

Briefing Note

The Government of Canada's Economic and Fiscal Forecasting Process

Ottawa, Canada November 17, 2008 www.parl.gc.ca/pbo-dpb Prepared by: Chris Matier, Bradley Recker and Stephen Tapp The Department of Finance (Finance Canada) prepares, on a quarterly basis, an economic forecast, based on a survey of private sector forecasters, which underlies the fiscal projections presented in budgets and economic and fiscal updates. Following the release of the quarterly National Income and Expenditure Accounts (which are typically released at month's end in February, May, August and November by Statistics Canada), Finance Canada conducts a survey of private sector organizations regarding their views on the national economic outlook for the current calendar year and for the subsequent six years. Table 1 provides a list of organizations that have been surveyed along with variables requested.

Table 1: Finance Canada Survey of Private Sector Forecasters

Organ	izations	Variables		
Bank of Montreal	Laurentian Bank	Real GDP growth	U.S. real GDP growth	
CDP Capital	J.P. Morgan	GDP inflation	U.S. GDP inflation	
Centre for Spatial Economics	Merrill Lynch	CPI inflation	U.S. CPI inflation	
CIBC World Markets	National Bank of Canada	Core CPI inflation	U.S. 90-day T-bill rate	
Conference Board of Canada	Royal Bank of Canada	3-month T-bill rate 10-year benchmark	U.S. 10-year government bond rate	
Desjardins	Scotiabank	government bond rate	WTI Oil Price (USD/bbl)	
	TD Bank	Canada-U.S.		
Deutsche Bank of Canada	UBS Warburg	exchange rate	Henry Hub Natural Gas price	
Economap	University of Toronto (PEAP)	Unemployment rate	(USD/mmbtu)	
Global Insight				

Determining Fiscal Room Available for New Initiatives

The economic forecasts from Finance Canada's survey of private sector forecasters provide the macroeconomic outlook. For fiscal planning, the key economic variables in the survey are Canadian real Gross Domestic Product (GDP) growth, GDP and Consumer Price Index (CPI) inflation, and short- and long-term interest rates on government debt. Real GDP growth and GDP inflation combine to form nominal GDP growth.²

¹ Section 2 of the report *Forecasting Processes and Performance of the Department of Finance* by PEAP and CIRANO provides additional detail and an assessment of the economic and fiscal forecasting process conducted by Finance Canada. http://www.fin.gc.ca/wp/Freviewe.html

Other elements of the economic forecast, such as unemployment and average hourly wages are also used to forecast Employment Insurance (EI) benefits costs and premiums. However, differences in EI costs and premiums do not materially affect the estimate of fiscal room available as premiums are required by legislation to be set such that total EI revenues offset EI-related expenses.

- Nominal GDP is the single broadest measure of the Government of Canada's tax base.
 As a result, changes in the forecast of nominal GDP growth due to changes in real GDP growth or GDP inflation result in changes in the Government of Canada's expected revenues.
- **CPI inflation** affects the government's expected costs of inflation-adjusted programs, such as Old Age Security and the indexation of personal income taxes and credits.
- Interest rates The direct effect of long- and short-term interest rates on the Government
 of Canada's budget balance is felt through their impact on public debt charges, which is
 the interest the government pays on the public debt.

Producing detailed fiscal projections also requires additional economic assumptions to generate forecasts of the individual tax bases and expenditure programs, which Finance Canada provides. For example, Finance Canada prepares, on a quarterly basis, its own economic forecast that guides the preparation of the income and expenditure components of nominal GDP underlying the private sector survey-based macroeconomic outlook.³

The income and expenditure composition of nominal GDP plays a crucial role in the fiscal projection because different components of income and expenditure are taxed at different rates. Indeed, some components of nominal GDP are not taxed (e.g. capital consumption allowances) and GDP itself includes revenue from taxes on products and factors of production.

Ultimately, the economic forecast (based on the private sector macroeconomic outlook in conjunction with Finance Canada's assumptions) is translated into a fiscal forecast with the difference between status-quo government revenues and expenses being the basis for fiscal room available for new initiatives. Other potential sources of fiscal room result from reallocation exercises, such as the 2005 Expenditure Review (http://www.fin.gc.ca/budget05/booklets/bkexpe.htm), the 2006 Expenditure Restraint exercise, and

the ongoing Strategic Review exercise. Typically, the identification of available fiscal resources is completed by the first week of January.

Allocating Available Resources

Once the amount of fiscal room available is identified, the process for allocating these resources can begin. This process is managed jointly by officials in the Liaison Secretariat for Macroeconomic Policy (LSMP) of the Privy Council Office (PCO) and the Fiscal Policy Division of Finance Canada and is facilitated by the Sources and Uses Table (S&U).

³ Statistics Canada measures nominal GDP (i.e. the unduplicated value of production within Canada) in two ways: (1) from incomes arising from production and (2) from final expenditures on production. The first approach sums factor incomes generated by productive activity, representing the returns to the labour and capital employed. The second approach sums all sales to final users (consumers, governments, businesses, exports less imports). http://www.statcan.ca/english/sdds/document/1901_D3_T9_V1_E.pdf

The S&U lists the source of funds available, as determined by the exercises described above, and potential uses, after accounting for funds required to implement the government's fiscal policy objective, which recently has been to leave up to \$3 billion annually for debt reduction. Potential uses of funds include prospective tax measures and new programs and are largely identified through consultations between program branches of PCO and Finance Canada and liaison branches of line departments. Discussions also take place at the ministerial level and between ministers' offices.

The list of potential uses is a bottom-up approach, with each program branch indicating a large number of potential programs that fit with the government's established priorities. As a result, the total cost of the first draft list of potential uses typically greatly exceeds the level of resources available. From here, the allocation of resources is an iterative process, with the S&U being reviewed by the Deputy Minister of Finance and the Clerk of the Privy Council on numerous occasions as well as by the Minister of Finance and the Prime Minister, though somewhat less frequently. During the allocation process, program analysts in the various program branches of Finance Canada, with input from their counterparts in program branches at PCO, summarize in a few pages each of the fully-costed proposals/uses. These summaries help senior PCO and Finance Canada officials and the Prime Minister and Minister of Finance determine which of the proposals should receive funding. After approval of the final S&U is given, each of the final item's summary is edited to include a decision box indicating the amount of funding provided to the proposal. The end result is an S&U that fully allocates the available resources. These new initiatives are categorized into themes aligned with government priorities and eventually become the chapter themes contained in the budget.

The decision boxes contained in the budget texts form the basis of the budget Record of Decision (RD), which is written by PCO LSMP with input from Finance Canada and program branches at PCO. The budget RD includes a paragraph and five-year funding profile for each of the items announced in the budget. It is approved by Cabinet and provided to the Treasury Board Secretariat (TBS) as each of the departments provided with new funding in the budget must submit details of their proposals to, and receive approval by, Treasury Board before funding can be appropriated to departments by Parliament through the supply process.

TBS notifies departments of funds that have been provided to them for specific programs in the budget, usually commencing this task within a day of the budget's release. Departments and TBS program analysts then begin preparing Treasury Board submissions, the first step in accessing new funding through the supply process. http://www.tbs-sct.gc.ca/media/nr-cp/2005/1027b-eng.asp

International Comparison

According to a report from the International Monetary Fund (IMF), Canada's budgeting procedures and reporting processes compare favourably, relative to those of G7 and other small industrialized countries (http://www.imf.org/external/pubs/ft/wp/2005/wp0566.pdf).

The IMF report finds that "fiscal forecasting in Canada is governed by one of the strongest institutional frameworks relative to benchmark countries" and that "one particular strength is the explicit use of macroeconomic projections from a wide range of private forecasters for the preparation of the budget".

As Table 2 reports, relative to the countries considered, in Canada, private sector forecasters play the most active role in developing the macroeconomic forecast and are often consulted prior to budgets and economic and fiscal updates to discuss the economic outlook. The Government's *Annual Financial Report* compares actual budget outcomes to those forecast in the budget and explains where the differences arose. There have also been occasional, extensive external reviews of Canada's fiscal forecasting processes, most recently in 2005 (the O'Neill Report) and also in 1994 (by Ernst and Young). The level and detail of fiscal information provided in the budget and fiscal updates are also comparatively high.

Table 2: International Comparison of Fiscal Forecasting Processes

	Involvement of non- government agencies in forecasts ¹		Ex-post assessment of forecasting performance ²		Availability of fiscal performance information ³
	Macro	Revenue	Self	External	Detail and Regularity
Australia	Medium	Low	Regular	Occasional	Medium
Canada	High	Medium	Regular	Occasional	High
Germany	Medium	High	Occasional	Occasional	Low
Netherlands	Medium	Medium	Regular	No	Low
Sweden	Low	Low	Occasional	No	Low
Switzerland	Low	Low	Occasional	Occasional	
United Kingdom	Low	Low	Regular, legal	Regularly	High
France	Medium	Low	Regular	Regular	High
Italy	Low	Low		No	Low
New Zealand	Medium	Medium	Regular	Occasional	High
United States			Regular		High

Source: (http://www.imf.org/external/pubs/ft/wp/2005/wp0566.pdf)

Despite these successes, the IMF report noted potential areas for improvement based on OECD best practices. The IMF report suggests that Canada could enhance the understanding of budgetary forecasts by "providing more information on the assumptions and methods underlying

¹ Non-governmental agencies play active role (high), are directly consulted (medium), or are not involved (low).

² "Self"=forecasting performance analysis in end-of-year reports; "External"=reviews by government audit office or agency.

³ Measures annual and regularly provided central government reports on fiscal forecasting from the list of reporting items of OECD Best Practices. High, medium and low rank the country relative to the group average (= medium).

the translation of the macroeconomic outlook into fiscal projections." Another area that is lacking is a long-term (10-25 year) outlook for public finances, such as done for the U.S. by the independent Congressional Budget Office (CBO). The other areas cited for improvement include preparing: a pre-election report, a general citizen's guide, and providing Parliament with the budget earlier in the process — the budget is generally tabled less than two months before the start of the upcoming fiscal year.

A broader area for improvement could be how fiscal forecasts are presented. Currently, point estimates are used to present the forecast for the path of future economic and fiscal variables. The CBO in the U.S. recently began reporting its longer-term forecasts in the form of a distribution or "fan chart", rather than point estimates. This would mean, for example, that rather than reporting a point estimate of a \$3 billion budget balance, the range of potential budget balances and their likelihood would be reported in a graph. This process better recognizes the inevitable uncertainty of forward-looking forecasts.