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# ALLOCATING THE FEDERAL BUDGETARY SURPLUS

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# ALLOCATING THE FEDERAL BUDGETARY SURPLUS

In 1997-1998, the federal government posted its first budgetary surplus in decades. Through 2002-2003, the government realized a cumulative surplus of more than $100 billion.

During the House of Commons Standing Committee on Finance's 2003 pre-budget consultations, many groups offered recommendations regarding how the federal budgetary surplus(1) should be allocated. As in previous years, witnesses were divided over whether these funds should be used for debt reduction, program spending, tax cuts or some combination of all three.

To provide a context for such discussions, this paper examines how the federal government's budgetary surpluses were allocated over the post-deficit period. While there are certain difficulties in measuring how the surpluses were spent, and while results are very sensitive to the choice of the base year, an analysis of the federal government's finances during this period suggests that the majority of surplus funds were used to reduce the accumulated deficit, with program spending and tax reductions receiving relatively fewer funds.

## MEASURING THE FEDERAL BUDGETARY SURPLUS

Determining how the federal government has allocated its budgetary surpluses since 1997 presents a number of difficulties, as discussed below.

(1) The surplus includes the Contingency Reserve and the measure for economic prudence, which, if unspent, are effectively surplus funds.

### A. Tax Cuts

Tax revenues are related to economic growth: when the economy grows, tax revenues will generally increase, and when it shrinks, so will revenues. The value of tax reductions can be approximated by holding constant the federal revenue-to-GDP ratio for a given base year. The difference between actual federal revenue in a given year and the calculation of what federal revenue would have been if the revenue-to-GDP ratio had been held constant yields an estimation of the value of the tax changes. (2)

For example, if federal revenue in the base year is $100 and GDP is $1,000, the federal revenue-to-GDP ratio is 10%. All else being equal, if GDP rises by $100, to $1,100, and if the federal government takes the same share of taxes out of the economy as in the base year (i.e., 10% of GDP), tax revenue will be $110. However, if the federal government reduces taxes, all else being equal, the revenue-to-GDP ratio will be less than 10%, and federal revenue will be less than $110. If, for example, federal revenue is $101, the difference between $110 and $101 – $9 – is the value of the tax cut.

In Table 1, which covers the 1996-1997 to 2002-2003 period, column one presents actual federal revenue each year and the total federal revenue collected over the surplus period (1997-1998 to 2002-2003). Column two shows nominal GDP, while column four reports what federal budgetary revenue would have been if the revenue-to-GDP ratio had remained at 16.8%, its 1996-1997 level. As column three shows, the revenue-to-GDP ratio was actually above 16.8% through 2000-2001; only in 2001-2002 and 2002-2003 did it fall below that level, and quite substantially so. Applying the above-mentioned methodology: in the years when actual revenue (column one) was higher than projected revenue (column four), there was a tax increase (see the positive amounts in the last column, for the 1997-2001 period); and in the years when actual revenue was less than projected revenue, there was a tax cut (see the negative amounts in the last column, for the 2001-2003 period). Thus, over the total surplus period, there was a cumulative federal tax reduction worth almost $21.5 billion.

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(2) Because of the progressive nature of Canada's tax system, revenues as a share of GDP will tend to fluctuate at the top and bottom of a business cycle. As a result, it is difficult to assess how much of a change in tax revenue in a given year is the result of tax cuts or increases and how much is due to changes in the level of economic activity. Over an entire business cycle, however, all else being equal, changes in government revenues should track the state of the economy.

**Table 1: Federal Budgetary (Tax) Revenue and Nominal GDP, 1996-1997 to 2002-2003**

| Year | Actual Revenue | Nominal GDP(1) | Revenue-to-GDP Ratio | Projected Revenue, Holding the Revenue-to-GDP Ratio at 16.8% | Difference in Revenue(2) |
|---|---|---|---|---|---|
| | **$ millions** | | **%** | **$ millions** | |
| 1996-1997 | 140,853 | 836,864 | 16.8 | N/A | N/A |
| | | | | | |
| 1997-1998 | 152,116 | 882,733 | 17.2 | 148,299 | 3,817 |
| 1998-1999 | 156,146 | 914,973 | 17.1 | 153,715 | 2,431 |
| 1999-2000 | 166,112 | 982,441 | 16.9 | 165,050 | 1,062 |
| 2000-2001 | 182,748 | 1,075,566 | 17.0 | 180,695 | 2,053 |
| 2001-2002 | 171,688 | 1,107,459 | 15.5 | 186,053 | -14,365 |
| 2002-2003 | 177,561 | 1,154,949 | 15.4 | 194,031 | -16,470 |
| **Total, 1997-1998 to 2002-2003** | **1,006,371** | **6,118,121** | **16.4** | **1,027,843** | **-21,472** |

(1) Income basis, average of quarterly seasonal figures.

(2) Difference between actual and projected tax revenues, if the federal revenue-to-GDP ratio is not held at 16.8%. A negative amount indicates that federal tax revenue in a given year would have been higher if the ratio had been held at 16.8%. (As explained above, a negative amount is equivalent to a tax cut.)

Sources: Statistics Canada (GDP figures); Department of Finance, *Fiscal Reference Tables 2002-2003*; and Library of Parliament calculations.

## B. Spending Increases

In economic terminology, government spending increases beyond those necessary to account for inflation and population growth are called "real" spending increases. When government spending increases match the rate of inflation and population growth, economists say that no new "real" spending has been undertaken. "Real" increases in federal program spending can be calculated by subtracting spending in the base year (adjusted by the inflation rate and population growth) from actual program spending; the result can be assumed to be spending increases above the amount needed to finance spending necessitated by population growth and inflation.

For example, assume spending in Year 1 is $100, spending in Year 2 is $110, and the inflation rate plus the rate of increase in the population from Year 1 to Year 2 is 5%. If spending had grown only by population growth and inflation, Year 2 spending would have been

$105. Subtracting population/inflation spending ($105) from actual spending ($110) yields the "real" increase in spending ($5).

Table 2 presents the rates of population growth and inflation (as measured by the all-items Consumer Price Index [CPI]). These are calendar-year data. Because federal financial data are for fiscal years, these rates of change are matched as closely as possible with the fiscal-year data for purposes of the calculations in Table 3; i.e., the inflation/population growth rate for 1999 is applied to the 1999-2000 fiscal year.

**Table 2: Inflation and Population Growth Rates, 1997-2002**

| Year | Inflation Rate | Population Growth Rate | Total, Inflation Rate and Population Growth Rate |
|---|---|---|---|
| | % | | |
| 1997 | 1.6 | 1.1 | 2.7 |
| 1998 | 0.9 | 0.9 | 1.8 |
| 1999 | 1.7 | 0.9 | 2.6 |
| 2000 | 2.7 | 0.9 | 3.6 |
| 2001 | 2.6 | 1.0 | 3.6 |
| 2002 | 2.2 | 1.0 | 3.2 |

Source: Statistics Canada, CANSIM II database.

Column one in Table 3 presents actual federal spending levels from 1996-1997 to 2002-2003 and gives total program spending over the surplus period (1997-1998 to 2002-2003). Column two shows what spending would have been if it had risen by only the rate of inflation and the rate of population growth from its 1996-1997 level. Annual real spending increases over the period varied widely, from a real spending cut of $25 million in 1999-2000 to a real spending increase of $12.4 billion in 2002-2003, as shown in column three. Over the surplus period, total real spending rose by $30.3 billion.

**Table 3: Federal Program Spending Calculations, 1996-1997 to 2002-2003**

| Year | Actual Federal Spending | Base Year's Spending Adjusted for Inflation and Population Growth(1) | Real Spending Increase(2) |
|---|---|---|---|
| | $ millions | | |
| 1996-1997 | 102,260 | N/A | N/A |
| | | | |
| 1997-1998 | 106,864 | 105,021 | 1,843 |
| 1998-1999 | 109,995 | 106,887 | 3,108 |
| 1999-2000 | 109,583 | 109,608 | -25 |
| 2000-2001 | 118,694 | 113,433 | 5,261 |
| 2001-2002 | 125,018 | 117,342 | 7,676 |
| 2002-2003 | 133,323 | 120,886 | 12,437 |
| **Total spending, 1997-1998 to 2002-2003** | **703,477** | **673,177** | **30,300** |

(1) Federal spending level if program spending had risen by the rates of population growth and inflation (as measured by the CPI) from the 1996-1997 base year.

(2) Difference between actual federal program spending and what spending would have been if it had risen only by the rates of population growth and inflation from its 1996-1997 level.

Sources: Statistics Canada, CANSIM II database; Department of Finance, *Fiscal Reference Tables 2002-2003*; and Library of Parliament calculations.

## C. Debt Reduction

Calculating the amount of money allocated to debt reduction is more straightforward than calculating tax cuts or spending increases; it is simply a matter of comparing debt levels between two years, with the difference between them being debt reduction. It must first be determined, however, which accounting method will be used to report the amount of debt reduction.

In 2002-2003, the federal government began to use full-accrual accounting to report its finances. Previously, it had used a modified-accrual accounting system. With modified-accrual accounting, net debt (financial liabilities minus financial assets) equalled the federal government's accumulated deficit. Full-accrual accounting, however, also takes into account non-financial assets. With full-accrual accounting, the accumulated deficit is equal to net debt minus non-financial assets. In determining the level of debt reduction, either net debt or the accumulated deficit may be used. For simplicity, this paper will use changes in the accumulated deficit under full-accrual accounting to determine the amount of the federal allocations toward debt reduction.

It should be noted, however, that reductions in the accumulated deficit may not wholly represent reductions in the federal government's financial liabilities. The government can reduce its accumulated deficit by increasing its holdings of non-financial assets; likewise, it can reduce its accumulated deficit by increasing its holdings of financial assets. As the Auditor General of Canada remarked in 2001, "[t]he surplus for the year does NOT automatically pay down the debt. There is neither any law nor accounting rule that requires this. This year's surplus was applied to several areas, only one of which was the reduction of debt. Part of the surplus was used, for example, to support increases in financial assets such as loans, investments and advances"(3) (emphasis in original).

As Table 4 shows, the federal government reduced its accumulated deficit every year from 1997-1998 through 2002-2003. Cumulatively, the accumulated deficit fell by $52.3 billion.

**Table 4: Federal Budgetary Balances, 1996-1997 to 2002-2003**

| **Year** | **Federal Budgetary Surplus** | **Accumulated Federal Budgetary Deficit** |
|---|---|---|
| | **$ millions** | |
| 1996-1997 | -8,688 | 562,850 |
| | | |
| 1997-1998 | 2,132 | 560,718 |
| 1998-1999 | 2,847 | 557,871 |
| 1999-2000 | 13,145 | 544,726 |
| 2000-2001 | 20,162 | 524,564 |
| 2001-2002 | 7,019 | 517,545 |
| 2002-2003 | 6,969 | 510,576 |
| **Total, 1997-1998 to 2002-2003** | **52,274** | |

Source: Department of Finance, *Fiscal Reference Tables 2002-2003*.

(3) "Auditor General's Observations on the Financial Statements of the Government of Canada for the Year Ended March 31, 2002," p. 1.39; available at: http://www.oag-bvg.gc.ca/domino/other.nsf/html/99pac_e.html/$file/2002agobs_e.pdf.

### D. Base Year

A determination of how the federal budgetary surplus has been allocated among debt reduction, tax cuts and program spending is very sensitive to the choice of base year. The 1996-1997 fiscal year was chosen because it represents the last year in which the federal government ran a budgetary deficit (federal fiscal years run from 1 April to 31 March).

## FINAL RESULTS

Given that results may be distorted in any given year by such events as higher-than-expected growth or (in the case of 2000) the implementation of a federal tax-reduction plan, this paper reports cumulative results for the period 1996-1997 through 2002-2003. As noted earlier, it is impossible to determine in any given year whether economic growth or tax cuts are responsible for changes in government revenue, though over the course of a business cycle revenues will generally track the state of the economy, all else being equal.

As reported in the previous tables and summarized in Table 5, tax revenue fell by $21.5 billion, real program spending rose by $30.3 billion, and the accumulated budgetary deficit declined by $52.3 billion over the federal budgetary surplus period of 1997-1998 to 2002-2003. Together, these sums amount to some $104 billion, which represents the cumulative federal budgetary surplus during that period. As Table 5 shows, 50% of this surplus was allocated to debt reduction, 29% was allocated to program spending, and 21% to tax cuts.

**Table 5: Allocation of the Federal Budgetary Surplus, 1997-1998 to 2002-2003 (Cumulative)**

| | Actual | Projected(1) | Surplus(2) | Share of the Surplus |
|---|---|---|---|---|
| | $ millions | | | % |
| Federal Tax Revenue (Tax Cuts) | 1,006,371 | 1,027,843 | 21,472 | 21 |
| Federal Program Spending | 703,477 | 673,177 | 30,300 | 29 |
| Reduction in Accumulated Federal Budgetary Deficit | 52,274 | | 52,274 | 50 |
| **Total** | | | **104,046** | **100** |

(1) Projected federal revenue is an estimate of federal revenue, holding the revenue share of GDP at the 1996-1997 level (16.8%); projected federal spending is federal program spending if 1996-1997 spending had risen only by the rates of inflation and population growth.

(2) The difference between actual and projected federal revenue is taken to equal the share of the surplus that went to tax cuts over the 1997-1998 to 2002-2003 period; the difference between projected and actual federal spending is taken to equal the share of the surplus that went to federal spending over the 1997-1998 to 2002-2003 period; the reduction in the accumulated deficit is the share of the surplus that went to reduce the federal debt.

Sources: Department of Finance, *Fiscal Reference Tables 2002-2003*; Statistics Canada, CANSIM II database (inflation, GDP and population calculations); and Library of Parliament calculations.

As mentioned earlier, these results are very sensitive to the choice of base year. Furthermore, the relatively low share of the surplus that was allocated to tax cuts is biased somewhat by the fact that the federal government did not announce the majority of its tax-cut plan until the February 2000 Budget and the October 2000 *Economic Statement and Budget Update*. As Table 6 shows, the share of the surplus allocated to federal tax cuts increased dramatically in 2001-2002 and 2002-2003, reaching 49% of the federal budgetary surplus in 2001-2002, while reducing the accumulated federal deficit became a lesser priority.

**Table 6: Federal Budgetary Surplus Allocation, 2001-2002 and 2002-2003**

| Year | Share of Federal Budgetary Surplus | | | |
|---|---|---|---|---|
| | Federal Program Spending | Federal Tax Cuts | Accumulated Federal Deficit Reduction | Total |
| | % | | | |
| 2001-2002 | 26 | 49 | 24 | 100 |
| 2002-2003 | 35 | 46 | 19 | 100 |

Source: Library of Parliament calculations.

Note: Numbers may not total 100 due to rounding.

## CONCLUSION

The allocation of the federal budgetary surplus is a point of debate. As the Auditor General of Canada has noted, there is no accounting or legal rule requiring surplus funds to be allocated toward federal debt reduction. Furthermore, as the House of Commons Standing Committee on Finance's 2003 pre-budget consultations demonstrated, there is a diversity of opinions regarding how future surpluses should be spent.

With regard to past federal budgetary surpluses, this paper concludes that, over the 1997-1998 to 2002-2003 period, there was some variation in the relative priority accorded to tax cuts, program spending and accumulated deficit reduction. Overall, one-half of those federal budgetary surpluses was applied to reduce the accumulated federal deficit; federal program spending increases took 29%; and federal tax cuts accounted for the remaining 21%. In the two most recent years of that period, however, tax cuts accounted for almost one-half of the annual surplus; at the same time, the share of the surplus that was allocated to program spending increased, while the share devoted to accumulated deficit reduction declined.