

The Fiscal Dividend and the Federal Debt

G.C. Ruggeri*

PRÉCIS

Cet article compare deux méthodes pour réduire le rapport entre la dette fédérale et le PIB. La première consiste à maintenir indéfiniment des budgets équilibrés et à laisser à la croissance économique le soin de déterminer le taux de diminution du rapport entre la dette et le PIB. L'autre préconise d'accélérer la réduction du rapport entre la dette et le PIB en produisant des excédents budgétaires et en utilisant ces excédents pour rembourser la dette fédérale. Cet article fait la comparaison entre ces deux alternatives et les conséquences potentielles de chacune sur les primes de risque, le risque de récession, les paiements à l'étranger, l'épargne nationale, l'équité entre les générations et le freinage fiscal.

L'article constate que les arguments en faveur d'une structure fiscale fédérale non équilibrée avec des excédents budgétaires ne sont pas convaincants. Il conclut qu'il est préférable de maintenir indéfiniment des budgets équilibrés pour obtenir une croissance stable, un taux d'emploi élevé et même l'équité entre les générations.

ABSTRACT

This article compares two approaches to the reduction of the federal debt/GDP ratio. One approach is to maintain balanced budgets indefinitely and let economic growth determine the rate of decline in the debt/GDP ratio. The other approach is to speed up the fall in the debt/GDP ratio by running budget surpluses and using them to pay down the federal debt. The article compares these two options in terms of their implications for risk premiums, risk of a recession, payments to foreigners, national savings, intergenerational equity, and fiscal drag.

The article finds that the arguments for maintaining an unbalanced federal fiscal structure by running budget surpluses are unconvincing. It concludes that a policy of maintaining balanced budgets indefinitely is preferable in terms of stable growth, high employment, and even intergenerational equity.

* Of the Department of Economics, University of New Brunswick, Fredericton. The author is thankful to Marc Lisac and an anonymous referee for helpful comments.

INTRODUCTION

The federal government has a balanced budget within its grasp and a fiscal structure in place with a built-in tendency to generate surpluses thereafter. Accordingly, it has turned its attention to the question of what to do with the so-called fiscal dividend. This euphemism for a budget surplus suggests that, given the federal tax structure, the federal fiscal restraint plan exceeded the requirements for achieving balanced budgets over the long term. It also reminds us that recent reductions in federal spending and increases in taxation have produced a federal fiscal system that is unbalanced, since it incorporates revenue growth in excess of spending growth. The normal course of action would be to correct the imbalance by reducing revenue, increasing spending, or both. Following Alberta's lead, however, the federal government has adopted another course: running federal surpluses in order to pay down the federal debt.

In adopting this course, the federal government has in effect asked Canadians to continue to make sacrifices, perhaps for a prolonged period, in the hope of improving the living standards of future generations. Canadians have made sacrifices throughout the present decade. First they suffered an excessive tightening of monetary policy. More recently, they have suffered retrenchments in spending by both the federal government and the provinces. Now they are asked to continue to suffer for the sake of reducing the federal debt. The purpose of the first dose of bitter economic medicine was to hold off a perceived threat of inflation and so prevent inflation's potential erosion of economic stability and growth. For the second dose, the official justification was the need to avoid a financial crisis and restore fiscal stability. What is the justification for the third dose? That is the question I shall address in this article.

THE VANISHING DEFICIT

The federal debt is simply the accumulation of federal deficits over time. Its relationship to gross domestic product (GDP) depends on the relative growth rates of the deficit and GDP. If the deficit grows more slowly than GDP, then the deficit/GDP ratio will decline. If the government runs a balanced budget year after year, then the federal debt will stop growing and the debt/GDP ratio will decline steadily. The federal debt/GDP ratio is already falling and will continue to fall as long as the federal government runs balanced budgets. Federal budget surpluses are not needed to reduce the federal debt relative to GDP.

Yet the existing federal fiscal structure will automatically generate surpluses. The reasons why it will do this are not a mystery.¹ The federal government receives more than half of its revenue from the personal income tax. Because the tax has a progressive rate structure, the revenue from the tax

¹ Detailed calculations are found in G.C. Ruggeri, D. Van Wart, G.K. Robertson, and R. Howard, "Vertical Fiscal Imbalance and the Reallocation of Tax Fields in Canada" (June 1993), 19 *Canadian Public Policy* 194-215.

grows more rapidly, on average, than does personal income. For the rest of its revenue requirements, the federal government relies mostly on the goods and services tax (GST) and corporate income taxes. Revenues from these two taxes generally grow at about the same rate as GDP. The net result, then, is that total federal revenues increase somewhat more rapidly than does GDP. This result implies that over the long run the ratio of federal revenues to GDP will increase even without any increase in tax rates. Federal spending, on the other hand, is structured not to grow as rapidly as GDP even in the absence of spending cuts. For example, general administrative costs are largely independent of economic activity, transfers to provinces are set to grow more slowly than GDP if they are to grow at all, and the growth of many transfer payments is retarded by the use of income testing, which claws back the benefits as the income of potential recipients increases. So, whereas federal revenues are structured to grow more rapidly than GDP, federal expenditures are structured to grow more slowly than GDP. The difference between the two built-in growth rates produces a tendency to falling deficits and, eventually, increasing surpluses.

It should be pointed out that this imbalance in the federal fiscal structure was not created by the fiscal restraint plan of the present government. Rather, it was put into place through the taxation and spending policies of the previous government. Given the fiscal structure in place in 1993, the federal deficit would have declined in value and as a ratio to GDP and the federal budget would have been balanced in fiscal year 2002-2003.² Although there is no consensus on the extent to which the current government's fiscal plan has affected the federal fiscal imbalance, economists agree that the current federal fiscal structure will lead to surpluses of considerable magnitude. For example, the Royal Bank's chief economist, John McCallum, forecasts a surplus of \$14.8 billion by 2001 and Wood Gundy's chief economist, Jeffrey Rubin, forecasts a surplus that will rise from \$7.6 billion in fiscal year 1999-2000 to \$16.0 billion in 2001-2002.³

Those who favour fiscal imbalances have justified them to this point as a means of balancing the federal budget and restoring fiscal stability. Their continuation is predicated on a need to reduce the size of the federal debt and its ratio to GDP. I shall argue here that the case for running federal surpluses in order to speed the rate of decline of an already falling debt/GDP ratio is not convincing.

THE DEBT-TO-GDP RATIO: FALLING, BUT HOW FAST?

Since the debt is equal to the accumulated past deficits, its value and its ratio to GDP depend systematically on changes in the deficit. For example, in order for the debt/GDP ratio to remain constant, the amount of debt must increase at the same percentage rate as GDP. For this outcome to

² Ibid., at 201.

³ Quoted in "Canada's New Fiscal Order," *The Globe and Mail*, October 11, 1997.

hold, the deficit must equal the value of the debt times the growth rate of GDP. To put the matter differently, the debt/GDP ratio can be kept constant by maintaining a deficit/GDP ratio equal to the growth of GDP times the debt/GDP ratio.⁴ If fiscal sustainability is defined, as is often done in the literature, as a stable debt/GDP ratio, then fiscal sustainability is consistent with deficit financing as long as it satisfies the above constraint on the deficit/GDP ratio.⁵

Although a constant debt/GDP ratio, whatever its value, identifies a sustainable fiscal structure, one may argue that a low value is preferable to a high one.⁶ In Canada, the federal government has built a fiscal structure that goes beyond fiscal sustainability in terms of a constant debt/GDP ratio; its fiscal structure promises to yield a balanced budget very soon and surpluses thereafter. Maintenance of a balanced budget, let alone surpluses, means that the debt has stopped growing. As long as there is positive economic growth, balanced budgets will lead automatically to a declining debt/GDP ratio. The existing Canadian fiscal structure exceeds the requirements of fiscal sustainability because it yields declining, not constant, debt/GDP ratios. Under balanced budgets, the speed of the decline in the debt/GDP ratio depends entirely on the rate of growth of nominal GDP generated by the combination of real output gains and price level increases. Only prolonged stagnation or deflation would reverse this trend.

Figure 1 shows the path of the debt/GDP ratio under alternative fiscal policies. These alternative paths were derived by using the data in the 1997 federal budget, which projects a balanced budget in 1999-2000, and an average annual growth rate of nominal income of 4 percent (the rate assumed by Scarth). In fact, these assumptions are likely to overstate the value of the debt/GDP ratio, at least over the medium term. Post-budget releases by the Department of Finance indicate that the federal budget is likely to be balanced earlier than the budget documents predict, and nominal GDP is growing at a rate of more than 4 percent.

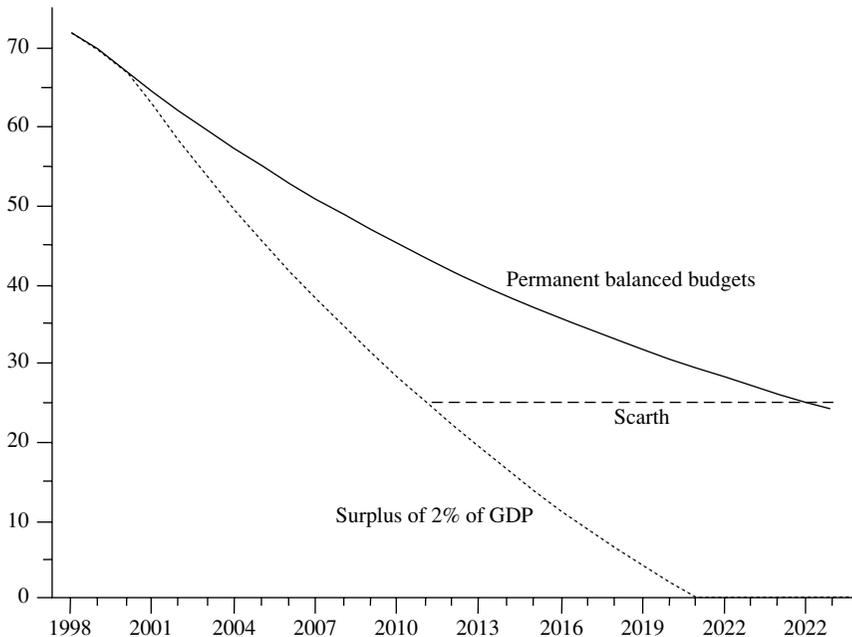
Figure 1 has two important implications. First, as long as budgets are balanced, any increase in GDP will cause the debt/GDP ratio to fall. The rate of fall will increase with the rate of GDP growth, but any positive growth rate will eventually reduce the ratio to zero.

Second, it is not possible to hold the debt/GDP ratio at any arbitrarily set positive level while running balanced budgets. A balanced budget in a context of growing GDP necessarily implies a declining debt/GDP ratio.

⁴ For more details on the relation between deficits and the debt/GDP ratio, see William M. Scarth, "Beyond the Deficit: Generation X and Sustainable Debt" [February 1996], no. 77 *C.D. Howe Institute Commentary* 1-20.

⁵ See, for example, Oliver Blanchard, Jean-Claude Chouraqui, Robert P. Hagemann, and Nicola Sartor, "The Sustainability of Fiscal Policy: New Answers to an Old Question" (Autumn 1990), 15 *OECD Economic Studies* 7-36; and Jocelyn Horne, *Indicators of Fiscal Sustainability*, WP/91/5 (Washington, DC: International Monetary Fund, 1991).

⁶ Scarth, *supra* footnote 4, at 4.

Figure 1 Debt/GDP Ratio Under Alternative Assumptions

Holding this ratio constant, after it starts to decline, requires a deficit. If we dislike deficits, we have no choice but to set the target debt/GDP ratio at zero. Running surpluses speeds the approach to this target in the same manner as does increased economic growth. Pegging a positive debt/GDP ratio and running surpluses will just get us more quickly to the point at which we have to start running deficits again. Thus the debate over the desirability of a budget surplus is not about fiscal sustainability (we have already gone beyond that), but about the size of the federal debt. These points should be kept in mind when the economic effects of debt reduction are evaluated.

The first option, depicted in figure 1 by the solid line, is a policy of running balanced budgets indefinitely. Under this policy, the debt/GDP ratio, which starts at nearly 72 percent in 1997-98, falls below 50 percent in 10 years, to 33 percent in 20 years, and to 25 percent in 27 years.

Alternatively, let us suppose that the federal government indefinitely runs surpluses of 2 percent of GDP. The policy goal is to eliminate the federal debt in a steady manner. In this scenario, represented in figure 1 by the dotted line, the debt/GDP ratio falls more quickly than it does in the balanced-budget scenario. It falls to 50 percent in 6 years, 25 percent in 13 years, and zero after 22 years. Thereafter, if the surpluses continue, the government will accumulate assets, and the resulting asset/GDP ratio may increase over time. This would not be a sustainable situation and would eventually require adjustments to government spending or taxation.

The broken line in figure 1 shows the debt/GDP ratio under William M. Scarth's proposal to run a federal surplus of 2 percent of GDP for 10 years, the time necessary to reduce the debt/GDP ratio to 25 percent, and then to run a deficit of 1 percent of GDP in order to keep the debt/GDP ratio at 25 percent.⁷ Two comments on this proposal are in order here. First, my calculations indicate that it would take 13 years of 2 percent surpluses, not 10 years, to achieve the target debt/GDP ratio. Second, after declining for 13 years—that is, until fiscal year 2011-12—the federal debt would start to increase again. In fiscal year 2025-26, it would be higher under Scarth's proposed scheme than it would be under a permanent balanced budget.

To sum up: sooner or later, the present imbalance in the federal fiscal structure must be corrected through adjustments to either taxation or spending. The alternative approaches to reducing the debt/GDP ratio shown in figure 1 differ only in the timing of the correction. Under the permanent balanced-budget alternative, the correction is immediate. Under Scarth's proposal, the correction is made after 10 years (13 years according to my calculations) of budget surpluses, but it is larger because it involves the running of deficits thereafter. Under the long-term surplus approach, the correction is after 22 years, when the entire federal debt is eliminated. It will do now to consider the economic implications of a reduction in the debt/GDP ratio more rapid than the reduction that would occur under the permanent balanced-budget approach.

WHAT DO WE GET FROM A FASTER REDUCTION IN THE DEBT/GDP RATIO?

Before I discuss the implications of the speed at which the debt/GDP ratio is reduced, let me reiterate the main facts relevant to the analysis:

- The federal budget is headed toward balance and may reach it as early as fiscal year 1998-99.
- The federal debt/GDP ratio is already falling and will continue to fall, given the direction of the federal deficit.
- For the reasons discussed earlier, the federal fiscal structure will generate surpluses before the end of this decade even without reductions in federal spending.

The question, therefore, is no longer whether we can avoid a fiscal crisis or how to reverse the trend toward increasing debt/GDP ratios. These issues have been resolved, and the price has been paid. The unemployed have felt the effects of lower employment insurance benefits, young people looking for work have been frustrated by high unemployment rates, and people on social assistance or in need of health care have shouldered some of the burden of the reductions in provincial spending induced in part by cuts in federal transfer payments. The fundamental fiscal policy

⁷ Scarth, *supra* footnote 4.

issue now is whether the federal government should run balanced budgets and leave it to economic growth to reduce the debt/GDP ratio or whether this reduction should be speeded up by running surpluses and applying the excess funds to the debt until it is either eliminated entirely or reduced to a lower level, such as the 25 percent level suggested by Scarth.⁸ The rest of this article evaluates these two options in terms of their effects on six important economic factors: the risk premium, the risk of recession, payments to foreigners, national savings, intergenerational equity, and fiscal drag. In evaluating the two options, it is important to remember that the economic effects of an increasing debt/GDP ratio are not exactly symmetric with the economic effects of a declining debt/GDP ratio. Consequently, the arguments used in the discussion of the former cannot be applied indiscriminately to the latter.

The Risk Premium

One of the main arguments used against increases in the debt/GDP ratio is that they increase the risk premium that governments must pay on their debt. Macklem, Rose, and Tetlow put the matter as follows:

High debt and deficits . . . create uncertainty, the price of which is reflected in risk premiums. Both casual observation and more formal econometric evidence suggest that the larger government debt and deficits are relative to the size of the tax base, the higher is the real interest rate that governments must pay.⁹

Even if one agrees with these conclusions, which are not universally accepted, the fact remains that increases and reductions in the debt/GDP ratio do not produce symmetric effects. In theory at least, there is no upper limit to the risk premium: the fear of default might be so great that it scares off all potential purchasers of government debt. There is, however, a floor to the risk premium: its value cannot go below zero. Once that floor has been reached, there is nothing to gain from further reductions in the debt/GDP ratio.

One may argue that risk premiums will persist even under fiscal sustainability if the prevailing view is that the constant debt/GDP ratio is too high. A policy of maintaining balanced budgets indefinitely, however, generates declining debt/GDP ratios; under this policy, therefore, the risk premium will eventually disappear. The question is how much more quickly it will disappear given a policy aimed at a speedier reduction in the debt/GDP ratio, and the answer depends on the initial level of the risk premium and its response to changes in the debt/GDP ratio. Assume, for example, that

⁸ One could also consider the option of running deficits that are small enough to produce a steady decline in the debt/GDP ratio. I do not consider this option here on the assumption that Canadians have at present a strong aversion to government deficits.

⁹ Tiff Macklem, David Rose, and Robert Tetlow, "Government Debt and Deficits in Canada: A Macro Simulation Analysis," in William B.P. Robson and William M. Scarth, eds., *Deficit Reduction: What Pain, What Gain?* (Toronto: C.D. Howe Institute, 1994), 231-72, at 249.

the risk premium associated with the current federal debt/GDP ratio of about 72 percent is 50 basis points and that it will fall by 6.6 basis points with each reduction of 1 percentage point in the debt/GDP ratio.¹⁰ Under these assumptions, the risk premium would disappear after four years of balanced budgets and after three years of budgets that produced a surplus equivalent to 2 percent of GDP. The budget surpluses would advance the elimination of the risk premium on government debt by only one year.

In the matter of risk premiums, a distinction must be made between private debt and public debt. In an open economy such as Canada's, public borrowing does not crowd out private investment, since domestic firms can borrow all of the funds they require in the international market at the world interest rate. Any interest premium that a firm may be charged will depend on the riskiness of the firm and not on the government's debt position. The government's debt position may affect borrowing costs in the private sector if the debt/GDP ratio is so high and rising so quickly that it undermines foreign confidence in the whole economy. This argument was used with some validity in the fight against the deficit. It does not hold in a fiscal environment that generates balanced budgets and steady reductions in the debt/GDP ratio. Reducing the debt/GDP ratio more quickly by running budget surpluses will not reduce the cost of borrowing for the private sector.

The Risk of Recession

Another argument for budget surpluses is that they provide a cushion against recession: if the government runs surpluses when the economy is expanding, so the argument goes, it will have the means to mitigate the effects of a future recession. This countercyclical budget policy would not affect the value of the debt over the long term, since surpluses in good years would be offset by deficits in bad years.

Although this argument has its own relevance within the framework of stabilization policy, it is not relevant to the question of how quickly the debt/GDP ratio should be reduced. There are, however, three things to be said about the possibility of a recession that are relevant to this question.

To begin with, there is ample evidence that the US and Canadian economies have stabilized along a moderate non-inflationary growth path. The risk of a private-sector-led recession appears to be quite remote. Given consistently balanced budgets, a future recession would occur in the context of a much-reduced debt/GDP ratio and would not seriously threaten fiscal sustainability.

Second, even given a slowdown in economic growth, under a balanced-budget approach the debt/GDP ratio would continue to fall as long as there was any growth at all. In fact, in this situation the federal government could even run a countercyclical deficit without reversing the decline in the debt/GDP ratio.

¹⁰ This is the value assumed by Macklem, Rose, and Tetlow, *supra* footnote 9, at 252.

Third, the economic instability of the past decade has been largely created by public policy—first by unduly restrictive monetary policy and then by tight fiscal policy. Rather than running surpluses to guard against policy-created rainy days, it would be preferable to avoid the use of destabilizing fiscal and monetary policy.

The federal government has addressed concern about cyclical fluctuations by establishing what amounts to a stabilization fund. That is, it has incorporated a contingency reserve in its annual budget and financed this reserve by running a surplus in the employment insurance (EI) account. The concept of a stabilization fund has theoretical underpinnings in Keynesian economics, and has been used extensively in the Scandinavian countries. Basically, a stabilization fund is created by running surpluses when the economy is operating near or above its potential, as a means of weakening inflationary pressures; during economic downturns, the government uses the accumulated funds to prevent deficit financing or reduce its magnitude. Since the Canadian economy is currently operating below potential, one may reasonably argue that a more urgent concern is the implementation of policies aimed at eliminating the output gap and reducing the rate of unemployment. One might also argue that the existing fund would be financed more equitably through general taxation than through payroll taxes.

Payments to Foreigners

Another argument against government debt is that it makes us poorer in the long run by increasing the share of domestic income that must be paid to foreigners. As the debt/GDP ratio rises, payments to foreigners are likely to increase, for two reasons: (1) if domestic savings do not increase, we must sell more bonds to foreigners, and (2) as we sell more bonds, the risk premium may increase. The federal government should minimize this loss—so the argument goes—by running budget surpluses and reducing the national debt. As I noted earlier, balance budgets would eliminate the second component of this cost in about four years, so there is little to gain in this respect from a speedier reduction in the debt/GDP ratio. As to the first component, it is worth pointing out that Canada has recently become a net creditor. Federal surpluses, by increasing public savings, would increase the net flow of income that arises from our creditor status. We would certainly be better off as a nation, but the results would be the same if foreigners did not own any of our government debt. The real issue, then, is not whether it is desirable to reduce payments to foreigners but whether it is desirable to increase national savings.

Higher National Savings

In the absence of any change in the level of private savings or in provincial budget balances, running federal budget surpluses implies a preference for higher national savings. What does one get from higher national savings? The answer depends on whether we are dealing with a closed economy or an open one.

In a closed economy, domestic savings must equal domestic investment.¹¹ Consequently, any increase in domestic savings will reduce interest rates and stimulate investment until it has absorbed the increased savings. The net result will be an increase in investment, output, income, and living standards. In this case, by collecting revenue in excess of its expenditures, the government forces a reduction in private and total consumption, reduces its net borrowing (which becomes negative), and leaves more funds for financing private investment.

The Canadian economy, however, is essentially a small open economy. In an open economy, the saving and investment decisions are severed, since domestic firms can borrow at the world interest rate any funds that are not available from domestic savings. In this case, increases in national savings will not increase investment and output but will alter the pattern of consumption through time. Total future consumption will increase but at the cost of reduced private and public consumption in the present. When this intertemporal adjustment to consumption is made voluntarily in the private sector, the increase in total consumption is a net gain to society. When it results from compulsory reductions in public consumption, it may have important distributional effects that must be taken into account in determining whether or not society as a whole is better off. Increasing national savings through budgetary adjustments will provide a free lunch to some Canadians—those who gain the most from increases in future consumption and pay the least in terms of reduced current consumption. Other Canadians will have to pick up the tab. In evaluating the costs and benefits of higher national savings achieved through federal surpluses, it is important to know who gets the free lunch and who pays the bill.

Intergenerational Equity

Alternative approaches to the reduction of the debt/GDP ratio have important equity implications, since they affect the distribution of income between generations and among different income groups in a given year. The restoration of intergenerational fiscal balance is one of the main arguments advanced by Scarth¹² in support of running budget surpluses. According to Scarth, the generation that entered the labour force in the 1950s (“the fortunate generation”) benefited from favourable labour markets and, starting in the 1960s, from generous government programs as well. During their working years, thanks to rapid economic growth and their relatively small number, the members of that generation enjoyed rising real incomes. Meanwhile, they accumulated Canada pension plan (CPP) benefits in excess of the value of their contributions, benefited for part of their lives from universal health care, and acquired eligibility for universal pensions under the old age security (OAS) scheme. By contrast, in

¹¹ Jack M. Mintz, “Is There a Future for Capital Income Taxation?” (1994), vol. 42, no. 6 *Canadian Tax Journal* 1469-1503.

¹² *Supra* footnote 4.

Scarth's view, the generation that is now entering the labour force ("generation X") faces less favourable labour market conditions and the prospect of lower living standards and higher taxes. Scarth argues that it is generationally unfair to continue to provide government benefits to the well-to-do members of the fortunate generation while cutting government programs for generation X, which faces a shortage of jobs and higher taxation. The federal government should redress this intergenerational inequity by keeping tax rates unchanged and reducing transfers to the fortunate generation—that is, by running a surplus—for 10 years. When this repayment by the fortunate generation of its excessive economic benefits has reduced the debt/GDP ratio to 25 percent, the government will be able to increase spending and reduce taxes for generation X. In Scarth's words,

the federal government's deficits and debt are being reduced too slowly to permit a significant transfer of living standards back to generation X. What is needed is a more ambitious fiscal retrenchment that ensures that some of the costs of this transfer are borne by those high-income earners who belong to this century's most fortunate generations. . . . The federal government must now move, without delay, beyond its current interim deficit-to-GDP ratio target and, in the interests of intergenerational fairness, ensure that an increasing portion of the spending cuts are made to programs aimed at older Canadians who are at the less needy end of the income scale.¹³

The following discussion takes a closer look at intergenerational issues and government programs aimed at seniors. It suggests that Scarth's emphasis on intergenerational equity in the context of the federal debt may be misplaced.

Postponed Tax Liabilities

As Boadway has pointed out,¹⁴ the public debt should be viewed as accumulated postponed tax liabilities. For several reasons, however, this view of the public debt does not necessarily imply a redistribution of tax liabilities across generations.

Investment in Public Infrastructure

The government expenditures that created the public debt were not entirely in the form of public consumption. They also involved a potentially large investment component. For example, expenditures on physical infrastructure, such as roads and national parks, provide benefits for an extended period and improve the living standards of more than one generation. Even expenditures on protection of persons and property, though usually treated as consumption, provide long-term benefits, since they help to maintain a safe environment for old and young Canadians alike.

¹³ Ibid., at 15.

¹⁴ Robin W. Boadway, "Public Debt: Good or Bad?" (Spring 1992), 5 *Canadian Investment Review* 9-15.

Public Investment in Human Capital

Economists are increasingly stressing the role of human capital as a source of progress and economic growth.¹⁵ This role of human capital, however, is not captured by the national income accounts (NIA). Jorgenson and Fraumeni¹⁶ have estimated that in the United States investment in human capital is almost three times as large as investment in physical capital. Ignoring human capital greatly underestimates the true levels of investment and wealth in the economy and may lead to misguided policies. According to Nordhaus, “[our] tools for measuring saving and investment are stone-age definitions in the information age.”¹⁷ He estimates that when expenditures on human capital are fully taken into account, the “genuine” saving rate (which, in a closed economy, equals the investment rate) is at least three times the conventional rate.

Laroche, Merette, and Ruggeri¹⁸ argue that the shortcomings of the NIA extend to the classification of government spending, which the NIA generally treat as consumption even when it involves a large component of investment in human capital. An example of this misclassification is the treatment as consumption of expenditure on teachers’ salaries, books, and other matters related to education. These authors also argue that this misclassification extends to transfer payments. They suggest that human capital includes not only the acquired knowledge and skills of individuals but also their ability to acquire knowledge and skills. Given this definition, government policies may affect human capital by influencing an individual’s potential as well as the amount of knowledge or skill that he or she actually acquires. Consequently, even what appear to be expenditures undertaken exclusively for redistributive purposes—such as social

¹⁵ Gary S. Becker, “Investment in Human Capital: A Theoretical Analysis” (October 1962), supplement, 70 *Journal of Political Economy* 9-49; Gary S. Becker, *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education* (New York: National Bureau of Economic Research, 1964); Theodore W. Schultz, “Investment in Human Capital” (March 1961), 51 *The American Economic Review* 1-17; Theodore W. Schultz, “Reflections on Investment in Man” (October 1962), supplement, 70 *Journal of Political Economy* 1-8; Jacob Mincer, “Investment in Human Capital and Personal Income Distribution” (August 1958), 66 *Journal of Political Economy* 281-302; Jacob Mincer, “On-the-Job Training: Costs, Returns, and Some Implications” (October 1962), supplement, 70 *Journal of Political Economy* 50-79; Jacob Mincer, *Schooling, Experience, and Earnings* (New York: National Bureau of Economic Research, 1974); Paul M. Romer, “Increasing Returns and Long-Run Growth” (October 1986), 94 *Journal of Political Economy* 1002-37; Paul M. Romer, “Endogenous Technological Change” (October 1990), supplement, 98 *Journal of Political Economy* S71-102; and Robert E. Lucas Jr., “On the Mechanics of Economic Development” (July 1988), 22 *Journal of Monetary Economics* 3-42.

¹⁶ D.W. Jorgenson and B.M. Fraumeni, “The Accumulation of Human and Non-Human Capital, 1948-1984,” in *Investment and Economic Growth*, chapter 5, presented at the Simon Kuznets Lectures, Yale University (1994).

¹⁷ William D. Nordhaus, “Budget Deficits and National Saving” (March-April 1996), 39 *Challenge: The Magazine of Economic Affairs* 45-49, at 48.

¹⁸ M. Laroche, M. Merette, and G.C. Ruggeri, “On the Concept and Dimensions of Human Capital” (mimeograph, Department of Finance, 1997).

assistance payments to single parents, school lunches for needy children, and subsidized day care—may contain some element of investment in human capital and should no longer be classified strictly as consumption.

The definition and measurement of human capital raise a variety of complex issues. Although there is no broad agreement on these issues, it is important to recognize that we can no longer ignore the multifaceted aspect of human capital, especially in the context of knowledge-based economies. We can no longer limit our definition of public expenditures on human capital to direct spending on education and training—and the NIA fail to treat even this expenditure as investment—but must extend it to some portion of public spending on health care and even to the component of transfer payments that improves individuals' ability to acquire knowledge and skills. This view of human capital does not imply, for example, that we would be making a huge investment in human capital if we doubled teachers' salaries. It suggests, however, that we should take a fresh look at how we classify government expenditures and how we evaluate the economic effects of various government programs.

Programs Aimed at Private Savings and Investment

Government activity that provides benefits to more than one generation also includes spending and tax programs aimed at stimulating private investment and enhancing productivity. These programs include direct transfers to businesses, corporate income tax expenditures, and the preferential tax treatment of selected private saving instruments, such as registered retirement saving plans (RRSPs).

The postponed tax liability that arises from borrowing to finance government spending (and tax expenditures) for public infrastructure and human and private investment does not represent an intergenerational shift of tax liabilities from older to younger generations, since the latter participate in the benefits from this spending. These tax liabilities should instead be treated partly as the repayment of a loan provided by society for the benefit of future generations.

Intragenerational Deferral of Taxes

Another portion of the federal debt represents deferred tax liabilities for the current generation from the various tax-assisted saving plans. Plans such as RRSPs provide a tax break on contributions and earnings but at the time of withdrawal impose the deferred income tax on both principal and accumulated earnings. The funds accumulated in RRSP accounts have grown rapidly over the past decade and in 1993 amounted to \$177 billion.¹⁹ Given annual contributions in excess of \$20 billion and the tax-free accumulation of assets, the stock of RRSP assets may approach \$400 billion in 1997. This stock will continue to grow at a rapid rate, given its tax-free

¹⁹ Statistics Canada, *Trusted Pension Funds: Financial Statistics, 1993*, catalogue no. 74-201, 6-7, table A.

accumulation, if contributions continue at least at current levels. If we assume conservatively that RRSP assets attract income tax at the middle federal marginal tax rate of 26 percent, we can estimate the potential federal revenue from their taxation at about \$100 billion or one-sixth of the federal debt in 1997. If we add the portion of the federal debt that represents deferred taxes on tax-assisted saving plans to the portion of the debt associated with public investment in human and physical capital and with public assistance to private investment, the result is a substantial portion of the total debt that does not generate any intergenerational shift of tax burdens.

Cuts in Programs Aimed at Seniors

In evaluating the national debt as a source of intergenerational inequity, it should be noted that government transfers to well-to-do seniors have been drastically reduced during the past decade and are in line for further cuts. Applicants for the OAS are now subject to an income test that eliminates benefits for well-to-do seniors. The proposed seniors' benefit will both further erode OAS benefits and eliminate a number of tax preferences aimed at seniors. This restructuring will effectively confine government assistance to senior households with below-average incomes. It will also eliminate for middle-income Canadians the benefits of tax-sheltered saving plans, since the combination of statutory personal income tax rates and clawback rates on the seniors' benefit will produce very high marginal tax rates. Some of the provinces too, following an example set by Alberta, have reduced public benefits for middle- and high-income seniors by consolidating and strictly targeting their financial assistance to seniors.

Thus the current fiscal structure, including the proposed seniors' benefit, will at once reduce the public benefits that middle- and high-income seniors receive and generate ever more public revenue as seniors withdraw tax-sheltered assets and pay the deferred income tax. The notion that seniors will become an increasingly heavier burden on society because of their above-average health care needs may be exaggerated, since it does not take into consideration the increasing taxable wealth of seniors. The intergenerational transfer of government benefits from current to future generations advocated by Scarth may already be taking place.

Private Intergenerational Transfers

Measures of intergenerational equity must also take into account private transfers of income and wealth from older to younger generations. One mechanism for intergenerational transfers is the so-called Ricardian equivalence. Through this mechanism, older generations provide compensation in the form of appropriately calculated bequests for the higher tax burden that debt financing will impose on younger generations. Some private and voluntary intergenerational redistribution takes place even in the absence of Ricardian equivalence. Individuals save not only for the purpose of smoothing lifetime consumption, but also as a precaution against unforeseen needs. Since lifespans are uncertain, some portion of precautionary

savings will never be spent; instead, they will become unplanned bequests. Finally, future generations will face lower, not higher, tax rates because of the current federal tax structure's built-in tendency toward surpluses. Evidence that taxes are likely to be lower in the future is provided by the promises to cut taxes that three of the major political parties made during the recent federal election campaign. The promised cuts varied from party to party in timing and magnitude, but the general commitment was the same in all three cases.

In conclusion, it is not necessarily true that the fortunate generation will consume all of its private income while enjoying generous and unearned benefits from government programs, leaving subsequent generations to face higher taxes and lower living standards. This conclusion, of course, does not imply that we should ignore the issue of intergenerational equity. Rather, it suggests that this issue is more complex than it may appear to be at first glance and should be evaluated in all of its dimensions.

Scarth's concern about the bleak employment prospects for young workers and the fact that they are bearing a heavy burden in the fight against deficits raises a different set of policy issues. The solution to the plight of young workers, however, is not the maintenance of high taxes in order to generate a surplus with which to provide better days in the future. They need jobs now, not the promise of job opportunities in the future. It seems to me that macroeconomic policy has three main objectives: price stability, fiscal sustainability, and the combination of high employment and stable growth. The first two objectives have been met; the third remains elusive, perhaps because it has been subordinated to the first two. The existence of an unbalanced federal fiscal structure with a built-in tendency to generate budget surpluses in the near future does create an opportunity to address the employment problem without jeopardizing either price stability or fiscal sustainability. Yet if we are truly concerned about high rates of unemployment in general and lack of employment for young workers in particular, there is a simpler, more effective, and more direct solution to the problem than that of running budget surpluses. The federal government could, instead, reduce payroll taxes in order to stimulate employment and pursue joint agreements with the private sector to promote the provision of work experience for young people in general and not just those who are currently collecting EI benefits. This program would rebalance the federal fiscal structure, stimulate employment and growth, and reduce intergenerational inequities without inflicting additional pain on Canadians.

Fiscal Drag

Proposals that favour budget surpluses often fail to mention the negative economic effects of surpluses. If a government is running budget surpluses, then it is collecting in taxes more than it spends. Any excess of taxation over spending not only reduces the living standards of current generations but also exerts a fiscal drag on the economy. The lower private or public spending associated with the surplus reduces aggregate demand and prevents the economy from growing along its potential path.

The reduced GDP level, in turn, slows down the fall in the debt/GDP ratio. The effects of this fiscal drag may extend far beyond the period in which the government runs surpluses if the reduced demand for labour and for goods and services depresses the capital stock and the usable skill level of the work force. Moreover, since the negative effects of budget surpluses would not be shared equally by all Canadians, surpluses raise equity concerns as well. Any full comparison of the alternative claims of budget surpluses and balanced budgets as means to reduce the debt/GDP ratio must take all of these costs into account.

CONCLUSION

This article has evaluated the major arguments for running federal budget surpluses in order to reduce the debt/GDP ratio more quickly than it would be reduced under a policy of permanent balanced budgets. It has analyzed the case for budget surpluses in relation to risk premiums, risk of a recession, payments to foreigners, national savings, intergenerational equity, and fiscal drag. This analysis has found none of the arguments for maintaining an unbalanced federal fiscal structure by running surpluses to be convincing. In my view, targeting fiscal policy to the maintenance of balanced budgets over the long term has important advantages over running budget surpluses: it avoids fiscal drag and its negative impact on output and equity, promotes higher employment and stable economic growth, and automatically generates a steady decline in the debt/GDP ratio. It is even preferable to the policy of running surpluses in terms of its effect on intergenerational equity.

I have also suggested that debt reduction and the so-called fiscal dividend are separate issues. The fact that the federal government will soon be faced with a fiscal dividend—a surplus—implies the existence of structural imbalances in the federal fiscal system. Redressing these imbalances would involve adjustments to taxes and spending in order to maintain a balanced budget through time. The issue of debt reduction has to do primarily with questions about the appropriate size and role of government. It should be debated separately. As to the various proposals to run federal surpluses for the purpose of speeding the decline in the debt/GDP ratio, the following fundamental question should be addressed: Why should Canadians accept the continuation of high unemployment rates in order to accelerate the decline in the debt/GDP ratio when this ratio will fall steadily through a policy that can combine lower tax rates, improved public services, balanced budgets, and higher employment?