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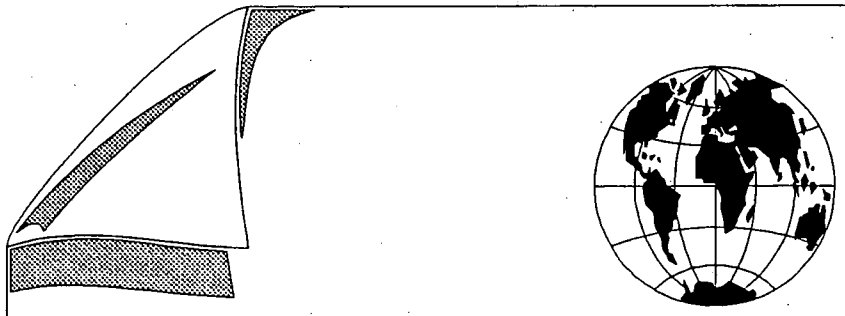

Takin' Care of Business:

The Impact of Deficit Reduction on the Trade Sector

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On 27 February 1995, the federal government released its budget for the fiscal year 1995-96 with a projected deficit of $32.7 billion. In 1994-95, the deficit was $37.9 billion. The goal of the government is to reduce its shortfall to 3% of GDP (about $24.3 billion) by 1996-97. While there has been much public discussion regarding the merits of deficit reduction in Canada, and financial markets have periodically drawn international attention to the issue, comparatively little attention has been paid to the effects of deficit reduction on the trade sector. This Commentary will focus on the (mostly indirect) effects of deficit reduction -- and government debt reduction -- on the trade sector.

The Deficit and Debt in Perspective

In Canada, total government expenditures have exceeded total government revenues since 1975. Over the last 20 years, federal government spending has consistently exceeded federal government revenues, and, taken together, the provinces have spent more than they have collected in all but two years (1978 and 1988). At the federal level, the deficit reached $32.7 billion in 1993.[1] The total provincial deficit has grown markedly in recent years, from $4.5 billion in 1990 to $17.2 billion in 1993. The total government deficit (including federal, provincial and municipal levels) was close to 7% of Gross Domestic Product in 1993.

The OECD estimates that, in 1993, the structural, or non-cyclical, component of Canada's total government deficit was 4.5% of potential GDP.[2] The structural component of a deficit is that portion that is not associated with a temporary cyclical downturn in economic activity, when government expenditures typically increase and government revenues typically decline. This structural component is considered a

[1] This is on a national accounts basis. See Statistics Canada, *Canadian Economic Observer*, Statistics Canada, December 1994, table 3. Data released in budget documents are on a public accounts basis. National accounts are reported for calendar years, while public accounts are reported for fiscal years. In addition, national accounts data are meant to capture all government transactions, including those outside the budget such as Canada and Quebec pension plans.

[2] Potential GDP is the level of production sustainable at normal rates of capacity utilization and employment of labour. When actual output is below potential output, as is the case during a cyclical downturn, an output gap is said to exist. The OECD estimates that, in 1993, Canada's output gap was 4.4% of potential output. See OECD, *Economic Outlook*, No. 56, OECD, Paris, December 1994, pp. 34, A33.

cause, rather than an effect, of fluctuations in economic activity. A large structural deficit is normally an indication that public-sector discretionary spending is not consistent with the government's long-term ability to pay for that spending. The structural deficit in Canada is composed largely of interest payments on accumulated government debt.[3] In other words, it is past spending excesses that are primarily responsible for the present structural fiscal imbalance.

Those past spending excesses have resulted in a large and growing government debt. Canada's net government debt was about 62% of GDP (about $440 billion) in 1993, up from 14% in 1980.[4] Non-resident holdings of Canadian government debt amounted to $238 billion.[5] As the debt grows relative to GDP, there is an increase in the share of domestic resources that are devoted to debt servicing and a decline in the share of resources that are available for general domestic consumption. In addition, a degree of fiscal flexibility is lost when a high debt/GDP ratio precludes the introduction of counter-cyclical fiscal initiatives. Clearly, the debt/GDP ratio cannot be allowed to increase indefinitely. It would eventually stifle domestic economic activity by requiring an ever-increasing share of resources to service the debt, and virtually eliminate the possibility of any active government role in stabilizing the economy.[6]

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[3] Although interest payments are neither cyclical nor purely discretionary, the OECD includes them as part of the structural deficit.

[4] The gross debt was 92% of GDP. Net debt is calculated by subtracting financial assets held by the government sector from gross debt. Such assets include cash, bank deposits, loans to the private sector, participations in private sector companies, holdings in public corporations and foreign exchange reserves. See OECD, *op. cit.*, p. A37.

[5] See R. Lafrance and M. Kruger, "Canada's Net International Indebtedness", in *Bank of Canada Review*, Bank of Canada, Ottawa, Summer 1994, p. 43.

[6] In order to avoid an ever-increasing share of resources devoted to debt servicing, the debt/GDP ratio must be stabilized. In this regard, the government's long-term budget constraint is:

$$(r - g) * DEBT = TAX - PRIMARY\ EXPENDITURE$$

where r is the real interest rate, g is the growth rate of real GDP, DEBT is the stock of government debt, TAX is total tax revenues and PRIMARY EXPENDITURES is total government expenditures net of interest payments on the debt.

If this relationship does not hold, then the debt/GDP ratio changes. In Canada in the 1980s, real interest rates were higher than real GDP growth (r greater than g) and primary expenditures rose faster than taxes, causing the debt/GDP ratio to rise dramatically. See T. Macklem, "Some Macroeconomic Implications of Rising Levels of Government Debt", in *Bank of Canada Review*, Bank of Canada,

By virtually any means of comparison, the Canadian fiscal position is among the weakest of all industrialized countries. Within the G-7, only Italy and the U.K. have higher deficits as a share of GDP, and only Italy has a higher gross public debt as a share of GDP.[7] Summing corporate and government debt, Canada has the highest level of net foreign indebtedness relative to GDP (at about 40%) of all the G-7 countries.[8] As a reflection of the tendency to rely on foreign savings, the Canadian current account deficit relative to GDP is also the highest of the G-7 (see Annex).[9]

What Does Deficit Reduction Mean for Trade?

Given the magnitudes of the Canadian debt and deficit, particularly in a relative international context, it is reasonable to assume that they must have significant negative effects on the domestic economy, including the trade sector. Indeed, both the Canadian public and international financial markets have reached that conclusion, and there is now some urgency attached to the need for government to address its fiscal position. The 1995-96 Budget is evidence of the federal government's commitment to carrying out the necessary measures to improve its fiscal record and enhance the macroeconomic environment simultaneously. The specific impact on the trade sector will be largely indirect, but positive nonetheless.

Reduction in Imports

There are two ways to improve the trade balance -- reduce imports and increase exports. Deficit (and government debt) reduction can do both. By stimulating aggregate demand through an increase in public-sector consumption, a deficit can increase imports and cause a deterioration in the trade balance.[10] Due to the openness of the Canadian economy, and the fact that present Canadian deficits are

Ottawa, Winter 1994-95, pp. 45-7.

[7] See OECD, *op. cit.*, pp. A32, A36. Some fiscal comparisons among G-7 countries are available in this Commentary's Annex.

[8] No other G-7 country's net international indebtedness is even half as large as a share of GDP. See Annex.

[9] See Department of Finance, *Canada's Economic Challenges*, Ottawa, January 1994, pp. 43-4.

[10] See N. Bruce and D. Purvis, "Consequences of Government Budget Deficits", in *Fiscal and Monetary Policy*, Royal Commission on the Economic Union and Development Prospects for Canada, University of Toronto Press, Toronto Ontario, 1986, p. 59.

composed largely of the borrowing costs associated with past government consumption, it is likely that there has been a higher level of imports into Canada as a result of fiscal deficits.

The fact that there has probably been a weaker than otherwise anticipated Canadian trade balance due to successive government deficits should not, on its own, be too disturbing. It is more worrisome that past fiscal deficits were based on government consumption and not productive investment.[11] Consequently, the fiscal deficits and weaker trade performances that have been incurred have contributed little to potential future economic growth. To the extent that deficit reduction can focus on lowering government consumption, the benefits are much more obvious, since the decline in government spending, including that on imports, will not adversely affect future economic growth.

Improved Competitiveness

According to the 1994 *World Competitiveness Report*, government plays a key role in determining relative international competitiveness.[12] Canadian competitiveness ranks sixth among G-7 countries (sixteenth overall), and is drawn down by a very low ranking government sector. The Report partially attributes a lack of entrepreneurial activity and individual initiative in Canada to the high foreign debt relative to GDP, the high deficit relative to GDP and the high level of government consumption. Following the logic of the Report, if fiscal restraint leads to a reduction in the relative size and influence of the Canadian public sector, it will foster an entrepreneurial spirit and ultimately strengthen Canadian competitiveness.

One means by which a large government sector can impede private sector initiative is by imposing a heavy tax burden. In Canada, total government tax revenues have increased from about 32% of GDP in 1980 to close to 38% of GDP in the early 1990s.[13] A high and increasing tax burden is not conducive to improving international competitiveness. The tax burden in Canada is significantly higher than those of our major trading partners -- the United States and Japan. The only way for

[11] See Department of Finance, *Creating a Healthy Fiscal Climate*, Ottawa, October 1994, p. 7.

[12] See *The World Competitiveness Report 1994*, International Institute for Management Development, Lausanne Switzerland, and The World Economic Forum, Geneva Switzerland, September 1994.

[13] See Department of Finance, *Canada's Economic Challenges*, Ottawa, January 1994, p. 48.

the tax burden in Canada to decline (or at least stop rising) is for the government to address its fiscal imbalance, in particular the structural component.

Lower Interest Rates and Increased Investment

One of the most important macroeconomic impacts of consecutive large deficits and a large debt is upward pressure on real interest rates. During the 1980s, for example, when the federal deficit rose dramatically as a share of GDP, the real interest rate in Canada averaged 6.2%.[14] In the 1970s, the real interest rate was only 1.1%. There are generally two ways that fiscal imbalances affect interest rates. First, in the national savings-investment balance, deficits absorb savings, thus increasing the cost of investment capital, which is measured by the rate of interest.[15] Second, deficits increase uncertainty with respect to future government economic policy, and raise the possibility that the government will resort to "printing money" to pay off its debt. Lenders require a premium (a higher interest rate) to offset the risk associated with possibly being repaid in deflated dollars.[16]

For simplicity, this Commentary will assume that deficit reduction, such as that undertaken by the federal government, is accompanied by a reduction in the debt/GDP ratio.[17] As a result, the government's new fiscal initiatives will unambiguously work towards pushing real interest rates downward. Other things equal, lower real interest rates reduce the cost of capital and imply an increase in investment spending. According to the Council on Competitiveness, "investment is the fundamental building block of current and future economic activity and . . . is also the fundamental

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[14] The real interest rate is calculated as the average bond yield on over 10-year government of Canada bonds less the year-over-year growth in the GDP deflator. See T. Macklem, *op. cit.*, p. 47. It should be noted that the increase in the Canadian deficit was not the only cause of higher real interest rates in Canada in the 1980s. Between the 1970s and the 1980s, real interest rates in major industrialized countries rose for several reasons. Canadian rates were, and continue to be, largely influenced by international developments. See H. Howe and C. Pigott, "Determinants of Long-Term Interest Rates: An Empirical Study of Several Industrial Countries", in *Quarterly Review,* Federal Reserve Bank of New York, Vol. 16, No. 4, Winter 1991-92, pp. 12-28.

[15] See Department of Finance, *op. cit.*, p.42. This is particularly problematic in a closed economy with a more limited pool of savings.

[16] See T. Macklem, *op. cit.*, p. 53.

[17] This need not be the case, however, since the debt and deficit shares of GDP can move in opposite directions.

determinant of national competitiveness."[18] Thus, deficit reduction can enhance the international competitive position of domestic firms through an indirect incentive to increase capital expenditures.

One of the determinants of investment spending is the level of net national savings.[19] In Canada, there is sufficient domestic savings to finance private investment, but government borrowing requires the use of foreign savings as well.[20] The reliance on foreign savings is reflected in Canada's current account deficit, which is the worst (relative to GDP) of all G-7 countries. A reduction of the fiscal deficit will address the savings-investment imbalance in Canada, reduce competition for domestic savings and perhaps allow for an increase in private investment that is presently "crowded out" by public-sector borrowing.[21]

For a large international borrower, it is also possible that drawing heavily on foreign savings might reduce the level of foreign economic activity and, in turn, reduce the borrowing country's exports, causing a deterioration in its trade balance.[22] There are two reasons to doubt that this is the case for Canada. First, although Canada's net international indebtedness relative to GDP is the worst of the G-7 countries, Canadian net international indebtedness is becoming more diversified.[23] Second, and more important, total Canadian international borrowing is small in

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[18] See Council on Competitiveness, *Competitiveness Index 1994*, p. 8.

[19] Net national savings is defined as national disposable income minus national consumption minus depreciation. It is also understood as the sum of private-sector and public-sector savings.

[20] In 1992, of the savings required for government borrowing ($44 billion) and private investment ($109 billion), $29 billion was foreign sourced and $124 billion was from domestic sources. See Department of Finance, *op. cit.*, p. 42.

[21] See B.M. Friedman, "Implications of the Government Deficit", in *The Economics of Large Government Deficits*, Federal Reserve Bank of Boston, Boston MA, October 1983, pp. 73-95. The argument that private investment is crowded out by government deficits is considered most appropriate for closed economies that do not have access to international capital markets. But it is also relevant for an economy such as Canada's that has accumulated a large international debt which is serviced at an increasing premium. That premium can restrict the willingness and capacity of governments to obtain international financing, effectively curtailing their access to international markets.

[22] See *The Economic Report of the President*, U.S. Government Printing Office, Washington DC, February 1983, pp. 62-4, 69-70.

[23] See R. Lafrance and M. Kruger, *op. cit.*, p. 46.

absolute terms, and is not likely to have any noticeable effect on other countries' GDP growth.[24]

The Exchange Rate

Clearly, Canada has relied extensively on foreign savings to make up the shortfall of domestic funds. According to Ben Friedman, "solving the budget problem with capital inflows would simply mean substituting a crowding out of the . . . economy's foreign sector, through high real exchange rates, for the crowding out of the investment sector that would otherwise come about through high real interest rates."[25] Friedman is claiming that an expansionary fiscal policy that is funded by an inflow of foreign capital causes an appreciation of the domestic currency. The appreciation then reduces net exports, so that the original fiscal stimulus (the deficit) generates no change in output.[26] If an expansionary fiscal policy reduces net exports through a currency appreciation, does it necessarily follow that a contractionary fiscal policy will increase net exports through a currency depreciation?

It should be clarified first that the exchange rate depends, among other things, on both fiscal and monetary policies. It should also be noted that, with any policy change, there are differences between the levels of variables in the short term (when they are subject to adjustment effects) and their long-term equilibrium values. Bank of Canada analysts have recently estimated both the short-term and long-term effects of changing the level of government debt as a share of GDP.[27] They simulated the impact of reductions in the debt/GDP ratio based on two scenarios -- one in which the economy is initially in a state of excess demand and inflation is rising, and the other in which there is initially excess supply in the economy and inflation is falling.

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[24] At the end of 1993, outstanding international debts issued by the Canadian public and private sectors represented about 7% of the world total. See Bank for International Settlements, *64th Annual Report*, Basle Switzerland, June 1994, p. 111.

[25] Friedman, *op. cit.*, p. 86.

[26] This is the standard Mundell-Fleming model, an explanation of which is contained in O.J. Blanchard and S. Fischer, *Lectures on Macroeconomics*, MIT Press, Cambridge MA, 1989, pp. 537-40.

[27] See T. Macklem, D. Rose and R. Tetlow, "Government Debt and Deficits in Canada: A Macro Simulation Analysis", in *Deficit Reduction: What Pain, What Gain?*, W.B.P. Robson and W.M. Scarth (eds.), C.D. Howe Institute, Toronto Ontario, 1994, pp. 231-72.

In both scenarios, the fiscal contraction reduces aggregate demand in the short term, although less so in the excess supply case. Inflation falls, allowing monetary authorities to ease policy, and short-term interest rates and the risk premium on government debt decline. As interest rates decline, the domestic currency depreciates in real terms causing an increase in net exports.[28]

Over the long term (approaching 20 years), aggregate demand responds positively to the reduction in interest rates and inflation. The reduction in net international indebtedness increases the share of domestic output that is available for domestic consumption. That permanent gain in domestic consumption is the basis for the Bank analysts' conclusion that, despite the short-term costs of reducing the debt/GDP ratio (including a temporary reduction in domestic consumption), the long-term gains are substantial and worthy of pursuit.

In terms of the real exchange rate in the long term, in both scenarios it is virtually unaffected by the fiscal initiative. There is a slight real appreciation in both cases. The lesson (in terms only of the real exchange rate effects) is that net exports can be positively stimulated by a reduction in the level of government debt relative to GDP in the short and medium term, but not in the long term.

Conclusion

The size of the public sector debt in Canada suggests that it will cast a shadow over the domestic economy for some time. Realistically, large public debts that accumulate over several years cannot be eliminated at once, at least not without significant economic displacements. The federal government now has a credible plan for reducing its deficit and easing the debt burden, both of which are critical to enhancing the domestic macroeconomic environment and raising the level of investors' confidence in the Canadian economy.

[28] A similar relationship between fiscal restraint, the exchange rate and net exports was also revealed in a modelling exercise undertaken to evaluate the impact of deficit reduction in the U.S.. See R.C. Bryant, *Consequences of Reducing the U.S. Budget Deficit*, Brookings Discussion Papers in International Economics, No. 104, The Brookings Institution, Washington DC, February 1994, pp. 10-1. Such an impact on the exchange rate is not, however, accepted by all analysts. Some believe that deficit reduction will increase the confidence of foreign investors in the Canadian economy and boost the value of the dollar. See, for example, W.B.P. Robson and W.M. Scarth, "Debating Deficit Reduction: Economic Perspectives and Policy Choices", in *Deficit Reduction: What Pain, What Gain?*, W.B.P. Robson and W.M. Scarth (eds.), C.D. Howe Institute, Toronto Ontario, 1994, p. 25.

The trade sector will benefit noticeably from the effects of deficit and debt reductions. The expected decline in real interest rates should spur investment spending, which is one of the keys to maintaining a country's international competitiveness. There is also some evidence that the real exchange rate will depreciate in the short and medium term, and provide a stimulus for net exports. To the extent that deficit reduction will eventually lead to a decline in the tax burden faced by Canadians, this will enhance the country's international competitiveness. The relationships between tax policy, relative international tax burdens, competitiveness and international trade and investment flows will be researched in some detail by the Economic and Trade Policy Division (CPE) in an upcoming Staff Paper.

Annex: G-7 Fiscal Comparison for 1993

All data are expressed as shares of GDP

Country	Total Government Deficit	Government Gross Debt	Net International Indebtedness	Current Account Balance	Gross National Savings
Canada	**7.1**	**92.2**	**-39.8**	**-4.3**	**12.8**
U.S.	3.4	64.3	-10.3	-1.6	14.5
Japan	0.2	73.7	14.5	3.1	33.9
Germany	3.3	50.2	12.9	-1.1	22.1
France	5.8	52.2	-3.1	0.8	19.8
Italy	9.6	119.4	-11.3	1.2	17.2
U.K.	7.7	47.1	3.7	-1.7	12.8

Source: OECD, *Economic Outlook*, No. 56, Paris, December 1994.

Note: Gross National Savings data are for 1992.