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Did Government Stimulus Fuel Economic Growth in Canada?

An Analysis of Statistics Canada Data

Main Conclusions

- The Canadian economy turned a corner midway through 2009; GDP increased by 0.2 percent in the third quarter and by 1.2 percent in the fourth quarter (this is after three consecutive quarters of decline: -0.9 percent in the fourth quarter of 2008, -1.8 percent in the first quarter of 2009, and -0.9 percent in the second quarter of 2009).
- During the recession, Canadian governments enacted fiscal stimulus packages including the federal government, which implemented its $47.2 billion, two-year *Economic Action Plan.*
- The federal government has repeatedly claimed credit for Canada's improved economic performance in the second half of 2009. However, Statistics Canada data show that government consumption (i.e., spending) and government investment (i.e., infrastructure) played a negligible role in the economic turnaround.
- Of the 1.1 percentage point improvement in economic growth between the second and third quarter, government consumption and government investment each contributed only 0.1 percentage points. Business investment contributed 0.8 percentage points and was the driving force behind the improvement in economic growth.
- Of the 1.0 percentage point improvement in economic growth between the third and fourth quarter, government consumption and government investment contributed nothing. Over this period, increased net exports were the primary reason for the improvement in economic growth.
- Tax relief in the *Economic Action Plan* likely made some contribution to the improvement in GDP growth in the form of private consumption and business investment, but these contributions were small.
- Statistics Canada data support recent academic studies showing that stimulus initiatives that primarily rely on government spending fail to increase economic growth, whereas those that rely on tax relief succeed.

Introduction

Canada, like most other countries, did not escape the impact of the global financial crisis of 2008-2009 and the resulting economic recession. Fortunately, the recession in Canada is proving to be far from the doomsday many predicted. After three consecutive quarters of economic decline, from the fourth quarter of 2008 to the second quarter of 2009, the Canadian economy has turned a corner. Data from Statistics Canada show that economic output (gross domestic product, or GDP) grew in the third and fourth quarters of 2009 (Statistics Canada, 2010a).

During the recession, the federal and many provincial governments enacted fiscal stimulus packages to help boost economic activity. For example, the federal government implemented a $47.2 billion, two-year stimulus plan it called *Canada's Economic Action Plan* (Department of Finance, Canada, 2009; 2010).

As the economic recovery has taken hold, many governments have linked the turnaround to their stimulus packages. The federal government noted, for instance, that "recent economic developments suggest that the *Economic Action Plan* has helped to stabilize the domestic economy and has supported the resumption of economic growth" (Department of Finance, Canada, 2010: 280).

As the economy continues to recover, it is critical to assess the economic impact of the stimulus packages put in place by Canadian governments. In order to do so, this Alert examines Statistics Canada data on the contributions of government consumption, government investment, and private sector activity to the change in economic growth in the third and fourth quarters of 2009.

Economic growth in 2008-2009

The Canadian economy was adversely affected by the global financial crisis which began mid-way through 2008. In the fourth quarter of 2008, the Canadian economy, as measured by Gross Domestic Product (GDP, i.e., the value of all the goods and services produced in Canada), experienced the first of three consecutive quarters of decline (figure 1).[1] Specifically, GDP decreased by 0.9 percent in the fourth quarter of 2008, 1.8 percent in the first quarter of 2009, and 0.9 percent in the second quarter of 2009. After three quarters of economic decline, GDP increased by 0.2 percent in the third quarter of 2009 and 1.2 percent in the fourth quarter (Statistics Canada, 2010a).

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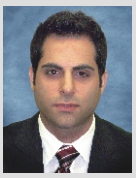

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Canadian governments respond with "stimulus" packages

As the economy slipped into recession, many Canadian governments implemented fiscal stimulus packages in the hopes of boosting economic activity. The stimulus packages contained a mix of tax and spending initiatives, though most were heavily weighted toward spending.

Federal government's Economic Action Plan *(EAP)*

The biggest spender was the federal government, which introduced its *Economic Action Plan (EAP)*, a two-year, $47.2 billion stimulus package, in the first quarter of 2009.[2] The stimulus package consists of four principle actions (see Department of Finance, Canada, 2009, Table 3.1: 69):[3]

1) to help Canadians and stimulate spending
2) to stimulate housing construction
3) to build infrastructure
4) to support businesses and communities

Actions to help Canadians and stimulate spending: the EAP contains a mix of permanent tax relief, and expanded benefits and training for unemployed workers. The single largest initiative of the $13.2 billion directed to this category is the permanent $4.5 billion reduction in personal income taxes.[4] These reductions consist primarily of an increase in the basic personal

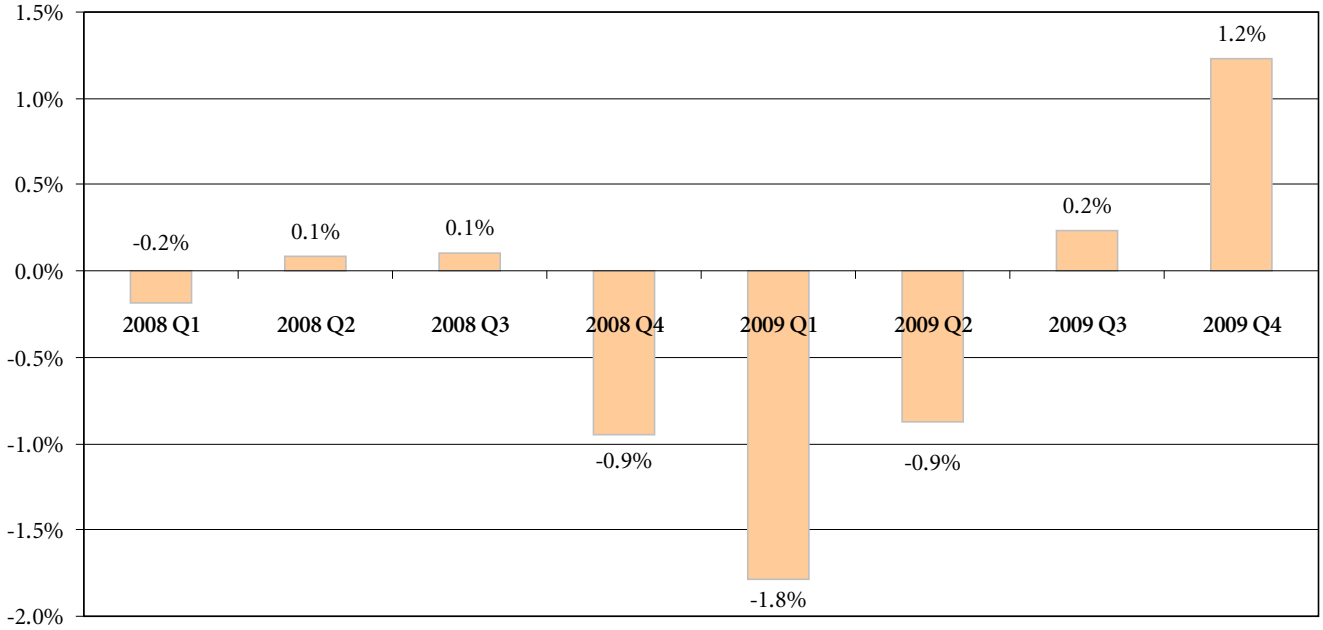
exemption (the amount of income taxpayers can earn tax free), an increase in the thresholds of the bottom two personal income tax rates, and targeted relief for seniors.[5]

Another large initiative listed in the EAP to "help Canadians" is the $2.5 billion freeze in Employment Insurance premiums for 2009 and 2010.[6] While the EI premium "freeze" is featured prominently in the *Economic Action Plan* as an initiative to help "stimulate" spending, in reality there was to have been no change in EI premiums from 2008 to 2009.[7] Furthermore, the premium freezes will have little impact on private consumption because there will be no permanent effect on the income of Canadians—they will be forced to pay higher EI premiums (taxes) in the future to balance the EI "account" over time.

Actions to help stimulate housing construction: the EAP pledges to spend $7.8 billion over two years to help stimulate housing construction. A notable initiative in this regard was the $3 billion temporary Home Renovation Tax Credit program, which provided Canadians with up to $1,350 in tax relief on renovations undertaken in 2009. The remaining stimulus for housing construction consists of, among other things, the First-Time Home Buyers' Tax Credit ($350 million over two years) and $4.1 billion on social housing initiatives funded by the federal government and marked as infrastructure.

Actions to build infrastructure: by far the largest portion of the $47.2 billion *Economic Action Plan* is allocated to infrastructure spending. In fact, the federal government has stated that "more that 40 percent of the Plan's total stimulus funding is devoted to infrastructure investment" (Government of Canada, 2009: 215). Infrastructure projects include roads, bridges, water treatment facilities, social housing, and public transit. Many of these projects are partnerships between the federal government and the provinces and municipalities who contribute additional funds.

Figure 1: Quarterly GDP growth, inflation-adjusted



Note: GDP is measured in real (inflation-adjusted) 2002 dollars.

Source: Statistics Canada, 2010. National Income and Expenditure Accounts: Data Tables. Available at http://www.statcan.gc.ca/pub/13-019-x/2009004/tab-eng.htm, as of March 3, 2010.

Actions to support businesses and communities: The federal stimulus plan earmarks $14 billion over two years for spending "to support businesses and communities." $11.8 billion was spent in 2009/10, of which $9.7 billion was a bail-out of the automotive industry. In addition to industry subsidies, over $2 billion is earmarked for regional economic development programs, and almost $1 billion for business tax and tariff relief. Of the $1 billion in business tax relief, nearly $700 million comes from a temporary 100 percent capital cost allowance (CCA) rate on computer purchases for businesses.

Provincial stimulus plans

In addition to the federal stimulus package, provincial and territorial governments have undertaken their own stimulus packages. According to the federal government, additional provincial and territorial stimulus will amount to $14.4 billion over two years, with $6 billion being spent this coming year, 2010/11 (Department of Finance, Canada, 2010).

Did government stimulus contribute to the economic turnaround?

As Canada's economy began to recover in the second half of 2009, the federal government has repeatedly claimed credit for the improvement. For instance, the federal government's March 2010 budget boasted that the *Economic Action Plan* played an important role in "fostering a recovery in Canada" (Department of Finance, Canada, 2010: 287).

Table 1: Contributions to GDP growth, 2nd and 3rd quarter, 2009

	2nd quarter 2009	3rd quarter 2009	Percentage point change from 2nd to 3rd quarter
GDP growth (percent)	-0.9%	0.2%	1.1
Percentage point contribution to GDP growth:			
Private Consumption	0.2	0.5	0.3
Government Consumption	0.2	0.3	0.1
Investment	-0.3	0.9	1.1
Government investment	0.2	0.2	0.1
Business investment	-0.5	0.3	0.8
Residential structures	0.1	0.1	0.0
Non-residential structures	-0.4	-0.1	0.2
Machinery and equipment	-0.3	0.3	0.6
Inventories (business)	0.1	0.3	0.2
Net exports	-1.1	-1.5	-0.4

Source:
Statistics Canada, 2010. National Income and Expenditure Accounts: Data Tables. Available at http://www.statcan.gc.ca/pub/13-019-x/2009004/ tab-eng.htm, as of March 3, 2010; calculations by authors.

Notes:
(a) GDP is measured in real (inflation-adjusted) 2002 dollars.
(b) The contributions of the four components to GDP growth may not sum to the overall level of growth because of rounding and Statistics Canada's statistical discrepancy, a residual resulting from double-entry bookkeeping in national accounts (Statistics Canada, 2008a).
(c) Due to rounding, the percentage point change from the second to third quarter may not add up. For instance, the contribution from government investment appears to be constant at 0.2 percentage points in both quarters, whereas the change in the contribution from the second to third quarter is 0.1. The contribution from government investment was 0.154 percentage points in the second quarter and 0.223 percentage points in the third quarter of 2009, a difference of 0.069 percentage points.

Before analyzing whether government stimulus actually fuelled the economic turnaround, it is important to understand how Statistics Canada constructs Gross Domestic Product (GDP), the most commonly used and recognized measure of the level of economic activity.

Gross Domestic Product (GDP)

Four principal components comprise GDP: private consumption, government consumption, investment (government and business), and net exports.[8]

Private consumption captures household spending on consumer goods and services (i.e., personal care products, food, clothing, cars, appliances, etc.).

Government consumption measures government spending at all three levels (federal, provincial, and local) on goods and services, including wages and salaries of government employees.[9]

Investment consists of a number of sub-components: business investment, government investment, and inventories.[10] Business investment measures business spending on residential structures (new homes and major renovations) and non-residential structures (such as office buildings) and machinery and equipment. Government investment measures government spending (again at all three levels: federal, provincial, and local) on machinery and equipment and infrastructure such as roads and hospitals, etc.

Net exports include the total value of exported goods and services minus total imports.[11]

Change in GDP growth from the 2nd to 3rd quarter, 2009

Table 1 presents GDP growth in the second and third quarters of 2009 along with the percentage point contribution of each of the four components: private consumption, government consumption, investment, and net exports.[12]

In the second quarter of 2009, the economy was in recession and economic output (GDP) decreased by 0.9 percent. The 0.9 percent decrease can be broken down and the contributions of each component analyzed. As table 1 indicates, private consumption and government consumption each positively contributed 0.2 percentage points to overall GDP growth.

On the other hand, investment and net exports hindered GDP growth; investment by -0.3 percentage points and net exports by -1.1 percentage points. Summing the direct percentage point contributions of each component equates to a 0.9 percent decline in GDP in the second quarter.

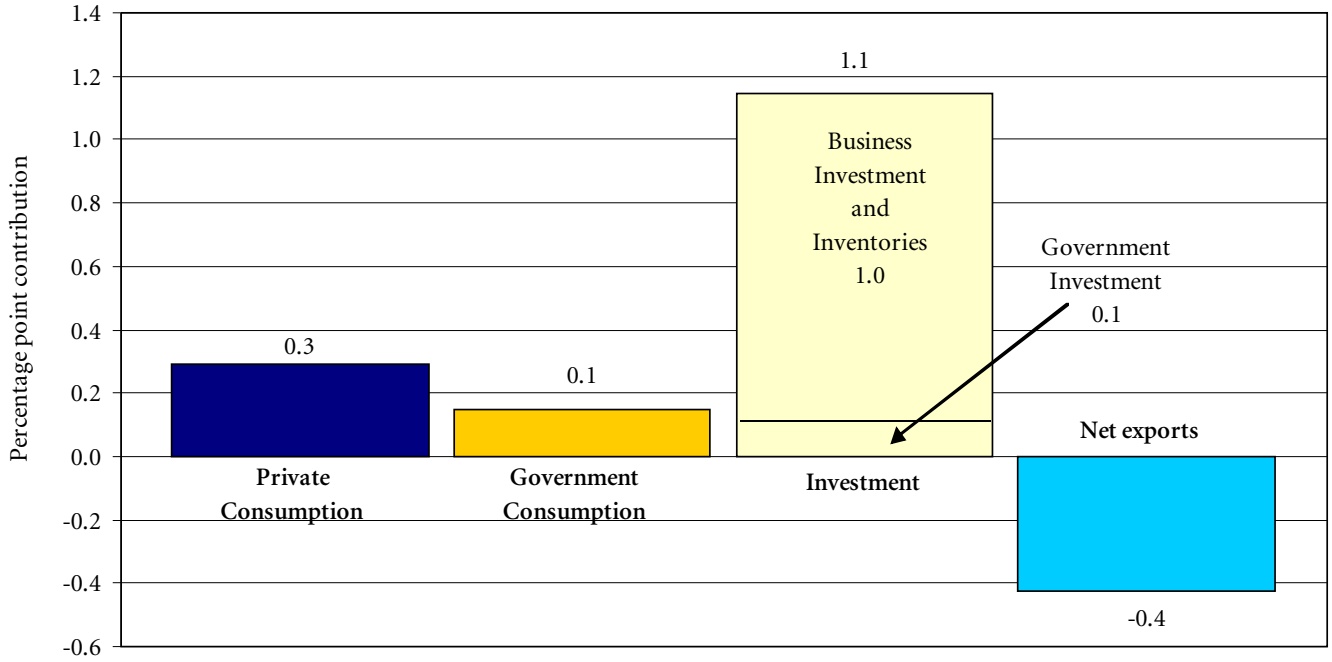
This analysis, however, only examines growth in the second quarter. To assess the success or failure of government stimulus (that is, government consumption and government investment) we must analyze the change in economic growth *between* the second and third quarters. Since a turnaround in the economy is defined as the move from a drop in GDP in one quarter to its growth in the next, an analysis of what contributed to the turnaround must examine the change in growth rates between quarters and the drivers of the change. While the economy was still shrinking in the second quarter (-0.9 percent), it grew in the third quarter by 0.2 percent. Put differently, economic growth improved by 1.1 percentage points from -0.9 percent to 0.2 percent between the second and third quarters (table 1, third data column).

Of the 1.1 percentage point improvement in economic growth, private consumption contributed 0.3 percentage points, government consumption 0.1 percentage points, investment 1.1 percentage points, and net exports -0.4 percentage points.

Disaggregating the investment component reveals that business investment—and specifically investment in machinery and equipment—was the driving force behind the change in the contribution from investment. Specifically, of the 1.1 percentage point change in investment, 0.8 percentage points came from business investment, of which 0.6 percentage points came from business investment in machinery and equipment. On the other hand, the contribution from government investment was negligible at 0.1 percentage points. Interestingly, despite government attempts to stimulate renovations in the housing sector, investment in residential structures did not contribute to the change in GDP growth from the second to third quarter of 2009.

As noted above, the federal government's *Economic Action Plan* (EAP) did include some tax relief that likely contributed to the improvement in GDP growth. As recent academic studies have shown, stimulus packages based on tax relief encourage economic activity, whereas those based on government spending do not. For

Figure 2: Contribution to the 1.1 percentage point increase in GDP growth from 2nd to 3rd quarter, 2009



Sources: Statistics Canada, 2010. National Income and Expenditure Accounts: Data Tables. Available at http://www.statcan.gc.ca/pub/13-019-x/2009004/tab-eng.htm, as of March 3, 2010; calculations by authors.

example, an analysis by Harvard economists Alberto Alesina and Silvia Ardagna of stimulus initiatives in Canada and 20 other industrialized countries from 1970 to 2007 found that successful initiatives—those that increase economic growth—focus on tax cuts. Unsuccessful stimulus initiatives, on the other hand, rely on government spending (Alesina and Ardagna, 2009).

The $4.5 billion reduction in personal income taxes likely had an impact on consumption given the permanent nature of the tax relief. In addition, the EAP provided $1 billion in business tax relief, of which nearly 70 percent was used to provide a temporary 100 percent capital cost allowance (CCA) rate on computer purchases for businesses. However, the impact of allowing businesses to fully expense their investments in computers in one year was small since computers contributed only 9.8 percent to the increase in machinery and equipment investment (Statistics Canada, 2010b; calculations by authors).

Figure 2 illustrates the percentage point contribution of each component to the change in GDP growth between the second and third quarters of 2009. The figure clearly shows that government consumption and government investment (i.e., stimulus spending) played a negligible role in the economic turnaround in that period. The small positive growth in the third quarter of 2009 was mainly driven by business investment, specifically business investment in machinery and equipment.

Change in GDP growth from the 3rd to 4th quarter, 2009

Table 2 presents GDP growth in the third and fourth quarters of 2009 along with the percentage point contribution of each of its four components: private consumption, government consumption, investment, and net exports.

As noted above, to assess the success or failure of government stimulus (government consumption and government investment) we must analyze the change in economic growth *between* the two quarters.

Table 2: Contributions to GDP growth, 3rd and 4th quarter, 2009

	3rd quarter 2009	4th quarter 2009	Percentage point change from 3rd to 4th quarter
GDP growth (percent)	0.2%	1.2%	1.0
Percentage point contribution to GDP growth:			
Private Consumption	0.5	0.5	0.0
Government Consumption	0.3	0.3	0.0
Investment	0.9	0.2	-0.7
Government investment	0.2	0.2	-0.1
Business investment	0.3	0.2	-0.1
Residential structures	0.1	0.4	0.3
Non-residential structures	-0.1	-0.1	0.0
Machinery and equipment	0.3	-0.1	-0.4
Inventories (business)	0.3	-0.2	-0.5
Net exports	-1.5	0.4	1.9

Source:
Statistics Canada, 2010. National Income and Expenditure Accounts: Data Tables. Available at http://www.statcan.gc.ca/pub/13-019-x/2009004/tab-eng.htm, as of March 3, 2010; calculations by authors.

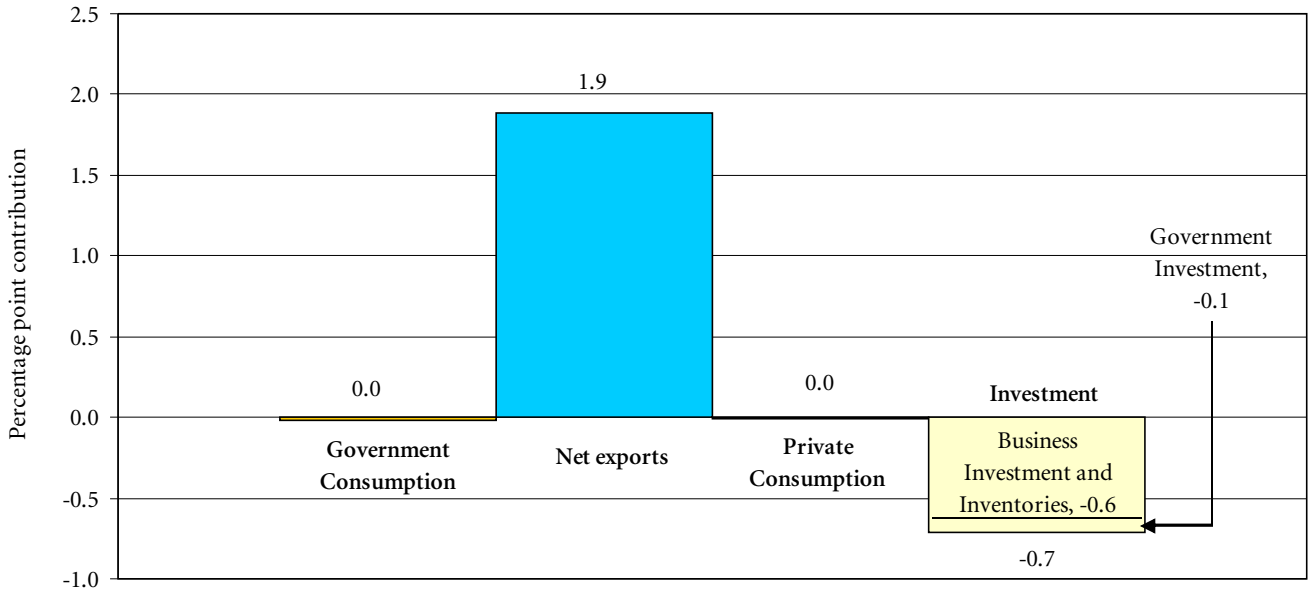
Notes:
(a) GDP is measured in real (inflation-adjusted) 2002 dollars.
(b) The contributions of the four components to GDP growth may not sum to the overall level of growth because of rounding and Statistics Canada's statistical discrepancy, a residual resulting from double-entry bookkeeping in national accounts (Statistics Canada, 2008a).
(c) Due to rounding, the contribution of government investment appears to be constant at 0.2 percentage points in both quarters, whereas the change in the contribution from the third to fourth quarter is -0.1. The contribution of government investment to GDP was 0.223 percentage points in the third and 0.155 percentage points in the fourth quarter of 2009, a difference of negative 0.68 percentage points.

The economy grew by 0.2 percent in the third quarter and 1.2 percent in the fourth. In other words, economic growth improved by 1.0 percentage point (from 0.2 percent to 1.2 percent) between the two quarters (table 2, third column).

As the third column of table 2 shows, private consumption and government consumption did not contribute to the 1.0 percentage point improvement. Worse, investment hindered the improvement in growth by -0.7 percentage points, primarily because of the reduction in inventories (inventories hindered improvement in GDP growth by -0.5 percentage points). While there was a substantial 0.3 percentage point contribution from investment in residential structures, investment in renovations (which are included in this component) did not contribute anything (Statistics Canada, 2010b; calculations by authors). Put differently, the federal government's temporary Home Renovation Tax Credit had a negligible impact on the increase in GDP growth. Of its four main components, only net exports contributed to the increase in GDP growth. The improvement in that component was primarily the result of a slowdown in the growth of imports of goods and services.[13]

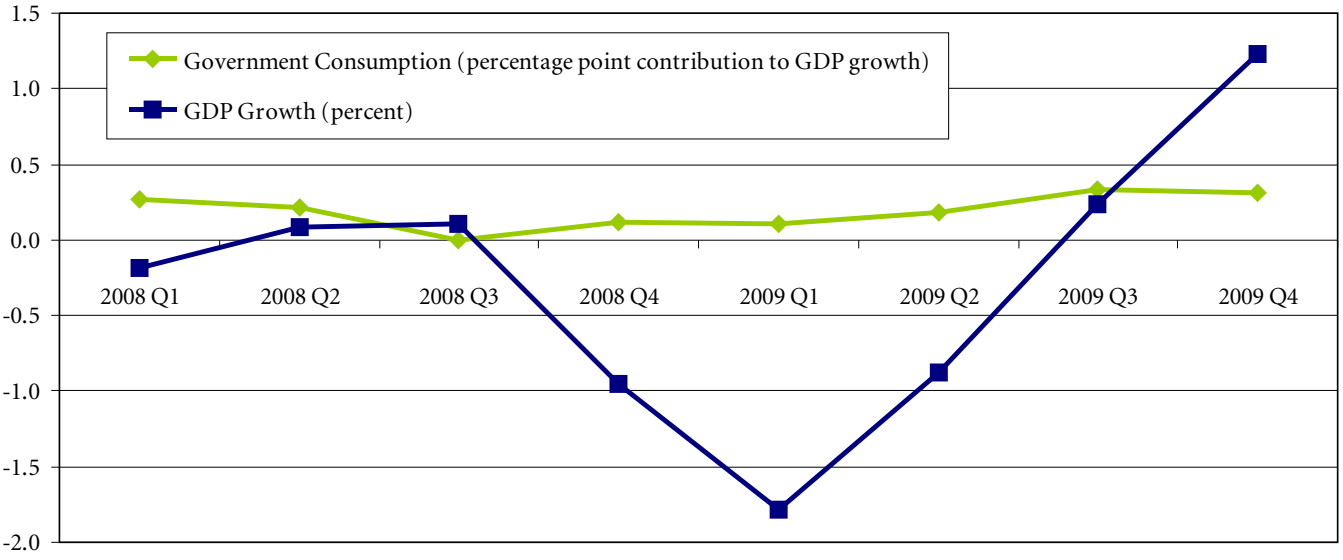
Figure 3 displays the percentage point contribution of each component to the change in GDP growth between the third and fourth quarters of 2009. The figure clearly shows that net exports were solely responsible for the 1.0 percentage point increase in GDP growth from the third to fourth quarter of 2009.

Figure 3: Contribution to the 1.0 percentage point increase in GDP growth from 3rd to 4th quarter, 2009



Sources: Statistics Canada, 2010. National Income and Expenditure Accounts: Data Tables. Available at http://www.statcan.gc.ca/pub/13-019-x/2009004/tab-eng.htm, as of March 3, 2010; calculations by authors.

Figure 4: GDP growth and contribution from government consumption



Source: Statistics Canada, 2010. National Income and Expenditure Accounts: Data Tables. Available at http://www.statcan.gc.ca/pub/13-019-x/2009004/tab-eng.htm, as of March 3, 2010.

Government consumption and government investment: a closer look

Figure 4 presents GDP growth and the contribution from government consumption from the first quarter of 2008 to the fourth quarter of 2009. As the figure illustrates, the economy was in recession in the fourth quarter of 2008 to the second quarter of 2009, and grew in third and fourth quarters of 2009. However, the percentage point contribution of government consumption to GDP is markedly constant throughout the period; whether the economy was shrinking, stagnant, or growing, the contribution of government consumption was stable.

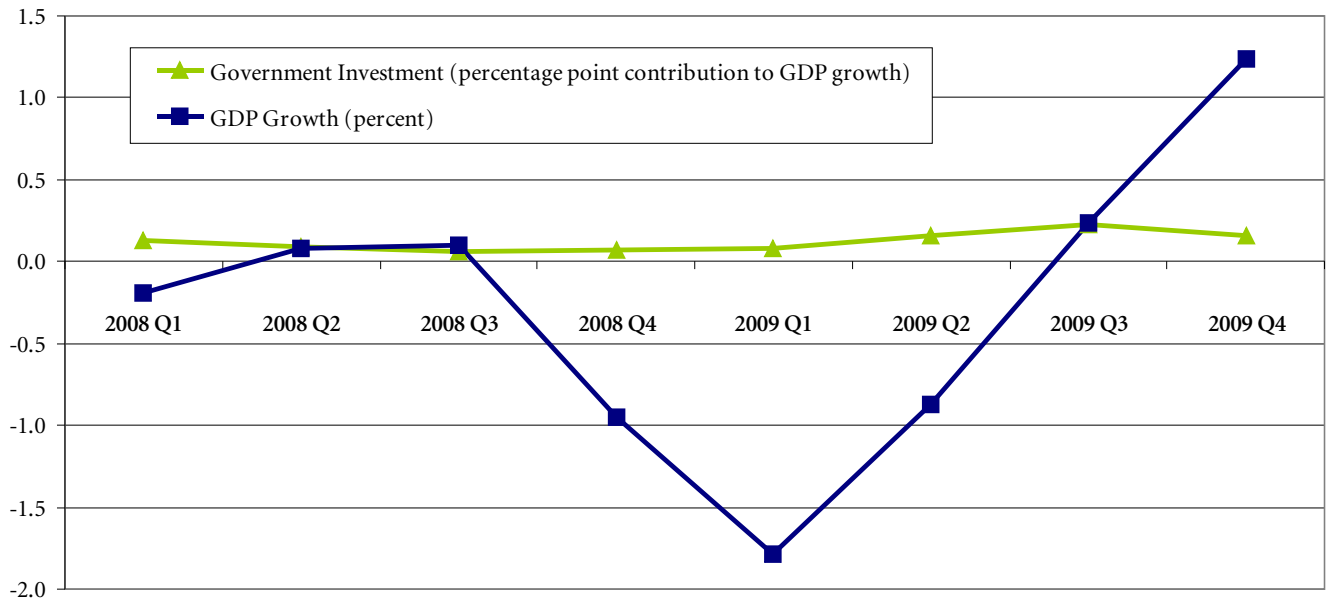
The results are similar for government investment (see figure 5) and are unsurprising; infrastructure projects take time to plan and implement. In fact, a recent report by the Parliamentary Budget Office (PBO) suggests that most of the federal stimulus money dedicated to infrastructure projects will not be spent until well into the 2010/11 fiscal year (PBO, 2009). Therefore a large portion of that stimulus spending—particularly infrastructure spending—will be spent as the economy naturally begins to grow. As a result, the government will be competing with the private sector for resources, which will result in increased costs and fewer private sector projects.

Conclusion

The federal government has claimed credit for Canada's economic turnaround in the second half of 2009, but data from Statistics Canada tell a different story. The contributions from government spending and government investment to the improvement in GDP growth are negligible. Increases in private consumption and business investment were the main drivers of economic growth from the second to third quarter. To the federal government's credit, the *Economic Action Plan* did include some tax relief that likely added to the contributions to GDP from private consumption and business investment, though these additions are likely small given the scale of the tax relief.

Net exports were the main driver of economic growth from the third to fourth quarter, and these were a result of a slowdown in the growth

Figure 5: GDP growth and contribution from government investment



Sources: Statistics Canada, 2010. National Income and Expenditure Accounts: Data Tables. Available at http://www.statcan.gc.ca/pub/13-019-x/2009004/tab-eng.htm, as of March 3, 2010.

in imports of goods and services. Private consumption, government consumption, and government investment did not contribute to the turnaround during this period.

The analysis of data from Statistics Canada in this Alert shows that government stimulus spending did not have a material impact on Canada's economic recovery. The evidence supports recent academic studies that show that stimulus initiatives that rely on government spending fail to increase economic growth (i.e. Alesina and Ardagna, 2009).

Notes

1 Economists define an economic recession to be at least two consecutive quarters of a decline in real Gross Domestic Product (GDP). While the Canadian economy also experienced a drop in GDP in the first quarter of 2008, a decline lasting just one quarter does not meet the definition of a recession.

2 The federal *Economic Action Plan* was originally valued at $39.9 billion (see Department of Finance, Canada, 2009). Subsequent changes bring the most recent two-year total to $47.2 billion (see Department of Finance, Canada, 2010, Table 5.1: 199).

3 The value of the four principle actions, as listed below, do not sum to $47.2 billion because some actions overlap with others. For example, there is infrastructure spending within both the housing and business and communities components of the EAP.

4 In the tax relief category, the *Economic Action Plan* also includes the $1.7 billion increase in the National Child Tax benefit supplement, the Canada Child Tax Benefit, and enhanced the Working Income Tax Benefit. However, these are refundable tax credits and should be considered spending initiatives as Canadians receive payments from governments even if they pay no income tax.

5 While the government claimed that this tax relief would "help build a solid foundation for future economic growth, more jobs, and higher livings standards" (Department of Finance, Canada, 2009: 109), the changes did little to improve the incentives for Canadians to work, save, invest, and act entrepreneurially (Clemens et al., 2006).

6 The government arrived at this figure by calculating the total revenue that will be collected over the next two years under the current Employment Insurance premiums ($1.73) and comparing it with the total revenue that would have been collected if premiums were raised by their maximum annual allowable amount of 15 cents in 2009 and 2010. The difference between these two figures is $2.45 billion.

7 On November 14, 2008 —long before the Economic Action Plan was created —the government announced that it would set the 2009 EI premium at $1.73 per $100 of insurable earnings. Calling it a "stimulus" now is merely a fabrication. The Canada Employment Insurance Financing Board (CEIFB), a crown corporation created in 2008, ensures that the EI "account" is balanced over time. The EI account contains $2 billion in reserves to cover "deficits" in economic downturns. If a deficit occurs, as is the case for 2009 (resulting from significant increases to EI benefits and the economic downturn), the CEIFB would ordinarily be forced to increase premiums in future years (normally, the CEIFB would have had to start increasing EI premiums in 2010. The maximum premium rate increase allowed is 15 cents per year).

8 GDP can be measured using three different approaches: the income, expenditure, and value-added approaches (Statistics Canada, 2008a). In this Alert, we use data from the expenditure approach, which contain data on private consumption and government consumption as well as investment and net exports.

9 Government transfers to individuals are not included in government consumption as they are captured in other components of GDP, namely, private consumption and investment.

10 Inventories typically consist of both inventories in the business and government sectors. However, the analysis in this Alert excludes government inventories because these inventories are negligeable and therefore did not contribute to GDP growth.

11 Imports are goods and services that are not produced in Canada and therefore their production does not generate economic activity within our borders. Imports are subtracted from GDP as they are captured within the consumption and investment components.

12 Statistics Canada calculates and presents inflation-adjusted dollar values of overall GDP and of each of its components on a monthly, quarterly, and yearly basis. Unfortunately, the change in the dollar value of GDP and its components cannot be analyzed to determine the contribution of those components to changes in GDP. While a complete discussion of the reason is beyond the scope of this Alert, it relates to the way in which Statistics Canada adjusts the value of GDP and its components for inflation (for further details, see Statistics Canada, 2008b: 42-54). Because of this

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inflation adjustment, dollar value changes in GDP are not directly comparable to dollar value changes in its components. However, Statistics Canada does calculate the direct percentage point contribution of each GDP component to overall GDP growth for each quarter. The percentage point contribution data allows for an assessment of the direct contribution of each component to economic growth, including government consumption and government investment.

13 Imports increased by 2.2 percent in the fourth quarter, after increasing 8.0 percent in the third quarter (Statistics Canada, March 1, 2010a). As a result, the impact of imports on GDP growth was -2.3 percentage points in the third quarter and -0.7 in the fourth quarter for a change of 1.7 percentage points. Of the 1.9 percentage point contribution to the improvement in GDP growth from the third to four quarter, imports accounted for 1.7 percentage points.

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References

Alberto Alesina and Silvia Ardagna (2009). *Large Changes in Fiscal Policy: Taxes versus Spending*. NBER Working Paper No. 15438. National Bureau of Economic Research.

Clemens, Jason, Niels Veldhuis, and Milagros Palacios (2006). Tax cuts must focus on incentives. *Fraser Forum* (July/August). The Fraser Institute. <http://www.fraserinstitute.org/commerce.web/product_files/FraserForum_JulyAugust2006.pdf>, as of March 16, 2010.

Department of Finance, Canada (2009). *Canada's Economic Action Plan—Budget 2009* (January 27). <http://www.budget.gc.ca/2009/pdf/budget-planbugetaire-eng.pdf>, as of March 16, 2010.

Department of Finance, Canada (2010). *Budget 2010: Leading the Way on Jobs and Growth.* <http://www.budget.gc.ca/2010/pdf/budget-planbudgetaire-eng.pdf>, as of March 16, 2010.

Government of Canada (2009). *Canada's Economic Action Plan—A Second Report to Canadians* (June). <http://www.plandaction.gc.ca/grfx/docs/cap-eng.pdf>, as of March 16, 2010.

Parliamentary Budget Office [PBO] (2009). *Infrastructure Stimulus Fund: Reporting on Activities to Promote Budget Transparency* (December 11). <http://www2.parl.gc.ca/sites/pbo-dpb/documents/ISF_Note_and_Tables_En.pdf>, as of March 16, 2010.

Statistics Canada (2010a). Canadian economic accounts. *The Daily* (March 1). http://www.statcan.gc.ca/daily-quotidien/100301/dq100301a-eng.htm, as of March 16, 2010.

Statistics Canada (2010b). National Income and Expenditure Accounts: Data Tables. <http://www.statcan.gc.ca/pub/13-019-x/ 2009004/tab-eng.htm>, as of March 3, 2010.

Statistics Canada (2008a). Glossary. <http://www.statcan.gc.ca/pub/13-017-x/2008001/5213481-eng.htm>, as of March 16, 2010.

Statistics Canada (2008b). *Guide to Income and Expenditure Accounts*. Catalogue no. 13-017-X. Statistics Canada.