Tax Policy Changes in the 2009 Budget: Much Ado About Stimulus?

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"Adversity is a stimulus." James Broughton

Introduction

The 2009 Federal Budget (Finance Canada [FC] 2009) was announced amidst a global economic contraction that followed a protracted period of significant economic growth. The objective of the budget was to "protect [Canada] from an immediate economic threat while providing the solutions we need to secure our long-term growth and prosperity" (p. 9) by delivering "potent economic stimulus to encourage growth and restore confidence in our economy." (p. 10) The mantra for the estimated \$30 billion stimulus plan was that it must be: **timely** and begin within the first five months of 2009; **targeted** to produce "the largest increase in Canadian jobs and output" (p. 10); and **temporary** such that the stimuli end when the economy recovers. (p. 10)

Of the \$30 billion in announced spending in Budget 2009 (FC 2009, p. 10), over one third was apportioned to tax relief: approximately \$1 billion directed at simulating business investment and over \$12 billion focused on stimulating individual consumption. Table 1 summarizes these tax policy changes and their estimated cost to the Government of Canada. The changes are grouped into one of three categories, depending on the general intent of the change, as follows: changes to stimulate business investment; changes to stimulate housing construction; and changes to help Canadians and spending stimulus.

This paper will describe the tax policy changes in the 2009 Budget, highlighting the motivation (perceived or stated), the context, and perceived effect for each change. It will also

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comment, where appropriate, on the stimulus effect of the change. In reviewing the table a general observation quickly emerges: the tax policy changes contained in Budget 2009 included not only changes that appear to have been proposed with one or more of the three criteria for its stimulus plan in mind but it also included changes that reflect the government's general approach to taxation over the last decade. In particular, there are a number of changes that are neither targeted nor temporary and several are measures that have been taken in previous budgets during period of economic growth.

	2008-09	2009-10	2010-11	Total			
Changes to Stimulate Business Investment							
Increasing Small Business Threshold	-	45	80	125			
Mining Investment Tax Credit	-	70	-15	55			
Changes to Capital Cost Allowance	_	340	355	605			
Computers and M&P Machinery	-			055			
Tariff Relief on Machinery & Equipment	12	76	81	169			
Repealing Section 18.2 of the ITA	-	-	-	-			
Sub-total	12	531	501	1044			

Table 1: Tax Changes and Estimated Cost

Stimulate Housing Construction							
Home Renovation Tax Credit	500	2500	-	3000			
Home Buyers' Plan	-	15	15	30			
First-time Home Buyers' Tax Credit	30	175	180	385			
Sub-total	530	2690	195	3415			
Helping Canadians and Spending Stimulus							
Freezing El Rates	693	1381	-	2074			
Personal Income Tax Changes	470	1885	1950	4305			

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National Child Benefit Supplement and Canada Child Tax Benefit	-	230	310	540
Working Income Tax Benefit	145	580	580	1305
Age Credit	80	325	340	745
Sub-total	1388	4401	3180	8969
Total All Tax Changes	1930	7622	3876	13428

NOTE: Cost estimates taken directly from the 2009 Federal Budget

Changes to Stimulate Business Investment

Small Business Threshold

Canadian Controlled Private Corporations (CCPCs) operate under a preferred tax regime over foreign controlled and publicly traded corporations in Canada.² One element of the preferential tax regime is that, similar to the personal income tax system, the CCPC tax regime is progressive. For qualifying CCPCs, active business income up to the Small Business Threshold (SBT) is taxed at a lower rate than income above that amount. Budget 2009 increased the SBT from \$400,000 to \$500,000. (FC 2009, p. 181) Currently, the rate applied to income below the threshold is 11% and 19% is the rate applied to income above the threshold.³ The change in the threshold effectively reduces taxes for qualifying CCPCs whose active business income is *above* \$400,000. Specifically, the increase in the threshold translates into a tax savings of \$8,000 for qualifying CCPCs whose active business income is above \$400,000.

The rationale for this increase is to support the growth of small businesses by allowing them to "retain more of their earnings for reinvestment and expansion, thereby helping to create jobs and promote economic growth in Canada." (FC 2009, p. 181) Underlying this statement is the assumption that the higher tax rate applied to business income above the SBT acts as a barrier to growth. There is some evidence to support the notion that businesses intentionally remain below the SBT. ⁴ Hendricks et al (1997) found that reported business income clustered just below the SBT. The percentage of businesses, however, is small with only 3% of businesses clustering near the SBT (98.1% of businesses reported taxable income below the threshold (p.

² A CCPC is defined in subsection 125(7) of the Income Tax Act (ITA).

³ The benefits from the small business threshold begin to be clawed back when a CCPC taxable capital reaches \$10 million and is fully clawed back when it reaches \$15 million. This clawback applies to CCPCs in all provinces except Ontario which has its own clawback mechanism.

⁴ One way for a business to target business income to just below the threshold is to pay out any income over the threshold as wages or bonuses to the owner(s).

29)). While the study is dated, examining business income reported for 1992, it remains one of the few studies in this area.⁵

The barrier to growth, however, is not the SBT per se but rather the steep increase in tax rates applied to income above the threshold. That is, increasing the SBT does provide incentive for firms to grow their income from \$400,000 to \$500,000, but it creates a disincentive to grow any further.. In order to minimize the effect of the cap, the differential between the two rates, currently at 8%, needs to shrink. Table 2 summarizes the changes in the threshold and tax rates faced by CCPCs since 2002. The differential between the two rates has already shrunk from 13% in 2002 to the current 8% and is scheduled to be reduced to 4% by 2012.

1											
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Small											
Business	200	225	250	275	300	400	400	500	500	500	500
Threshold	200	223	250	215	500	-00	+00	500	500	500	500
(\$000)											
Small											
Business	12	12	12	12	12	12	11 5	11	11	11	11
Tax Rate	12	12	12	12	12	12	11.5	11	11	11	11
(%)											
General											
Corporate	25	23	21	21	21	21	19.5	19	18	16.5	15
Rate (%)											

 Table 2: Small Business Threshold, Small Business Tax Rates, and the General Corporate Rate

In terms of meeting the guiding principles of stimulus spending, the measure is neither temporary nor is it specifically targeted to increase jobs and output. Why might the increase in the SBT have little effect on growth? First, increasing the threshold assumes that small businesses are interested in growth. Tal (2006) found that "almost 60% of all small business

⁵ Given this discussion, it is timely to update the work in Hendricks et al. (1997). In the past eight years, the small business threshold has been raised six times without any significant evidence that doing so supports growth amongst small businesses. Such detailed analysis should be done before any further increases are contemplated.

owners in Canada consider themselves as "lifestylers" that use their business as a means of generating income, while balancing other commitments or lifestyle choices" (p. 8) and are not interested in growth. In addition, Hendricks et al. (1997) found that only 0.6% of businesses were able to grow their business income beyond the threshold implying that the threshold "plays a significant role in financing growth for only a small fraction of CCPCs." (p. 10) This notion that few businesses benefit from an increase in the threshold is also borne out by the relatively low estimate of the forgone revenues of this initiative, estimated at only \$80 million in 2010-2011.

Second, it ignores other barriers to growth such as business acumen, access to capital, compliance costs, labour legislation, succession planning, and, of course, demand for the businesses goods and services. Third, raising the limit appears to benefit only a small proportion of qualifying CCPCs. In fact, one of the recommendations made by the Technical Committee on Business Taxation (TCBT) (Canada 1998) was that the small business threshold should not be increased for this reason. (p. 5.8) Fourth, most employment growth by small businesses is due to the creation of new businesses and not growth of existing business and most new businesses will enter the market well below the SBT. (Industry Canada 2008; Canada 1998, p. 5.2)) Fifth, it fails to address the burden of profit insensitive taxes, such as property taxes, payroll taxes, excise taxes, and provincial sales taxes, which have a "disproportionate impact on smaller businesses." (Canada 1998, p. 5.5) Last, the SBT creates "distortions and incentives for tax planning". (Canada 1998, p. 5.8)

In lieu of raising the Small Business Threshold, Budget 2009 could have accelerated the planned decrease in the general corporate tax rate, shown above in Table 1. Such a change would have benefited not only CCPCs with businesses income above the SBT (including those that

have the benefits of the small business thresholds clawed back) but all corporations. The research clearly shows that corporate taxes significantly influence investment decisions and it has been shown that they negatively influence organizational form, financial structure, and dividend policy. (ab Iorwerth & Danforth (2004), Bird and Smart 2001, Parsons (2008), Schaller (2007)) A more pressing small business policy issue, which is tied to an aging population, is succession planning because 71 percent of small business owners in Canada intend to exit ownership or transfer control of their business by 2016, yet only 35% of these businesses have a succession plan and only 7% have a formalized plan. (Bruce and Picard 2006, p. 306-307) Without a greater policy emphasis on succession planning amongst Canadian small businesses, many businesses and associated jobs will not exist in the very near future.

Mining Investment Tax Credit

Section 66(1) of the Income Tax Act allows principal business corporations (certain corporations in the mining, oil and gas, and renewable energy and energy conservation sectors) to fully deduct exploration and pre-development expenses incurred in Canada from its income in the year the expenses were incurred. Many corporations with exploration and development expenses, however, are in a non-taxable position in a given tax year and are unable to deduct these expenses. Whilst unused exploration and pre-development expenses can be carried forward indefinitely, qualifying corporations can also choose to transfer these deductions to flow-through-share (FTS) investors. FTSs are attractive to corporations that have difficulty raising capital to finance exploration and pre-development activities, notably junior resource corporations, which have little prospect of generating revenue in the foreseeable future, and which will go out of businesses and not be able to use the deductions without FTS investments. They are also attractive to investors as they are permitted to fully deduct the cost of their FTSs

from their income: the deduction is worth more to an individual than to a corporation since personal income tax rates are notably higher than corporate tax rates.

While FTSs are not a recent addition to the Canadian tax regime, the super flow-throughshare (SFTS) is. In the 2000 Economic Statement and Budget Update (Finance Canada 2000), the Government of Canada announced the non-refundable Investment Tax Credit for Exploration (ITCE). It was intended to be temporary (expiring at the end of 2003) 15% investment tax credit for investors in flow-through shares of mineral exploration companies. The impetus for the SFTS was the low price of metals that occurred throughout the 1990s and which caused a significant contraction in mineral exploration. While metal prices rebounded to historical highs by the mid 2000s, the tax credit was renewed for additional one year periods. It was re-instated in 2006 as the Mineral Exploration Tax Credit (METC) which was set to expire March 31, 2009 but Budget 2009 extended the credit for an additional one year period. Many provinces also have comparable programs. The purpose of the credit is to stimulate exploration activities.

It is useful to provide an example of how FTSs in general and the tax credit specifically benefit the investor. Mary is an investor located in BC who earns \$250,000 a year and is taxed at the highest rate both federally (29%) and provincially (14.7%). She decides to invest \$10,000 in a mining exploration company though the purchase of FTS. In the tax year in which she makes the purchase, she is able to deduct the \$10,000 from her income. Had she not made the purchase, she would have paid \$2,900 in federal taxes and \$1,470 in provincial taxes on the \$10,000. As a result of the deduction, Mary saved \$4,370 in income taxes making the cost of the investment to Mary only \$5,630. Since Mary invested in a mining exploration company, she is also eligible for provincial and federal tax credits. The value of the BC tax credit is 20% or \$2,000. The federal METC is 15% but is calculated on the value of the investment minus any provincial tax credit.

In Mary's case it is calculated on \$8,000 for a federal tax credit worth \$1,200. Because the tax credits are in effect a grant, the value of the federal and provincial tax credit is subject to income tax, resulting in Mary incurring a tax liability of \$1,390. In total, Mary garners a tax benefit of \$6,180. Of the \$10,000 initial investment, Mary shoulders \$3,820 (38.2%) of the cost while taxpayers bear \$6,180 (61.8%) of the cost of the investment.

In order for Mary to break even (ignoring inflation and other time costs of money), she only needs to sell the \$10,000 investment for \$4,888.03 (the adjusted cost basis of the shares is zero). If she sells for this amount, she will only pay \$1,068.03 in capital gains taxes, leaving Mary with the initial after-tax cost of the investment (\$3,820). In this scenario, the taxpayer is left with a \$5,111.97 deficit. Because Mary sold at a value less than her original investment, this implies that the company's stock price decreased and it can be assumed that they did not find any mineral deposits of value implying no additional corporate taxes to make up the difference. In fact, in order for the taxpayer to break even (assuming no additional corporate taxes), Mary would have to sell the shares for \$28,283.75 which represents an unlikely 182% return on her (and the taxpayers) investment. Clearly, the tax regime for FTS is preferential even without the METC and one has to wonder how much additional influence the tax credit has had on investment in mining FTS. In addition, there is evidence to indicate that the investments in mining FTS is predominately done for tax planning reasons as demand for these products increases at the end of the calendar year.⁶ They are also actively marketed to investors who are looking for last-minute tax deductions. An unintended cost of the SFTS regime is that it is likely shifting investment dollars away from other, less risky, and unsubsidized investments.

⁶ As demand for FTS increases, the quality of the products for sales on the market decreases thereby increasing the likelihood that Canadian taxpayers are never reimbursed for their share of the investment in FTSs.

The Prospectors & Developers Association of Canada credits the METC as contributing significantly to mineral exploration activity and new mineral discoveries in Canada. In particular: increasing exploration expenditures from approximately \$300 million in the late 1990s to an estimated \$1.722 billion in 2006, the highest total for exploration and deposit appraisal expenditures since 1987 and 1988; and leading to 268 new mineral discoveries in 2005 compared to 15 in 1999. (Prospectors & Development Association of Canada n.d.). Figure 1 plots exploration expenditures along with the Metal Price Index (MPI) from 1980 to 2007. It shows a high correlation between expenditures and metal prices and it is likely that the true driving force behind the expansion was the increase in metal prices.



In terms of the value of the deposits found, the value has increased from \$189 million in 1999 to \$556 million in 2007 in nominal terms. However, most of this increase is due solely to the rise in prices. In real terms, the value has increased from \$428 million in 1999 to \$450 million in 2007. As a percentage of exploration costs, the value of the deposits dropped from

60% of exploration costs in 1999 to 24% in 2007. This indicates that the increase in exploration is not paying off in terms of an increase in the value of located deposits.

There is little evidence that the METC induces increased exploration activity over that stimulated by the existing FTS regime and the increase in commodity prices. On the investor side, the METC subsidizes high risk investments and appears to be predominately used for tax planning purposes by high income taxpayers rather than for calculated investment purposes. On the administration side, the FTS regime is associated with high administrative and compliance costs and most of the benefits accrue to tax lawyers and accountants. (McKenzie (1994) and Jog, Jenjosek, & McKenzie (1996)) Whether or not the increased exploration pays off in terms of long-term jobs and economic opportunities in northern Canada, depends on how and on what the exploration costs are being spent and how many of the deposits become long-term viable mines.

Changes to Capital Cost Allowance

Generally, under Canada's tax code costs incurred to earn income are deductible from the income earned for tax purposes. This is called the matching principal: it matches expenses with the income generated. When an expense is incurred to acquire a capital asset, the expense is typically allocated over the useful life of the capital asset since the one-time expense generates a flow of income. The capital cost allowance (CCA) rate determines how much of the cost of a capital asset may be deducted each year for tax purposes. The CCA deduction is non-refundable and the CCA rates vary according to the useful life of the capital asset. In addition, to prevent a flurry of tax motivated purchases at the end of a tax year, for many assets only half of the expense can be included in the purchase year for purposes of that year's CCA deduction calculation. This is commonly referred to as the half-year rate. To calculate the CCA deduction, most asset classes use the declining balance. The declining balance method produces relatively

larger CCA deductions during the earlier years of an asset's life, decreasing deductions over time, and an asset balance that never reaches zero. The other method is called a straight-line method and generates equal CCA deductions each year until the balance reaches zero.

Budget 2009 included changes to the capital cost allowance (CCA) system for two specific assets, the intent of which was to increase or accelerate investment in these specific capital assets. First, the CCA rate for computer equipment and systems software was temporarily increased from 55%⁷ to 100% for qualifying purchases after January 27, 2009 and before February 1, 2011. In addition, the half-year rate was waived so that the expense is fully deducted in one year. The measure is intended to boost productivity through faster adoption of newer technology (FC 2009, p. 167). Second, the CCA rate for machinery and equipment used for production is normally 30%. Budget 2007 implemented a temporary 50% straight-line CCA rate for purchases of these assets made before January 1, 2009. Budget 2008 extended this to include purchases made in 2009 and provided for a declining basis for assets acquired in 2010 and 2011. Budget 2009 waived the declining basis and extended the 50% straight-line CCA rate into 2010 and 2011. This means that purchases of machinery and equipment can be fully deducted in the first two years of the assets useful life. This measure is to "assist businesses in the manufacturing and processing sector to meet the current economic challenges, boost productivity, and position themselves for long-term success." (FC 2009, p. 168)

Increasing the CCA rate permits an asset to be depreciated more rapidly than the presumed decline in the asset's value; thereby providing an immediate tax advantage. For example, a qualifying CCPC with taxable income before CCA of \$500,000 (effective tax rate of 11% in 2009) and a year-end of December 31 purchases \$20,000 in computer equipment and systems software on March 15, 2009. Under the accelerated rules with the half-year rate waived,

⁷ CCA rate for computer equipment and systems software was increased from 45% to 55% in Budget 2007.

the business can deduct \$20,000 from its operating income for an immediate tax savings of \$2,200 in 2009. Under the normal CCA rules, with a CCA rate of 55% and the half-year rate, the total tax savings approaches \$2,200 but it is spread over a number of years as shown in Table 3.

Software	e		
Year	Capital Cost	CCA	Tax Savings
2009	20000.00	5500.00	605.00
2010	14500.00	7975.00	877.25
2011	6525.00	3588.75	394.76
2012	2936.25	1614.94	177.64
2013	1321.31	726.72	79.94
2014	594.59	327.02	35.97
2015	267.57	147.16	16.19
2016	120.40	66.22	7.28
2017	54.18	29.80	3.28
2018	24.38	13.41	1.48
2019	10.97	6.03	0.66
2020	4.94	2.72	0.30
2021	2.22	1.22	0.13

Table 3: Normal CCA	Rules for Compu	ter Equipment &
Software		

There are several things to note about accelerating CCA rates, assuming no changes in tax rates and positive taxable business income. First, the total tax savings under an accelerated regime and the normal regime is essentially the same in nominal terms.⁸ Second, the total taxes paid by the corporation under the two regimes are the same but the accelerated regime allows the business to defer corporate taxes to future years. Third, because of the deferment, an accelerated CCA regime can be viewed as an interest free loan from the government but since the general corporate tax rate is scheduled to drop over the next several years, the accelerated CCA regime

⁸ Though the present value of taxes paid are lower with the accelerated CCA.

actually reduces overall taxes paid corporations by allowing business that pay the general corporate tax rate to claim more of the deduction during years in which the tax rate is higher.

The underlying assumption is that the temporary acceleration rate will incentivize businesses to increase their investments in these assets, thereby increasing the long-term productivity and growth. Accelerating CCA rates have several key shortcomings. First, in any year some firms will be investing in these assets regardless and the accelerated rate simply subsidizes behaviour that would have occurred anyway.⁹ Second, businesses with no taxable income in the years the accelerate rate applies do not benefit from the change despite making the desired purchase. Third, it is assumed that accelerating the purchase of the specific assets has a bigger benefit than increased purchases of other assets. That is, accelerated rates cause investment dollars to be shifted from other asset classes which, for any given business, could have induced higher productivity growth than an investment in an accelerated class.¹⁰ Fourth, an accelerated rate essentially subsidizes the sector that produces the asset at the expense of other sectors in the economy. In particular, the program leads to an increase in demand for certain assets and a decrease in demand for others. Further, the increase in demand will likely lead to increases in the prices of specific assets because of the increase in demand. Fifth, accelerated rates distort the matching principle underlying the Canadian tax system. Finally, as pointed out by the TCBT "when assessing the appropriateness of certain accelerated deductions, it should be remembered that there are a number of other significant deductions, which, while recognized for financial accounting purposes can only by deducted later – perhaps many years later – for tax

⁹ Of course this is a common problem with most incentive programs, such as SR&ED, but any such programs should stipulate the currently level of activity and the anticipated increase in activity due to the new initiative.

¹⁰ One justification for accelerated CCA is that the specific assets generate externalities. There is some evidence that investment in machinery and equipment generates spillover effects (e.g. Long and Summers (1991) but this is a highly controversial view (e.g. Auerback, Hassett, & Oliner (1994).

purposes. These rules may more than offset the advantages accruing to businesses that are able to claim capital cost deductions more rapidly than they depreciate them in their own records."¹¹ (Canada 1998, p. 4.9)

A better policy to promote investment in the short-term to ensure long-term increases in productivity without subsidizing certain businesses and sectors would have been to accelerate the reduction in the general corporate tax rate (see Table 2).¹² Such a measure would have been a more efficient way to incentivize businesses to increase investments in capital assets.¹³ Alternatively, abolishing the half year rate or implementing simple pro-rating system based on the purchase date for all asset classes could have been pursued. Finally, if there was still a desire to target specific assets, then an investment tax credit is a preferable tool.¹⁴ (Canada 1998, p

4.10)

¹¹ In particular, TCBT noted that:

These rules include:

⁻ provisions for the best estimate of legal claims. For accounting purposes, a company must accrue its best estimate of outstanding claims, but in general, these can only be deducted for income tax purposes when actually determined or paid.

⁻ provisions for obsolescence and for the decline in value in certain capital assets. While these may be required for accounting purposes, in a number of circumstances they will not be recognized for tax purposes either until actually incurred or until the disposal of the last asset in a class of similar assets.

⁻ provision for a post-retirement benefit for retired employees. Under current accounting proposals, these costs must be accrued, for accounting purposes, over the working lives of the individuals, so as to match these costs with the contribution that the employees make to the generation of revenue. For tax purposes, however, the costs can only be deducted as incurred. (Canada 1998, p. 4.23)

¹² As the quality of capital assets produced in the market tends to increase overtime thereby prolonging the life of many capital assets, CCA rates should be reviewed regularly to ensure that the rate continues to match the life of the asset.

¹³ In the absence of spillovers from certain types of assets, most economists would agree that the preferred tax structure is one with a broad base and a low statutory rate.

¹⁴ As articulated by the TCBT, investment tax credits:

Are generally a more efficient incentive than accelerated allowances, because the benefit is provided up front where it can assist in financing the cost of the asset, rather than over some period of years. The use of investment tax credits makes the incentive more visible and therefore imposes accountability as well as avoiding distorting the income tax base. The use of federal investment tax credits instead of accelerated allowances minimizes the entanglement of federal and provincial tax systems. The cost of a federal initiative is thus borne by the federal government and not shifted in part to the provinces (through alterations in the common tax base), thus preserving the integrity of the taxable income base for both levels of government. (Canada 1998, p. 4.11-4.12)

Eliminating Tariffs on Machinery & Equipment

As noted in Budget 2009, almost 90% of imports entering Canada are tariff-free (FC 2009, p. 169) yet many items under the broad category of machinery and equipment are subject to tariffs ranging from 2% to 11%. Budget 2009 permanently eliminates tariffs on machinery and equipment. Tariffs raise the price of these goods, both foreign and domestic, which reduces demand for them. In general, taxes on inputs distort production decisions and the government revenues collected through the tariff does not offset these losses. Eliminating the tariff is consistent with the interest to encourage Canadian businesses to purchase machinery and equipment (see the above section on capital cost rates).

Repealing Section 18.2 of the Income Tax Act

Budget 2009 contained a seemingly innocuous bullet stating it was repealing the interest deductibility constraints in 18.2 of the Income Tax Act; but unlike most other budget items, no additional information or explanation was provided despite this is a significant policy change. (FC 2009, p. 162)

As noted previously, the matching principal of Canadian tax system allows taxpayers to deduct costs incurred to earn an income from the income earned. For example, if a taxpayer borrows money for income-generating purposes (e.g. purchasing shares that pay a dividend) the interest paid on the borrowed money is tax deductable. That is, only the income earned minus the cost incurred is taxable. There is, however, a twist when it comes to Canadian corporations with foreign affiliates. In general, Canadian corporations can invest or acquire shares in foreign affiliates and the dividends the Canadian corporation earns from this investment is not subject to taxation in Canada if it is earned in a country with which Canada has a tax treaty. The twist arises if the Canadian corporate borrows money to make the initial investment. The corporation can deduct the interest for tax purposes but does not pay tax on the associated income;¹⁵ there is no matching income to expenses.¹⁶ The problem that arises is that if the foreign affiliate is located in a low or no tax region, then the tax paid on the incoming income does not approximate Canadian taxes, implying that the effective tax rate on the foreign investment income is lower than on similar income from domestic sources . The generous tax treatment of interest funding foreign direct investment erodes tax revenues in Canada.

The Department of Finance began reviewing these tax rules in 1987, the Auditor General expressed concern with the current rules in 1992 and again in 2002, and the TCBT recommended that interest deductibility for investment in foreign affiliates should be disallowed. (Canada 1998, p. 6.18). No action was taken until Budget 2007 announced the surprise addition of section 18.2 to the Income Tax Act. Specifically, "interest expense on indebtedness incurred to acquire the shares of a foreign affiliate no longer be deductible, unless and until the shares generate income that Canada actually taxes." (FC 2007, p. 242) Section 18.2 was to come into force on March 19, 2007 but it was delayed until January 1, 2012 and considerably narrowed to include only "the range of affected interest expense to that which can be linked with the earning of exempt income in "double-dip" and other "tax-efficient" financing structures." (Edgar et al 2008, p. 810)

Despite not coming into force until 2012, Budget 2009 announced that it would immediately repeal section 18.2. Repealing section 18.2 was one of the recommendations made by the Advisory Panel on Canada's System of International Taxation that reported in December 2008 and which favoured instead a regime that included the adoption of a specific anti-avoidance

¹⁵ The rule providing Canadian companies with the ability to deduct interest on funds borrowed to invest in domestic and foreign affiliate has been in place since the 1972 tax reform.

¹⁶ For a more complete description of the rules regarding the exemption of foreign source income, interested readings should consult the report by the Advisory Panel on Canada's System of International Taxation (Canada 2008).

rule. (Canada 2008) Edgar et al. (2008) disagree with the recommendations made by the Advisory Panel and instead argue for the adoption of a comprehensive thin capitalization regime. The arguments both in favour and against section 18.2 are complicated and summarizing the debates here would exhaust the page constraints of this short paper. Instead, interested readers should consult Canada (1998), Edgar et al. (2008), and Canada (2008) for a full discussion.

Stimulating Housing Construction

Home Renovation Tax Credit

According to Budget 2009, "home renovations can represent a smart investment in the long-term value of a home and generate-broad based economic activity...to support economic growth during these challenging times, Budget 2009 proposes to introduce a temporary Home Renovation Tax Credit (HRTC). The HRTC will provide a temporary incentive for Canadian to undertake new renovation projects or accelerate planned future projects, thus providing timely stimulus to the Canadian economy..." (FC 2009, p. 127) The HRTC in a non-refundable tax credit that applies to renovations undertaken between January 28, 2009 and February 1, 2010 and applies to eligible expenditures above \$1,000 but below \$10,000. The maximum value of the tax credit is, therefore, \$1,350.

Is there a need to stimulate home renovations in Canada? Figure 3 plots real expenditures on renovations since 1981. Expenditures on home renovations have double since 1999, from about \$16 billion to almost \$33 billion in 2008. Not only did renovation expenditures over this period far exceed the historical average rate but also surpassed growth in real GDP. Expenditures, however, began to slow in 2008 and in the first quarter of 2009 renovation activity fell 4.2%; however, the amount being spent is about 6% higher than that spent in the same

quarter in 2006. (Statistics Canada 2004) This slowing of growth appears to be more of a correction back to a more balanced growth path and is not indicative of a sector that is troubled.



Figure 3: Renovation Expenditures, 1992 Constant \$

Another reason for stimulating renovations was to partially offset the decline in the construction of new housing. Figure 4 plots real expenditures on new home construction since 1981. The trend is quite similar to that seen for renovations: expenditures had almost doubled between 1999 and 2008 and the growth rate was steep. Expenditures began to slow in the second quarter of 2008 as the world wide economic decline took hold and the value of new home construction fell to a six year low over the subsequent year. This long decline, however, has likely just recently turned a corner with the Canada Mortgage and Housing Corporation (CMHC 2009) noting that home constructions increased by a surprising 12.1% in August 2009.

Many of the arguments that were made against the accelerated CCA rates for computers and machinery discussed above apply to this budget item. The tax credit will subsidize a significant amount of expenditures that would have occurred regardless and it will be very



Figure 4: New Home Construction, 1992 Constant \$

Source: Statistics Canada

difficult to disentangle how much of total expenditures was truly stimulated by the credit.¹⁷ Individuals owing no federal tax will not benefit from the HRTC, making the credit targeted towards middle- and high-income earners. It also assumes that accelerating any planned or new renovations has a bigger benefit than other expenditures that may have been planned by the homeowner. In addition, renovations made now may also not pay off as much in the future due to the depreciation of most renovations. Many renovations only truly payoff when done within a few years of an expected sale and accelerating renovations may not be in the long-term interests of the homeowner.. For example, a kitchen renovation from the 1980s would not hold its full value into 2008. It is unclear why all Canadian taxpayers should be subsidizing an investment in an asset when the returns mostly accrue to the individual home owner and their family (particularly due to the principal residence tax exemption). Finally, the administrative costs of this initiative, particularly audit and enforcement, is likely to be quite high on the HRTC reducing any benefit from the initiative. Income taxes are highly distortionary and a more

¹⁷ Supra footnote 9.

significant long-term benefit would have likely come from further accelerating income tax cuts, particularly to high-income earners.

Another possible benefit of the HRTC is that due to the need of the homeowner to document the expenditures to be claimed, it may shift renovation expenditures from the underground economy into the observed economy. On the other hand, the tax credit is less than the price differential normally seen in this market making underground expenditures still preferred on a price comparison basis. Further, many persons who operate in the underground economy do so covertly such that the homeowner is still issued a receipt, albeit a generic receipt. The HRTC did not include explicit rules about the documentation requirements and the credit will, in part, go towards expenditures made and income earned in the underground economy.

Home Buyers' Plan

The Home Buyers' Plan (HBP), introduced in 1992, permits first-time home buyers to withdraw up to \$20,000 from the Registered Retirement Savings Plan (RRSP) to purchase or build a home without incurring a tax liability. If the purchase is made with a spouse or common law partner than each individual can withdraw up to the maximum amount. In this case, both individuals must qualify as first-time home buyers. Withdrawals under the HBP must be repaid with the minimum annual repayment being equal to 1/15 of the amount withdrawn. Individuals that fail to make a repayment, in full or in part, must add the shortfall amount to their taxable income. The primary motivation for the program was that first-time home buyers have more difficulty in coming up with an appropriate down payment as they do not have equity from a previous home. Budget 2009 increased the maximum withdrawal amount to \$25,000. The revised withdrawal amount provides a 20% down payment on \$125,000 in purchase price of a home. To put this into

context, in March 2009, the average home price in Canada was \$288,641 and ranges from \$147,682 in PEI to \$425,708 in BC. (Canadian Real Estate Board n.d.)

Because the taxpayer is allowed to deduct RRSP contributions from their income and a withdrawal under the HBP does not induce a tax liability, this effectively means that first-time home buyers can use up to \$20,000 in pre-tax income to purchase a home. The withdrawal, however, needs to be paid back with after-tax dollars to the program and it is likely that the individual's marginal tax rate was lower when making the contributions than when making the repayments thereby providing no loss in tax revenues to the government. In essence, the program allows an individual to borrow from themselves. The cost to the individual is the investment return (or the benefit of losing out on an investment loss) of the withdrawn money but, in theory, the asset they invested in (the house) should increase in value thereby earning a return on investment outside the RRSP. Assuming the home is the individual's primary residence, upon sale the gains are not taxed whereas had the gains accrued in the RRSP are taxed on withdrawal. Whether or not the investment in housing versus an investment in an RRSP yields a greater return to the individual depends on a variety of different factors, including the taxpayer's marginal tax rates when RRSP contributions and withdrawals were made.

The HBP is popular amongst first-time home buyers. According to the Canada Mortgage and Housing Corporation (Canada Mortgage and Housing Corporation [CMHC] 2006), since 1992 over 1.5 million individuals have used almost \$16 billion of their RRSPs to buy homes. In addition, per annum withdrawals and number of individuals using the program have remained relatively stable since the inception of the program. Since the inception of the program, the average withdrawal under the HBP is about \$10,000-\$11,000 (though it varies significantly by province), or about half the original maximum amount, and approximately 130,000 individuals

use the program. The plan, however, is primarily used in Ontario and Quebec, with these residents accounting for 92% of participants in the program and accounting for 97% of withdrawn amounts. A survey conducted in March 2005 of mortgage holders found that nearly half of first-time home buyers used RRSPs as a source of down payment and for 39% of first time home buyers the RRSP withdrawal was the primary source of their down payment. Overall, the increase in the threshold would appear to benefit a very small proportion of first-time home buyers. In addition, as banks include the required repayments when calculating the amount of mortgage the individual qualifies for, the withdrawal decreases the maximum total mortgage the individual qualifies for.

It should be noted that Budget 2008 announced the Tax Free Savings Account (TFSA) which allows individuals to save after-tax income and earn investment icome tax free. Some thought needs be given as to whether RRSPs are an appropriate savings vehicle over the long-run for home purchases, particularly since the TSFA provides a more suitable vehicle to save for consumption expenditures such as home purchases.

First-time Home Buyers' Tax Credit

When purchasing a home, buyers incur costs in addition to mortgage and moving costs and some are one-time, nonrecurring costs. The non-recurring costs are commonly referred to as closing costs and include legal fees and disbursements, title insurance, land survey fees, property transfer taxes, GST, mortgage processing fees, appraisal fees, and other miscellaneous costs. Closing costs tend to run in the order of up to 4 percent of the purchase price of the home though it varies by jurisdiction. Budget 2009 introduced a First-time Home Buyers' Tax Credit (FTHBTC) for homes acquired after January 27, 2009. The FTHBTC is a non-refundable tax credit that provides a maximum of \$750 in tax relief. The rationale for the credit is that many first time

home buyers find it difficult to "pay these costs in addition to saving money for a down payment." (FC 2009, p. 132) The measure is provided under the "stimulate housing construction" pillar.

Given the structure of the tax credit, the FTHBTC is unlikely to cause any changes in behaviour. Because this is being delivered through the tax system as a credit, it simply acts as a delayed partial reimbursement of costs (delayed until the home buyers receive their refund in the first or second quarter of the following year). It means that the home buyers must first pay all the closing costs up front so home buyers must still save for their closing costs or use their available credit, assuming that by doing so they are able to afford the stream of payments and it does reduce their approved mortgage amount. They also must wait up to a year before receiving their subsidy for buying their first home. That is, it does not reduce the amount that needs to be saved in order to purchase the home. As a consequence, the FTHBTC cannot accelerate an already planned purchase or cause other individuals to make the leap into home ownership. In other words, the FTHBTC simply subsidizes behaviour that would have occurred without the tax credit. There may be some delayed benefit amongst those who claim the FTHBTC and receive a tax refund; however empirical evidence suggests that lump sum payments such as a tax refund are much more likely to be used to increase savings or reduce debt rather than induce increased consumption. (Shefrin and Thaler 1988; Feldman 2008)

A final comment relates to the material on the HBP discussed above: individuals can use their withdrawals under the HBP to cover their closing costs. In this case, the FTHBTC is providing a tax credit for expenditures made from pre-tax dollars. Whilst tax credits have become quite common under the Canadian and other tax systems, tax credits are normally

calculated using net or taxable income rather than pre-tax income; hence, the FTHBTC as currently structured represents a significant shift in the tax policy and not for the better.

Helping Canadians and Spending Stimulus

Freezing EI Rate

While changes to the EI rates can be considered a tax policy change since EI premium are essentially a payroll tax. Budget 2009 froze EI premiums for both 2009 and 2010 at 2008 rates: \$1.73 per \$100 (p. 95) for the employee rate. This also effectively froze EI premiums for employers, which is calculated at 1.4 times the employee rate. On the basis that EI premiums would have been increased in 2009 in order to achieve a break-even level, this change could be viewed as a tax cut. However, as the maximum insurable earnings (MIE) rose from \$41,100 to \$42,300 in 2009, the net effect is that employees whose wage earnings are below the 2008 MIE threshold will pay no additional tax while employees whose wage earnings are above the 2008 MIE will pay additional taxes. Equally, employers will pay more in EI premiums for all employees whose wage earnings are above the 2008 MIE. In total, employees earning above the 2008 MIE will pay approximately \$20 (or 0.77 cents per pay cheque assuming a biweekly pay schedule) more and employers will pay approximately \$30 more per annum in EI premiums than in 2008 thereby reducing income for both parties. That said, the additional amount being withheld during a given pay period is negligible and may not have any direct negative effects on consumption or employment and certainly has fewer negative effects than had rates been increased. A separate chapter in this volume discusses the EI system.

Personal Income Tax Changes

In 2009 all bracket thresholds increased 2.5% due to indexation¹⁸ but Budget 2009 included an additional increase of 5% to the exemption amount and thresholds for the first two of the four tax brackets. That is, the personal exemption and the thresholds for the first two tax brackets increased by 7.5%. To deliver the relief in a timely fashion, withholding calculations were revised effective April 1, 2009.

Table 4 summarizes the exemption and threshold amounts for 2008, the original 2009 figures based on the changes announced in the budget, the maximum tax savings, and the maximum savings per pay cheque assuming a bi-weekly pay schedule. The increase in the personal exemption over and above the original exemption amount for 2009 results in a tax savings of \$33 for the year or an additional \$1.27 cents per pay cheque for individuals in the top tax bracket. Having an additional \$1,893 taxed at 15% rather than 26% results in an additional tax savings of \$75.76 and a total tax savings of \$108.76 or an additional \$4.18 per pay cheque if at the top of the threshold. And having an additional \$3,788 taxed at 22% rather than at 26% provides a further tax savings of \$113.64 and a total tax savings of \$222.4 or an additional \$8.55 per pay cheque for individuals in the top tax bracket. The resulting effect is that every taxpayer will pay less tax in 2009 resulting in an overall increase in disposable income in Canada that will, at least in part, fuel increased consumption; albeit perhaps just an extra coffee from Tim Hortons for some or a venti soy chai latte and a raspberry scone at Starbucks for others (and only every two weeks). An alternative use for this additional money is to offset any housing rental

¹⁸ Beginning January 1, 1974, the personal income tax system was indexed annually by raising the tax brackets and increasing the personal exemptions by an inflation factor based on the CPI.¹⁸ The 1986 tax reform limited the inflation factor to the CPI less 3%. This shifted the personal income tax system in Canada from a fully indexed system to a system based on partial indexing and resulted in bracket creep; because incomes generally rise with the cost of living, many Canadian paid more taxes than they would have had the system remained fully indexed.¹⁸ Effective January 1, 2000, full indexation was restored. In addition, Budget 2000 announced a five-year tax reduction plan which increased the tax brackets and personal exemptions by greater than inflation in some years.

increases or increases in property taxes that have occurred in 2009. For example, in Saanich, BC, the average increase in property taxes for 2009 amounts to \$77.¹⁹

Tax Rate		Original		Tax Savings	Cumul. Tax Savings	Saving s Per Pay Chequ
S	2008	For 2009	Budget 2009	1		e
0%	\$9,600	\$10,100	\$10,320	33	33	1.27
15%	Up to \$37,885	Up to \$38,832	Up to \$40,726	75.76	108.76	4.18
22%	\$37,886-\$75,769	\$38,833-\$77,664	\$40,727-\$81,452	113.64	222.4	8.55
		\$77,665-	\$81,452-			
26%	\$75,770-\$123,184	\$126,264	\$126,264	0	222.4	8.55
29%	>\$123 185	>=\$126.265	>=\$126.265	0	222.4	8 55

Table 4: Original	and Modified	Personal In	come Tax B	Bracket Th	resholds and 1	Exemption

¹ Calculated using the difference between the original thresholds for 2009 and those announced in Budget 2009.

This assumes, however, that taxpayers notice the difference in their take home pay and also spend the increase. In the United States, Shapiro and Slemrod (2001) added questions onto the April 1992 Survey of Consumers following a change in withholding amounts that resulted in a small increase in take home pay. The findings are quite interesting. Half of the respondents did not notice a change in their paycheque which supports the findings of Krishna and Johar (1996) and Morwitz, Greenleaf and Johnson (1998) that small credits are ignored. This also indicates that paying out tax relief in regular, small payments will also likely be ignored. More interesting is that of the half that did notice a change, half of those reported that the paycheque was reduced as a result of the change. Of those that did notice and noticed an increase, when asked what they would do with this extra money, less than 50% said they would spend it.

¹⁹ The author's property tax bill increase of \$150 in 2009, combined with the \$20 in additional EI premiums, has eroded her federal personal income tax relief to \$52 per annum.

An alternative measure, followed in the U.S., is to provide an immediate stimulus cheque to taxpayers for their annual tax relief rather than revising the withholding formula. The assumption is that by providing a large amount all at once will have a greater effect on consumption expenditures. The evidence, however, indicates that the marginal propensity to consume (MPC) out of lump sum payments is much lower than the marginal propensity to consume out of regular income. The MPC estimates for regular income range from 0.5 to 0. 685 but only 0.32 to 0.437 for lump sum income. (Ishikawa and Ueda 1984; Shefrin and Thaler 1988) Out of the two ways to deliver tax relief to individuals with an expectation of a short-term stimulus affect, the method followed by Canada appears to be the preferred choice; however, increases in other taxes such as increase in property taxes and payroll taxes need to be taken into account before determining the potential stimulus effect.

Age Credit

Individuals who are 65 years of age and earn an income that is below a certain threshold are allowed to claim an additional non-refundable personal credit called the age amount credit. The purpose of this credit is to help alleviate poverty amongst seniors. In 2009, seniors with a taxable income amounting to \$32,311 or less receive the full credit, it is partially clawed back on incomes between \$32,312 and \$75,031, and eliminated for individuals whose income exceeds \$75,032. Budget 2009 increased the age credit by \$1,000 to \$6,408 providing seniors with an added tax relief of \$150 per annum. As noted by Kevin Milligan (2009), the age credit distorts horizontal equity across age groups with low- and moderate-income households and provides additional after-tax income to households that have already acquired consumer durables such as cars, furnishings, and homes. In this regard, they have often have lower annual durable expenditure requirements than non-senior households with similar income levels. On the other

hand, they may have larger overall marginal propensities to consumer since they no longer need to save for retirement. Combining this information, the increase in the age credit may provide some economic stimulus. But a more broad-based measure would have been to increase the GST credit, further increasing the personal exemption (discussed below), are further enriching the Working Income Tax Benefit (WITB) (discussed below), each of which would have provided a greater stimulus effect since a greater proportion of consuming households would have been targeted.

Canada Child Tax Benefit & the National Child Benefit Supplement

The Canada Child Tax Benefit (CCTB) and the National Child Benefit Supplement (NCBS) were implemented in 1998 and represented an integrated approach to federal and provincial child benefit programs. Budget 2009 announced changes in the payments under these programs; the changes are directly tied to the aforementioned changes in the personal income tax system. CCTB benefits are clawed back at a rate of 2% for one child and 4% for families with two or more children once family income exceeds the threshold set for the 15% income tax bracket. Because this threshold was raised to \$40,726, this means that qualifying families can earn an additional \$1,894 over the threshold that would have been in place through indexing alone. Equally, the clawback threshold under the NCBS was increased by the same increase as the CCTB threshold to \$23,712. The overall effect is that families earning more than \$38,832 but below the amount where the CCTB is fully clawed back and families earning more than \$23,712 but below the amount where the NCB is fully clawed back both receive an additional benefit amount over what they would have had thresholds increased by the normal indexation amount; however these changes will have little effect on children in the poorest families in Canada. A separate chapter in this volume discusses in more detail child benefits in Canada.

Working Income Tax Benefit

Canada's poorest working families did, however, benefit from changes to the Working Income Tax Benefit. Budget 2007 introduced the WITB with the objective of lowering the "welfare wall" and making "work pay for low- and modest-income Canadian." (FC 2007, p. 78) That is, the goal is to increase the labour supply of low-income Canadian. The WITB is modeled after the 30-year old American program called the Earned Income Tax Credit (EITC).

Budget 2009 increased the available tax credit from \$522 to \$925 for individuals and from \$1044 to \$1,680 for couples and single parents. For individuals, the enhanced benefit is phased in at a rate of 25% of each dollar earned over \$3,000, reaching a maximum for earned income between \$6,700 and \$10,500. The benefit is phased out at a rate of 15% of each additional dollar earned over \$10,500 and fully eliminated at an income of \$16,667. For couples and single parents, the enhanced benefit is phased in at a rate of 25% of each dollar earned in excess of \$3,000, reaching a maximum for earned income between \$9,720 and \$14,500. The benefit is phased out at a rate of 15% of each dollar earned in excess of \$3,000, reaching a maximum for earned income between \$9,720 and \$14,500. The benefit is phased out at a rate of 15% of each additional dollar earned in excess of \$14,500 and fully eliminated at an income of \$25,700. The enhanced program provides a benefit that is closer to that originally envisioned for such a program by Liberal Finance Minister Goodale in 2005 and in effect the changes cut personal income taxes for those qualifying individuals.

Scarth and Tang (2008) provide a simulation of the effects of the WITB program before the enhancement. They find that the WITB reduces structural unemployment though the magnitude is small, their market wage may be reduced, and it increases average income of beneficiaries. The overall conclusion is that the WITB does "increase the living standard of the targeted subset of the working poor." (p. 34) They also find that the WITB program has more positive effects than a comparable employment subsidy or general income tax cut. An unintended benefit of the program is that, since it has a positive effect on observed labour supply,

it is likely to draw some low-income individuals out of the underground workforce, thereby providing them with access to social security programs such as CPP and EI and ensuring protection by labour regulation.

Combined, the CCTB/NCB and WITB measures put more money into wallets and purses of households that are very likely to use it to boost consumption expenditures. In addition, the WITB combined with personal income tax relief, the Canada Employment Credit, and changes to the Child Tax Benefit and associated supplement are significant steps towards reducing poverty in general and child poverty in particular; however, poverty amongst the homeless and individuals not working remain unaddressed.

Conclusion

The budget contains a number of measures to stimulate consumption. In terms of stimulating business investment, increasing the small business threshold, renewing the METC, and changing the CCA are inefficient measures to stimulate investment and should have been replaced by accelerating the cuts to corporate taxes. On the other hand, eliminating tariffs is beneficial. The measures to stimulate housing construction are not substantiated by the evidence and, like many of the measures to stimulate business investment, are likely to have a low "bang for the buck" because there is no evidence they will substantial increase spending in this areas and are likely to simply subsidize activities that would have been undertaken in the absence of the tax measure. Instead this money could have been used to accelerate personal tax cuts and enrich programs aimed at helping the poor. Finally, the measures aimed at helping Canadians and stimulate personal spending are beneficial but are more beneficial for poverty reduction than economic stimulus (though the two are intertwined) since the programs are not likely to be or should they be temporary. That said, there has been little focus on helping the homeless and the non-working

poor (many of whom are single mothers) and this represents a significant gap in current policy. Taken together the message arising from this analysis is that the ideal economic stimulus when using the tax system are those actions that should be done, regardless of the general macroeconomic situation. Taxes are highly distortionary and the best stimulus often comes from cutting overall tax rates and allowing individuals and firms to decide where and how to spend it.

Citation List

ab Iorwerth, A. and Danforth, J. (2004) "Is investment not sensitive to its user cost? The macro evidence revisited." Working Paper 2004-05, Department of Finance, Ottawa.

Auerbach, A., Hassett, K., and Oliner, S. (1994) "Reassessing the Social Returns to Equipment Investment," *Quarterly Journal of Economics* 109(3), p. 789-802.

Bird, R. & Smart, M. (2001) "Tax Policy and Tax Research in Canada," in Patrick Grady and Andrew Sharpe, eds., *The State of Economics in Canada* (Montreal: McGill-Queen's University Press).

Bruce, D. & Picard, D. (2006) Making Succession a Success: Perspectives from Canadian Small and Medium-Sized Enterprises. *Journal of Small Business Management* 44(2), p. 306-309.

Canada. (1998). *Report of the Technical Committee on Business Taxation*. Ottawa: Department of Finance.

Canada. (2008) *Report of the Advisory Panel on Canada's System of International Taxation*. Ottawa: Department of Finance.

Canada Mortgage and Housing Corporation (2006). Housing Now. Ottawa: Public Works and Government Services, July

Canada Mortgage and Housing Corporation (2009). Preliminary Housing Start Data. Ottawa: Public Works and Government Services, September.

Canadian Real Estate Board (n.d.) MLS Statistics. Retrieved May 5, 2009, from <u>http://www.crea.ca/public/news_stats/statistics.htm</u>.

de Long, J.B. and Summers, L. (1991) "Equipment investment and economic growth," *Quarterly Journal of Economics* 106 (2), p. 445–502.

Edgar, T., Farrar, J., and Mawani, A. (2008). "Foreign Direct Investment, Tin Capitalization, and the Interest Expense Deduction: A Policy Analysis," *Canadian Tax Journal* 56(4), p. 803-869.

Feldman, N. (2008). Mental Accounting Effects of Income Tax Shifting. *Review of Economics and Statistics* (forthcoming.)

Finance Canada (2000). *Economic Statement and Budget Update 2000*. Ottawa: Department of Finance.

Finance Canada (2007). *The Budget Plan: Aspire to a Stronger, Safer, Better Canada*. Ottawa: Department of Finance.

Finance Canada (2009). *The Budget Plan: Canada's Economic Action Plan.* Ottawa: Department of Finance.

Hendricks, K., Amit, R. & Whistler, D. (1997). *Business Taxation of Small and Medium-sized Enterprises in Canada*. Working Paper 97-11. Prepared for the Technical Committee on Business Taxation. Ottawa, ON: Department of Finance.

Industry Canada. 2008. Key Small Business Statistics. Ottawa: Industry Canada. January.

Ishikawa, T. & Ueda, K. (1984). The Bonus Payment System and Japanese Personal Savings. In Aoki, Masahiko, ed., *The Economic Analysis of the Japanese Firm*. Amsterdam: North Holland.

Jog, V., Lenjosek, G., and McKenzie, J. (1996) "Flowthrough Shares: Premium Sharing and Cost-Effectiveness," *Canadian Tax Journal* 44(4), p. 1016-1051.

Krishna, A. & Johar, G. (1996) Consumer Perceptions of Deals: The Biasing Effects of Varying Deal Prices. *Journal of Experimental Psychology: Applied*, 1996, 2(3), 187-206.

McKenzie, K. (1994) "Refundability and the Incentive Effects of Flowthrough Shares," *Canadian Tax Journal* 42(4), p. 1100-1114.

Milligan, K. (2009, May 7) *What Have Four Conservative Budgets Done to Personal Income Taxes? An Empirical Analysis of Who Won and Who Lost from 2005 to 2009.* Speech presented for the John Deutsch Institute conference, The 2009 Budget: Challenge, Response and Retrospect, Kingston, ON.

Morwitz, V., Greenleaf, E., & Johnson, E. (1998). Divide and Prosper: Consumers' Reactions to Partitioned Prices. *Journal of Marketing Research*, 25 (November), 453-463.

Parsons, M. (2008). "The Effect of Corporate Taxes on Canadian Investment: An Empirical Investigation." Working paper 2008-01, Department of Finance.

Prospectors & Developers Association of Canada (n.d.) PDAC's position on Canada's 'super' flow-through program. Retrieved May 5, 2009, from http://www.pdac.ca/pdac/advocacy/financial/flow-through.html.

Schaller, H. (2007) "The long-run effect of taxes, prices, and the interest rate on the capital stock." Working paper, Carleton University.

Scarth, W. & Tang, L. (2008). An Evaluation of the Working Income Tax Benefit. *Canadian Public Policy*, XXXIV(1), 25-36.

Shapiro, M.D & Slemrod, J. (2001). Consumer Response to Tax Rebates. NBER Working Paper No. W8672. Available at SSRN: http://ssrn.com/abstract=294721

Shefrin, H. M., & Thaler, R. H. (1988). The behavioral life-cycle hypothesis. *Economic Inquiry*, 26, 609-643.

Statistics Canada. 2004. "Canadian economic accounts." *The Daily*. March 2. Statistics Canada. http://www.statcan.gc.ca/daily-quotidien/090302/dq090302a-eng.htm (accessed May 5, 2009).

Tal, B. (2006). *Small Business in Canada: Trends and Prospects*. CIBC World Markets Economics and Strategy. September.