

**THE FEDERAL DEFICIT:
SOME ECONOMIC FALLACIES**

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THE FEDERAL DEFICIT: SOME ECONOMIC FALLACIES

A federal budget always encourages commentators to brandish their essays, speeches and editorials on the deficit. This year such comments appear to be more noticeable. With the stress on the deficit in the budget of 26 February, public debate on this subject is likely to remain strong.

The recent dramatic fall in the Canadian dollar's value, has highlighted the international marketplace's view of Canadian economic policy and the need for a reduced budgetary deficit. Whether or not this view is accurate — it probably is — is largely irrelevant. It puts pressure on the Minister of Finance to curb spending (raise taxes), which is what the Canadian business community has been urging for some time, as witnessed by the statements of the Business Council on National Issues.⁽¹⁾

On the other hand, a number of newspaper editorial writers and economists have been arguing that there is no need to reduce the deficit further. They suggest that the Minister of Finance has either beaten back the deficit monster, although the public has not yet noticed, or he is looking at the wrong deficit concept. According to this view, laymen and business leaders look at the nominal deficit figures as they are commonly published and perceive a crisis; if only they would only put the figures in perspective, examine the proper concepts and make the appropriate adjustments, they would see that no problem exists.

These views, as put forward by some economists, form the basis of this paper. As the reader will note, this broad approach has a great deal of appeal. Reducing the deficit problem is much easier and less painful than reducing the deficit itself.

(1) Business Council on National Issues, *The Federal Deficit: Some Options for Expenditure Reduction*, Ottawa, 2 August 1984; and Business Council on National Issues, *National Deficits and Debt, Meeting the Challenge*, Ottawa, October 1985.

IS THE DEFICIT A PROBLEM?

As the deficit grows, so, apparently, does the number of commentators who claim it is not really very large.

In 1982 it became clear that the federal deficit had very quickly ballooned to what appeared to be dangerous proportions. Soon afterwards, however, some economists⁽²⁾ were calling for even larger deficits on the grounds that the adjusted deficit was really not large at all; in fact it was far too small. The Department of Finance entered this debate with a paper⁽³⁾ that put federal deficits in their “proper” context and concluded that the federal deficit was in fact much smaller than was commonly thought to be the case.

The observed deficit is misleading because, unless adjustments are made for distortions caused by the level of economic activity and the rate of inflation, the stated deficit is not an accurate reflection of the government’s fiscal position.⁽⁴⁾

When the economy performs below its potential, revenues are lower than they would otherwise be and expenditures tend to be higher. This is because revenues and some expenditures are functionally related to the level of national output. Discretionary changes in both spending and tax measures can accentuate this trend.

Over the course of a business cycle, then, the deficit will increase as the economy declines, and fall as the economy recovers. It is this automatic movement which requires a cyclical adjustment in order to identify the government’s fiscal position correctly.

After having made a proper adjustment for cycles in economic activity, we are left with the concept referred to as the “structural deficit,” which reflects the inherent fiscal position

(2) See for example: J. Bossons and D.P. Dungan, “The Government Deficit: Too High or Too Low?”, *Canadian Tax Journal*, Vol. 31, No. 1, January-February 1983, p. 1-29. The authors of this study argued that the consolidated fiscal position of all governments “... contributed to the worsening depression in economic activity ...” and “without significant additional fiscal stimulus from the government sector... the Canadian economy will experience close to zero growth in real GNP during 1983.” In fact, real growth in 1983 turned out to be 3.3%.

(3) Canada, Department of Finance, *The Federal Deficit in Perspective*, Ottawa, April 1983

(4) Technically, the proper measure of the deficit should also include such items as the unfunded portion of CPP/QPP liabilities which are excluded in published figures. This inclusion would have increased the size of the federal deficit by an average of \$18,100 million over the past seven years. The inclusion of the unfunded liability in government superannuation plans would have added another \$2,300 million to the federal deficit in 1984. The federal government’s CPP liability is strictly limited to the size of the fund and as such it would be more appropriate to add this change in the value of unfunded liabilities to the consolidated government deficit. Nevertheless, the unfunded liability represents a future increase in CPP contributions which will be required to meet commitments. Since these contributions are viewed as federal taxes, an increase in this unfunded liability has the same effect as an increase in the size of the federal deficit.

of the government more accurately. A large structural deficit indicates a long-term or chronic problem, whereas a large cyclical deficit is a temporary phenomenon.

It is important that this adjustment be made correctly. If the budget is to balance over the course of a cycle (and it should be pointed out that this is the strict interpretation of Keynesian fiscal policy), the adjustment must be made on the basis of average performance over the cycle and not peak performance. It is common practice for proponents of such adjustments to use unreasonable base levels of economic activity. The Bossons/Dungan paper used a 6% unemployment rate as the basis of adjustment. The Department of Finance paper used a cyclically adjusted unemployment rate concept based on a “normal” adult male unemployment rate of 4.0% - 4.5%. Thus, it is not surprising that these two documents go a long way towards demonstrating that a deficit does not exist. In fact the bias in these measures can be seen from the fact that the Finance adjustments show an output gap starting as far back as 1977. It is likely that the Department’s measure is picking up changes in labour supply and treating them as changes in labour demand.

Since the trough of economic activity in the last quarter of 1982, at least three years of recovery have taken place. Real output has more than regained what was lost since 1981 and real per capita output has also increased since then. It is quite evident by now that we should no longer be arguing that the deficit is largely a cyclical phenomenon,⁽⁵⁾ particularly since cyclical adjustments, as they are made in practice, tend to push the size of structural deficit downward.

In summary then, the whole point of the cyclical adjustment was to discover the part of the reported deficit that is structural in nature. This is important from the point of view of fiscal policy. A cyclical deficit is something the economy can grow out of very quickly, whereas a structural deficit requires explicit policy or action either to cut expenditures and/or to raise taxes. Those who argue for policy action aimed at the deficit view it as a structural phenomenon, while those who argue against such measures view it as largely cyclical.

The business cycle is not the only factor that may distort the meaning of deficit figures. Rising prices also have a distorting effect. Assets with a fixed nominal value exhibit declines in real value over time with positive levels of inflation. To compensate for this loss when inflation is expected, a premium is attached to interest rates. Thus in times of rising

(5) This is not to suggest that economists will not make such arguments. In the summer of 1985, it was argued that the federal fiscal position was highly restrictive. The structural deficit was calculated to be 3.7% of GNP in 1985 and only 1.8% of GNP in 1986. But this would indicate that the Canadian economy was once again in recession. See: T. Wilson, “The Fiscal Stance and the Economic Outlook — The Short-Term Impact,” in D.D. Purvis (ed.), *Report of the Policy Forum on the May 1985 Federal Budget*, John Deutsch Institute for the Study of Economic Policy, July 1985.

prices, part of the nominal interest payments are in fact a repayment of some of the original principal. The use of nominal interest costs thus imparts an upward bias to the real measure of the deficit.

The Department of Finance⁽⁶⁾ has calculated the decline in the real value of net fixed-value liabilities, using this figure to inflation-adjust the deficit. In 1981 and 1982, this type of adjustment lowered the observed deficit/GNP ratio by about two percentage points.

The Department provided estimates only as far as 1982. These have been updated to 1985 using the Department's methodology and are presented in Table 1. Whereas the inflation adjustment significantly reduced the deficit measure in the early 1980s, it is now proving to be a minor consideration. This adjustment reduces the deficit/GNP ratio from 6.2% to 5.3% in 1983, from 7.0% to 6.0% in 1984, and from 6.6% to 6.1% in 1985.

TABLE 1
INFLATION-ADJUSTED FEDERAL GOVERNMENT BUDGET BALANCES
(National Accounts Basis)

Net fixed-value liabilities		Actual budget balance	Decline in real value of net fixed-value liabilities	Inflation-adjusted budget balance	Percentage of GNP	
					Actual	Inflation-adjusted
1970	8,320	266	408	674	0.3	0.8
1971	8,520	-145	294	149	-0.2	0.2
1972	8,816	-566	494	-72	-0.5	-0.1
1973	9,374	387	1,091	1,477	0.3	1.2
1974	9,024	1,109	1,354	-2,463	0.8	1.7
1975	8,894	-3,805	909	-2,896	-2.3	-1.8
1976	11,878	-3,391	1,031	-2,360	-1.8	-1.2
1977	15,962	-7,303	966	-6,337	-3.5	-3.0
1978	22,282	-10,685	1,538	-9,147	-4.6	-4.0
1979	34,803	-9,264	4,123	-5,141	-3.5	-2.0
1980	44,759	-10,153	4,591	-5,561	-3.5	-1.9
1981	55,896	-7,979	6,216	-1,763	-2.4	-0.5
1982	64,854	-21,083	6,718	-14,365	-6.0	-4.1
1983 ⁽⁷⁾	84,449	-24,100	3,610	-20,490	-6.2	-5.3
1984	112,912	-29,659	4,228	-25,431	-7.0	-6.0
1985	140,265	-30,814*	2,258	-28,556	-6.6	-6.1

* Estimate

Source: Canada, Department of Finance, *The Federal Deficit in Perspective*, Ottawa, April 1983, p. 64

(6) Canada, Department of Finance Canada (1983).

(7) The last three entries have been calculated using the Department's methodology as outlined in the above document.

The deficit adjustments suggested by various economists are designed to measure the extent of the properly stated structural deficit. At the time of writing, the papers by Professors Bossons and Dungan and the Department of Finance argued that the deficit was not a problem since it was due to either the recession or the accelerated repayment of real government debt.

If we apply the methodology of Bossons and Dungan and the Department of Finance, only one conclusion can be reached: the deficit is a very serious problem and has become progressively more so. The deficit is almost entirely structural in nature in 1985-86⁽⁸⁾ and prescriptions for growing out of the problem have, therefore, little chance of success.

Having demonstrated that we have a large structural deficit, one might expect that the debate has been resolved and that no one would argue that the “real budget” is close to balance. On the contrary, it is always possible to find an economist with a new deficit concept.

One such concept that has not yet become a standard feature of the debate is the primary deficit.⁽⁹⁾ This measures the difference between government revenues and program expenditures only. This is simply an indirect way of saying that interest payments are ignored. When such interest payments constitute a large part of total expenditures, their elimination can easily convert a large deficit to a balanced budget or even a surplus. Then again, if we ignore social spending or transfers to provinces, the surplus will be even larger. And if we also ignore defence spending and payments to farmers...

There is a very specific advantage to using a primary deficit concept: it can be used to blame monetary policy for high measured deficits, rather than fiscal policy, as is normally the case. To quote from a recent newspaper editorial:

But spending isn't the problem. Real interest rates that exceed growth in the economy are. What reason on earth is there for wage earners and businesses to sacrifice a steadily rising share of income they produce to unproductive interest payments? And why should those who depend on worthwhile government programs pay the price? In his budget, Wilson's got two choices for reducing the mountain of

(8) The ratio of cyclically-adjusted (structural) deficit to the measured deficit was 70% in 1984, 54% in 1983, and 50% in 1982. This ratio should be even higher for 1985 and 1986. These figures come from Department of Finance data and, as argued in this paper, likely give an underestimate of the size of the structural deficit. See: Canada, Department of Finance, *Economic Review, April 1985*, Ottawa, 1985, p. 129.

(9) The expression “primary deficit” has been used in the Budget Papers but no policy inference was drawn.

public debt: Deal with the real problem, or mask it by cutting valuable programs that make this country work.⁽¹⁰⁾

By dealing with the “real problem,” the editorial means reducing real interest rates through expansionary monetary policy. The Department of Finance does not resort to this shifting of blame. In a pre-budget consultation paper, it states:

The fiscal problem is, in essence, one of structural imbalance between expenditures and revenues. Monetary policy cannot address this fundamental problem.⁽¹¹⁾

There is no conceivable justification for ignoring interest payments when calculating the deficit, unless of course the government has no intention of honouring its debts. Whenever the government runs a deficit and borrows from capital markets it must incur an interest expense. This is simply the opportunity cost of using this resource and is no less legitimate than the opportunity cost of using labour or raw materials.

Yet another way of looking at the deficit is to examine its impact on the debt/GNP ratio. As long as this ratio is stable over time, it is said, the size of the deficit should not be of concern. This argument ignores an important question about the level at which we attempt to stabilize the ratio. It is one thing to keep debt at 30% of GNP, it is another to keep it at 100% of GNP, as the following discussion will show.

The debt/GNP ratio is an important economic variable. If the economic agents view public and private sector financial instruments as perfect substitutes, an increase in the degree of public debt held by the economy necessarily crowds out the amount of private debt held. This is worrisome because public spending tends not to be as productive as private spending. Indeed a large part of public borrowing is aimed at financing current consumption rather than investment in capital (whether tangible or human). As a result, the deficit not only fails to stimulate economic activity in the short run, it also has adverse effects on longer-term economic growth and productivity change.

A rising debt/GNP ratio is not a problem in itself. If the level of productive public investment was too low, we would in fact want a rising ratio! The present concern with

(10) “Attack on Deficit Misses the Mark,” *Toronto Star*, 7 February 1986.

(11) The Hon. Michael Wilson, *Reducing the Deficit and Controlling the National Debt*,” Department of Finance, Ottawa, November 1985, p.17.

the government's fiscal position and its trend comes from the belief that too much public debt has already been accumulated, or will be accumulated in the next few years. Stabilizing the debt/GNP ratio is a necessary condition for fiscal prudence but it is clearly not sufficient.⁽¹²⁾ The policy issue is then not *when* the ratio is stabilized but *where* it is stabilized.

The Department of Finance has recognized this constraint in its most recent statement on deficits and debt. The medium-term goal is to stabilize the debt/GNP ratio by the early 1990s, while the longer-term goal is to reduce it to the pre-recession level.⁽¹³⁾

Consider the implications for government policy of attempting to maintain a stable debt/GNP ratio. If the government's fiscal position is in a steady state (i.e. it is running deficits that maintain the debt/GNP ratio at some constant level), then the following relationship must hold:

$$\text{Primary Deficit} + \text{Interest Rate} \times \text{Debt} = \text{GNP Growth Rate} \times \text{Debt}$$

If the primary deficit is zero and the monetary sector is in equilibrium (i.e. inflation rate equals expected inflation rate) then a constant debt/GNP ratio requires real interest rates to equal the rate of real GNP growth. If they are higher, the debt/GNP ratio will grow, even with a primary balance. This is the situation to which the Minister was alluding when he said "Real interest rates higher than real rates of economic growth compound the current fiscal problem."⁽¹⁴⁾ He went on to make the following analogy, "The situation can be compared to making an investment with borrowed funds. If the return on that investment is lower than the rate of interest being paid on the debt, the result is obvious."⁽¹⁵⁾

But what is the lesson to be learned from this? It is that if the rate of interest exceeds the rate of return, one should not make the investment — not that one should make the investment and then complain about high interest rates. Rather, if real interest rates are too high, the government must run a primary surplus⁽¹⁶⁾ to stabilize the debt/GNP ratio. Since the government has far more control over the size of the primary deficit/surplus than over the real rate of interest, that is the variable it should control to achieve its goal.

(12) N. Laurie, "Wilson Doesn't Have to Reduce Deficit Further," *Toronto Star*, 29 January 1986.

(13) The Hon. Michael Wilson (1985), p. 17 and 23.

(14) *Ibid.*, p. 11.

(15) *Ibid.*

(16) The equation on p. 9 would have a negative entry for the primary deficit.

THE HAZARDS OF ADJUSTING THE DEFICIT

There is a legitimate reason for making certain adjustments to the observed deficit in order to put the government's fiscal position into perspective. Economic cycles and inflation affect the observed deficit and it is important to note the origins and implications of such changes. It is not only legitimate to look at the debt/GNP ratio, it is unwise not to do so. It is, however, not legitimate to view this ratio only in terms of its constancy. It is even useful to look at the concept of the primary deficit; but it is clearly not legitimate to use it as a basis of policy. The debt accumulated in the past is part of the legacy of any current administration and the costs associated with such a debt cannot be ignored.

Having said all this, why should we view such adjustments with scepticism? There are several reasons, chief of which is that these new views of the deficit are promoted by those who would like to see the government incur much higher deficits. It is one thing to try to hide the real size of fiscal imbalance to avoid embarrassment or hysteria; it is quite another to use this mathematical wizardry to promote even greater deficits. What we have, then, is a potential problem.

It has been pointed out elsewhere⁽¹⁷⁾ that mischievous results can flow from cyclical and inflation accounting and it may in fact be possible to make the deficit and debt/GNP ratios unstable. The two essays cited give a more detailed view of this problem, but we can relate some of the hazards here.

If the cyclical adjustment is made on the basis of an unrealistic benchmark, the government's fiscal stance will be biased toward larger and more frequent deficits than desirable. If these deficits are themselves the source of poor economic performance, then today's high deficits justify tomorrow's high deficits, which justify next week's higher deficits, and so on.

Inflation accounting tends to put a floor under the current real value of net debt and to create a strong disincentive for ever reducing this real value. In this way, any temporary and unexpected increase in the deficit produces a permanent legacy in terms of higher debt and higher future deficits.

(17) See: B. Zafiriou, "Deficits: How Big and How Bad?" and M. Wrobel, "Policy Implications of Inflation-Adjusted Government Deficits," in *The Economic Review (5): Issues in Stabilization Policy* BP 69E, Research Branch, Library of Parliament, Ottawa, May 1983.

Treating the deficit issue as solely a problem of stabilizing the debt-to-GNP ratio can also provide an incentive for higher deficits. The deficit/GNP ratio that will stabilize a particular debt/GNP ratio can be defined according to the following formula:

$$\frac{\text{Deficit}}{\text{GNP}} = \frac{\text{Debt}}{\text{GNP}} \times \text{GNP Growth}$$

By stabilizing the ratio at the 1990/91 forecast level rather than the 1980/81 pre-recession level, the government more than doubles the size of deficits it will run into perpetuity. And this is based on a prospect of steady growth. A recession in the meantime would increase deficits and the level of debt at which its growth could be stabilized with the result that the floor on the deficit would again be raised.

To make this argument more concrete, consider the case where Canadian GNP grows by 6.5% per year. To stabilize the debt/GNP ratio at its forecast 1990-91 level⁽¹⁸⁾ allows an annual federal deficit as high as 4.1% of GNP. If, on the other hand, the government attempts to stabilize this ratio at its pre-recession level of 0.28:1, annual federal deficits could not exceed 1.8% of GNP. On the basis of 1984 Gross National Product, this difference represents in excess of \$10,000 million of allowable deficit per year.

The greatest threat to fiscal stability comes from the use of the primary deficit as the relevant fiscal concept. Like it or not, any government is constrained by the actions of its predecessors in accumulating debt and the drain on financial resources resulting from the associated interest cost. We may have a primary surplus today but the debt and today's observed deficits are due to all those primary deficits in the past.

Interest charges represent the opportunity cost of borrowing money and a recognition that these financial resources have other useful purposes elsewhere. If government was to be convinced that borrowed funds were free, the quantity demanded would rise dramatically. In other words, interest rates are a check on the size of deficits. Some might feel that this check is not very important, but we need only look at how other zero-priced resources are used to get a good idea of what would happen to the size of deficits if interest rates were ignored.

(18) This calculation uses the 1990-91 debt/GNP ratio forecast in the May 1985 federal budget, namely 0.63:1.

CONCLUDING REMARKS

As economic science becomes more sophisticated, it is better able to place certain variables within their proper perspective. “Sophisticated” economics, however, also has a propensity for deriving rather bizarre conclusions. It is quite conceivable that when the federal deficit reaches \$500 billion per year and exceeds 50% of annual GNP some analysts will be telling us that the deficit is not a problem, that tighter fiscal policy would be a disaster and that what is really needed is an economic policy based on the needs of the people and not the wishes of international currency speculators.

The four ways of looking at the deficit presented here all have some merit in very specific contexts. However, indiscriminate reliance on them would be dangerous; and could simply provide an excuse to produce even higher deficits.

In 1983, we were told that the deficits would go away with economic recovery and reduced inflation. A sceptical view was that “the current consolidated government deficit in Canada is very large and – barring changes in the fiscal structure – likely to remain large in the foreseeable future (this is particularly true of the federal deficit, which is proportionately much greater than that of the provinces and municipalities).”⁽¹⁹⁾ The more we make use of these new views of deficits, the greater will be the accuracy of the sceptics’ predictions.

Finally, a comment on economic analysis and the deficit seems worthwhile. The four approaches to the deficit presented here are ways that economists might look at the issue but that accountants, for example, might ignore. The approaches have some economic rationale. It is, however, incorrect to view the current debate as one with the business community on one side (arguing for rapid deficit reduction) and economists on the other (arguing for a more sensible approach). Such a view ignores the fact that a large part of the economic community views the deficit and debt with alarm and has argued for significant reductions in both. Should the February 1986 budget be judged to do little about the deficit, it does not mean that Mr. Wilson has sided with economists in general, although he may have sided with some in particular.

The subject matter of this paper is still sufficiently imprecise and subject to enough differences in opinion to be able to be used to “prove” almost anything. This is in sharp

(19) Zafiriou (1983), p.18.

contrast to mathematical analysis, which can prove whether the second derivative of a linear function is itself an exponential function or whether two plus two equals five.

The use of economic analysis cannot reduce the current federal deficit. Such analysis confirms that the deficit is a problem. If we look at the situation in its proper perspective and make the appropriate adjustments, we see that the shortfall in government revenues is very great. Economic analysis can be misused, however, to show quite the opposite.