A Federal Budget Designed for the Times

The Economic Action Plan of 2009

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The Canadian federal budget of January 27, 2009, involved several "firsts". It was the first budget in over a decade which embodied planned deficits over a five-year forecast horizon. It was the first budget in a generation proposed by a minority government facing a genuine threat of defeat at the hands of an unusually consolidated political opposition. And it was the first federal budget in over twenty-five years (and maybe far more) to be presented to the House of Commons during a remarkably synchronized global economic and financial crisis.

This paper offers my assessment of the 2009 federal budget and how it was motivated by the economic context of the time. My position as the Clifford Clark Visiting Economist at the federal department of finance has allowed me to witness parts of the budget-making process as an insider, and in my paper I will try to provide my take on some of the thinking and motivation for the key policy actions taken.

The paper is divided into four sections. First, I describe the global economic situation as it appeared in January, 2009. As you are well aware, the current recession has its roots in events which occurred outside of Canada. Reviewing these events is crucial because the global nature of the recession played an important role in shaping the government's budget actions. Second, I turn to the Canadian economic context. In many ways, the Canadian economy was in better

shape than the economies of the United States and Europe. All the same, and despite what was suggested by some commentators at the time, the nature of globalization implied that any global recession would inevitably be felt in Canada.

In the third section I turn to the budget itself, and explain how the policies adopted by the government were tailored to fit the economic context. Due to the several significant measures aimed at improving the functioning of financial markets, I argue that Budget 2009 was more than a conventional budget. I provide an interpretation of the government's chosen mix of new spending and tax measures, as well as the decision to balance the needs for short-run stimulus and long-run fiscal prudence. The fourth section contains a brief summary, including some comments regarding the actions taken by the government to ensure that the budget policies would be implemented as quickly as possible.

One final introductory comment is necessary. I intentionally avoid commenting on the political realities that the government faced during the preparation of Budget 2009. I make no claim that political considerations played either no role or even one subservient to the economic necessities; Janice MacKinnon addresses these issues directly in her paper. In what follows I present my perspective only on how the budget reflected the *economic* context of the times.

1. The Global Economic Context, January 2009

The rising delinquencies of U.S. sub-prime mortgages, caused in part by the collapse of U.S. housing prices, was the proximate cause of the problems that emerged in the fall of 2007. Large-scale securitization of these mortgages, however, meant that the losses would not be concentrated among the initial issuers of these questionable mortgages. Nor would the losses be contained to these specific securities; financial contagion spread quickly across a range of investment products, with the result being a general seizure in credit markets. With globalized capital markets, however, the interruption in the flow of credit was not confined to the United States. What began as a U.S. housing problem soon became a global credit crisis.

Through the summer of 2008, the perception by most policymakers was that the fundamental problem was one of *liquidity*, even though one could not ignore the role played by some reckless financial institutions. Government policy took the approach of using targeted interventions aimed at assisting those specific institutions in trouble, the U.K. nationalization of

Northern Rock and the U.S. government-assisted takeover of Bear Stearns being the most prominent examples.

On the monetary side, central banks recognized that straightforward reductions in policy interest rates were necessary but probably not sufficient for dealing with the evident lack of liquidity. The counterparty risks associated with the uncertain location and quality of what we now call "toxic assets" had led to a collapse in the credit market and to a significant increase in corporate spreads. Any attempt to increase the flow of credit through interest-rate reductions would thus be ineffective so long as the monetary pipes remained plugged. Central banks therefore began implementing a series of targeted and less-conventional (and sterilized) policies aimed not so much at reducing interest rates (or increasing the money supply) but at unclogging these monetary pipes and thus restoring the flow of credit.

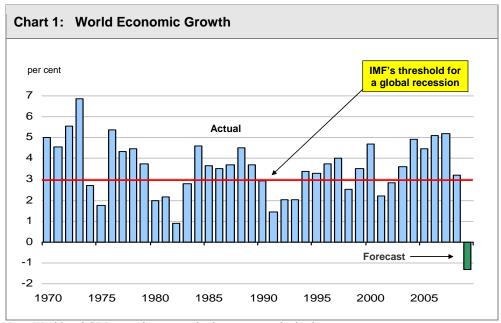
By the end of September, however, it became clear that the real problem was one of *systemic stability*. Even financial institutions once viewed as solvent were threatened by the failure of others that were either sufficiently large or sufficiently "interconnected", or both. With the effective nationalization of Fannie Mae and Freddie Mac, the Fed's bail-out of AIG, the collapse or takeovers of Lehman Brothers, Washington Mutual, and Wachovia, and the conversion of the remaining investment banks to "ordinary" commercial banks, the U.S. financial system was dramatically transformed virtually overnight. The financial carnage radiated outward from the United States to envelope most of the developed world.

Large-scale re-capitalization of financial institutions then became a government priority, both in Europe and in the United States. Debate raged about the best way to accomplish this recapitalization. One option involved governments purchasing a significant equity position in the companies, perhaps even a controlling interest; another involved governments purchasing the toxic assets from the institutions and concentrating them in a "bad bank", much as had been done in the United States with the Resolution Trust Company following the savings and loans crisis in the mid 1980s.

Since the middle of 2007, it has become commonplace to hear economists speak of the financial markets separately from the "real" economy, almost as if the former are merely a side-show to the latter. I admit to being puzzled by this language. Nobody would ever suggest that the markets for labour or raw materials could be separated from the "real" economy, so why a separation for financial markets? And if there has ever been an illustration of how financial

markets are an integral part of the overall economy, and how credit is a crucial input to the production process, surely it is the events of the last 18 months.

With the banking sector reeling, the "shadow" (i.e., non-bank) financial system seizing up, and stock markets collapsing, it should surprise nobody that the financial crisis quickly affected production and employment. And given the global nature of financial markets, it is also unsurprising that the economic slowdown occurred globally (see Chart 1). Indeed, the remarkable synchronicity of the various national recessions is testimony to the centrality of financial markets generally, and the flow of credit specifically, in the smooth operation of modern economies.



Note: World real GDP growth on a purchasing-power parity basis.

Source: International Monetary Fund World Economic Outlook, April 2009.

Central banks, especially the U.S. Federal Reserve, began to respond in a much more aggressive manner. The financial world watched with awe as the size of the Federal Reserve's balance sheet doubled in just a few months. With policy rates near zero and the pace of the economic decline increasing, the terms "quantitative easing" and "credit easing" soon appeared in the lexicons of economists and policymakers. Would it soon be necessary elsewhere to directly purchase financial assets with freshly-printed money, thus fighting against the financial sector's panic and the associated collapse in the money multiplier? Central banks began discussing what such a policy approach might look like, whether it would be necessary, and whether it would be effective at stimulating the economy.

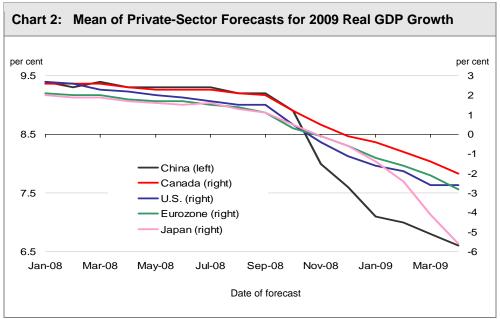
As global economic activity slowed sharply in the fall of 2008, however, it was becoming clear that monetary policy—even in its more creative and aggressive forms—would be insufficient to deal with the global recession. First, at the heart of the economic problem was an overly indebted household and business sector, especially in the United States but also in other developed countries. Second, the speed and magnitude of the economic slowdown, combined with the shattering of the financial sector, had led to a massive decline in consumer and business confidence. For both reasons, lower interest rates and more accessible credit were unlikely to be sufficient to restore aggregate demand. Something else would be needed.

To make matters worse, there was a growing recognition of two facts. First, based on historical experience from around the world, recessions associated with financial crises tend to be both deeper and more protracted than more "usual" recessions. Second, the extent to which this recession was synchronized across countries suggested that one of the standard channels of economic recovery—exports—would not be available this time round. After all, if *all* economies are experiencing roughly the same scale of recession, who is available to pull others out of the downturn through an increase in their own domestic demand?

The global and synchronized nature of both the financial crisis and the economic slowdown led to a remarkable international effort in designing a broadly coordinated policy response. At the first-ever G20 leaders' summit in Washington in November, 2008, there was agreement that monetary policy would be insufficient for dealing with the growing recession. The IMF had recommended the *simultaneous* adoption of fiscal stimulus packages in the range of 2 percent of GDP, and the G20 leaders accepted this recommendation, recognizing that a simultaneous fiscal expansion would provide greater stimulus than would unilateral action because of the reduction in import leakages. Furthermore, the leaders agreed to take whatever actions would be necessary to stabilize the financial system and also to have their countries work together to improve financial-market regulations to prevent the recurrence of such dramatic financial crises in the future.

It is worth emphasizing the level of uncertainty among economists and policymakers in late 2008 regarding both the scale and the pace of the then-coming global recession. In the summer of 2008, most forecasts still showed healthy GDP growth for a large selection of countries. By October, these forecasts had been revised downward to show slower growth, but still predicted no recession for the near future. By Christmas, however, the forecasts showed deep recessions across the developed world (see Chart 2). Many economists were sufficiently

shaken by the speed of the economic deterioration that they were nervous just opening their morning newspapers for fear of what other shoes might have dropped during the night. One could easily feel this anxiety within the department of finance.

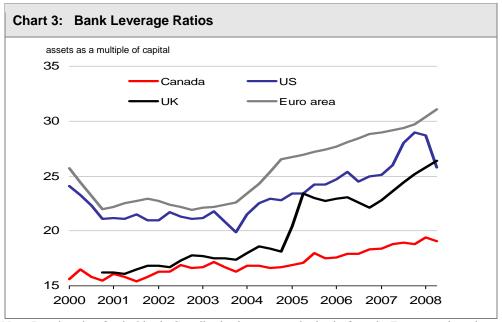


Source: Blue Chip Economic Indicators - January 2008 to April 2009.

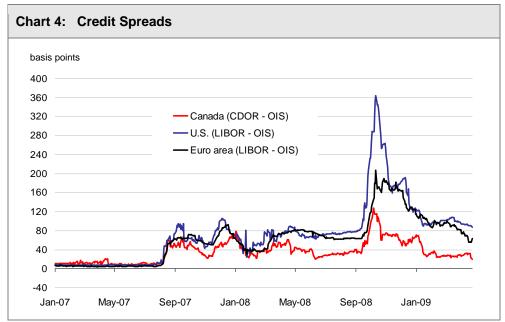
2. The Canadian Economic Context, January 2009

During the fall of 2008, there was some confusion surrounding the extent to which Canada would be caught up in the global financial and economic crisis. While Canada clearly had some advantages over other countries, it was equally clear that our links to the global economy would transmit both the financial-market events and the "real" slowdown into the Canadian economy.

The Canadian banks were more capitalized and less highly leveraged than were the banks in the United States and Europe (see Chart 3). In addition, they were less exposed to the toxic assets that were wreaking havoc elsewhere. As a result, there was no danger of any significant bank failure in Canada; as we all know, our banking regulations are now held up as the model to be replicated by those countries desperately in need of regulatory reform. As sound as the Canadian banks were, however, the non-bank "shadow" financial system was still adversely affected by the global financial crisis, testimony to the globalized nature of financial markets. The markets for corporate bonds and asset-backed securities, both of which play a crucial role in the overall provision of credit, were hamstrung with credit spreads far above the levels seen before 2007 (see Chart 4).



Note: Based on data for the big six Canadian banks, seven major banks from the Euro area, six major UK banks, and five large U.S. commercial banks. Canadian data are based on the regulatory ratio of assets (including some off-balance sheet items) to adjusted Tier 1 and Tier 2 capital. Leverage for other countries is measured as the ratio of balance-sheet assets to shareholders' equity. Sources: Bloomberg; financial statements.

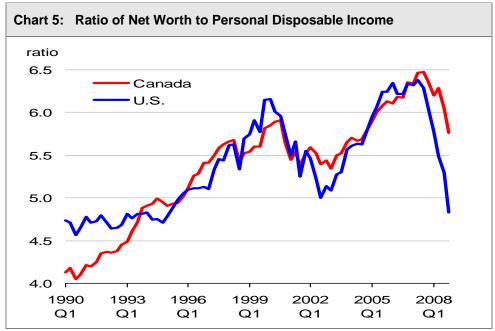


Note: The rate on the overnight-indexed swap (OIS) is used as a proxy for expected overnight rates. LIBOR is the London Interbank Offered Rate. CDOR is the Canadian Dealer Offered Rate. Daily data up to and including April 24, 2009.

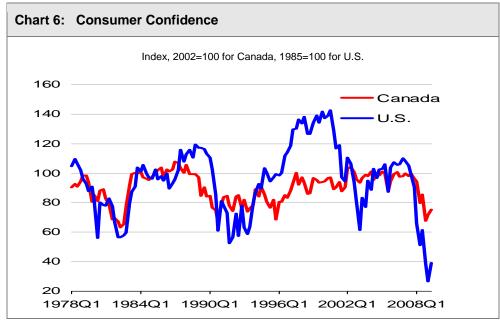
Source: Bloomberg.

Canadian households were also less indebted than were their American counterparts, and the reduction in net worth as a fraction of disposable income in Canada was smaller than the collapse that occurred in the United States (see Chart 5). As a result, the amount of de-leveraging that would be necessary was smaller in Canada. That being said, the decline in Canadian

household wealth was still large enough that some retrenchment of Canadian consumers was still going to take place, especially when combined with the collapse in confidence that had occurred (see Chart 6). Overall, Canadian households might have been in better shape than their American friends, but the road ahead would nonetheless be rough.



Sources: Statistics Canada; Department of Finance.

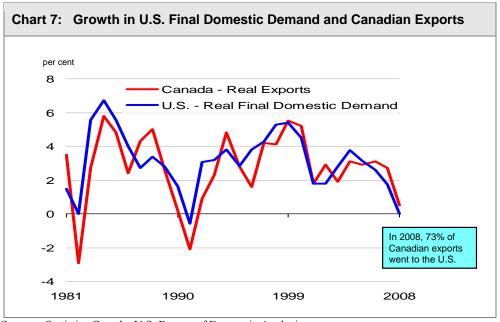


Note: 2009Q2 data is preliminary as it includes only April 2009. Sources: The Conference Board of Canada; The Conference Board.

Canada's sound public fiscal position was also held up as a strength, but perhaps in a way which confused the message. It is undoubtedly true that the federal government's low debt-to-

GDP ratio of 29 percent in 2008 gave it ample flexibility with which to respond to the economic crisis. Even planned budget deficits of 2 or 3 percent of GDP for three years in a row would raise the debt ratio to levels still far below the highpoint of 68 percent attained in 1995. Thus, Canada's past efforts at debt reduction had paid off handsomely by now providing the government with considerable room to manoeuvre. But contrary to what some seemed to be suggesting at the time, the strong fiscal position of the government could not offer Canada safe harbour from the global economic storm.

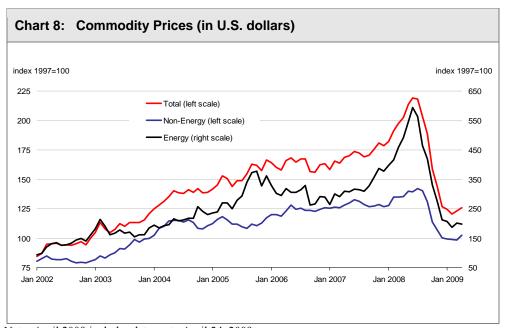
However strong Canada's economic position was at the beginning of 2009, the openness of Canada's economy meant that Canada could not avoid the coming global recession. The global integration of capital markets meant that financial-market disruptions originating elsewhere spilled over into Canadian markets, thus inhibiting the flow of credit domestically. Canada's dependence on exports to the United States, for a wide range of goods and services but notably for automobiles and forestry products, meant that any recession there—especially one centered on housing and automobiles—would have the usual dramatic (though lagged) effects here (see Chart 7).



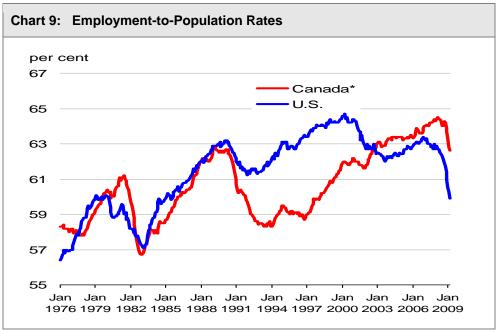
Sources: Statistics Canada; U.S. Bureau of Economic Analysis.

Canada's resource firms sell to a world usually hungry for raw materials. But the collapse of commodity prices in 2008, reinforced (if not caused) by the global recession, meant not only a reduction in activity in one of Canada's most dynamic sectors but also a dramatic decline in Canada's terms of trade, with the implied reduction in Canada's gross domestic income (see

Chart 8). Finally, employment in Canada had already begun to decline by late in 2008. From its peak in September, Canadian employment had fallen roughly 1 percent by January. In the United States, the decline had started a year earlier and by January the cumulative decline was a much larger 3 percent (see Chart 9). Given the usual lagged transmission from U.S. to Canadian economic events, more employment losses were certain to be in Canada's future.



Note: April 2009 includes data up to April 24, 2009. Source: Department of Finance Commodity Price Index.



Note: * Calculated using U.S. methodology.

3. A Budget Designed for the Times

Given this global and Canadian economic context, what was the federal government's policy response? Note that the 2009 federal budget is called an "economic action plan" rather than just a budget. While some of this labelling may be political spin, it does reflect something genuine about the budget. The 2009 budget contains more than the "usual" fiscal measures because the Canadian economy faced more than the "usual" economic challenges.

The government was mindful of many downside risks for different segments of the Canadian population, and thus was led to design a budget containing a large number of policy actions. In a world of extreme policy uncertainty, it was probably necessary to take many policy measures in order to have even a modest number of policy successes. As a result, most readers find it easy to get lost in the many budget details and to lose sight of the bigger picture. In what follows, I offer my sense of this bigger picture but do so by omitting a great many policy details. I focus on three general themes: financial-market measures, the dual need for fiscal stimulus, and the importance of maintaining fiscal prudence.

A. Financial-Market Measures. The government's starting point was to ensure a sound and well-functioning Canadian financial system. Properly functioning financial markets are necessary for the operation of monetary and fiscal policies, and thus it would have made little sense to produce a budget of conventional fiscal measures without first tackling the existing financial problems. Disruptions in the financial system lay at the heart of the global recession, and illustrated to all the extent to which credit is the lifeblood of modern economies. Typical recessions begin with well-functioning financial markets but rising bankruptcies occurring during the recession put obvious strains on financial institutions; subsequent recoveries occur despite the weakened state of these institutions. The current downturn, however, began with weakened financial markets and institutions, and the depth and length of the recession was likely to generate significant "negative feedback", perhaps threatening their solvency. The shoring up of these markets and the restoration of the normal flow of credit was thus viewed as a sine qua non for a solid economic recovery.

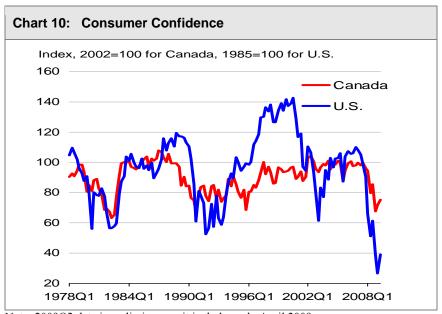
Some might reasonably argue that the government's financial-market policies are the most important part of the 2009 budget; but the general lack of understanding of financial markets, combined with the absence of the measures' direct fiscal costs, probably explain why

these policies received much less press coverage than did the more familiar taxation and expenditure policies. The entire set of financial policies, called the *Extraordinary Financing Framework* (EFF), was designed to enhance the operation of Canada's financial markets and to restore the flow of credit to something approaching normal, all while exposing the Canadian taxpayer to a minimum of risk. The Insured Mortgage Purchase Plan (IMPP) involved the CMHC buying up to \$125 billion in insured mortgages from Canadian banks, thus providing liquidity to the banking system. Capital injections to the Business Development Bank (BDC) and Export Development Canada (EDC) permitted these financial crown corporations to expand their borrowing and thus their provision of credit to the private sector by an estimated \$13 billion. In an effort to re-start the market for asset-backed securities, which are crucial forms of finance for vehicle- and equipment-leasing companies, the Canadian Secured Credit Facility (CSCF) will eventually allow BDC to purchase up to \$12 billion of these securities, thereby improving market liquidity.

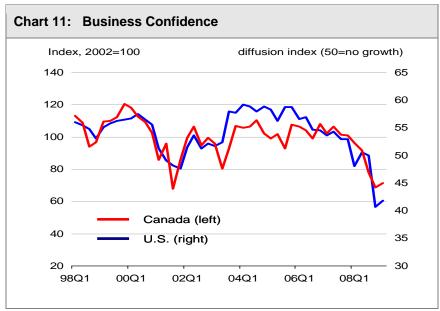
In an economy in which the flow of credit is both crucial and temporarily impaired, the motivation for these measures is clear. Of course, one can criticize these actions on the grounds that such active government involvement in the provision of credit is bound to create inefficiencies, and perhaps worse. But the likely government response to such criticisms (consistent with my own) is that the current priority is to keep credit flowing in an economy in which gaps in the market are pervasive, even if some of the newly provided credit would not have been provided in even a well-functioning market. Or, to paraphrase James Tobin's quip about Harberger triangles and Okun gaps, unemployment trumps efficiency in the current economic context. The policy challenge for the future, and it is not a small one, is to judge when credit markets have returned to "normal" (perhaps a "new" normal) and thus when these extraordinary measures can be pulled back; put differently, the policy challenge is to determine the government's best exit strategy from these extraordinary financial-market measures.

B. The Dual Need for Fiscal Stimulus. As Bill Scarth notes in his paper, a growing consensus has emerged in recent years that monetary policy is better able than discretionary fiscal policy to provide timely and effective economic stabilization. As I argued above, however, by late 2008 it was recognized in Canada and elsewhere that in this recession monetary policy could not be relied upon to do all of the heavy lifting, for two reasons. First, the magnitude of the shock suggested a need to use both monetary and fiscal stimulus to dampen the recession.

Second, both linkages of the traditional monetary policy transmission mechanism had been weakened. Events in the financial markets had distorted the link between the policy interest rate and other market interest rates. And the need for private-sector deleveraging and the collapse of consumer and business confidence called into question the link between market interest rates and aggregate demand (see Charts 10 and 11). With monetary policy in such a weakened state, it was clear that fiscal stimulus would have to step up.



Note: 2009Q2 data is preliminary as it includes only April 2009. Sources: The Conference Board of Canada; The Conference Board.



Sources: The Conference Board of Canada, Institute for Supply Management (ISM) non-manufacturing survey.

Fiscal policy was not just necessary as a means of dampening the extent of the economic slowdown, however. It was equally important to adopt fiscal measures to help Canadians cope with the decline in income and loss of jobs that would inevitably occur. In particular, there was a need to implement carefully designed fiscal measures to provide assistance to those Canadians who would bear the brunt of the recession. The dual tasks of providing aggregate stimulus and protecting economically vulnerable Canadians implied that the budget needed to contain a mix of targeted spending and tax measures.

As regards the need for aggregate stimulus, the government accepted the familiar and sensible claim that new spending tends to have a larger short-run fiscal multiplier than do tax reductions, even permanent ones. As a result, the government's new measures focused on spending for broadly defined infrastructure, including the construction and renovation of social housing, new structures and maintenance for universities and colleges, public infrastructure projects for all levels of government, critical community services for First Nations, and incentives for individuals to purchase and renovate private homes. There was a natural emphasis on funding only "shovel ready" projects so that the economic stimulus would be felt as soon as possible; at the same time, however, there was a recognition that it is difficult to construct a list of genuine and sensible projects that can be completed quickly, and so there was also a recognition of a likely tradeoff between "sensible" spending and "timely" spending. As the fiscal stimulus was in its design phase, there was an inevitable re-learning of some of the key limitations of large-scale discretionary fiscal stabilization policy.

The recognition that not everything could be done on the spending side contributed to the economic and political pressures for some of the aggregate stimulus being delivered through tax reductions. And the previously mentioned need to protect Canada's most vulnerable individuals suggested personal income-tax reductions targeted at low- and middle-income households. In addition to increases in the basic personal amount, which provide tax relief for all taxpayers, the government also increased the generosity of the existing child benefits and age credits. Perhaps most significant was the policy to double the tax relief provided by the Working Income Tax Benefit (WITB), a measure introduced in 2007 and designed to lower the "welfare wall" by reducing the work disincentives created by the high marginal tax rates facing low-income Canadians.

Recalling the speed at which Canadian employment had begun to decline in the last few months of 2008, it is no surprise that in the government's desire to assist vulnerable Canadians

the budget also introduced several labour-market measures. To reduce the costs and increase the benefits of employment insurance, the EI contribution premiums were frozen for two years and the maximum benefit period was extended by five weeks. In addition, access to the federal EI work-sharing program was improved and the maximum benefit period was extended from 38 to 52 weeks. Finally, more resources were provided to a whole range of labour-force training programs, including those provided through the EI system.

Overall, the fiscal cost of the budget measures was estimated to be \$22.7 billion in 2009-10 and \$17.2 billion in the following year (see Table 1). These figures do not include the financial-market measures, which have no direct fiscal cost (if the acquired assets retain their value). With provincial leverage coming both from the income-tax system and from partnership on infrastructure spending, these numbers increase to \$29.3 billion and \$22.3 billion, respectively. So the estimated size of the total fiscal stimulus is 1.9 percent of GDP in 2009-10 and 1.5 percent in 2010-11, numbers consistent with the agreement reached in Washington among the G20 leaders.

Table 1: The Budget Numbers			
	2009	2010	Total
	(billions of dollars - cash basis)		
El changes, Personal tax reductions, Skills and Training	5.9	6.9	12.8
Tax measures to support housing, Social housing investments	5.4	2.3	7.8
Infrastructure programming	6.2	5.6	11.8
Tax and Tariff changes, Sectoral adjustment measures	5.3	2.3	7.5
Total Federal Stimulus	22.7	17.2	39.9
Total Stimulus (with Leverage)	29.3	22.3	51.6
As a share of GDP (%)			
Total federal stimulus	1.5	1.1	2.5
Total stimulus (with leverage)	1.9	1.4	3.2

Tax measures account for \$10.1 billion of total stimulus

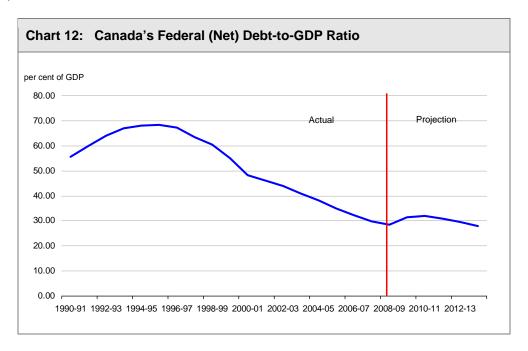
Spending measures represent \$29.9 billion of total stimulus

These estimated measures of the size of the fiscal stimulus, however, are only part of the estimated budget *deficits*. Even in the absence of new discretionary fiscal measures, the economic slowdown was quickly pushing the government's books into the red. For 2009-10, the

estimated deficit would have been \$11 billion in the absence of new policies; the budgetary measures increased this planned deficit to just under \$34 billion. For the 2010-11 fiscal year, the total estimated deficit was increased by the new policy actions to just under \$30 billion.

Note that the government was intentionally conservative in its forecasts of revenue over the budget period, using a forecast for nominal GDP growth (which largely determines government tax revenues) significantly less than the mean of the private-sector forecasts. This conservatism reflected the government's belief that most of the risks to the budget forecast were on the downside; as a result, the economy could get worse than many forecasted without causing an increase in the planned deficit. As many now suspect, however, the actual recession will prove to be even deeper and sharper than what was built into the conservative budget forecast, and so the actual deficits for the 2009-11 fiscal years may be even larger than the estimates appearing in the budget.

C. The Importance of Fiscal Prudence. In designing the 2009 budget, the government faced a tradeoff between the short-term need for fiscal stimulus and the longer-term need to maintain fiscal prudence, a concept probably best reflected by the size of the debt-to-GDP ratio. The government did not want to sacrifice Canada's hard-won gains achieved over the previous decade, with the debt ratio falling from a high of 68 percent in 1995 to 29 percent in 2008 (see Chart 12).



flexibility to do even more than it proposed in the 2009 budget. As Rick Harris argues in his paper in this volume, the uncertainty of the economic situation suggests a case for erring on the side of over- rather than under-stimulating the economy by means of fiscal policy. Surely the government could tolerate seeing the debt ratio rise back up to 35 percent or even 40 percent before resuming on its downward path. Put differently, the government could easily have designed the budget to contain a fiscal stimulus double the actual numbers, thereby further dampening the size of the recession and offering even more protection to vulnerable Canadians. Or would this have been so easy?

Some argue that Canada's past performance on debt reduction gave the government the

In order to provide *additional* stimulus that does not threaten the government's longer-term fiscal prudence, any additional tax or spending measures must satisfy two conditions. First, new budget measures must be easily *scalable*; that is, it must be feasible to significantly increase the current scale of the policy measures. If this is not straightforward, then increasing the size of the overall stimulus is difficult. Second, the additional budget measures must be *reversible* during the inevitable future recovery. If such reversal is infeasible, for either economic or political reasons, then a much stronger case exists for keeping the stimulus package small. As it turns out, it is difficult to find policy measures that are *both* scalable and reversible. Consider the two broad categories of infrastructure spending and tax reductions.

One big advantage of placing infrastructure spending at the core of a fiscal stimulus package is that it is relatively easy to reverse the spending when the economic recovery occurs. As long as the spending is committed on a project-by-project basis rather than by establishing new programs which take on a life of their own, there can be considerable confidence that the spending will simply stop once the project is finished. The problem with infrastructure is that it is not easily scalable.

The often-heard difficulties associated with infrastructure spending should be taken seriously. Simply put, it is extremely hard to find good projects that can be sensibly conceived, formally approved, carefully designed, environmentally cleared, and efficiently constructed in short order—especially if we want to avoid spending the money on things for which there is little long-run value. As one individual from southern Alberta said at a pre-budget consultation I attended in January, "the last thing we need is another cowboy museum"! Compounding these difficulties are the political complexities of reaching agreements with multiple levels of government, including the playing of various spending and taxation games that inevitably take

place. So there are real limits to how much fiscal stimulus can be provided through infrastructure spending.

Any desire to increase the size of the fiscal stimulus therefore leads inevitably to a search for deeper tax reductions. Changes in taxes are trivial to scale up: one can just as easily reduce any given tax rate by 3 percent as to reduce it by 1 percent. But with tax reductions we quickly encounter the problem of reversibility. There is a general feeling among many economists that temporary tax changes are much less effective as stimulus measures than are permanent ones. In a model with purely Ricardian consumers (which requires some extreme assumptions), one gets the sharp prediction that temporary tax changes generally have no effect at all. But even in less extreme settings, the same general logic points to a reduced effect on aggregate demand if households know that tax changes will be reversed in the near future. So in order to be effective stimulus, the tax reductions need to be permanent. (Although we should also recognize the logical possibility that with seriously impaired credit markets we are likely to have more liquidity-constrained households and thus temporary tax cuts may be almost as effective as permanent ones!) But if they are to be permanent, how does the government balance the budget or produce a surplus once the economy starts on the path to recovery? And even if one were convinced that a temporary tax cut would be stimulative, the political forces working to lock-in such tax cuts are enormous. As Milton Friedman once famously suggested, nothing is so permanent as a temporary tax cut.

One other consideration argued against designing a larger fiscal stimulus. To the extent that credit is an input to the production process, it is quite likely that the financial-market adjustments due to occur over the next few years—including a more accurate re-pricing of risk—will lead to a reduction in the growth rate of potential output. If so, we cannot expect tax revenues to return to their pre-recession path. Instead, real (and nominal) GDP, and therefore the government's tax revenues, can be expected to grow more slowly as a long-run average. Restoring fiscal balance over the medium term will thus be that much more difficult, even with unchanged tax rates.

Mindful of these concerns, the government struck a pragmatic balance. It pushed infrastructure spending about as far as it could go. (Indeed, we may learn a year from now that it was simply unable to spend the amount it budgeted for this purpose.) It chose some modest and permanent tax cuts that are effective in offering modest relief to individuals and at the same time are affordable over the longer term. The five-week extension to EI benefits was billed as a

temporary measure, but only time will tell whether the federal government (this one or some other) has the courage to reverse this policy in the future.

The budget shows the government's debt-to-GDP ratio rising to a peak of 32 percent by the end of 2010-11, at which point it slowly resumes its downward path toward some notional target of 25 percent or even lower. With the economy now probably worse than expected at the time of the budget, the peak may well be higher and occur later than suggested in the budget. Fortunately, the government's solid fiscal position coming into this recession means that there is ample room to manoeuvre. That we have any room to manoeuvre is, of course, the current payoff from the federal government's past actions in reducing the debt ratio—it is part of what a few years ago we called the "fiscal dividend". The 2009 budget strives to maintain this budget flexibility as much as possible into the medium term by keeping the debt ratio relatively low.

Given Canada's coming demographic challenges, such fiscal flexibility will be essential in the future. The aging of the baby-boom generation implies that, beginning roughly in 2020 and continuing for about 30 years, there will be declining labour-force growth and rising health-care expenditures. The declining growth in the labour force will imply, for unchanged productivity growth, a decline in the share of GDP that can be collected as tax revenues (for given tax rates). At the same time, the increased demand on health-care services suggests that, unless Canadian governments are able to reduce other types of public spending, there will be an increase in the share of GDP spent by governments. Thus we have a coming "fiscal squeeze" which will create both economic and political challenges, and will almost certainly require a further increase in the government's debt-to-GDP ratio. Addressing these significant economic and political challenges will require careful government planning, effective communication with the Canadian people, and unpleasant policy decisions. Facing these challenges will be far easier with a lower debt ratio than with a higher one.

4. Final Words

The sharp and sudden decline in the pace of economic activity demanded that the government's fiscal actions be effective and timely. The economic situation also demanded, as did the political pressure from the opposition parties, that the government take extraordinary actions to implement its budget measures as quickly as possible.

To accelerate the funding of measures in the *Economic Action Plan*, the government introduced the *Budget Implementation Act*, 2009, in the House of Commons on February 6, 2009. The Act provided funding authority for \$7.6 billion in spending for a range of measures, many of which would normally be funded through the annual appropriations process but were included in the Act this year in order to facilitate their rapid parliamentary approval. In addition, this year the Act was passed by the House of Commons and the Senate in just over a month, significantly faster than the nearly four months it took to receive royal assent for the 2008 budget.

To ensure that the budget measures would be implemented as quickly as possible, the government created a new central vote in the Main Estimates. This vote allowed up to \$3 billion in funding to be provided to departments for budget measures until formal authority for these initiatives could be obtained through the Supplementary Estimates. The government also planned to table spring Supplementary Estimates in late May to provide funding authority for the majority of the remaining budget measures. Funding for budget measures is not usually appropriated until December. Finally, the government streamlined the federal approval process for infrastructure projects to ensure that infrastructure funding could be spent during the next two construction seasons.

In sum, the economic environment as of January, 2009, demanded that the federal government take timely and dramatic actions on many fronts. It therefore designed a budget which focussed on financial-market measures aimed at restoring the flow of credit, infrastructure spending aimed at dampening the magnitude of the recession, and targeted tax breaks and EI changes aimed at protecting those Canadians most vulnerable to the effects of the economic downturn. It selected a combination of policy actions both feasible and affordable, thus preserving Canada's hard-won fiscal prudence. The government indicated that it was prepared to do more if the need should arise. As of the middle of May, some individual signs of a nascent recovery were apparent, and thus with a little luck such additional budget measures will not be necessary. Only time will tell.