fiscal commitments could be traced to the lack of access to growth sensitive revenue sources.

1.1 Background – Economic growth and government fiscal positions in Alberta

The first decade of the 21st century was one of increased prosperity for the Alberta economy in general and Calgary in particular. The local economy reaped the benefits of strong demand for commodities from emerging world economies. In this period, prices for energy such as crude oil and natural gas rose sharply and the province realized the benefits from a combination of rising prices and increased sales volumes.

8 Growth related or growth sensitive revenue sources are the revenue sources that grow automatically with the economy.

9 The government financial statistics used in this study are from the Provincial and Territorial Economic Accounts (PEA) , issued by Statistics Canada. In the PEA, government revenues and expenditures are recorded for different provinces. Revenues include both own source revenues and intergovernmental transfers received from other orders of government. Expenditures are divided into current expenditures and capital investments. The former includes the order of government's own spending responsibilities as well as transfer payments to other orders of government. The net contribution position includes an order of government's saving from own source revenues and expenditures and intergovernmental transfers, plus reserve fund inflows (capital consumption allowances) and statistical adjustments. In order to see it from a taxpayer's perspective, intergovernmental transfers are excluded from most of the charts and discussions.

The latest PEA account includes nineteen tables with GDP in nominal and real dollar data from 1981 to 2008 and public financial data for 1981 to 2007. Tables 1, 6-9, 12, 14 are used in this study to 1) discuss the relationships between government revenues/expenditures/fiscal positions and regional economic growth; and 2) estimate the contribution of Calgarians to the three orders of government over 1988-2007.

10 The estimation methodology was developed by the C4SE in 2005 and has been used by various government entities including The City of Toronto and Alberta government.

11 This period was chosen due to data availability.

1. Introduction

Increased business profits and government revenues created the basis for a sharp increase in investment spending, which in turn, resulted in job creation. Higher employment growth created a robust demand for labour which resulted in increased net migration to the region. Strong population growth and growing incomes drove consumer spending which further increased business cash flow. Growth resulted in further growth.

During the 1988-2007 period, population growth in Calgary was faster than the rest of Alberta and Canada, thanks to large inflows of inter-provincial and international migrants looking for job opportunities and a high quality of life. On average, the annual population growth rate was 2.3 per cent in Calgary, compared to 1.8 per cent in Alberta and 1.1 per cent in Canada.

In 2007, total population in Calgary passed the one-million mark to 1,020,000. This rate of growth placed the city's existing infrastructure under significant strain. In turn, The City of Calgary invested heavily in infrastructure to accommodate growth and to replace and upgrade existing infrastructure.

During this period, The City of Calgary experienced increased fiscal stress and budgetary pressures as the need for funding to keep up with the increase in demand for municipal services and infrastructure from a growing population far exceeded its financial ability. Calgary's municipal government debt increased substantially from $1.6 billion in 1988 to $2.1 billion in 2007 and $2.9 billion in 2009. After excluding the effects of population growth, the per capita debt in Calgary shows an unsustainable upward growth trend, which is opposite to the situation at the federal or provincial orders of government. In fact, the federal government experienced declining debt balances since 1999, and the Government of Alberta paid off all sovereign debt in 2000 and managed to accumulate a surplus of $35 billion by the end of 2007.

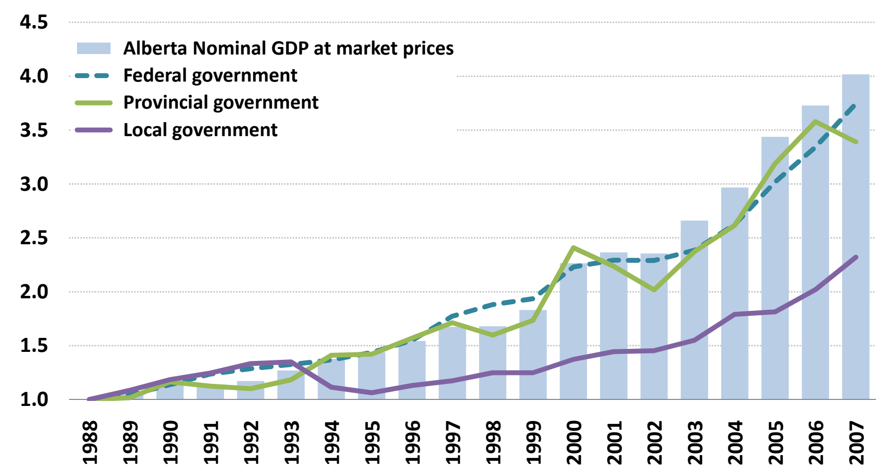
The Canadian and Alberta governments have experienced increased financial prosperity over the 1988-2007 period. This is in contrast to the financial situation in large urban municipalities such as The City of Calgary, where revenue growth was not enough to take care of their increasing responsibilities. The success of the Government of Canada and the Government of Alberta in improving their financial position over the last ten years came largely from the contributions of citizens in leading economic regions such as Calgary. Those regions are the urban areas where a majority of Canada's working age population and employed labour force live and work, and where most of the country's economic activity occurs.

The federal and provincial governments' own-source revenues grow in line with Alberta's economy

Chart 1.1

GDP vs. Government Revenue Excluding Intergovernmental Transfers in Alberta

index, 1988 = 1



Sources: Statistics Canada; Corporate Economics

Through an examination of data from the Provincial Economic Accounts (PEA) for Alberta from 1988 to 2007, it is clear that rapid economic growth[12] in the province resulted in increased revenues and expenditures for the three orders of government in the province, albeit at various paces. The federal and provincial governments benefited most from Alberta's economic growth, as seen in the rapid growth in their own-source revenues[13] (See Chart 1.1).

12 Alberta's gross domestic product (GDP) at market prices grew from $63.9 billion in 1988 to $256.9 billion in 2007 and $291.3 billion in 2008.

13 A government's own-source revenues are the revenues received from sources other than transfer payments from other orders of government, namely government revenue excluding intergovernmental transfers.

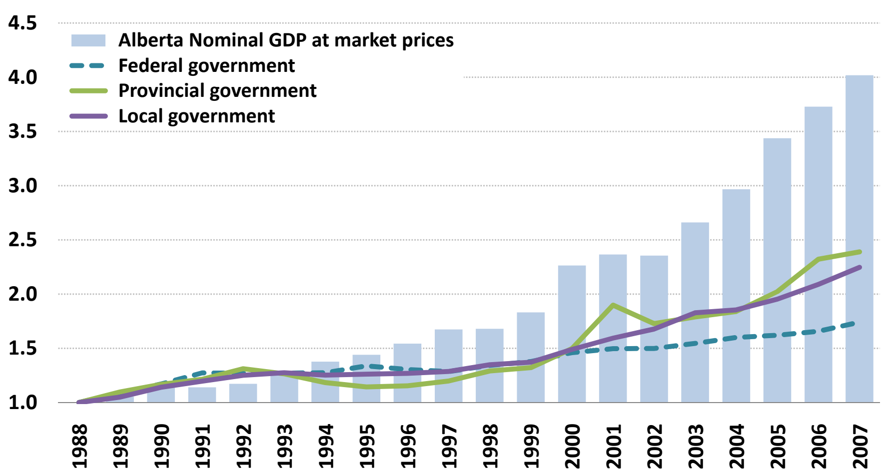
Government current expenditures excluding intergovernmental transfers grew the fastest at the provincial and local orders (See Chart 1.2). At the same time, capital expenditures increased fastest at local order of government followed by the provincial government, reflecting the increased demand for infrastructure and public services resulting from increased population and economic activities in the province (See Chart 1.3). In total, the local and provincial governments in Alberta led the growth in government total expenditures (current and capital) from 1988 to 2007, excluding intergovernmental transfers (See Chart 1.4).

Government current expenditures grow fastest at the provincial and local orders in Alberta

Chart 1.2

GDP vs. Government Current Expenditure excluding Intergovernmental Transfers in Alberta

index, 1988 = 1



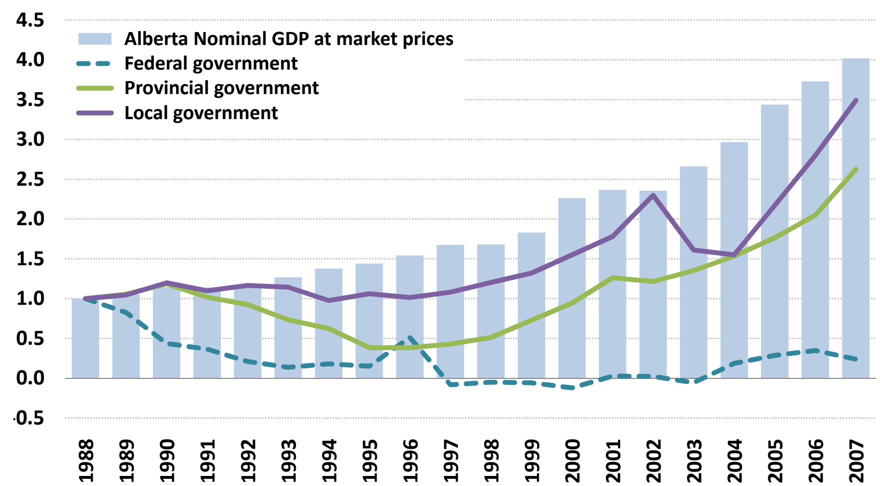
Sources: Statistics Canada; Corporate Economics

Local governments had to respond to increased demand from economic and population growth by increasing capital investments

Chart 1.3

GDP vs. Government Capital Expenditure in Alberta

index, 1988 = 1



Sources: Statistics Canada; Corporate Economics

1. Introduction

The fiscal positions of the three orders of government in Alberta changed in different directions over the past two decades: while the federal and provincial governments realized increasing capacity to spend represented by positive net contribution values, local governments experienced a need to fill the increasing fiscal gap indicated by negative net contribution values (See Chart 1.5).

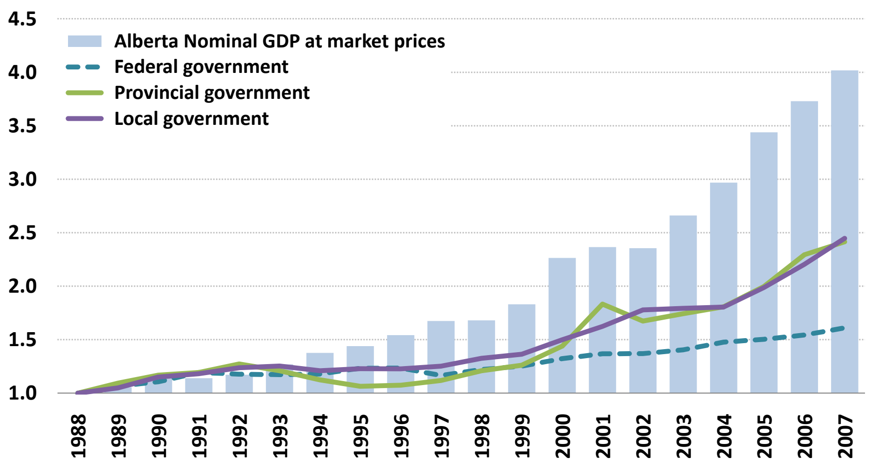
Because funding shortfalls are systemic for local governments in Canada, the federal and provincial governments used intergovernmental transfers as a tool to address the fiscal imbalance. However, this arrangement is not stable as transfer payments can be changed at the discretion of the other orders of government. Local governments therefore face uncertainties in their financial planning due to potential unexpected cuts caused by changes in the priorities of other orders of government.

The local and provincial governments in Alberta led the growth of government expenditures in economic boom times

Chart 1.4

GDP vs. Government Total Expenditure Excluding Intergovernmental Transfers in Alberta

index, 1988 = 1



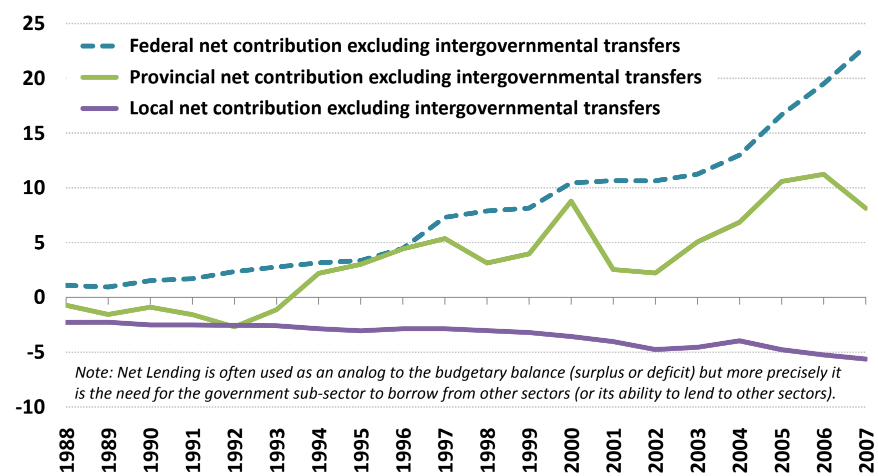
Sources: Statistics Canada; Corporate Economics

Government fiscal positions improved significantly at the federal and provincial orders in Alberta, but deteriorated at the local order

Chart 1.5

Government Fiscal Positions in Alberta: The Need to Borrow vs. the Ability to Lend

billions of dollars

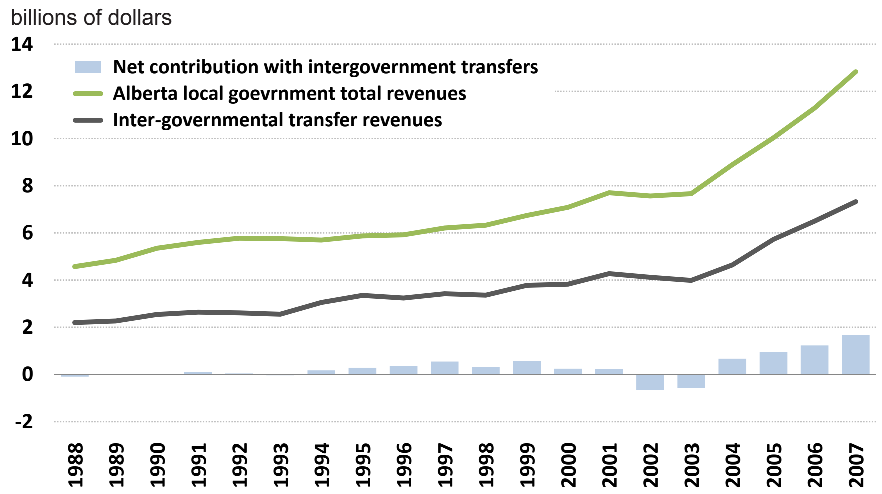


Sources: Statistics Canada; Corporate Economics

The fiscal positions of Alberta's local governments after including intergovernmental transfers are shown in Chart 1.6. It is clear that **intergovernmental transfers are an important source of revenue for local governments to fill the gap between their own-source revenue and their spending responsibilities**.

Intergovernmental transfer is important in filling the gaps between local governments' own-source revenues and their spending responsibilities

Chart 1.6
Local Governments' Fiscal Positions in Alberta



Sources: Statistics Canada; Corporate Economics

1.2 Fiscal imbalances affect local governments

The fiscal system in Canada is based on federalism[14]. In Canada, government spending is significantly more decentralized than in other industrialized nations. For example, in 2005 the centralization ratio - the proportion of total government expenditure made by the central government - was 39 per cent in Canada, compared to 50 per cent in the U.S. and 78 per cent in the U.K.

Since 1926, the distribution of government revenues and expenditures has changed dramatically for all orders of government in Canada. Over the 1926- 2005 period, provincial governments increased their share of spending (from 20 per cent in 1926 to 44.7 per cent in 2005) at the expense of local governments (from 42 per cent in 1926 to 19.5 in 2005). In the meantime, the federal and provincial governments' share of total government revenues increased (from 62 per cent in 1926 to 81.8 in 2005), while local governments were left with a smaller share (from 37 per cent in 1926 to 11.6 per cent in 2005) (Rosen et al, 2008).

Over the years, the debate over vertical fiscal imbalance[15] in Canada has been ongoing between the federal government and provincial governments. These discussions could easily be extended to include local governments. The vertical fiscal imbalance between the local governments and the federal or provincial governments has made it difficult for local governments to finance their spending responsibilities. The situation is even worse for big cities like Calgary, because they over-contribute to the fiscal positions of the

14 Federalism is a system of the government in which sovereignty is constitutionally divided between a central governing authority and constituent political units (like states or provinces). In Canada, the system of federalism is described by the division of powers between the federal parliament and the country's provincial governments, under the Constitution Act (previously known as the British North America Act) of 1867.

15 The vertical fiscal imbalance refers to a gap between revenue sources and spending responsibilities between orders of government, that is, between the federal and provincial governments (SSC, 2006).

federal and provincial governments at the expense of spending on their own infrastructure.

1.3 Implication of the study

Economic studies have identified the importance of cities and their impact on local and national economies. These studies also show that while big cities such as Calgary led economic growth in Alberta for the past two decades, growth in the rest of the province has been catching up with that of big cities due to technological spill-over and movements of labour and capital.

Logically, increasing public investments in Calgary that promote innovation and efficiency would create a win-win situation for the province's long-term economic growth. However, in reality the insufficient public investment in Calgary due to over-contribution to other orders of government has hurt not only Calgary's local economy but also the rest of Alberta and the Canadian economy.

The federal and provincial governments have the fiscal capacities that municipal governments lack to address growth related issues, so they should help financially constrained cities like Calgary. By helping cities to prosper, the nation as a whole prospers.

2. Calgary's Contribution to Government Fiscal Positions

2.1 Methodology for estimating a city's fiscal contribution to the three orders of government

Over the years, residents and businesses in Calgary have contributed significantly to the fiscal position of the federal and provincial governments. However, this contribution is not well understood by the general public because of the lack of readily available data from official sources such as Statistics Canada. To overcome the data limitation and evaluate these contributions, The Centre for Spatial Economics (C4SE) developed a methodology for The City of Calgary in 2005 to estimate Calgary's contribution to the federal and provincial government fiscal conditions. The method was also used for similar exercises by other government entities, including the Alberta Government and The City of Toronto[16].

In this study, the C4SE method is extended to estimate Calgarians' contribution to their local government's fiscal position. Details of the method and estimates for Calgary are described in the appendix.

2.2 Calgary's contribution to government fiscal positions

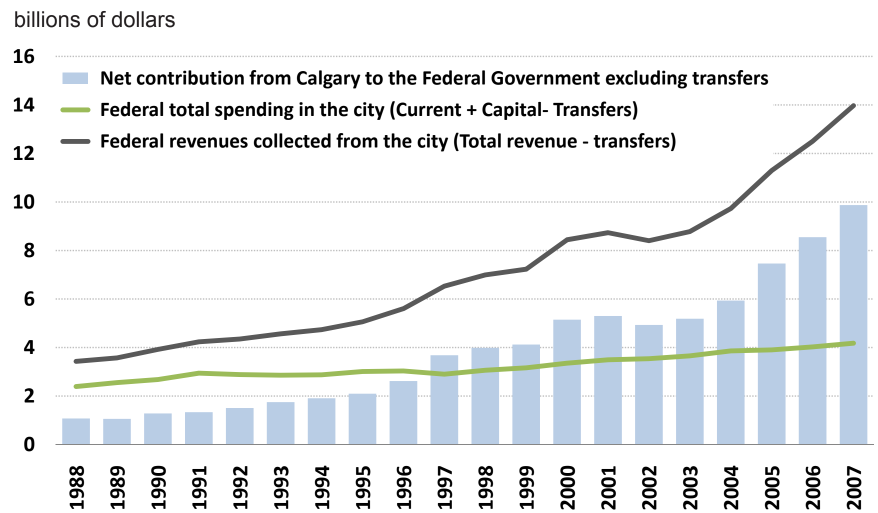
The positive net contribution positions for the federal and provincial governments in the 1988-2007 period[17], excluding intergovernmental transfers, indicate that the federal and provincial governments collected more money in taxes and other payments from Calgary than they spent in the city. Specifically, the net contribution position for the federal government excluding intergovernmental transfers jumped from $1.1 billion in 1988 to $9.9 billion in 2007, growing by 18 per cent annually. During the same period, the net contribution position for The Government of Alberta, excluding intergovernmental transfers, grew more significantly by 30 times from the initial amount of $0.1 billion in 1988 to $3.7 billion in 2007(see charts 2.1 and 2.2).

16 Toronto Board of Trade (2002) "Strong City Strong Nation: Securing Toronto's Contribution to Canada", June

17 The period of estimation was chosen based on the availability of data. The latest taxation data available is for 2007, while unemployment data for the Calgary Economic Region is from 1988.

Calgary's net contribution to the federal government's fiscal position grew the largest over the past twenty years (from $1.1 billion in 1988 to $9.9 billion in 2007)

Chart 2.1
Calgary's Contribution to the Federal Government



Sources: Statistics Canada; Corporate Economics

2. Calgary's Contribution to Government Fiscal Positions

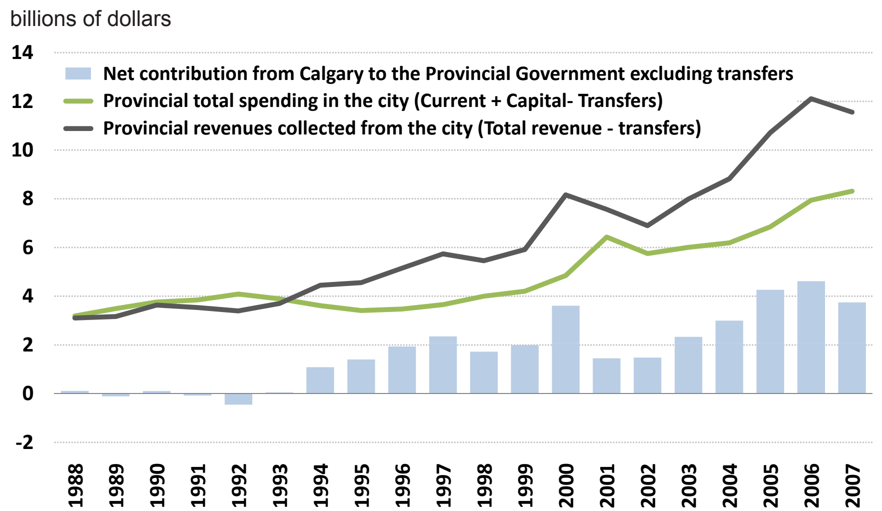
The major sources of revenue contributed from Calgary to the federal government are: direct taxes from persons, direct taxes from corporate and government business enterprises, indirect or excise taxes, and contributions to social insurance plans.

The four major sources of revenue contributed from Calgary to the provincial government include: investment income, direct taxes from persons, indirect taxes, and direct taxes from corporate and government business enterprises, all of which are driven by economic activities.

The negative net contribution position for the local government, excluding intergovernmental transfers, was observed during the same period. The local government of Calgary collected less taxes as payments from Calgarians than it spend in the city. In other words, there was a funding gap between the local government's own-source revenues and its spending responsibilities. Over the past two decades, the gap has widened from $0.5 billion in 1988 to $1.5 billion in 2007 (see Chart 2.3).

Calgary's net contribution to Alberta Government's fiscal position grew significantly over the past twenty years (from $0.1 billion in 1988 to $3.7 billion in 2007)

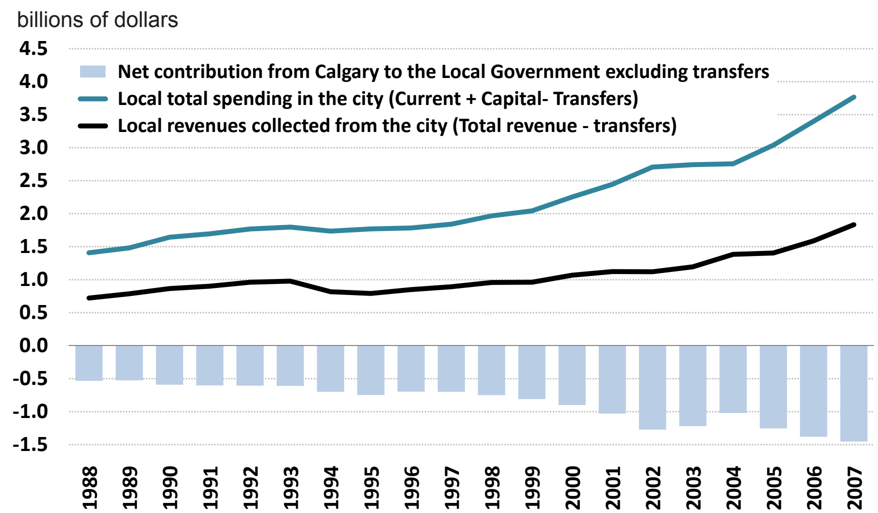
Chart 2.2
Calgary's Contribution to the Alberta Government



Sources: Statistics Canada; Corporate Economics

The funding gap between the local government's own-source revenues and its spending responsibilities grew over the past twenty years (from $0.5 billion in 1988 to $1.5 billion in 2007)

Chart 2.3
Calgary's Contribution to the Local Government



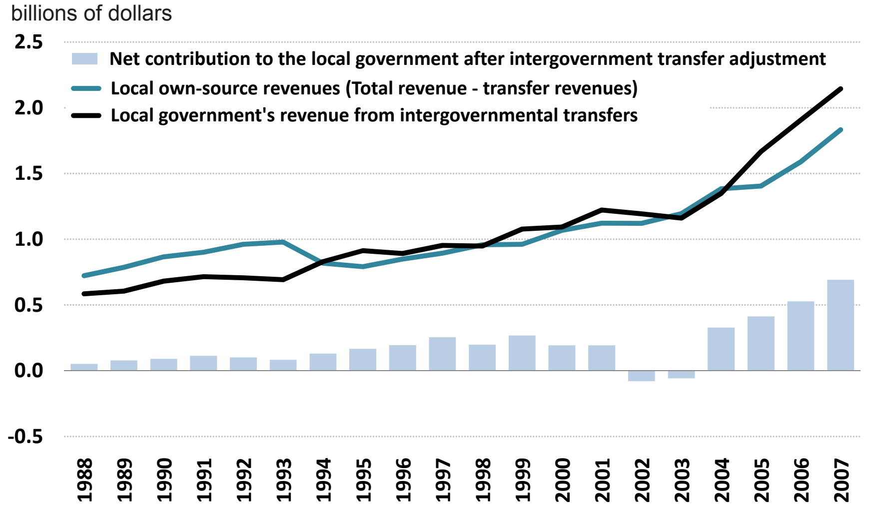
Sources: Statistics Canada; Corporate Economics

Only after adding intergovernmental transfer payment revenues from the other orders of government (mainly from the Alberta Government), was the local government able to bridge the funding gap from 1988 to 2007 (see Chart 2.4). Over the past two decades, these transfer payments grew faster than the local government's own-source revenues ($0.7 billion in 1988 and $1.8 billion in 2007), from $0.6 billion in 1988 to $2.1 billion in 2007. This trend is the net result of increases in provincial government revenues, arising largely from economic growth, and the slower increases in the local government revenues that is less linked to economic growth.

Intergovernmental transfer is an increasingly important revenue source for the local government in Calgary

Chart 2.4

Local Government's Fiscal Position in Calgary after Transfer Adjustment



Sources: Statistics Canada; Corporate Economics

3. The Case of Over-Contribution in Calgary and its Causes

3.1 The over-contribution situation in Calgary

From the tax payers' perspective, there has been an over-contribution situation in Calgary over the past two decades: a large amount of tax payments went to the federal and provincial governments, leaving less than adequate funding for the municipal government to invest in local infrastructure. This report does not suggest that Calgary should not contribute to the provincial or the federal government. It recognizes that stronger economies should contribute to both national and provincial governments to assist the weaker economies. However, the current over-contribution situation is clearly unsustainable. Calgary and other municipalities in the same situation would not be able to sustain a dynamic economy unless they are able to invest in areas that allow them to maintain their local infrastructure and support an appropriate quality of life for current and future generations.

Given the lack of consensus on standards or thresholds for defining over-contribution, several statistical indicators are used here to illustrate the point.

3.1.1 A relatively small share of Calgary's tax dollars went to the local government to provide goods and services for the local community

A comparison between the federal, provincial and local government fiscal positions in Calgary shows that most of the tax revenues from Calgary go to the federal and provincial governments, and their share of revenues received from Calgary has increased from 89 per cent in 1988 to 93 per cent in 2007. Total expenditures for the provincial and local government grew faster than those for the federal government, because the provincial and local governments had to address increasing demands from local businesses and residents.

If intergovernmental transfers are excluded, the analysis shows that the federal and provincial governments realized increasing positive net contribution positions, which means that they had the capacity to contribute more funds to local governments over the years. However, the local government of Calgary would have had an increasing funding gap between its own-source revenues and spending responsibilities over this period, from \$0.5 billion in 1988 to \$1.3 billion in 2007. The local government was able to avoid this funding shortfalls only with the help of intergovernmental transfer revenues (See table 3.1).

Table 3.1 Government fiscal positions in Calgary

	1988		2007		1988-2007
Government fiscal positions in Calgary ($billion)	$billion	Share of total	$billion	Share of total	Compound annual growth rate
Total revenue excluding intergovernment transfers	**7.3**	**100%**	**27.4**	**100%**	**7%**
Federal government	3.4	47%	14.0	51%	8%
Provincial government	3.1	43%	11.6	42%	7%
Local government	0.7	10%	1.8	7%	5%
Total expenditure excluding intergovernment transfers	**7.0**	**100%**	**16.3**	**100%**	**5%**
Federal government	2.4	34%	4.2	26%	3%
Provincial government	3.2	46%	8.3	51%	5%
Local government	1.4	20%	3.8	23%	5%
Net contribution excluding intergovernment transfers	**0.7**	**100%**	**12.2**	**100%**	**17%**
Federal government	1.1	164%	9.9	81%	12%
Provincial government	0.1	17%	3.7	31%	20%
Local government	-0.5	-81%	-1.5	-12%	-5%
Net contribution with intergovernment transfers	**0.7**	**100%**	**12.2**	**100%**	**17%**
Federal government	0.5	78%	8.9	73%	16%
Provincial government	0.1	14%	2.6	21%	19%
Local government	0.1	8%	0.7	6%	15%

Sources: Statistics Canada; Corporate Economics

3.1.2 Accelerated population growth and high inflation in Calgary resulted in cost increases in providing new infrastructure and local public services

From 1988 to 2007, Calgary experienced faster growth in population and higher inflation than most of the other regions in Canada (see Chart 3.1 and Chart 3.2). As a result, the total per capita government expenditure in real dollars ($1988) in Calgary declined over the period, mainly from the federal and provincial governments (see table 3.2). The decline occurred during the time when standards for environmental protection increased and competitions to increase the quality of life among international cities intensified. The failure to account for population growth and inflation adversely affected the city's competitiveness in the global economy.

3. The Case of Over-Contribution in Calgary and its Causes

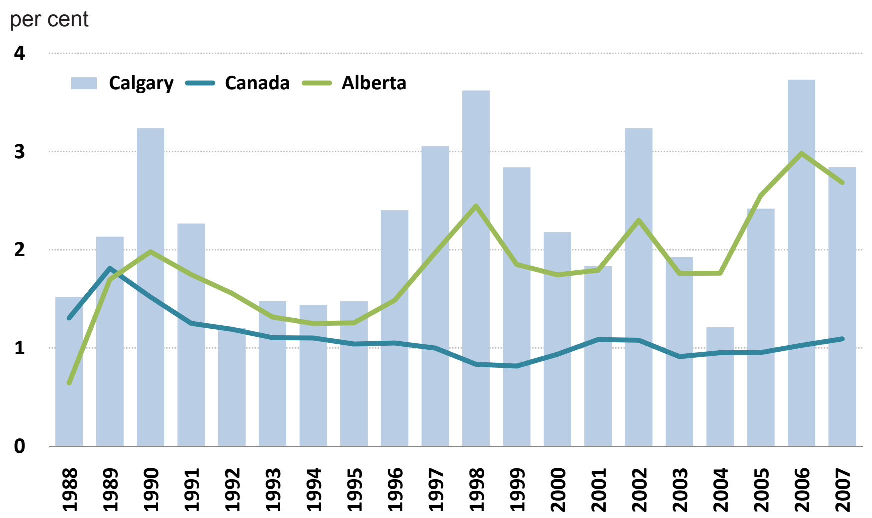
Table 3.2 Per capita government spending in Calgary ($1988 constant dollars)

	1988		2007		1988-2007 Compound annual growth rate
	$1988	Share of total	$1988	Share of total	
Per capita expenditure excluding intergovernment transfers	**10,796**	**100%**	**9,013**	**100%**	**-0.9%**
Federal government	3,697	34%	2,316	26%	-2.4%
Provincial government	4,924	46%	4,609	51%	-0.3%
Local government	2,175	20%	2,088	23%	-0.2%

Sources: Statistics Canada; Corporate Economics

Calgary had faster population growth than the rest of Alberta and Canada

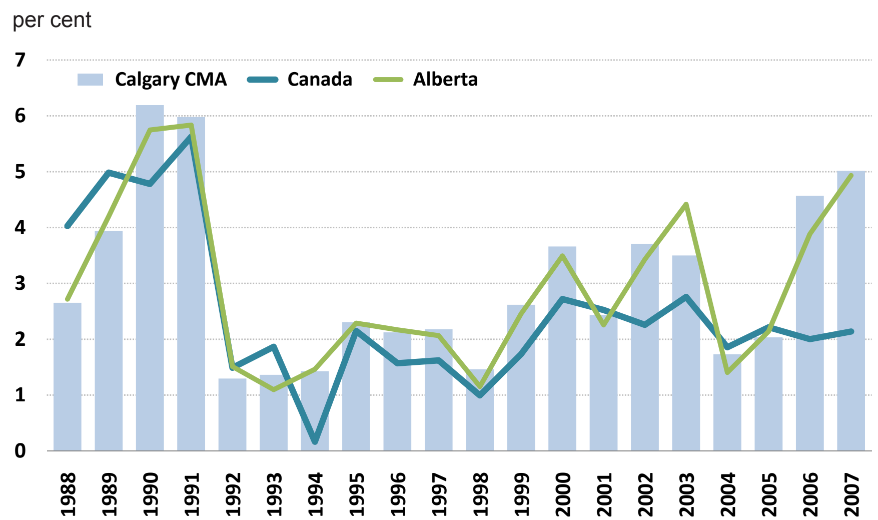
Chart 3.1
Population Growth: Canada, Alberta and city of Calgary



Sources: Statistics Canada; Corporate Economics

Calgary had higher inflation rates than the rest of Alberta and Canada

Chart 3.2
Inflation Comparison: Canada, Alberta and Calgary CMA



Sources: Statistics Canada; Corporate Economics

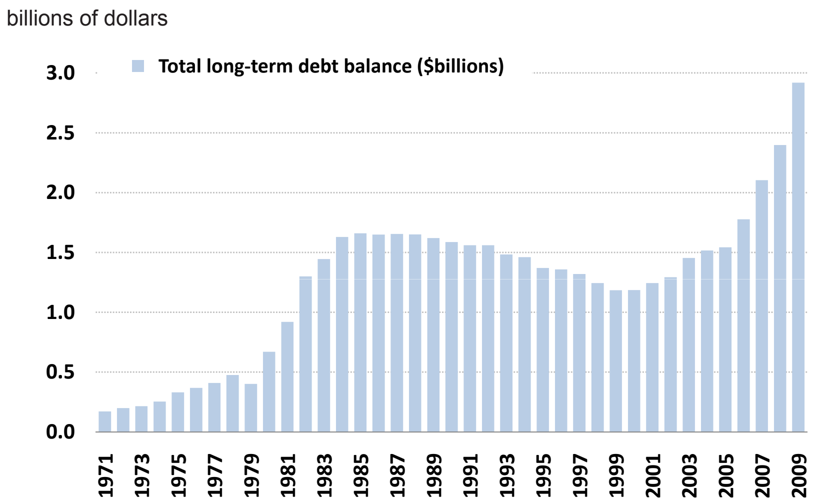
3.1.3 The City of Calgary's long-term capital debt reports show financial strains

According to The City of Calgary's financial reports, the municipal government has experienced two periods of high debt or borrowing since 1967. The first was during the late 1970s and early 1980s and the second was during 2000-2009. The City of Calgary borrowed in capital markets to invest in infrastructure to accommodate its fast growing population during these two periods. Calgary's municipal government long-term debt increased substantially from $1.2 billion in 1999 to $2.1 billion in 2007 and $2.9 billion in 2009 (see Chart 3.3). Even after adjusting for population growth, the per capita debt balance in Calgary still shows an unsustainable upward growth trend (see Chart 3.4). It is estimated that The City of Calgary could reach its debt borrowing limits in 2012-2014, if no new revenue sources are available and capital investment pressures intensify.

From Calgarians' perspective, even if these capital investments are needed to benefit them in the long-run, a continuous increase in long-term debt is an unfair tax burden.

The City of Calgary's borrowing hikes peaked during the past two economic booms (late 1970s- early 1980s; 2000-2009)

Chart 3.3
The City of Calgary Total Long-term Debt Balance (1971-2009)

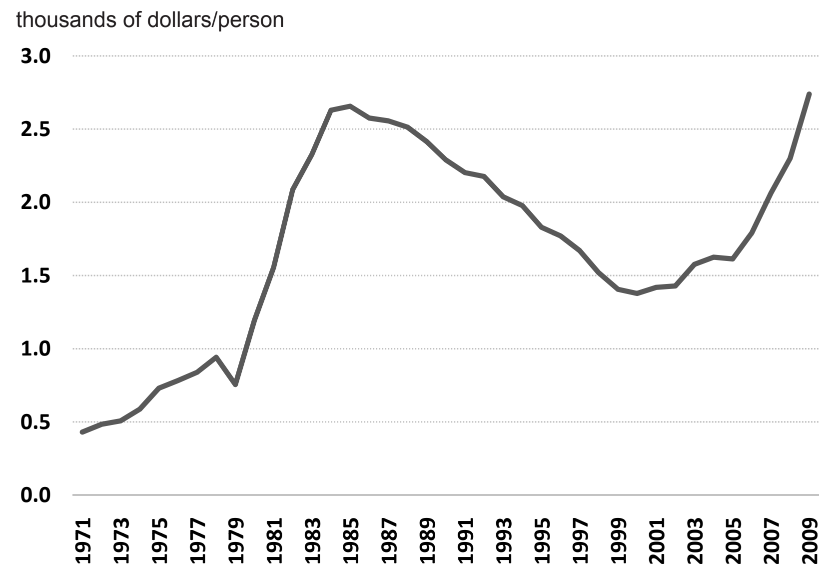


Note: Excludes mortgages and leases

Sources: The City of Calgary, various "Financial Report"

Continuous growth in debt at The City of Calgary is not sustainable

Chart 3.4
The City of Calgary Per Capita Long-term Debt (1971-2009):



Sources: The City of Calgary, various "Financial Report"

3.2 Causes of over-contribution

3.2.1 Municipalities do not have access to growth related sources of revenue

Over the past twenty years, Alberta experienced the country's fastest economic growth, driven by its energy sector. GDP in Alberta, unadjusted for inflation, grew by 4 times from $63.9 billion in 1988 to $256.9 billion in 2007. Total revenues collected in this period grew by 3.7 times for the federal government, by 3.4 times for the provincial government, and by 2.3 times for the local governments (see Chart 1.1 in Introduction). The comparison clearly shows that during this period the federal and provincial governments benefited more financially from the province's economic growth than the local governments in Alberta, since they have access to revenue sources that are tied to economic growth.

The differences in government revenue growth rates are the result of each government's ability to capture different revenue sources (see table 3.3). Many of these revenue sources grow with economy. For example, in 2007 the federal government collected 91 per cent of its total revenue in Alberta from three major sources: direct taxes from persons (mainly income taxes), direct taxes from corporate and government business enterprises, and taxes on production and imports. The Alberta Government collected 82 per cent of its total revenue in the province from: investment income (mainly royalties), direct taxes from persons (mainly income taxes), and indirect taxes (taxes on consumptions). All of these revenues are closely correlated with the economic growth in the province and therefore grow automatically with increases in personal income, investment activity and consumption.

However, local governments in Alberta collected 83 per cent of their total revenues in 2007 from taxes on production and imports (mainly real and personal property tax), a source of tax indirectly linked to economic growth through investment in property.

Clearly, the federal and provincial governments are the major beneficiaries of economic growth in Alberta in terms of increased tax revenues, because they have access to growth related tax sources. These growth-related tax revenues are deducted from source of income and grow with inflation and seem invisible to taxpayers. Growth in municipal revenues lags economic growth because of the lack of local government access to the growth sensitive revenue sources. Moreover, transfer payments are provided to local governments at the discretion of the provincial government where provincial priorities take precedence over municipal needs.

Adding to the financial constraints of the local governments, the Alberta government has increased its involvement in the property tax field by taking control of educational property tax revenues from the tax base of cities since 1994 (see Chart 3.5)[18]. This has reduced local autonomy (Rosen et al, 2008).

Calgary's over-contribution situation is directly caused by its lack of access to growth sensitive tax sources. Local residents and businesses, while contributing significant amount of taxes and other payments to the other orders of governments, experienced insufficient new infrastructure investments and limited provision of services in the city.

18 For many years the Alberta government has funded the greater part of the cost of providing K–12 education. Prior to 1994 public and separate school boards in Alberta had the legislative authority to levy a local tax on property, as supplementary support for local education. In 1994 the government of Alberta eliminated this right for public school boards, but not for separate school boards. Since 1994 there has continued to be a tax on property in support of K–12 education. The difference is that the mill rate is now set by the provincial government, and the money is collected by the local municipal authority and remitted to the provincial government. The relevant legislation requires that all the money raised by this property tax must go to the support of K–12 education provided by school boards. The provincial government pools the property tax funds from across the province and distributes them, to public and separate school jurisdictions and Francophone authorities, according to a formula.

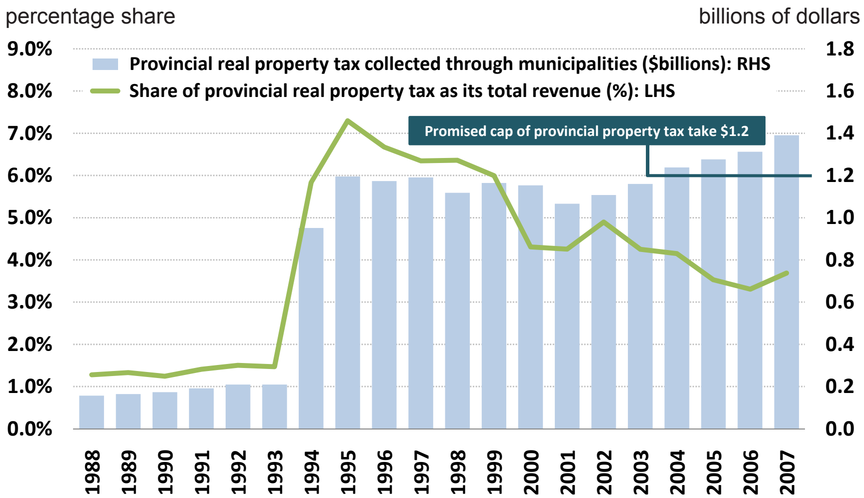
Table 3.3 Government revenue sources in Alberta

Government revenue sources in Alberta	1988		2007	
Federal Government Own-source Revenues in Alberta	$million	Share of total	$million	Share of total
1 Direct taxes from persons	4,499	45%	20,173	54%
2 Direct taxes from corporate and government business enterprises	1,785	18%	6,818	18%
3 Direct taxes from non-residents (withholding taxes)	115	1%	469	1%
4 Contributions to social insurance plans	1,073	11%	2,119	6%
5 Taxes on production and imports	1,939	20%	6,750	18%
6 Other current transfers from persons	2	0%	2	0%
7 Investment income	484	5%	733	2%
Total revenue excluding intergovernmental transfers	**9,897**	**100%**	**37,064**	**100%**
Provincial Government Own-source Revenues in Alberta	$million	Share of total	$million	Share of total
1 Direct taxes from persons	2,322	23%	6,840	20%
2 Direct taxes from corporate and government business enterprises	917	9%	3,469	10%
3 Contributions to social insurance plans	320	3%	985	3%
4 Taxes on production and imports ***(including provincial property tax and excise tax)***	1,672	16%	6,553	19%
5 Other current transfers from persons	439	4%	1,652	5%
6 Investment income	4,471	44%	14,885	43%
Total revenue excluding intergovernmental transfers	**10,141**	**100%**	**34,384**	**100%**
Local Government Own-source Revenues in Alberta	$million	Share of total	$million	Share of total
1 Taxes on production and imports ***(mainly municipal property tax)***	1,875	79%	4,591	83%
2 Current transfers from persons	44	2%	154	3%
3 Investment income	454	19%	763	14%
Total revenue excluding intergovernmental transfers	**2373**	**100%**	**5,508**	**100%**

Sources: Statistics Canada; Corporate Economics

Alberta Government's increasing involvement in the property tax added to local governments' fiscal stress

Chart 3.5
Alberta Government Revenue Source: Total Revenue vs. Provincial Property Tax



Sources: StatCan Catalogue no. 13-018-XWE, Vol. 2, tab08-eng No. 2

3.2.2 Property tax is not growth sensitive

According to The City of Calgary's financial reports, net taxes available for municipal purposes (namely The City's share of property tax revenues) accounted for 34 per cent of The City's total revenue in 1988. This share has increased by 8 percentage points over eighteen years to 42 per cent in 2007 (see table 3.4). The trend shows that The City of Calgary is increasingly relying on revenues from property taxes to finance its expenditure responsibilities. However, this main source of revenue did not grow at the same pace as the local economy and the city's population. The City's net taxes available for municipal purposes doubled from 1988 to 2007, causing total revenues excluding intergovernmental transfers to increase by 130 per cent over the same period (see table 3.5). This is in sharp contrast with the fiscal situations of the provincial and federal governments in Alberta, which grew by 270 per cent and 240 per cent respectively. The slow-growing revenue scenario for The City of Calgary is expected to continue, because its major revenue source, property tax, is not growth-sensitive.

Table 3.4 The City of Calgary's revenue sources

Revenue sources	1988	2007	Change of share in 1988-2007
Net taxes available for municipal purposes (property taxes)	34%	42%	8%
Sales of goods and services	49%	26%	-24%
Government transfers and revenue sharing agreements	9%	17%	8%
Investment income	4%	2%	-2%
Fines and penalties	1%	2%	0%
Licences, permits and fees	1%	3%	1%
Miscellaneous revenue	2%	10%	8%
Total revenue	**100%**	**100%**	**0%**

Sources: The City of Calgary "1988 Financial Report" and "2007 Annual Report"

According to Rosen et al (2008) property tax is a tax on wealth, a stock variable that refers to the value of the assets an individual or a business has accumulated at a point in time. In Canada, property taxes are levied on assessed values of local properties. The amount of property tax revenue collected is not closely related to the personal circumstances of individual taxpayers. In the case of property taxes on homeowners, the tax does not reflect the equity of the homeowner. Instead, it is based on the gross value of the real estate. Thus the property tax is the same for taxpayers with same assessed value homes but different mortgages. By comparison, income, consumption, and sales taxes are levied on flow variables that are associated with a certain period of time, so overall economic conditions contribute to the amounts of these tax revenues at the same time.

The property values in Calgary lag behind changes in the economy by at least a year; assuming that the assessed property values accurately reflect changes that took place in the economy over the previous year. In addition,

Table 3.5 The City of Calgary's revenue growth by source

Revenue sources	1988 ($thousands)	2007 ($thousands)	Total growth in 1988-2007 (per cent)
Net taxes available for municipal purposes	397,076	1,208,265	204%
Sales of goods and services	576,163	740,543	29%
Government transfers and revenue sharing agreements	105,348	482,850	358%
Investment income	41,482	56,474	36%
Fines and penalties	16,988	53,571	215%
Licences, permits and fees	13,545	74,238	448%
Miscellaneous revenue*	20,981	280,464	1237%
Total revenue excluding government transfers	**1,066,235**	**2,413,555**	**126%**
Total revenue	**1,171,583**	**2,896,405**	**147%**

Sources: The City of Calgary "1988 Financial Report" and "2007 Annual Report"

* The "miscellaneous revenue" in Table 3.5 for 1988 includes "miscellaneous revenue" ($12.2 million) and "net internal revenue from Service Funds" ($8.8 million) from 1988 Financial Report, and for 2007 includes "developer contributions" ($134.6 million), "miscellaneous revenue" ($20 million) and "equity in earnings of government business enterprises" ($125.8 millions) from 2007 Annual Report.

property taxes could only be levied and collected when properties are built. Consequently, taxes are not collected from a range of activities other than real estate.

3.2.3 Property tax is an easy target for criticism

Property tax is traditionally an easy target for criticism because of the following features. (Rosen et al, 2008):

i. Real estate transactions typically occur infrequently and on a fraction of total properties in a municipality, therefore the property tax must be levied on an estimated value. If this estimate is perceived as inaccurate, the tax is perceived as unfair.

ii. The property tax is highly visible, so taxpayers are aware of any increases in their property tax bills. In contrast to the federal and provincial income and payroll taxes which are deducted at source, property tax is often paid directly by the taxpayer. Moreover, the payments are often made on a lump-sum amount, so each payment comes as a large shock.

iii. Property tax is perceived as a regressive tax, partially a consequence of the "traditional view" of the tax which continues to dominate public debate, and which is reinforced by the fact that some property owners, particularly the elderly, do not have enough cash to make payments and may therefore be forced into selling their homes.

iv. Taxpayers may feel that they are powerless to do anything about other taxes but have some power in deciding property tax. For example, it is hard to organize a campaign against the federal income tax because a national campaign would involve large coordination costs. However, it is relatively easy to take an aim at the property tax, where it is levied locally.

4. Impact of Over-Contribution on Calgary and the Canadian Economy

4. 1 Economic growth in Canada is driven by big cities

There is an increasing consensus among economists and policy analysts that big cities are the engines of economic growth in a national economy. The theoretical and empirical literature points out that cities affect the economy in three ways - sharing, matching, and learning[19].

4.1.1 Economic growth represented by employment growth

Statistics Canada does not produce gross domestic product data at the sub-provincial level but releases employment data at the census metropolitan areas (CMA) level, therefore employment data are used as a proxy in this paper to show the contribution of cities' to Canada's economic growth.

Over the period 1988-2008, five out of the six biggest CMAs in Canada had faster employment growth than the national average and Calgary led the pack with a growth rate of 85 per cent (see table 4.1). Among the jobs created in Calgary, occupations that require high education and skills such as those in natural and applied sciences, social science, education, government services and religion grew the fastest (see table 4.2).

Big cities are not only the leaders of economic and employment growth in Canada, but also the places where knowledge economies expand and highly educated and skilled workers locate.

Table 4.1. Total employment growth in Canada's six largest CMA: (Thousands of persons)

Largest CMAs in Canada	1988		2008		1988-2008 total growth	
	Total	National share	Total	National share	Total growth	per cent
Montreal, Quebec	1,518	12%	1,901	11%	382	25%
Ottawa-Gatineau, Ontario/Quebec	482	4%	671	4%	189	39%
Toronto, Ontario	2,090	16%	2,920	17%	830	40%
Calgary, Alberta	379	3%	702	4%	323	85%
Edmonton, Alberta	414	3%	621	4%	207	50%
Vancouver, British Columbia	758	6%	1,243	7%	485	64%
Canada	**12,687**	**100%**	**17,118**	**100%**	**4,431**	**35%**

Sources: Statistics Canada; Corporate Economics

19 The discussion on the importance of cities was summarized in a recent working paper "Importance of cities: with emphasis on Canadian urban areas" prepared by The City of Calgary's Corporate Economics group.

Table 4.2. Calgary Economic Region (CER) Total Employment by Occupation: (Thousands of persons)

Calgary Economic Region (CER)	1988		2008		1988-2008 change	
	Total	% share	Total	% share	Total	% share
All	402.3	100%	755.5	100%	353.3	88%
Management	37.0	9.2%	69.7	9.2%	32.7	88%
Business, Finance & Administrative	94.7	23.5%	164.1	21.7%	69.4	73%
Natural & Applied Sciences & related	36.8	9.1%	81.8	10.8%	45.0	122%
Health	18.3	4.5%	35.3	4.7%	17.0	93%
Social Science, Education, Government Service & Religion	25.3	6.3%	54.7	7.2%	29.4	116%
Occupations in Art, culture Recreation & Sport	10.2	2.5%	18.6	2.5%	8.4	83%
Sales & Service	95.4	23.7%	170.7	22.6%	75.3	79%
Trades, Transport & Equipment Operators & related	58.6	14.6%	119.1	15.8%	60.5	103%
Occupations Unique to Primary Industry	14.1	3.5%	24.1	3.2%	10.1	71%
Occupations Unique to Processing, Manufacturing & Utilities	12.1	3.0%	17.6	2.3%	5.5	45%

Sources: Statistics Canada; Corporate Economics

4.1.2 Population growth is driven by people looking for better job opportunities and a higher quality of life

Starting in March 1987, Statistics Canada has provided annual working age population (age 15+) estimates at the census metropolitan areas (CMA) level. The estimates show that over the period 1988-2008, most of the growth occurred in Canadian big cities. Five out of the six biggest cities except Montreal experienced above average (24 per cent) growth (see table 4.3). Calgary recorded the highest growth (74 per cent) compared to the rest of the country (24 per cent in Canada), which is largely explained by its strong labour market (see table 4.1).

Historical evidence shows that people move to big cities not only for better job opportunities, but also for a higher quality of life. Quality of life is used as a proxy for the general well-being of individuals and communities and is also used to measure the liveability of a given city or nation. Quality of life is a composite measure that includes environment quality, physical and mental health, education, recreation and leisure time, and social belonging. The higher the quality of life, the more attractive the city is and consequently the more people will move to the city. As more individuals and businesses are attracted to a region, increased pressures are placed on roads, parks, the air, water and other environmental resources, which negatively impacts the region's quality of life. The quality of life is only sustainable over the long term if significant investments are made to update old infrastructure and build new infrastructure.

Table 4.3. Working age population growth in Canada's six largest CMA: (Thousands of persons)

Largest CMAs in Canada	1988		2008		1988-2008 total growth	
	Total	National share	Total	National share	Total growth	per cent
Montreal, Quebec	2,543	9%	3,064	9%	521	20%
Ottawa-Gatineau, Ontario/Quebec	696	3%	962	3%	266	38%
Toronto, Ontario	3,037	11%	4,541	14%	1,504	50%
Calgary, Alberta	544	2%	945	3%	401	74%
Edmonton, Alberta	621	2%	882	3%	261	42%
Vancouver, British Columbia	1,224	5%	1,939	6%	716	58%
Canada	**26,792**	**100%**	**33,311**	**100%**	**6,520**	**24%**

Sources: Statistics Canada; Corporate Economics

Two widely known reports that measure quality of life for cities are the Global Liveability Report[20] published by the Economist Intelligence Unit (EIU) and the Living Reports[21] published by Mercer. Calgary ranked high in both reports, which explains why so many people moved to the city over the past two decades.

The latest EIU report released in January 2010 ranked Calgary number five among 140 cities surveyed worldwide. Calgary scored 96.6 out of 100, compared to Western Europe's average of 92.1, North America's average of 91.5, and the World average of 76. Calgary's overall ranking in Mercer's report over the years was also high among the 420 cities surveyed. However, its ranking has declined in the past three years from number 24 in 2007 to 25 in 2008 and 26 in 2009.

4.2 Fiscal over-contribution from big cities hurts economic growth in Canada

Residents and businesses in Calgary contributed their fair share of tax payments to the economically disadvantaged regions through positive net contribution to the federal and provincial governments. In addition, Calgarians over-contributed during the 1988-2007 period, which resulted in a number of issues that other big cities in similar situations have also experienced.

20 The EIU's report surveys 140 cities around the world annually, using over 30 qualitative and quantitative factors across five broad categories: Stability, Health care, Culture and environment, Education, and Infrastructure.

21 Mercer has designed an objective way of measuring quality of living for expatriates based on factors that people consider representative of quality of living. Mercer evaluates local living conditions in all the 420 cities it surveys worldwide. Living conditions are analysed according to 39 factors, grouped in 10 categories: Political and social environment, Economic environment, Socio-cultural environment, Health and sanitation, Schools and education, Public services and transportation, Recreation, Consumer goods, Housing, Natural environment.

4.2.1 Over-contribution constrains economic growth in the contributing regions

Calgary's rapid population growth, along with the need to upgrade an aging capital stock, is driving up operating and capital budget costs for the local government. Because of the long lead times that are required to plan and construct municipal infrastructure, The City of Calgary must anticipate population growth to plan, build and finance new infrastructure long before the tax base is available to pay for these expenditures. This creates fiscal strain on the municipality.

In terms of business cycles, Calgary's economy is also more volatile than other regions in Canada because it is affected by investment cycles in the energy markets. As a result, demand for public services from local businesses and residents differ from economic boom to bust times. During boom times, increased economic activity and rapid population growth drive the demand for new infrastructure investments and more municipal services such as police, fire and public transit services. While during recessions, reduced demand for new investments is partly offset by increased demand for income assistance.

Calgary's over-contribution to the other orders of governments makes it harder for the local government to plan for its long-term financial needs. The City of Calgary can neither fund all projects for new capital investments and increased services in the boom times, nor take advantage of investment opportunities in the lower cost environment experienced during recessionary times. As a result, **The City has currently one of the highest debt rates among big Canadian cities and could reach its debt borrowing limit in 2012-2014**. This puts additional pressure on the municipality to raise property taxes and exposes local taxpayers to the risk of bearing a higher tax burden in the future.

People move to a place like Calgary not only for job opportunities, but also for a higher quality of life. Because of the mobility of skilled workers, cities around the world are increasingly competing with each other for those workers. Strong labour market conditions in Calgary have acted as a magnet for workers from outside the region. This has created an equally high demand for shelter and support services to address issues such as homelessness and affordable housing – issues that need all orders of government to address. Downloading of many government housing and support programs from other orders of government has added to this challenge.

There is evidence that over-contribution to other orders of government from Calgary has also negatively impacted the city's ability to maintain its global competitiveness. The city's drop in Mercer's quality of living ranking is a case in point. If the lack of investment in public services and infrastructure continues and Calgary loses its attractiveness, future growth in the region will be constrained.

Similar challenges also apply to other cities, where investments are associated with jobs and economic growth. According to K & L (November 2003), "Canadian cities must more and more prove themselves capable of competing with international cities for financial capital and skilled labour. Municipal governments have an important role to play in this regard. City governments are responsible for providing many of the services that make a city globally-competitive – serviced land, an efficient transportation system, public safety, potable water, recreation facilities, a culturally diverse and tolerant social environment, and etcetera – their fiscal capabilities are of paramount importance. An inability of city governments to finance these investments in social infrastructure, either at all or via an efficient system of revenue will cause not only the economies of cities to stagnate but also that of the provinces and the nation."

4.2.2 Over-contribution hurts the rest of Canadian economy

Economic analysis indicates that long-term economic growth depends largely on technological progress and knowledge creation in a nation's hub cities. Empirical studies found that historical growth rates have been different at global, national and state or provincial orders. Some regions grew first and became leading economies. Others either lagged the leaders with lower growth rates or caught up with faster rates of growth. The "catch-up" in economic performance is called convergence, a phenomenon found at various geographical levels in numerous studies. One of the recent studies, the 2006 Conference Board of Canada (CBoC) report, showed that intra-provincial convergence occurs in Canada between hub cities and remaining communities in respective provinces. Based on the CBoC report, a case study from The City of Calgary, "Growth convergence and strategic investment: an Alberta case study", further confirmed convergence in Alberta between hub cities (Calgary and Edmonton) and the rest of the province, and called for a strategic investment in these hub cities to promote long-term economic growth in the province.

There is a consensus that public funding should focus on promoting growth in leading economies, because it is the most efficient way of using limited public funding and the rest of the economy would benefit from convergence. In contrast, a big city's over-contribution, as in the case of Calgary, would hurt the provincial and national economies from a convergence perspective.

5. The Federal and Provincial Governments Have the Fiscal Capacity to Help Big Cities

5.1 The City of Calgary lacks sustainable fiscal capacity to deal with growth in the long-term

The City of Calgary's Long Range Financial Plan projects significant annual operating and capital budget shortfalls for the municipality in the next decade. According to the projection[22] in the "Long Range Financial Plan 2009 Update: 2010-2019", The City would face significant annual operating and capital budget shortfalls over the next decade if projected levels of existing revenue sources do not change. The cumulative operating funding shortfall would total more than $1 billion from 2012 to 2019, and the cumulative capital gap would reach $6 billion in 2019 (not including projects and upgrades not currently identified in the capital budget system). Closing the operating budget gap with additional property taxes would require additional mill rate increases averaging two per cent each year above The City of Calgary municipal price index (MPI) forecasts[23].

22 The operating projection is based on providing the same kinds of services currently provided and spending the same amount per capita (adjusted for forecasted inflation) to provide those services. This would be equivalent to maintaining the existing per capita resources and efficiency for each current City service. The capital projection is based on maintaining and extending infrastructure to serve the forecasted population according to the 10 year capital plan, as well as carrying out the not-funded projects included in the capital budgeting system.

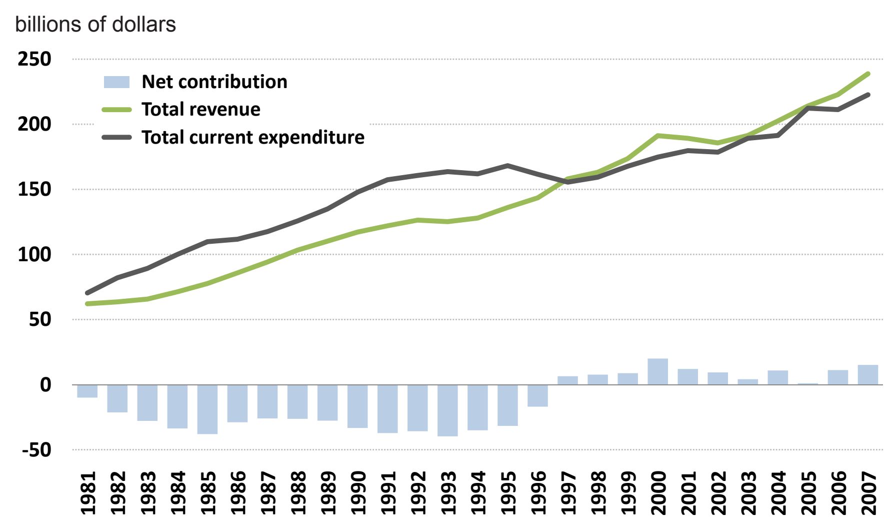
23 The model is based on the currently approved 2009-2011 operating budget and projects eight years beyond this, including impacts of population growth.

5.2 The federal and provincial governments have fiscal capacities to help big cities

The Canadian and Alberta Governments have both experienced improved public finances since the mid 1990s, partly due to the downloading of responsibilities to local governments in order to reduce their expenditures. Based on the PEA data, the federal government had budget surpluses since 1997 due to continuous increases in total revenues and dramatic downward shifts in total current expenditures (see Chart 5.1). In the same period, the Government of Alberta also had surpluses due to the fast growth in total revenues and a relative slow growth in total current expenditures (see Chart 5.2).

The Canadian Government enjoyed budget surpluses from 1997 to 2007

Chart 5.1
Federal Government Fiscal Balances in Canada (1981-2007)



Sources: Statistics Canada; Corporate Economics

5. The Federal and Provincial Governments Have the Fiscal Capacity to Help Big Cities

Since the mid-1990s until before the 2008-09 recession, the two orders of government were able to reduce their net financial debts (or accumulated deficits) significantly. In Alberta's case, the provincial government paid off all its debts and had a surplus of $35 billion dollars by the end of 2007 fiscal year (Chart 5.3 and Chart 5.4).

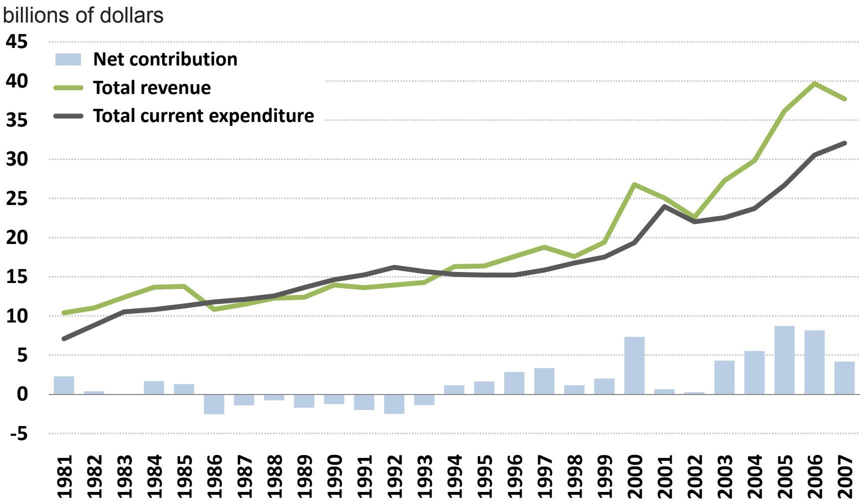
The federal and provincial governments both entered the recent recession with strong fiscal positions and thus fared better than almost all other major industrialized countries. Although both orders of government ran deficits for fiscal year 2008-09 and beyond to support the national and provincial economic recovery, they plan to return to balanced budgets in a few years.

According to the 2010 Federal Budget, nominal GDP in Canada is expected to grow at an annual average rate of 5 per cent in 2010-14, from $1,601 billion in 2010 to $1,953 billion in 2014. The total federal government revenues from taxes and other sources is expected to grow at the same rate as economy from $233 billion in the fiscal year 2008-09 to $296.5 billion in the fiscal years 2014-15, representing 14.6 per cent and 15.2 per cent of nominal GDP in Canada, respectively.

In its 2010 budget, the Government of Alberta also anticipates economic growth and increases in government revenues over the next four fiscal years. The nominal GDP for Alberta is anticipated to grow at an annual rate of 7

The Alberta Government enjoyed budget surpluses from 1994 to 2007

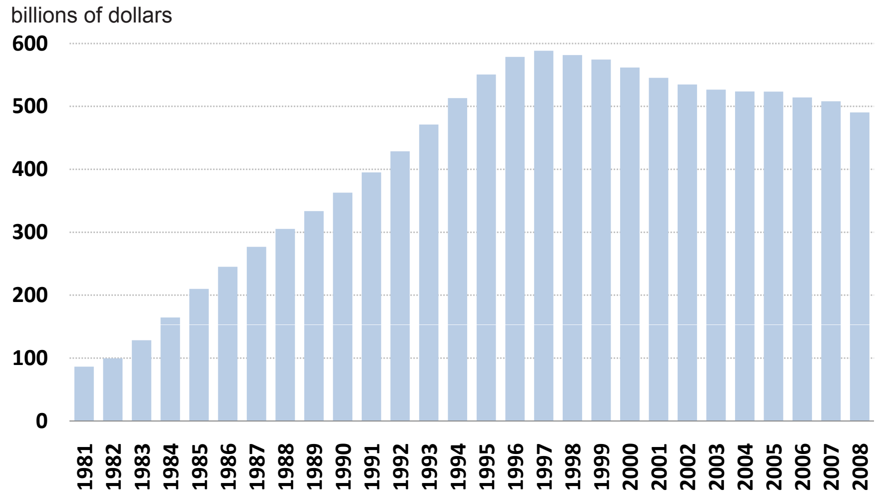
Chart 5.2
Alberta Government Fiscal Balances in the Province (1981-2007)



Sources: Statistics Canada; Corporate Economics

The Canadian Government reduced its debt level from 1997 to 2008

Chart 5.3
Federal Government Net Financial Debt in Canada (1981-2008)



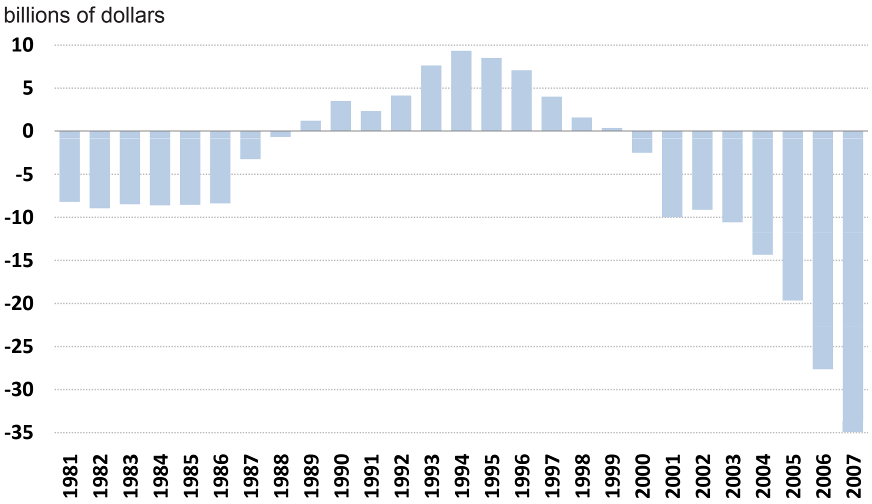
Sources: Statistics Canada; Corporate Economics

per cent, from $259 billion in 2010 to $317 billion in 2013, contributing to growth in total government revenue from $33 billion in fiscal year 2009-10 to $40 billion in fiscal year 2012-13.

These continued increases in government revenues over the next few years should strengthen the ability of federal and provincial governments to rebalance their budgets without inhibiting their current low tax policies. These strong fiscal positions also provide the federal and provincial governments the necessary capacity to help big cities like Calgary by granting them new revenue sources or giving them more transfer funds.

The Alberta Government became debt-free in 2000 and accumulated surpluses up to $35 billion in 2007

Chart 5.4
Provincial Government Net Financial Debt Balance in Alberta (1981-2007)



Sources: Statistics Canada; Corporate Economics

5.3 There is only one taxpayer

In a recent study using a similar method to the C4SE study, Dr. Kneebone estimated the fiscal contributions from Canada's nine major cities to the federal and provincial governments (R. Kneebone, 2007). The study shows that the major cities' residents paid more in taxes than they receive back in programs: a result neither unusual nor unexpected, since these imbalances reflect the influence of a progressive tax system and the design of government programs that transfer income to the aged and the disadvantaged. However, the findings have following implications:

> "It may benefit governments to appreciate how a fiscal measure may have detrimental impacts on the centres of economic activity responsible for generating most of Canada's wealth. If the design of taxes and spending programs matter for economic growth, and if their impact is felt across regions of the country in a way detrimental to economic growth in some regions, then the trade-off between economic efficiency and equity, which all policy makers must face, may need to be considered along the regional as well as the personal dimension."

All orders of government represent the same taxpayer. The different orders of government may have different responsibilities but their interests are complementary: they serve the same citizens and work towards the same goals to provide a high quality of life. A municipal government is often the only government presence in a region and is responsible for the delivery of most locally needed public goods and services and infrastructure investments. Therefore, it is under increasing pressure to raise more revenues to fund services and investments arising from the effects of population growth.

The City of Calgary as other municipalities cannot budget to run operating deficits and have limited revenue sources. It faces significant challenges while balancing competing priorities between investing in new capital projects, replacing or upgrading old infrastructure, and increasing operational budgets to meet growth in service needs during economic boom times. Since the recent economic recession, revenues have been reduced but the demands for local services are still present. In response to these challenges, The City of Calgary has used financial reserve funds as a buffer between peaks and valleys, and has borrowed heavily in capital markets to address capital funding gaps. These measures are temporary in nature and are not sustainable over the long run.

The consistent over-contribution situation in Calgary means that the municipal government needs help from the other orders of government in Canada to funding new infrastructures. The provincial and federal governments can help The City of Calgary by either giving more intergovernmental transfer funds or granting new revenue sources to The City.

In evaluating options for additional funding for municipalities, we must consider the risk of raising the already high overall tax burden on taxpayers, because as often noted "**there is only one taxpayer**" and the tax room is limited.

A preferred scenario for taxpayers is that there should not be an increase in their total tax bill, namely additional funding for municipalities should not increase tax burdens upon the tax payers. After experiencing long wait times for new infrastructure investments to start during the boom, a significant portion of Calgary's businesses and residents are increasingly reluctant to pay more taxes.

6. Conclusion

Taxpayers in Calgary have been over contributing to the federal and provincial government's fiscal balance sheets over the past two decades. The result is that a relatively small share of tax revenues went to the local government to provide investments in infrastructure investments and provision goods and services. Fast population growth and high inflation rates in Calgary during recent economic booms intensified this situation. As the local residents and businesses are increasingly reluctant to pay any more taxes to the municipal government and yet demand higher levels of service, The City of Calgary had to borrow heavily to finance its capital investments. This is not sustainable in the long-run.

This over-contribution situation is not well understood by the general public due to a lack of official data and measurements. A method introduced by the C4SE in 2005 provides a powerful tool to explore the problem and opens the discussion for solutions. Using the C4SE method, this study estimated and compared Calgary's fiscal contributions to the three orders of governments from 1988 to 2007. The result has shown that Calgarians consistently paid much more in taxes than they received in benefits from the provincial and federal governments.

The evidence shows that over-contribution not only hurts the local economy, but also affects the rest of Canada. As the Government of Canada and the Government of Alberta both have access to growth related tax sources and benefited largely from the recent economic boom, they are in strong fiscal positions and have the capacity to help fiscally strained big cities like Calgary.

This study calls for the government of Canada and the provincial government of Alberta to recognize the causes of over-contribution and be fully aware of the trade-off between promoting economic growth and addressing income re-distribution. The two orders of governments should put more emphasis on promoting economic growth and help the big cities like Calgary for the benefit of the province of Alberta and the nation.

Appendix: Estimates for Calgary's Contribution

The C4SE method

The C4SE method applies "allocators" or relative shares to the Provincial Economic Accounts (PEA) data to estimate Calgary's portion of federal and provincial government revenues and expenditures in Alberta by multiplying relevant allocators to the revenue or expenditure items on a government balance sheet. Eight allocators are used in the estimate, defined as follows:

	Allocators	Definition
1	Personal taxes	Calgary's income tax payable/Alberta's income tax payable
2	Labour income	Calgary's employment income/Alberta's employment income
3	Consumer expenditure	(Total income - income tax) in the Calgary/(Total income - income tax) in Alberta
4	Population	Calgary's total population/Alberta's total population
5	Population aged 0-14	Calgary's total population aged 0-14/Alberta's total population aged 0-14
6	Population aged 65+	Calgary's total population aged 65+/Alberta's total population aged 65+
7	Households	Calgary's household/Alberta's household
8	Unemployment	Calgary's total unemployment/Alberta's total unemployment

Different allocators are applied to individual revenue and expenditure items in the PEA Table 7 and Table 8 based on the source of the revenues or the targeted recipients of spending programs[24].

24 There are debates about which allocator should be used in the federal and provincial Net current expenditures on goods and services. One option is to use the federal or provincial government employment ratio between the Calgary and the province as a whole, the other is to use population ratio between the city and Alberta that we are using in this study. Proponents for the first choice observe the fact that the main component of government current expenditures is on the salaries and benefits of its employees. While supporters for the second choice argue that the benefits from government activities are not limited to the labour income that government employees receive, but spill over to larger recipients or the general population within the jurisdiction. Using the first option, the provincial government's net current expenditures would be much less than using the second ratio due to the fact that the majority of the provincial government's offices are located in Edmonton instead of Calgary. As a result, Calgary's net contribution to the Government of Alberta is estimated at a lower rate using the second ratio.

Appendix: Estimates for Calgary's Contribution

PEA Table 7

Federal Government Revenue and Expenditure in Alberta

		Allocators
Revenue:		
1	Direct taxes from persons	Personal taxes
2	Direct taxes from corporate and government business enterprises	Labour income
3	Direct taxes from non-residents (withholding taxes)	Personal taxes
4	Contributions to social insurance plans	Labour income
5	Taxes on production and imports	Consumer expenditure
6	Other current transfers from persons	Personal taxes
7	Investment income	Labour income
8	Current transfers from provincial governments	Population
9	**Total revenue**	NA
Current expenditure:		
10	Net current expenditure on goods and services	Population
11	Current transfers to persons	***NA (from Table 14)***
12	Current transfers to business	Labour income
13	Current transfers to provincial governments	Total population
14	Current transfers to local governments	Total population
15	Interest on public debt	Total population
16	**Total current expenditure**	NA
17	Saving	NA
18	Capital consumption allowances	Total population
19	Net capital transfers	Total population
20	Acquisition of non-financial capital	Total population
21	Investment in fixed capital and inventories	NA
22	Existing assets	NA
23	**Net contribution**	

PEA Table 8

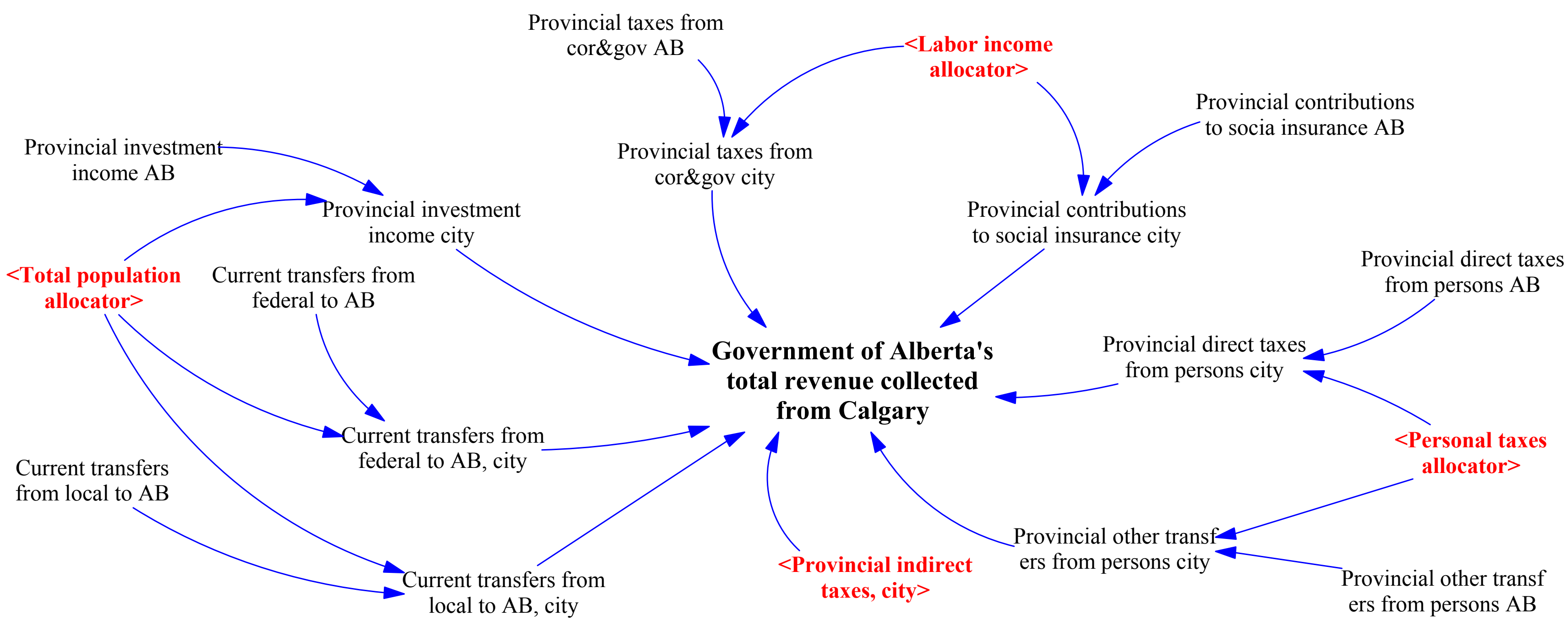
Provincial Government Revenue and Expenditure in Alberta

		Allocators
Revenue:		
1	Direct taxes from persons	Personal taxes
2	Direct taxes from corporate and government business enterprises	Labour income
3	Contributions to social insurance plans	Labour income
4	Indirect taxes	***NA (from T12)***
5	Other current transfers from persons	Personal taxes
6	Investment income	Total population
7	Current transfers from federal government	Total population
8	Current transfers from local governments	Total population
9	**Total revenue**	NA
Current expenditure:		
10	Net current expenditure on goods and services	Total population
11	Current transfers to persons	***NA (from T14)***
12	Current transfers to business	Labour income
13	Current transfers to federal government	Total population
14	Current transfers to local governments	Total population
15	Interest on public debt	Total population
16	**Total current expenditure**	NA
17	Saving(=Total revenue-total current expenditure)	NA
18	Capital consumption allowances	Total population
19	Net capital transfers	Total population
20	Acquisition of non-financial capital	Total population
21	Investment in fixed capital	NA
22	Existing assets	NA
23	**Net contribution**	NA

After multiplying the revenue and current expenditure items for Alberta as a whole by these allocators, Calgary's share of total revenues and expenditures to the federal and provincial governments are calculated (See the chart below). The total current expenditures and revenues collected from Calgarians by the federal and provincial governments are then used to estimate the net contribution positions[25] from the two orders of government to Calgary.

25 Net contribution position in a community: measures the balance of tax revenues and expenditures/ benefits to the community from a certain order of government. Positive net contribution means a government collects more than it gives back to the community, which also shows the ability of this government to transfer money to other orders of governments.

Government of Alberta's revenue collected from Calgary



In Table 8, revenue item 4 (the Indirect Taxes) is the summary result from Table 12, where eleven revenue items were estimated using various allocators. In Table 7 and Table 8, the eleventh current expenditure items (Current Transfers to Persons in Alberta) are summarized from the items in Table 14, which provided detailed data for both federal and provincial government Transfer Payments to Persons in Alberta by program.

PEA Table 12 (Part 1)

Provincial Indirect Taxes (Taxes on production and imports) in Alberta

Provincial government:		Allocators
8	Amusement tax	Consumer expenditure
9	Corporation tax (not on profits)	Labour income
10	Gasoline tax	Households
11	Motor vehicle licences and permits	Households
12	Other licences, fees and permits	Consumer expenditure
13	Miscellaneous taxes on natural resources	Labour income
14	Real property tax	Households
15	Retail sales tax (including liquor and tobacco)	Consumer expenditure
16	Profits of liquor commissions	Consumer expenditure
17	Gaming profits	Consumer expenditure
18	Payroll taxes	NA
19	Miscellaneous	Consumer expenditure
20	**Total provincial**	NA

PEA Table 14

Government Transfer Payments to Persons in Alberta

		Allocators
Federal:		
1	Family and youth allowances	Population aged 0-14
2	Child Tax Benefit/Credit and universal child care benefit	Population aged 0-14
3	Pensions, World Wars I and II	Population aged 65+
4	War veterans' allowances	Population aged 65+
5	Grants to aboriginal persons and organizations	Total population
6	Goods and services tax credit	Consumer expenditure
7	Employment insurance benefits	Unemployment
8	Old age security payments	Population aged 65+
9	Scholarships and research grants	Total population
10	Miscellaneous and other	Total population
11	**Total federal**	NA
Provincial:		
12	Workers' compensation benefits	Labour income
13	Grants to benevolent associations	Total population
14	Social assistance - income maintenance	Total population
15	Social assistance - other	Total population
16	Miscellaneous	Total population
17	**Total provincial**	NA

Extension of the C4SE method

The C4SE method is extended in this study to estimate the local government net contribution position in Calgary, using allocators in the PEA Table 9 (Local government revenue and expenditure in Alberta). This estimation provides a starting point to compare revenues, expenditures and net fiscal positions of the three orders of government under a common standard[26]. The allocators used for estimating Calgary's share of revenue and expenditure by item in PEA are listed in Table 9. Similarly, local government taxes in Table 9 are estimated from the PEA by allocators in table 12.

PEA Table 9

Local Government Revenue and Expenditure in Alberta

		Allocators
Revenue:		
1	Taxes on production and imports	***NA (from Table 12)***
2	Current transfers from persons	Personal taxes
3	Investment income	Labour income
4	Current transfers from federal government	Total population
5	Current transfers from provincial governments	Total population
6	**Total revenue**	NA
Current expenditure:		
7	Net current expenditure on goods and services	Total population
8	Current transfers to persons	Total population
9	Current transfers to business	Labour income
10	Current transfers to provincial governments	Total population
11	Interest on public debt	Total population
12	**Total current expenditure**	NA
13	Saving	NA
14	Capital consumption allowances	Total population
15	Net capital transfers	NA
16	Acquisition of non-financial assets	Total population
17	Investment in fixed capital	Total population
18	Existing assets	Total population
19	Net contribution	

PEA Table 12 (Part 2)

Local Indirect Taxes (Taxes on production and imports) in Alberta

Local government:		Allocators
28	Licences, fees and permits	Consumer expenditure
29	Real and personal property tax	Households
30	Business tax	Consumer expenditure
31	Developer's fees	Households

Note for PEA Tables 7, 8 and 9:

a. *Capital consumption allowances = Inflow to reserve fund*
= Reserve funds created, not cash outlay at current period

b. *Saving = Total revenue – Total current expenditure*

c. *Net contribution = Saving – Capital spending + Capital consumption allowances*

26 Since the core of the PEA is the concept of Gross domestic product (GDP) and the annual provincial income and expenditure data are estimates benchmarked to the Input-Output Accounts in the PEA, more accurate revenues and expenditures by item for The City of Calgary should be found in its annual financial reports.

Appendix: Estimates for Calgary's Contribution

City of Calgary's allocators	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
1. Personal taxes	0.36	0.36	0.36	0.36	0.36	0.37	0.37	0.37	0.38	0.39	0.39	0.40	0.40	0.40	0.39	0.39	0.39	0.40	0.39	0.39
2. Labour income	0.34	0.34	0.34	0.34	0.33	0.34	0.34	0.35	0.35	0.36	0.36	0.36	0.37	0.37	0.36	0.36	0.36	0.36	0.36	0.36
3. Consumer expenditure	0.33	0.33	0.33	0.33	0.32	0.33	0.33	0.33	0.34	0.35	0.35	0.35	0.36	0.36	0.35	0.35	0.36	0.36	0.36	0.35
4. Total population	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.28	0.28	0.28	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29
5. Population aged 0-14	0.24	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.26	0.26	0.27	0.26	0.27	0.27	0.27	0.27	0.27	0.28	0.29	0.29
6. Population aged 65+	0.22	0.23	0.23	0.24	0.24	0.24	0.24	0.24	0.25	0.25	0.25	0.26	0.25	0.25	0.26	0.26	0.26	0.26	0.26	0.26
7. Households	0.29	0.29	0.30	0.29	0.29	0.30	0.30	0.30	0.30	0.30	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.32	0.32
8. Unemployment number	0.27	0.27	0.28	0.29	0.29	0.30	0.29	0.29	0.28	0.29	0.27	0.29	0.29	0.30	0.33	0.32	0.33	0.30	0.30	0.28

Calgary's contribution to government fiscal positions

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total revenue excluding intergovernmental transfers	7,257	7,525	8,422	8,670	8,706	9,244	10,003	10,411	11,604	13,164	13,409	14,105	17,674	17,423	16,424	17,965	19,938	23,414	26,203	27,361
Federal government	3,430	3,573	3,921	4,235	4,350	4,565	4,736	5,061	5,601	6,530	6,995	7,229	8,444	8,735	8,405	8,781	9,731	11,296	12,504	13,971
Provincial government	3,105	3,166	3,635	3,534	3,395	3,701	4,449	4,559	5,153	5,740	5,457	5,915	8,162	7,566	6,898	7,990	8,822	10,715	12,110	11,557
Local government	722	786	866	901	961	978	817	791	850	894	958	961	1,068	1,123	1,121	1,194	1,384	1,404	1,589	1,833
Total expenditure excluding intergovernmental transfers	6,988	7,528	8,086	8,487	8,743	8,549	8,225	8,194	8,293	8,399	9,032	9,411	10,457	12,365	11,998	12,406	12,811	13,788	15,368	16,257
Federal government	2,393	2,555	2,681	2,945	2,886	2,860	2,875	3,012	3,034	2,903	3,064	3,164	3,354	3,494	3,539	3,657	3,862	3,902	4,028	4,178
Provincial government	3,187	3,491	3,761	3,847	4,089	3,891	3,614	3,413	3,475	3,654	4,001	4,204	4,850	6,427	5,752	6,006	6,192	6,848	7,940	8,313
Local government	1,408	1,482	1,644	1,695	1,768	1,797	1,736	1,769	1,784	1,841	1,967	2,042	2,253	2,444	2,707	2,743	2,756	3,038	3,400	3,766
Net contribution excluding intergovernmental transfers	654	422	799	653	447	1,192	2,296	2,753	3,860	5,333	4,962	5,305	7,860	5,726	5,140	6,302	7,913	10,474	11,786	12,167
Federal government	1,076	1,060	1,285	1,334	1,508	1,750	1,909	2,098	2,618	3,682	3,988	4,123	5,148	5,302	4,932	5,188	5,935	7,464	8,550	9,872
Provincial government	111	(111)	105	(79)	(455)	52	1,086	1,402	1,938	2,351	1,724	1,992	3,611	1,453	1,481	2,333	2,997	4,263	4,616	3,747
Local government	(532)	(526)	(591)	(602)	(606)	(610)	(699)	(747)	(697)	(699)	(750)	(810)	(900)	(1,029)	1,273)	(1,219)	1,020)	(1,253)	1,380)	(1,452)
Net contribution with intergovernmental transfers	654	422	799	653	447	1,192	2,296	2,753	3,860	5,333	4,962	5,305	7,860	5,726	5,140	6,302	7,913	10,474	11,786	12,167
Federal government	507	499	705	736	753	1,130	1,363	1,566	2,164	3,295	3,602	3,610	4,477	4,620	4,311	4,252	4,975	6,338	7,549	8,890
Provincial government	95	(155)	4	(197)	(407)	(21)	802	1,021	1,501	1,784	1,162	1,427	3,189	912	909	2,108	2,609	3,722	3,709	2,584
Local government	52	79	90	114	101	83	131	166	195	254	198	268	194	194	(80)	(58)	329	413	527	692
Per capita expenditure excluding transfers (in $1988)	10,796	10,792	10,573	10,240	10,289	9,781	9,146	8,777	8,494	8,170	8,357	8,251	8,655	9,811	8,892	8,715	8,741	9,002	9,250	9,013
Federal government	3,697	3,663	3,506	3,553	3,396	3,273	3,197	3,226	3,108	2,824	2,835	2,774	2,776	2,772	2,623	2,569	2,635	2,548	2,425	2,316
Provincial government	4,924	5,004	4,918	4,641	4,812	4,452	4,019	3,656	3,559	3,554	3,702	3,686	4,014	5,100	4,263	4,219	4,225	4,471	4,780	4,609
Local government	2,175	2,124	2,150	2,045	2,081	2,056	1,930	1,895	1,827	1,791	1,820	1,791	1,865	1,939	2,006	1,927	1,881	1,984	2,046	2,088

Note:
a. *Total spending in the city excluding transfers = Current expenditure + Capital spending- Transfer revenues*
b. *Capital spending = Acquisition of non-financial capital- Net capital transfers*
c. *Revenues collected from the city excluding transfers = Total revenue – Transfer expenditures*
d. *Net intergovernmental transfers = Transfer revenue - Transfer spending*
e. *Net contribution excluding transfer = Net contribution - Net intergovernmental transfers*

Table 7. Federal Government Revenue and Expenditure in Calgary (Millions of dollars)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Revenue:																				
Direct taxes from persons	1,627	1,743	2,112	2,155	2,141	2,185	2,249	2,461	2,787	3,277	3,724	3,715	4,239	4,726	4,259	4,382	4,922	5,955	6,699	7,884
Direct taxes from corporate and government business enterprises	601	598	474	433	439	537	620	672	787	981	963	1,168	1,647	1,287	1,365	1,537	1,861	2,108	2,380	2,476
Direct taxes from non-residents (withholding taxes)	42	38	43	38	39	41	43	50	74	79	75	91	103	124	115	110	124	147	188	183
Contributions to social insurance plans	361	319	413	485	567	603	652	638	641	694	656	638	661	677	657	648	642	703	747	769
Indirect taxes	635	697	695	948	1,005	1,063	1,023	1,065	1,152	1,322	1,386	1,410	1,535	1,652	1,778	1,875	1,978	2,178	2,269	2,393
Other current transfers from persons	1	1	1	1	2	2	1	1	2	2	1	0	1	1	2	-	2	2	1	1
Investment income	163	176	184	174	157	134	148	174	158	176	190	207	259	267	228	228	203	203	221	266
Current transfers from provincial governments	-	-	-	5	4	5	5	9	12	13	10	9	2	-	-	-	-	-	-	-
Total revenue	3,430	3,573	3,921	4,240	4,354	4,570	4,741	5,071	5,613	6,543	7,004	7,238	8,447	8,735	8,405	8,781	9,731	11,296	12,504	13,971
Current expenditure:																				
Net current expenditure on goods and services	500	532	597	619	634	660	652	656	616	596	612	665	755	784	861	895	925	986	1,045	1,067
Current transfers to persons	637	693	755	907	1,026	1,090	1,070	1,063	1,054	1,060	1,137	1,221	1,255	1,361	1,526	1,582	1,653	1,671	1,764	1,944
Current transfers to business	269	236	189	303	181	86	92	78	79	118	134	82	101	160	87	169	267	215	146	125
Current transfers to provincial governments	565	555	574	599	752	619	541	535	455	388	386	518	671	679	618	934	958	1,119	989	968
Current transfers to local governments	4	5	7	4	7	6	10	7	11	11	10	5	3	2	2	2	2	6	11	14
Interest on public debt	778	921	1,048	1,038	1,000	996	1,023	1,183	1,175	1,147	1,192	1,209	1,271	1,182	1,060	1,024	976	964	993	987
Total current expenditure	2,752	2,942	3,169	3,470	3,601	3,456	3,388	3,522	3,390	3,320	3,470	3,699	4,055	4,169	4,154	4,606	4,780	4,962	4,949	5,105
17 Saving (=Total revenue-total current expenditure)	678	631	753	770	753	1,114	1,354	1,549	2,223	3,223	3,534	3,539	4,392	4,566	4,251	4,175	4,951	6,334	7,555	8,866
18 Capital consumption allowances +	39	42	45	44	45	45	48	49	51	55	57	58	58	61	66	64	66	70	74	79
19 Net capital transfers +	(165)	(134)	(38)	(24)	(2)	19	14	24	(85)	78	66	55	66	56	39	43	(1)	(13)	(11)	(17)
20 Acquisition of non-financial capital -	45	40	55	54	42	48	53	57	26	60	55	43	40	63	45	31	41	53	69	38
21 Investment in fixed capital and inventories																				
22 Existing assets																				
23 Net contribution	**507**	**499**	**705**	**736**	**753**	**1,130**	**1,363**	**1,566**	**2,164**	**3,295**	**3,602**	**3,610**	**4,477**	**4,620**	**4,311**	**4,252**	**4,975**	**6,338**	**7,549**	**8,890**

Table 8. Provincial Government Revenue and Expenditure in Calgary (Millions of dollars)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Revenue:																				
Direct taxes from persons	840	845	1,063	1,108	1,020	1,027	1,156	1,202	1,407	1,626	1,800	1,866	2,052	1,755	1,715	1,755	1,922	2,282	2,658	2,673
Direct taxes from corporate and government business enterprises	309	355	287	250	191	254	361	442	603	705	475	538	999	723	764	575	759	947	1,202	1,260
Contributions to social insurance plans	108	124	142	144	134	175	186	160	143	150	157	129	131	187	239	320	332	345	363	358
Indirect taxes	493	504	541	604	577	685	972	1,063	1,095	1,186	1,204	1,237	1,419	1,482	1,596	1,712	1,843	1,976	2,163	2,251
Other current transfers from persons	159	172	191	216	238	258	299	321	343	385	407	396	399	438	495	544	555	573	598	646
Investment income	1,197	1,166	1,411	1,212	1,235	1,302	1,474	1,371	1,562	1,688	1,415	1,748	3,161	2,980	2,088	3,084	3,411	4,591	5,126	4,370
Current transfers from federal government	565	555	574	599	752	619	541	535	455	388	386	518	671	679	618	934	958	1,119	989	968
Current transfers from local governments	4	4	10	6	3	4	4	4	4	3	2	-	2	3	3	3	2	3	4	5
Total revenue	3,674	3,726	4,219	4,139	4,151	4,323	4,995	5,097	5,611	6,131	5,844	6,433	8,835	8,247	7,519	8,927	9,783	11,836	13,104	12,530
Current expenditure:																				
Net current expenditure on goods and services	1,798	1,941	2,099	2,227	2,274	2,259	2,130	2,142	2,257	2,403	2,690	2,866	3,150	3,460	3,792	4,099	4,300	4,674	5,088	5,711
Current transfers to persons	413	455	467	522	636	575	501	475	471	509	509	563	749	806	829	769	758	937	1,412	1,083
Current transfers to business	338	348	316	254	322	261	176	84	74	79	96	82	209	1,371	439	463	403	439	541	424
Current transfers to federal government	-	-	-	5	4	5	5	9	12	13	10	9	2	-	-	-	-	-	-	-
Current transfers to local governments	585	604	685	717	704	690	824	910	884	945	940	1,073	1,092	1,223	1,193	1,161	1,349	1,663	1,900	2,136
Interest on public debt	315	404	490	508	552	555	601	585	545	518	532	442	415	352	265	198	191	176	172	164
Total current expenditure	3,449	3,751	4,056	4,233	4,491	4,345	4,237	4,205	4,242	4,467	4,776	5,036	5,618	7,212	6,519	6,690	7,001	7,890	9,113	9,518
17 Saving (=Total revenue-total current expenditure)	225	(25)	163	(94)	(341)	(22)	758	892	1,369	1,664	1,068	1,397	3,217	1,035	1,000	2,237	2,781	3,946	3,991	3,012
18 Capital consumption allowances +	193	213	231	234	239	243	251	256	260	265	269	282	299	314	335	348	367	396	446	503
19 Net capital transfers +	(35)	(35)	(35)	(41)	(26)	(15)	(10)	(4)	(1)	(2)	-	-	(1)	(1)	(18)	(22)	(8)	(6)	(2)	(1)
20 Acquisition of non-financial capital -	289	309	354	295	279	227	196	123	127	143	175	251	326	436	408	455	532	615	725	930
21 Investment in fixed capital and inventories																				
22 Existing assets																				
23 Net contribution	**95**	**(155)**	**4**	**(197)**	**(407)**	**(21)**	**802**	**1,021**	**1,501**	**1,784**	**1,162**	**1,427**	**3,189**	**912**	**909**	**2,108**	**2,609**	**3,722**	**3,709**	**2,584**

Appendix: Estimates for Calgary's Contribution

Table 9. Local Government Revenue and Expenditure in Calgary (Millions of dollars)

		1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Revenue:																					
1	Taxes on production and imports	553	603	676	713	756	789	619	569	625	659	708	715	766	827	852	913	991	1,098	1,275	1,496
2	Current transfers from persons	16	17	19	18	21	21	24	22	25	27	31	33	38	41	41	44	48	50	55	60
3	Investment income	153	167	171	170	185	169	175	201	200	208	219	213	264	255	228	236	345	256	259	277
4	Current transfers from federal government	4	5	7	4	7	6	10	7	11	11	10	5	3	2	2	2	2	6	11	14
5	Current transfers from provincial governments	585	604	685	717	704	690	824	910	884	945	940	1,073	1,092	1,223	1,193	1,161	1,349	1,663	1,900	2,136
6	**Total revenue**	**1,311**	**1,395**	**1,557**	**1,623**	**1,672**	**1,675**	**1,652**	**1,709**	**1,745**	**1,849**	**1,908**	**2,039**	**2,163**	**2,348**	**2,316**	**2,357**	**2,735**	**3,073**	**3,500**	**3,982**
Current expenditure:																					
7	Net current expenditure on goods and services	940	1,009	1,120	1,189	1,246	1,278	1,257	1,272	1,302	1,349	1,466	1,516	1,687	1,770	1,912	2,106	2,125	2,284	2,479	2,671
8	Current transfers to persons	10	10	10	12	13	13	13	12	11	11	12	10	9	20	22	25	28	31	41	44
9	Current transfers to business	47	45	52	51	50	54	54	56	58	63	51	56	48	56	56	61	68	69	70	73
10	Current transfers to provincial governments	4	4	10	6	3	4	4	4	4	3	2	-	2	3	3	3	2	3	4	5
11	Interest on public debt	185	180	186	189	192	188	186	184	177	163	151	143	135	168	155	154	156	122	116	115
12	**Total current expenditure**	**1,186**	**1,249**	**1,379**	**1,448**	**1,504**	**1,538**	**1,515**	**1,528**	**1,551**	**1,590**	**1,682**	**1,725**	**1,880**	**2,016**	**2,147**	**2,349**	**2,379**	**2,508**	**2,710**	**2,907**
13	Saving	125	146	178	175	168	137	137	181	193	260	226	314	283	331	169	8	357	565	790	1,075
14	Capital consumption allowances	153	170	187	193	201	209	219	230	238	249	259	271	285	293	314	330	352	381	431	481
15	Net capital transfers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	Acquisition of non-financial assets	226	237	275	253	268	263	225	245	236	254	287	318	374	430	563	396	380	533	694	864
17	Investment in fixed capital	213	221	255	229	252	251	226	242	230	249	282	313	370	426	563	396	380	533	694	864
18	Existing assets	12	16	20	24	16	12	(1)	2	6	5	5	5	4	5	-	-	-	-	-	-
19	***Net contribution***	***52***	***79***	***90***	***114***	***101***	***83***	***131***	***166***	***195***	***254***	***198***	***268***	***194***	***194***	***(80)***	***(58)***	***329***	***413***	***527***	***692***

Table 12. Government Indirect Taxes (taxes on production and imports) in Calgary (Millions of dollars)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Provincial:																				
8 Amusement tax	3	3	4	4	4	3	3	3	2	-	-	-	-	-	-	-	-	-	-	-
9 Corporation tax (not on profits)	-	-	-	22	12	12	14	13	11	14	16	13	13	4	-	1	-	-	-	-
10 Gasoline tax	80	90	106	135	147	157	153	156	162	169	168	160	180	182	182	190	195	203	231	248
11 Motor vehicle licences and permits	22	23	25	26	25	24	26	26	28	34	34	34	35	37	40	46	38	43	51	53
12 Other licences, fees and permits	9	7	8	10	15	30	33	29	25	30	28	26	30	27	28	30	31	37	38	40
13 Miscellaneous taxes on natural resources	104	88	83	66	30	48	55	47	55	65	59	65	100	125	135	112	169	145	131	130
14 Real property tax	**46**	**48**	**52**	**56**	**62**	**62**	**281**	**355**	**352**	**361**	**341**	**357**	**355**	**328**	**344**	**359**	**381**	**397**	**420**	**448**
15 Retail sales tax (including liquor and tobacco)	70	82	96	111	113	111	112	114	117	129	134	140	135	138	216	250	276	272	306	311
16 Profits of liquor commissions	125	126	133	134	130	133	146	139	142	157	162	159	166	174	185	194	195	208	234	238
17 Gaming profits	33	38	35	40	40	105	148	181	200	227	263	282	339	394	379	403	432	543	615	641
18 Payroll taxes																				
19 Miscellaneous	-	-	-	-	-	-	-	-	-	-	-	-	66	73	89	127	127	128	136	142
20 Total provincial	**493**	**504**	**541**	**604**	**577**	**685**	**972**	**1,063**	**1,095**	**1,186**	**1,204**	**1,237**	**1,419**	**1,482**	**1,596**	**1,712**	**1,843**	**1,976**	**2,163**	**2,251**
Local:																				
Taxes on factors of production:																				
28 Licences, fees and permits	10	12	15	13	16	16	16	16	16	20	24	25	28	31	35	37	42	49	63	73
29 Real and personal property tax	**479**	**514**	**570**	**618**	**656**	**689**	**525**	**476**	**528**	**540**	**581**	**585**	**637**	**671**	**701**	**756**	**818**	**907**	**1,036**	**1,214**
30 Business tax	48	49	52	56	57	59	60	62	63	66	67	70	74	78	78	81	85	89	92	108
31 Developer's fees	16	27	39	26	27	24	17	15	17	31	36	36	28	47	39	39	46	53	84	100
32 Miscellaneous	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
33 Taxes on factors of production	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
39 Total local	**553**	**603**	**676**	**713**	**756**	**789**	**619**	**569**	**625**	**659**	**708**	**715**	**766**	**827**	**852**	**913**	**991**	**1,098**	**1,275**	**1,496**

Table 14. Government Transfer Payments to Persons in Calgary (Millions of dollars)

		1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Federal:																					
1	Family and youth allowances	64	66	69	73	74	1	1	1	1	1	2	2	3	3	4	5	6	6	7	8
2	Child Tax Benefit/Credit	9	13	15	16	17	136	137	136	139	145	155	157	181	203	218	222	237	260	325	374
3	Pensions, World Wars I and II	11	12	14	14	15	15	16	17	18	18	18	18	20	24	29	30	31	33	35	35
4	War veterans' allowances	6	5	5	5	5	5	5	5	5	5	6	6	6	4	3	3	4	4	5	7
5	Grants to aboriginal persons and organizations	55	63	76	89	92	100	107	128	128	140	178	171	190	196	225	228	246	260	252	263
6	Goods and services tax credit	-	-	16	51	73	76	79	80	83	86	86	89	92	100	97	101	104	111	114	114
7	Employment insurance benefits	228	250	250	332	384	371	313	273	228	183	192	231	186	213	308	323	312	254	248	250
8	Old age security payments	230	252	276	303	326	337	360	375	396	412	430	450	469	492	523	554	579	608	641	670
9	Scholarships and research grants	13	13	16	16	17	17	21	18	18	19	14	14	13	14	15	16	19	21	23	22
10	Miscellaneous and other	21	18	17	8	23	30	30	30	37	51	57	81	96	112	105	100	114	116	115	201
11	**Total federal**	**637**	**693**	**755**	**907**	**1,026**	**1,090**	**1,070**	**1,063**	**1,054**	**1,060**	**1,137**	**1,221**	**1,255**	**1,361**	**1,526**	**1,582**	**1,653**	**1,671**	**1,764**	**1,944**
Provincial:																					
12	Workers' compensation benefits	84	83	91	106	100	100	87	87	86	89	95	105	134	156	207	143	121	121	119	116
13	Grants to benevolent associations	62	75	86	96	203	135	90	82	75	83	66	95	119	150	148	151	149	247	287	308
14	Social assistance - income maintenance	198	210	220	256	282	133	92	71	64	55	46	40	33	30	30	32	37	38	41	43
15	Social assistance - other	35	34	36	36	25	165	159	162	167	185	164	162	188	201	216	237	264	314	347	368
16	Miscellaneous	35	52	33	28	26	42	73	71	79	97	138	160	276	268	227	206	187	217	618	248
17	**Total provincial**	**413**	**455**	**467**	**522**	**636**	**575**	**501**	**475**	**471**	**509**	**509**	**563**	**749**	**806**	**829**	**769**	**758**	**937**	**1,412**	**1,083**
18	Total local																				
19	Canada Pension Plan																				
20	Total																				

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Contributor

Estella Scruggs

Corporate Research Analyst

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