Infrastructure as Economic Stimulus

Investing in Municipal Infrastructure as a Contra-Cyclical Measure

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In our May 31, 2008, report *Municipal Infrastructure Macroeconomic Impacts of Spending and Level-of-Government Financing*, Informetrica developed model-based estimates of increased spending on infrastructure. We found that for each $1 billion in additional infrastructure spending, the size of the real economy would be increased by approximately 0.13 per cent and would add 11,500 jobs to total employment in the first year of added spending.

The May report provided an update to earlier reports on the same topic, and followed widespread concerns about the prospect of weakening economic performance for the next year or two. The urgency of that concern has become pronounced on the emergence of major global financial turmoil in September 2008. This follow-up to the earlier report provides notes on:

- the probability that the Canadian economy is in or will be in a recession in coming months;
- the extent to which current budgetary commitments on infrastructure could alter economic prospects; and
- comparison of infrastructure spending with other candidate pro-growth responses.

### Current Economic and Fiscal Circumstances

We have reviewed current published projections of financial institutions and other forecasting organizations to establish our view of economic prospects. We conclude the following.

Real Gross Domestic Product (GDP) was reduced in the first quarter of this year, with preliminary official data reporting that an increase in the second quarter recovered the earlier reduction but only partially. An official estimate of performance in the third quarter is not yet available, but monthly data suggest most of those who have released projections in the last few weeks that there was stronger growth than in the previous quarter. That's the good news. The bad news is some think there was a contraction in the third quarter, and all expect much weaker performance in the fourth quarter (i.e., "now"). Several, including the Bank of Canada in its October *Monetary Policy Report*, believe that GDP is contracting. Optimists expect real GDP will increase by 0.2 per cent from the third quarter. On an annualized basis, that is growth of less than one per cent.

Consensus Economics Inc. ("the Consensus") expects this to be a short and shallow recession, with growth recovered early in 2009, and accelerating through the year and into 2010. Pessimists in the Consensus expect further reductions in the opening half of 2009, but they expect recovery will emerge in the second half of the year, accelerating as we move into 2010. But there is reason to be concerned about this view, as there are risks to this baseline or reference view of the future. In January through March of 2007, the Consensus panel expected growth of 2.9 per cent for 2008. The panel has downgraded the outlook in every single month since then, estimating growth for this year of 0.7 per cent in the October report.1 The panel's view for 2009 has eroded from an estimate of 2.5 per cent in January of this year to a current projection of 1.1 per cent. And that anticipates that global action in financial markets, and global reductions in interest rates will, alone, right the ship with accelerating growth as indicated above.

Most if not all forecasters would agree that risks to the Consensus view are on the downside—a deeper and longer recession. There is a strong case for action as a "precaution" against the deeper and longer recession. The economy could be heading into something like the early 1980s or early 1990s recession of four to six quarters of reduced GDP, and rapidly rising unemployment. Why risk this?

A weak economy is bad for everyone's "balance." Compared to a period of steady growth, the current and near term economic slow down or recession will be negative for balances at all levels of government, with a high probability that, absent specific measures that increase taxes or reduce spending, the federal and many, possibly most, provincial balances will turn into deficits. It is important to note that the "balances" of households and businesses are also damaged by the real slowdown. Reduced employment and financial damage to the wealth of households are the sources of reduced revenues and weakened balance sheets for households. Stagnating or reduced corporate profits and sharply reduced equity values are similar signals for business.

Note that the damage to the balances of households and businesses, and governments, occurs in the absence of action. To arrest the weakness requires "discretionary" positive fiscal action—some combination of reduced taxes and increased spending as compared to what would otherwise have occurred (as in the spring budgets). That is, simply accepting the fact that there are reduced revenues without reacting to this is not true discretionary positive action. Cutting or slowing spending growth is discretionary fiscal action that will protect the balances of governments, but it will reduce GDP and employment to further damage the "balances" of households and business.

Finally, it is important to note that for discretionary actions to have positive effects in the real economy, action taken by one level of government should not be used to strengthen the balance of any of the directly affected recipients—other levels of government, households or business. Increased demand for real economic resources is the litmus test.

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1 We concluded that there would be variations in the effects depending on the kind of infrastructure being built—buildings, water/sewer, highways/streets. Variations were small, however, ranging from a high of 11,900 jobs to a low of 10,800.


3 Typically, cutting also adds to other “deficits”—poverty, health, infrastructure etc.
Are Infrastructure Budgets Significant?

The March 18, 2007, federal Budget Plan introduced major infrastructure initiatives including the extension of the Gas Tax Fund and the introduction of the Building Canada Fund. This committed $8.8 billion to be spent over seven years beginning in fiscal year 2007-08. We understand that federal funds for spending allocated to municipal infrastructure were to be matched by provincial and municipal financing. We understand from FCM that few if any disbursements from this commitment have yet been made.

Should the federal, provincial and municipal governments agree to projects financed by the federal budgetary allocations for 2007-08 through 2009-10, this would add a total of $8.052 billion to infrastructure spending ($2.684 billion from each level of government). Scaling the impacts reported in our May report, if disbursed in one year, this would increase the size of the otherwise weakened economy by slightly more than one per cent, and would add 92,000 to employment (44,000 in construction). For the federal government this would require no additional budgetary commitment beyond that made in 2007.

Were disbursements to begin in the coming January, if the Consensus is correct about growth, then the accelerated infrastructure spending would move growth for next year from 1.1 per cent to 2.1 per cent. This pace would be below the growth rate the economy should potentially be able to generate and might be accompanied by some increase in unemployment. It would roughly match the performance of the economy in 1996, 2001, and 2003. It would provide a growth cushion if the Consensus is wrong and the weakness proves to be deeper and more extended than is anticipated. A repeat of 1991, when GDP fell by more than 2 per cent and 82,000 were added to the unemployment rolls is in no one’s interest.

Comparing Infrastructure to Other Initiatives

If the hurdle of achieving some action can be surmounted, then considering how to stimulate is important. We think it is almost certain that accelerated spending on infrastructure will be widely regarded by public officials at the federal and provincial government levels as a “standard” response. With it widely agreed that the economic weakness is “now,” any action should be something that can be rapidly implemented, have low risk that financial stimulus is used by others to simply improve their balances (i.e., does not result in additional demands on economic resources), but can also be reversed when significant real growth is regained.

Potential candidates for action being explored are accelerated infrastructure spending, a personal tax cut (i.e., along the lines of the one-time, mid-2008 stimulus in the U.S.) or as in the Conservative Party platform a reduction in the diesel excise tax.

If the “test” is how this impacts the real economy in the short term, then the following are our estimates of effect on GDP and employment in the first full year of stimulus that is $1 billion. The tabulation below reports our estimate of such effects, and includes an estimate of the extent to which increased economic activity provides a borrowing or balance offset that at least partly compensates for the assumed $1 billion spending increase or tax cut.

As noted in the table below, infrastructure should be a widely accepted approach. The key argument to meet on this is establishing an ability to get the spending off the ground quickly. Arguments for this approach are: the short-term spending produces an especially large real impact on the economy; it leaves the governments with a real asset; and the real asset is improving the possibility of stronger productivity over the longer term. It is essential that the provinces and municipalities be part of the spending increase.

A relatively small impact from reduced personal taxes comes from the high probability that a significant part of the income benefit will be saved by households and not recycled as spending. An increase in transfers to households (higher Employment Insurance and welfare payments or extending these to a broader group) would be roughly equivalent to a personal tax cut. If aimed at the lower end of the income scale, positive effects would be larger than those reported for the personal tax cut, but would still fall short of infrastructure impacts. A corporate tax cut suffers from the same problem as the personal tax cut—a high probability that the income will be saved (with some of this transferred outside of Canada). This is particularly likely in a downturn since utilization of capacity is collapsing and there is a low probability that firms will invest in real equipment and structures.

A diesel tax cut equivalent to $1 billion has a positive, but also, relatively modest impact. Its principal channel of effect is through reduced prices (costs of transportation services are lowered) to provide real income benefits for households and businesses (consumer and investment spending is increased). If one is thinking about transitory effects, it is not clear that government would be prepared to reinstate the higher tax rate when the economy has resumed growth, especially since this circumstance would probably also include rising market-based energy prices.

<table>
<thead>
<tr>
<th>Real GDP (%)</th>
<th>Employment</th>
<th>All-Govt Balance Compensation ($ B)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infrastructure</td>
<td>0.13</td>
<td>11,500</td>
</tr>
<tr>
<td>Personal Tax Cut</td>
<td>0.08</td>
<td>5,700</td>
</tr>
<tr>
<td>Diesel Tax Cut</td>
<td>0.10</td>
<td>7,600</td>
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</tbody>
</table>

* Balance impacts from increased economic activity to offset $1 billion initiative

The government’s proposed cut in the diesel tax is in fact worth about $600 million per year, so actual economic benefits would be proportionately smaller.