FOCUS

ON BALANCING THE BUDGET

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THE FRASER INSTITUTE

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BALANCING THE BUDGET

I. INTRODUCTION

The recent financial activities of the federal government and some of the provinces has once again directed public attention to public sector deficits. That fact notwithstanding, there is not yet a move afoot in Canada, as there is in the United States, to make legislative or constitutional provision for a balanced budget. Nevertheless, many Canadians are concerned about the proclivity of governments to incur deficits. In our view, the time has come to seriously consider some form of legislative or at least political commitment to the notion of a balanced budget.

Of course, the concept of a balanced budget raises some fundamental economic issues. On the one hand there is the view that a balanced budget commitment would reduce government flexibility in conducting its affairs according to the economic circumstances. Deficits, it is argued, have to be used to offset economic recession and commitment to balancing the budget would eliminate this tool of economic policy. On the other hand, it is argued, commitment to a balanced budget is an essential aspect of fiscal responsibility on the part of government; the democratic process requires it; and failure to achieve it has grievous long-term consequences for the economy.

Some observers, on an entirely different plane, while acknowledging the importance in principle of a balanced budget, maintain that in practice it is simply not possible.

Yet another body of opinion maintains that while the fiscal responsibility objectives of the balanced budget princi-

ple are laudable, they are unlikely to be achieved by such a commitment. The point of this objection is that the budget may be balanced at a level of expenditure on the part of the government which itself is not in keeping with economic prosperity. Thus, for example, a budget could be balanced with the government absorbing 10 or 90 per cent of the Gross National Product. Those who demand fiscal responsibility from government would presumably be less attracted to the latter outcome than the former but a balanced budget is ambivalent between these two extremes.

The purpose of this paper is to examine the concept of a balanced budget and to provide some practical suggestions for achieving it. It is not anticipated that this will be the last word on the subject but rather that it will be a target piece to better focus discussion of this critical issue. In order to limit the scope of the paper, only the Canadian federal budget is examined. However, the principles and analysis could be applied equally well to provincial or municipal finances.

II. THE FEDERAL DEFICIT - HISTORICAL PERSPECTIVE

Budget balance the rule

Charts 1A and 1B provide a graphic overview of the Canadian federal government deficit in the interval 1926 to 1981. Chart 1A represents the deficit in nominal terms, that is to say in dollars of the year in which the deficit was incurred. Chart 1B adjusts the deficit numbers for inflation so that all of the deficits for each year are presented in dollars of 1971 value.

CHART 1A

FEDERAL DEFICIT

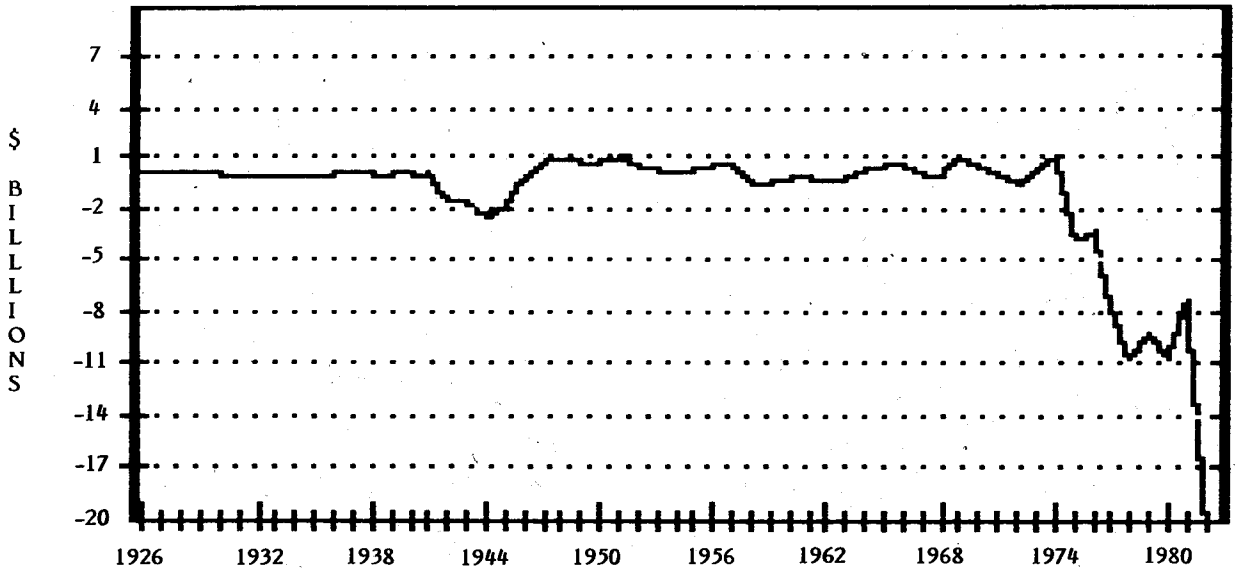
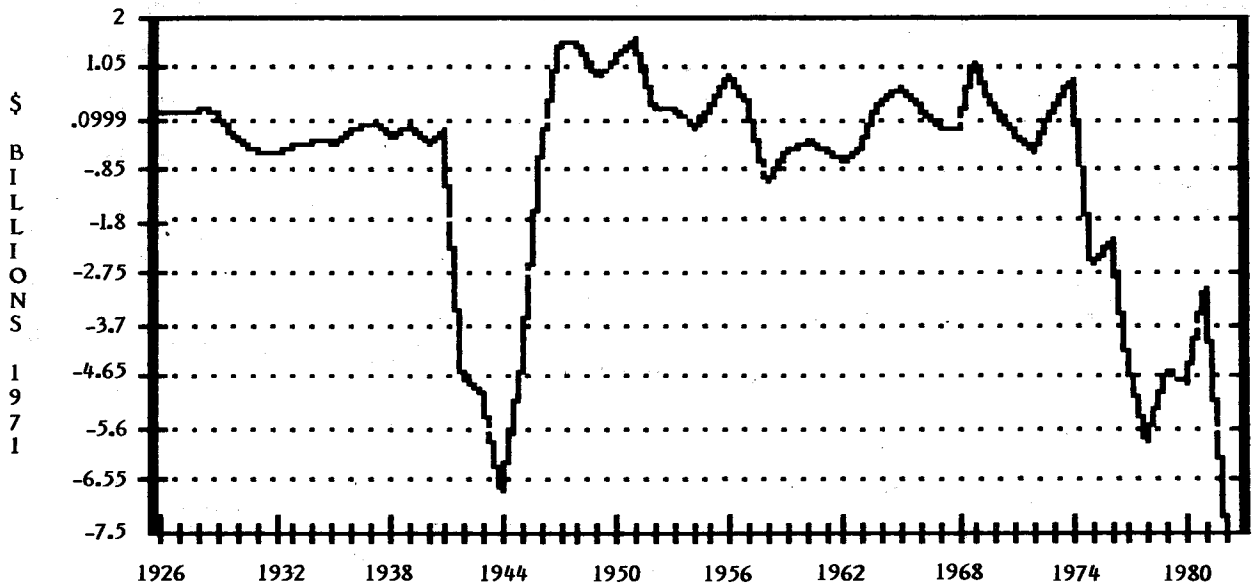


CHART 1B

INFLATION ADJUSTED DEFICIT



It is clear from the charts that Canada has experienced two periods of major deficits at the federal government level. This first of these was the war period, 1940-1945, and the second is a period commencing in 1974 and which has extended more or less to the present time.

Other than for these two major episodes, the general impression seems to be that, although there were deficits in some years and surpluses in others, there was no consistent tendency for either deficits or surpluses to predominate. In fact, considering the period from 1926 to 1974 there was no distinct period of time during which the federal government ran a consistent deficit other than in association with the waging of war or as in the period around 1932, to maintain expenditures in the face of falling revenues occasioned by the Great Depression.

The old idea of budget balance

While one can offer a number of explanations as to why government behaviour changed in 1974, one of the most likely is the different attitude towards deficits before and after. Certainly before 1940, the general public believed that governments should aim to balance their budgets. The balanced budget regime which is common in family finances was thus reflected in the operations of government. As James Buchanan and Richard E. Wagner point out in a recent book on the subject,

> Textbooks and treatises embodied the non-controverted principle that public budgets should be in balance. C.F. Bastable one of the leading public finance scholars of the late 19th and early 20th centuries in commenting on The Relation of Expenditure and Receipts, suggested 'that under normal conditions, there ought to be a balance between these two sides (expenditure and revenue) of financial activity. Outlay should not exceed income, ...tax revenue ought to be kept up to the amount required to defray expenses.'[1]

A survey of the balanced budget principle conducted by Jesse Berkhead in the Quarterly Journal of Economics in May 1954 leaves no doubt that the prevailing intellectual viewpoint had been to unambiguously support the notion of budget balance.

Reasons for balancing the budget

Aside from the Adam Smith insight that "what is prudence in the conduct of every private family, can scarcely be folly in that of a great kingdom," there were two reasons advanced for supporting a balanced budget. The first was the very commonsense notion that the failure to achieve budgetary balance meant that current expenditures would be financed at the expense of future generations because of the liability, in the form of government debt, which they would inherit from current generations. Aspects of equity and concern about the legacy which this would provide to the future generally inhibited governments from incurring deficits.

The second argument, advanced by the Swedish economist Knut Wicksell as early as 1890, was that if governments ran deficits then citizens were not being given clear information about the costs and benefits of programs which they were being asked to support electorally. Informed choice required a direct knowledge of both the costs and benefits of a proposed expenditure. To the extent that the cost could be transferred to a subsequent generation, citizens would select more government expenditure than they would if they themselves had to bear the true costs.

Although these ideas and other attitudes about the role of government created a general climate in which a balanced budget was mandatory, there were instances of deficit as have been noted. However, the expedient of a budgetary deficit was generally reserved for periods of war or depression when the costs of not incurring the deficit were manifestly larger than the costs which the deficit would impose upon the democratic process and upon the economy.

Neither was this historic commitment to a balanced budget as naive as many modern commentators suggest. For

example, Bastable in his commentary on the subject indicated,

> This general principle must, however, admit of modifications. Temporary deficits and surpluses cannot be avoided ...All that can be claimed is a substantial approach to a balance in the two sides of the account. The safest rule for practise is that which lays down the expediency of estimating for a moderate surplus, by which the possibility of a deficit will be reduced to a minimum.[2]

So there was understanding that this balanced budgeting process was an imprecise one and was more a commitment to a principle and to a kind of fiscal morality than it was to any sort of blind-eyed fiscal bean counting.

The Keynesian revolution

During the 1930s there was a revolution in intellectual circles about the role of government and in particular about the role of fiscal finance in the economy. John Maynard Keynes developed what he called a new theory of how the economy operated. In the context of this new theory, the role of government was perceived to be very different. The new idea was that government had the ability via its expenditure and taxation policies to influence the overall level of economic activity and therefore in times of economic distress, had an obligation to intervene in this way. Of course, this would mean from time to time that the government would have to run a deficit.

Balance the economy - not the budget

The change in attitude on the part of intellectuals can be found in a typical Principles of Public Finance text in the early 1950s. Hugh Dalton writing in 1954 said,

> The new approach to budgetary policy owes more to Keynes than to any other man. Thus it is just that we should speak of 'the Keynesian revolution.'...We may now free ourselves from the old and narrow conception of balancing the budget, no matter over what period, and move towards the new and wider conception of balancing the whole economy.[3]

The new Keynesian view of the world was that the level of the government's deficit ought to be regarded as a kind of flywheel for the economy; a balancing or counter cyclical element in the system which would quicken the economy during periods of economic depression and slow it down during periods of excessive economic momentum. In one brilliant stroke of rhetoric, Keynes destroyed the notion that the deficit be regarded as an indicator of fiscal prudence and elevated expenditure excess to the stature of a virtue.

As with any system of ideas, it takes time for change to occur. The new Keynesian insights did not truly change the attitude of the policy establishment until well after the Second World War. There is evidence to suggest that the Keynesian revolution in policy terms did not really begin in the United States, for example, until 1960.[4] The exact time when it became operative in Canada is difficult to pinpoint, nor is the precise timing critical to our current concerns. What is clear is that at some point during the course of the post-war era, the notion that the federal government budget ought to be used as a counter-cyclical economic device became thoroughly entrenched.

This notion was based on the proposition that government would be neither consistently in deficit nor consistently in surplus. Rather, the budget balance would be determined by the exigencies of the moment. And during the period 1945 to 1974 the Canadian historical record is roughly consistent with that notion. There were years of surplus and years of deficit -- but no distinct tendency toward either surpluses or deficits emerged. And, as long as the principal objective in

running a surplus or deficit was technical adjustment to the economic process, the fact that the old time religion of budget balance was no longer being adhered to, did not create too many difficulties. In fact, one might suggest that the philosophy of budget balance was not really rejected, rather balance was interpreted to cover a business cycle of 5 to 10 years, instead of being applied on an annual basis.

III. THE POLITICS OF BUDGET DEFICIT

However, the Canadian economist Harry G. Johnson noted an interesting point during the mid-1970s. He said that there was another item in governmental agendas which was transforming the loss of this fiscal religion into a great governmental mischief. Johnson's insight was based on the thought that governments are first of all political institutions and only secondarily economic institutions. And, the art of governmental politics is the art of redistribution. Since governments do not create wealth in any real sense, the way in which they curry electoral favour with specific constituencies is to award them benefits which are, in one way or another, extracted from other members of the electorate.[5]

This redistributional basis of modern politics arises from the fact that the general cost to the average taxpayer of a benefit conferred on a specific group may be quite small, and therefore politically acceptable. For example, it may only cost the average taxpayer a few cents to provide a relatively large subsidy or other benefit to a particular sector or region of the country. Moreover, it may be that many individuals may perceive that, although they are paying now, in the future they will benefit from the same sort of program. This is the case, for example, in programs like retirement pensions provided by government. To some extent it is also true of medical care and other government expenditure programs.

Taxpayer resistance and the rise of chronic deficits

However, at some point taxpayers resist the further extension of taxation to pay for programs -- even those which they themselves might benefit from in some future period. In reaction to this, governments begin to run deficits since deficits provide the opportunity to expand current expenditures with no taxpayer backlash. As long as taxpayers are unaware of the tax costs which they will have to bear in the future, as a result of the deficit, they may well agree to a deficit financed expenditure program which otherwise they would reject.

Surpluses are not politically popular

Clearly, increases in expenditures which create private benefit in the right constituencies will increase the chance of political incumbents being re-elected. Increases in taxation, on the other hand, will make it more difficult for political incumbents to be re-elected. There is, therefore, a natural tendency for political interests to bias the governmental fiscal process toward deficit rather than toward either budget balance or toward surplus.

A perennial problem

Of course, this proclivity of governments to use the public purse as a political device always existed -- politics has been relatively unchanged for many centuries in that sense. However, as long as the old time fiscal belief of balanced budgets was the general religion of the electorate, the route of deficit finance for political purposes was effectively closed off. The singular importance of the Keynesian revolution in this regard was that politicians could now claim that budget deficits had an inherent economic rationale and indeed a compelling morality about them. As long as the economy was "below its potential" it could be said the government was pursuing the nation's interest in incurring budgetary deficits.

While it may be too early to tell, the history of federal government finances since 1974 provides some evidence that Harry Johnson's conception of the budgetary process is well underway. This possibility behooves us to reconsider the modern wisdom of the Keynesian attitude toward the budget and to consider alternatives which may once again return the budget to the economic sphere. In this way, we may possibly remove the temptation from politicans to use it in a perverse way.

IV. THE MECHANICS OF A DEFICIT

What does budgetary balance mean exactly?

A budgetary balance is said to exist when total government expenditures precisely equal total government revenues. From the point of view of actual practice, a budgetary balance implies that in planning its expenditures and revenues a government must ensure that there will be enough revenue to cover its anticipated expenditures. This implies that governments must forecast their revenues, forecast their expenditures, and adjust expenditures and/or revenues to ensure that in prospect, they will be equal.

The family budget versus the nation's

In other words, there is little difference between the notion of a balanced budget for government and at the level of the individual household. There is, however, one fundamental difference. This relates to the ease with which expenditures and revenues can be forecast. In the case of an individual household it is relatively easy to forecast what revenues the household will have. It is also relatively easy to control the expenditures which the household will incur (although many readers may be inclined to dispute this point). In the case of governments neither of these things is true.

Government revenues difficult to forecast

First of all, it is much more difficult for governments to estimate revenues. They depend not only on the rates of tax which are levied by government but also on the extent to which the economy as a whole produces revenue, and the extent to which consumers buy commodities which are taxed by government. Thus, for example, if government levies a tax on cigarettes and during the course of the year cigarette consumption falls dramatically, then the revenue to government from that source will decline. Similarly, the revenue from personal income taxation and corporate profit taxation fluctuates with the ebb and flow of the economy. Accordingly, the government's ability to forecast its revenues will reflect its inability to forecast the movements of the economy precisely.

Expenditures difficult to control

On the expenditure side, there is also a greater degree of imprecision at the governmental level. This arises both because the exact level of expenditures associated with any given program may be difficult to forecast and also because once expenditure commitments have been made they are difficult to rescind. Thus, for example, a government committing itself to a program of retirement pensions or to a medical care program cannot know in advance what that program will cost in precise terms during the course of a given year. The cost of the program is determined by how many people take advantage of it, something which will fluctuate, as can easily be seen in the case of health care and unemployment insurance.

The budget tendency

Combining this expenditure uncertainty with the difficulty of forecasting revenues precisely means that in general it would be unusual if the budget were in fact to balance exactly.

However, certain tendencies can be clearly perceived. During years when the economy is generally expanding the expectation will be for surpluses to emerge as revenue growth proves to be stronger than projected. And expenditure growth, in the form of unemployment insurance benefits and other cyclically related expenditures, will tend to be less than projected. On the other hand, during bad years revenues will tend to be less than anticipated while expenditures will tend to be more. Hence a deficit will begin to emerge. The commitment to budgetary balance does not imply that there will be no surpluses or deficits but rather that once a tendency in either direction has been identified, corrective action will be taken. That is to say, a commitment to a balanced budget is a commitment to either raise taxes or reduce expenditures to combat deficits or reduce taxes or increase expenditures to eliminate surpluses.

What a budgetary balance does not mean

Evidently a balanced budget principle does not imply anything about the level of expenditure or its rate of growth or the level of taxation or its rate of growth. It is not a panacea for those who see the government sector is too large or the burdens of taxation too heavy. In order to achieve specific objectives related to expenditures or taxation, the supporters of such objectives would have to, in addition, insist on some limitation on expenditures and some limitation on taxation. However, as will be outlined in a following section, the principle of budgetary balance may reduce the rate of growth in government expenditure simply because of the way in which a budget balance mechanism would have to be implemented in actual practice.

V. THE IMPLICATIONS OF FAILING TO ACHIEVE BUDGET BALANCE

Two options for covering the deficit

Like the household, whenever expenditures exceed revenues, the government has two options. One is to borrow to cover these expenditures, the other is to print or create the money to pay for them. The only difference of course is that if the household selects the option of printing money, government regards this as the crime of counterfeiting. If the government decides to borrow to cover the excess of expenditures over revenue, then it will typically issue some sort of security to accomplish this. That is to say it will issue Canada Savings Bonds, Treasury Bills, or some form of government bond. In order to secure the spending power it wants, government offers an interest rate on these securities sufficient to attract private savings away from other potential users of those private savings.

Deficits crowd out private borrowers, raise interest rates

An example will help to illustrate this process. Suppose the following:

- in any given year the amount of savings and of investment in the private sector was $25 billion
- this amount of saving and investing was conducted on the basis of an interest rate which averaged 15 per cent
- the government at that point had no deficit and hence was not a net demander of private savings.

At this point the government finds it will incur a deficit of $10 billion and seeks to "finance" this shortfall by issuing bonds. In effect, this $10 billion requirement of the government is now added to the total private borrowing requirement of $25 billion. Since there is only $25 billion worth of savings, something has to happen.

In the first instance, the government will find that it will not be able to borrow the money it requires at the existing rate of interest. On the contrary it will find that in order to raise the $10 billion it will have to raise the interest rate which it offers to make savings more attractive. Secondly it must convince at least some private borrowers to leave the market. In other words, the government creates a situation of excess demand which causes interest rates to rise and some private borrowers to do without, in order to make room for government.

Let us suppose that interest rates rise to 17 per cent and that the higher rate of return causes an additional $3 billion in savings. The total supply of savings is now $28 billion, the total demand by the government is $10 billion. From the point of view of potential borrowers, while there was $25 billion worth of demand for investment capital at a rate of interest of 15 per cent, perhaps at 17 per cent there would be less demand. Indeed, if the government is to successfully finance its deficit the amount of private demand will have to have declined by at least $7 billion -- the difference between the amount by which saving increased ($3 billion) and the government's total requirement (10 billion). In other words, in order to finance its own expenditures the government will have "crowded out" an amount of private borrowing equal to $7 billion. Of course, the other possibility is that the borrowing will be done outside Canada. In this case, as interest rates rise the supply of savings will respond more flexibly via international capital flows, as lenders from other countries respond to the higher Canadian interest rates.

High interest rates turn on the printing press

The example we have used assumes a relatively modest increase in interest rates. But it may well be that the government's deficit is so large relative to the supply of private savings that a much larger increase in interest rates will be necessary in order to sufficiently crowd out private investment and/or increase private savings. If the interest

rate implied by such activity is (politically) too high, the government may be induced to resort to an alternative way of paying for its expenditures, namely by printing money.

Monetizing the deficit

If the money printing route is selected then obviously there need be no immediate reduction in private borrowing. For government simply expands the supply of loanable funds available by increasing the quantity of money. In actual practice, the creation of money to finance government expenditures also involves the issuance of debt, except that the debt is purchased not by savers in the community but rather by the central bank --The Bank of Canada -- and by the chartered banks who are provided with the reserves necessary to support their bond purchases by the Bank of Canada. In other words, in the real world of finance a government deficit financed by creating money involves the use of the central bank and the banking system to purchase government bonds. Accordingly, the process of selling bonds to the banking system in this way is described as "debt monetization," because it involves the conversion of government debt into money through the mechanism of the Bank of Canada and the chartered banking system.

It is worth noting that the connection between the government deficit and the printing of money is not an automatic one. There is no necessary connection between a budget deficit and the supply of money. The government can, in the first instance, decide to raise the money it needs via bonds sold to the general public. In this case, there is no necessary effect on the money supply. Conversely, with no change in the government deficit situation the Bank of Canada can cause an increase in the money supply by purchasing government bonds held by the general public.

Inflation proneness

While it is clearly the case that a deficit financed by money creation would create additional inflationary pressures, it is often not acknowledged that bond financing can pre-dispose the economy in the same direction. The reason is that the Bank of Canada -- even if formally independent of the government -- adjusts its policies in the light of ongoing economic affairs. And, even if the Bank of Canada does not directly set out to monetize the debt it may find that in the presence of aggressive bond sales by the government, it is led by circumstances to cause the money supply to rise faster than otherwise it would have. As we have noted above, this is likely to be true if the Bank of Canada has particular interest rate targets and the government's bond sales are causing interest rates to exceed the targets. In other words, the Bank of Canada may cause part of the debt to be effectively monetized as a by-product of its attempts to "stabilize" interest rates.

The evidence suggests that in the period since 1976, at least some of the government's debt was monetized in this indirect way. In spite of the fact that the federal government was placing increasing pressure on bond markets during the period, real interest rates on government bonds (the interest rate minus the inflation rate) averaged only about one and a half per cent and in several years were less than one per cent. The reason real interest rates were so low was that the supply of loanable funds was boosted by expansionary monetary policy.

As the bond issues of the next few years begin to have their effect on bond markets, the Bank of Canada will, if past behaviour is a guide, find itself accommodating the requirements of the government and, perhaps unwittingly, increasing the money supply at too fast a rate. The consequence will be increased inflationary pressure.

How printing money crowds out private spending

By issuing debt a government secures command over goods and services by convincing some individual or group in society to give up its purchasing power in order to buy government bonds. It is less clear how the government gets access to real purchasing power in the case where debt monetization or printing of money is used. The answer, of course, is that government acquires real purchasing power when it increases the supply of money because it reduces the purchasing power of the money already outstanding. If, to finance its $10 billion expenditure requirement, the government were to issue, via the banking system, an increase of $10 billion in the money supply, and if there were no change in the total supply of goods and services available in the economy, then the value of all existing money is reduced. That is to say, there will be inflation roughly equivalent to the increased quantity of money. Since citizens, in the first instance, do not recognize the declining value of their currency, they treat the new addition to the money supply as worth just as much as their present holdings.

Effects of deficit - deep and long lasting

The consequences of government deficits, therefore, depend on how the government chooses to finance the shortfall. If it creates an excessive money supply, it will promote inflation. If it opts for the alternative of issuing debt (borrowing), it will raise interest rates above the level they would otherwise have achieved and, in the process, crowd out private expenditures. The consequences of the latter effect are likely to be deep and long lasting. The reason is because of the nature of private and public expenditures.

For the most part, private expenditure financed by savings is investment; that is to say, expenditures used to increase the stock of productive capital either in the business or household sectors. Government expenditure, on the other hand, is for the most part made up of current consumption,

that is to say, payments for goods and services which are consumed during the current year. As a consequence, the normal crowding out which occurs when governments run a deficit causes the economy to allocate more of its savings, more of its resources, to current consumption and less to long-term productive capital investment. In turn, the economy is rendered less productive in the future than it would otherwise have been. Even in those instances where government itself spends for the long run, evidence suggests that these investments are likely to be less productive than comparable investments made in the private sector.

To put the point bluntly, savings used by government this year to pay for the activities of the Secretary of State, for example, are obviously of less value in stimulating the economy than money used to build a new plant or to open a new mine or to expand the productive capacity of an existing plant or mine. When one considers that in many instances people may be disemployed by the failure of private investment to materialize because it has been crowded out by some governmental expenditure on current services, the interpretation of deficit-financed expenditures on unemployment insurance benefits becomes an invidious one indeed. That is to say, it is not beyond the realm of possibility that increased expenditures on, say, medical benefits produce a government deficit which, to be financed, crowds out some private investment project which in turn causes more people in the private sector to be unemployed which in turn necessitates more expenditures on unemployment insurance.[6]

VI. PUTTING OFF THE EVIL DAY— THE ARITHMETIC OF TAX DEFERRAL

Deficit finance and tax deferral

In discussing the financing of the deficit, we indicated that the government can cover a budgetary shortfall either by issuing bonds or by printing money. When we speak of government deficits we conventionally say that government is financing the deficit in this way. But this is really an imprecise use of language. The issuing of bonds does not finance the spending of government in any meaningful sense. It is true that creating money finances government activities. It is also true that a government can finance its activities by levying taxes. But, ultimately, these are the only financial resources available to the government. When a government issues a bond, it merely defers taxes or the printing of money. In the end, the deficit must be paid for either by taxing or money creation.

For this reason it is most useful to regard government deficits simply as deferred taxes.[7] Once we regard bonds as a method of deferral a number of interesting facts come to light. One of these is the relationship between deficits, tax deferral, and interest rates.

Interest rates and tax deferral

In the days when governments could sell bonds yielding five per cent, "financing" the deficit by issuing bonds would defer the tax burden for about 63 years. That is, a deficit incurred in any particular year could be financed by issuing a bond; in subsequent years, the interest could be paid by issuing more bonds so that the actual tax burden of the deficit could be pushed far into the future. By the end of 63 years the accumulated interest on the original bond and all the bonds issued to pay the interest would amount to the initial deficit. In other words, because of the "compounding" of interest, the

total interest payments steadily increase until it equals the original deficit.

The situation changes dramatically when interest rates change. For example, currently one-year Government of Canada Bonds are fetching about 13.5 per cent in the marketplace. At this rate of interest, the period of deferral is reduced to about 16 years. That is, looking at the current $20 billion deficit, for example, if all of it and the interest payments associated with it are financed at 13.5 per cent, by mid-year 1998 the government of the day will be faced by a further financing requirement of $20 billion just to pay the interest on the debt associated with the original deficit. If government bonds yielded 16 per cent the deferral period would drop to about 12 years. At 20 per cent, a rate predicted for the not too distant future by some observers, the deferral period drops to less than nine years. (Table 1)

Table 1

THE TAX DEFERRAL PERIOD AT VARYING RATES OF INTEREST

Interest Rate Per Cent	Number of Years Into Future Deficit Is Deferred
5.	63
10.	24
13.5	16
16.	12
20.	9

This table is derived by calculating how long it would take for interest payments to equal the initial amount of a loan if all interest payments were financed by new loans.

The relationship between interest rates and deferral can be most clearly seen in the case where interest rates are 100 per cent. If interest rates were 100 per cent, the interest charge on the deficit would equal the deficit in one year. Therefore, the deferral period would be eliminated and the relationship between expenditures and taxpayer liability more easily observed.

Tax deferral and the public debt

The consequences of tax deferral for the size of the public debt are truly staggering. If the current deficit of $20 billion is financed in the way described at 13.5 per cent, for example, the public debt will be augmented by $151 billion by the time the deferral runs out in 1998. And, that increase in the nation's debt will be for this year's deficit alone.

One-year bonds are used in the example because the bulk of the federal government's obligations are of very short term. Two-thirds of them are treasury bills or Canada Savings bonds, both of which have potential maturities of less than one year. The assumption that the interest on the debt will be financed by further borrowing rather than taxes is based on the fact that this is the current practice of the federal government. For example, government revenues are projected to amount to $70.8 billion for 1982. Total outlays excluding public debt charges will amount to $72.9 billion over the same period. So, the government is not currently collecting enough revenue to pay for total expenditures excluding interest. This means that interest payments are being made with borrowed money. In terms of the household budget, this is like borrowing money to take a holiday and then borrowing money to pay the interest on the loan.

The factors causing current debt charges to rise

Lest the reader think these calculations a touch academic, it is important to note that these factors are responsible for the

dramatic increase in the fraction of total government spending devoted to interest payments. In 1982-83 it is anticipated that $17.7 billion will be spent to pay the interest on outstanding government debt. This represents 25¢ of each dollar of government revenue.

The budgetary squeeze

There are dire consequences of this which are often ignored. One is the pressure which it imposes on the budgetary framework itself. Rising population and expectation levels place tremendous pressure on governments to deliver an ever-increasing quality and quantity of public services. And, as we have indicated, because of the political dimension of economic policy, governments very often respond to the pressures. However, their capacity to respond to even the legitimate needs of taxpayers and citizens is put under pressure from the rising costs of past deferred taxes. Money which must be allocated in this year's budget to pay the interest charges on deferred taxes from previous years is not available to provide needed programs and benefits during the current year. And, as we have just seen, this dead weight cost, which produces no current benefit, currently amounts to 25 per cent of total government revenue. As the fraction of total revenue devoted to interest payments increases, it will squeeze out current benefits and programs or it will create even greater pressure for budgetary deficits of the sort that we have seen accumulating in the period since 1975.

VII. THE REASONS FOR DEFICITS AND TAX DEFERRAL

In light of the foregoing, it seems reasonable to view the government financing decision as choosing between taxes today and taxes in some future period (or money supply expansion today and money supply expansion in some future period). And, given the electorate's proclivity to regard

taxes with a jaundiced eye, it is understandable that governments often find taxes in some future period more attractive than current taxes. This is particularly true as long as interest rates permit deferral of taxes well beyond the natural life of a government.

How much would taxes have to increase to eliminate the deficit?

What are the tax consequences of deferral in the present circumstances? That is, how would existing taxes be affected if 22 per cent of the cost of current expenditures (i.e., the current deficit) was not deferred? Assuming that all tax increases would be borne by residents, the federal tax bill of the average Canadian would have to increase by 31.98 per cent. (1982-83 tax collections are anticipated to be $61.897 billion -- the increase necessary to eliminate the deficit is $19.800 billion.)[8]

Deferred taxes are hidden taxes

From the point of view of the average taxpayer, deficit "financing" amounts to hidden taxation since the tax liability which is deferred is not immediately obvious - nor even obvious after some deliberation. The result is that the average taxpayers' perception of the cost of government is distorted. The perceived cost is much lower than the actual. As noted above, it is precisely for this reason that governments often prefer to defer the tax consequence of their programs. Moreover, much of the current deficit arises from explicit tax reductions which were undertaken during the 1972-1978 period. Estimates provided in the December 1979 Budget of the Government of Canada suggested that tax reductions implemented during that past period served to reduce federal government revenues by $16.390 billion relative to what they would have been in the absence of the tax cuts.

Converting to tax deferral

In other words, for the past decade the federal government has engaged --whether consciously or not -- in a program of converting the actual tax cost of its program into deferred taxes in the form of deficits. As expenditure programs have increased in cost and become more numerous, the current tax burden per unit of government services faced by taxpayers has fallen. However attractive it may be for governments to defer the tax consequences of their spending decisions, there are several structural consequences of this action which bear careful consideration.

Problems with tax deferral

The most fundamental of these, as we have noted above, relates to the problem of public choice. We have all heard it said that the growth of government is an expression of the public will, that people want more government services, and government is merely an instrument of the people. While that may be true in a general sense, how much confidence can we have if this public choice is being made in the context of artificially depressed prices for government services? The above calculations suggest that in 1982-83 alone the tax cost of federal government programs will be only two-thirds of the actual cost -- the remainder being deferred. Can we reasonably expect the average voter to know the extent to which current services will have to be paid for in the future? If not, is it not likely that people would demand less government services if they did know the true cost?

The suspicion must be that the increasing resort to tax deferral is a tacit recognition by government that Canadians would not willingly support the existing level of programs or the government administering them, if they had to bear the true current cost of the programs.

Deficits conceal the true cost of government

A second structural consequence of tax deferral is the effect it has on the public-private sector mix of activities. In most cases, the complete cost of conducting activities in the private sector is included in the price of the activity. As we have seen, this may not be the case for publicly provided services. To the extent this is true, people's choices as to whether an activity should be conducted in the public sector or private sector will be biased toward the public sector.

It should also be recognized that different members of the electorate will have different attitudes toward the cost of programs financed by borrowing -- even if they perceive the true costs. The young will live to pay more of the total cost of tax deferral than the old. The latter, therefore, have a bias toward demanding more public services to the extent that the tax costs are deferred. This observation is of critical importance currently as we consider as a nation the appropriate role of the federal government in the provision of retirement benefits -- especially in view of the aging of our population and, consequently, of the electorate which will make the choices.

What then should be done?

It is the considered opinion of a growing number of economists, some of them associated with the Fraser Institute, that the only solution to the problems posed by budgetary imbalance is more direct commitment to expenditure reduction in the public sector and a more serious attempt to achieve budget balance. The Institute, in that regard, is heartened by the current enveloping procedure employed by the federal government and the establishment of individual expenditure-group growth targets along the lines of the Fraser Institute's 1976 proposal.[9]

IX. HOW TO ACHIEVE A BALANCED BUDGET

As we have seen, the problems of a balanced budget at the governmental level involve a variety of issues of principle and also some matters of a mundane, practical nature. In this section, we make the assumption that the matters of principle are established and dwell on the issue of how in practice a balanced budget could be achieved.

The first practical problem

The first practical problem is the fact that revenue estimating and expenditure control procedures, as currently available to governments, are not precise enough to ensure even an approximation to budget balance. As we have seen above, revenue estimates are imprecise because they are based on inexact forecasts of the performance of the economy. Estimates of expenditures, on the other hand, depend on the extent to which individuals take advantage of programs like health care, unemployment insurance, and to what extent provinces avail themselves of shared cost programs and so on. In consequence, expenditures also are subject to variation of sufficient magnitude to produce large budgetary errors even under the most normal of circumstances.

The second practical problem is that the government expenditure control process, the budgetary process, is itself so cumbersome and so slow to respond to apprehended errors in forecasting. Moreover, since there will always be a tendency to be optimistic in revenue projections and conservative in expenditure projections, the normal budgetary process may be ill-equipped to deal with the notion of balancing the budget even in principle. An illustration of the extent to which this combination of optimism and conservative estimates can produce tremendous error is to be found in the difference between the federal budget in the Fall of 1981 and that which the government tabled in June 1982. In October of 1981, the estimate of the deficit was $6.65 billion; in June 1982 the estimate was $19.8 billion.[10]

The importance of resolve

Evidently the pursuit of a balanced budget will require more precise and more reliable tools of fiscal manoeuvre than those currently in operation. But most of all, the achievement of a responsible fiscal posture on the part of the federal government requires, more than anything else, a resolve on the part of the Ministers of government to achieve it.

An automatic expenditure control mechanism-- the expenditure core

The most difficult aspect of budgetary control is achieving targets once they have been established. The foregoing litany of difficulties suggests that a successful program will have to include some form of automatic adjustment procedure which does not rely upon the cumbersome, formal budget process. One way of achieving this would be to establish budgeting targets in two parts. The first part would consist of a 'core' expenditure budget for each department or spending envelope, which would be based on the previous year's revenues. This would, of course, mean that there would be no automatic adjustment in budget levels for inflation or for growth in programs. From the point of view of each new year's expenditure, the zero base would be the previous year's revenue allocation for that department. While ideally this revenue allocation would include no elements of deficit, on a realistic basis it must be assumed that the initialization of the budgetary control process includes an allocation of a fraction of the deficit to each expenditure envelope. Table 2 provides an indication of how such a core budgeting process could work for the federal budgetary expenditures for the fiscal year 1982-83.

Calculating the core for 1982-83

The table is based on the national accounts rendition of federal government finances as contained in the June 28, 1982 Budget.

Table 2

CORE AND ADJUSTABLE EXPENDITURES 1982-83
(millions of dollars)

Total Revenue 1981-82	$ 65,134
minus	
Public Debt Charges expected 1982-83	17,705
equals	
Total core expenditure level	$ 47,429
plus	
Deficit Allowance from 1981-82	10,244
equals	
Adjusted core expenditures	$ 57,673
plus	
Expected Revenue increase above 1981-82 level	5,666
equals	
Total Budgetary Expenditures 1982-83 (excluding public debt charges)	$ 63,339

Source: Budget of the Government of Canada, June 1982 and calculations by the author.

In keeping with the actual nature of the expenditures, it is necessary to make a sharp distinction between public debt charges and other expenditures. Public debt charges are the only aspect of government spending which are unavoidable. While it is often maintained that other programs of government, offered on a statutory basis, are also uncontrollable this is in fact not the case. Government can change the law which establishes programs, whereas it cannot change the nature of a liability which it has accepted from those who have lent it money.

Recognizing the primacy of debt charges, the total core expenditure level for the next fiscal year is therefore calculated by subtracting, from total revenue in the current year, the amount of public debt charges forecast for the year ahead (1982-83).

In the example, total revenues for the past fiscal year were $65.134 billion; public debt charges are anticipated to be $17.705 billion; which leaves a total core expenditure level of $47.429 billion. However, in the current year expenditures exceeded revenues by $10.244 billion; given that the process is to be initialized at the starting deficit level, this must be added to the total core expenditure level to yield the adjusted core expenditure level. There is an important purpose in separating out the public debt charges and the deficit allowance in the core expenditure levels. It is to provide for adjustment in the process if either the total public debt charges are less or more than anticipated and to provide for a judgemental reduction in the deficit level in subsequent years.

Calculating adjustable expenditures

The final step in the process is to establish the second part of budgetary expenditures -- the 'adjustable' expenditure levels for the fiscal year. The starting point for this is the calculation of the anticipated increase in revenues from normal sources. In the example, this revenue increase (taken from the June, 1982 Budget) is anticipated to be $5.666

billion. A combination of the adjustable expenditures with the core expenditures provides an overall expenditure level for 1982-83 of $63.339 billion (excluding public debt charges).

The operational aspects of such a budgetary framework are simple to relate. If, as the Treasury Board reviews budgetary performance on a quarterly basis, it discovers that revenues are exceeding the projection contained in the budgetary framework, then the excess would be used to reduce the deficit projection contained in the budgetary framework. But suppose, on the other hand, that revenues were less robust than anticipated. Then the difference between the forecast and the realization would immediately be reflected in a reduction in the total adjustable expenditure allocation. If, by the end of the fiscal year, there had been a shortfall relative to expectation on the revenue side which was not completely adjusted for in expenditures, this would be reflected in the subsequent fiscal year by reduction in the core expenditure allowances. Similarly, the deficit allowance in the second fiscal year in the program would be reduced by some amount in order to provide for an eventual elimination of the budgetary deficit built into the fiscal framework.

A reasonable plan for the future?

This program as outlined is subject to the immediate criticism that it makes no allowance for the extraordinary increases in transfers to persons in the form of unemployment insurance payments, and no allowance for the extraordinary increase in capital assistance payments as provided for in the federal government budget for 1982-83. While it is true that this budgetary framework makes no allowance for these expenditure increases, they are properly considered as a reallocation of core expenditures rather than as simply an automatic extension of total government expenditures. In other words, the fiscal framework provided in Table 2 does not simply accept a $10 billion increase in the deficit as inevitable. Rather, it regards this as a variable under the control of the Government of Canada. It is only in this way

that we can reinforce the fiscal discipline which the casual use of the deficit has permitted governments to evade.

Some of the suggestions posed in this study will appear unconventional. This is true. But desperate times often call for significant departures. The major problems which are posed by the deficit, as outlined in this paper, suggest that unconventional, indeed emergency, actions are required at this time to prevent our current difficulties from creating a destructive legacy for the future. Now is the time to confront the difficult and complex problems which governments face. Now is the time to install a system of fiscal responsibility which will at least provide a hope for a return to some sort of fiscal realism.

APPENDIX A

WHAT WOULD KEYNES ADVISE ABOUT BUDGET DEFICITS?

The purpose of this appendix is to discuss the argument that is most often raised against balancing the budget -- namely, that the current deficit is necessary to maintain the level of spending in the economy and, hence, stimulate employment.

Do deficits produce more jobs?

As indicated in the main text, this proposition arises essentially from the Keynesian view of the economy and rests on the assumption that unemployment exists because there is deficient aggregate demand in the economy. That is, at some level of economic activity, higher than that currently obtaining, involuntary unemployment would be eliminated. Of course, Keynesians acknowledge that as the percentage of the labour force involuntarily unemployed approaches zero, the risk of inflation rises dramatically and, hence, there is the need to trade-off inflation and unemployment.

An alternative view of the world is based on the Nobel Prize winning insights of Milton Friedman. This asserts that there is a non-zero natural rate of unemployment below which the actual rate cannot be pushed. Any attempt to do this by raising the level of economic activity will result in continuous escalation of the inflation rate with no permanent reduction in the unemployment rate. The natural rate of unemployment reflects the demographic composition of the workforce, structural features of the industrial sector, geo-

graphical distribution of workers and their locational preferences, minimum wage laws, labour legislation, enforced union pay scales, unemployment insurance provisions, educational and skill characteristics, and a host of other structural features of the economy.

As an illustration of one aspect of this natural rate, one need only consider the unemployment in automobile-related industries. This is due to a structural shift in demand for North American automobiles. No amount of "pump priming" will remedy that problem. Indeed, pump priming may even be harmful if it created unwarranted expectations of a sustained recovery in this sector.

Using this "natural rate of unemployment" model, economists have been able to solve the seeming paradox of the coexistence of both high levels of unemployment and high rates of inflation. Moreover, estimates of the natural rate of unemployment have been made. For Canada they currently range around six per cent, with some estimates at seven per cent. Reduction of this unemployment rate will not be accomplished by simply raising the level of economic activity. Accordingly, we should not permit ourselves to believe that while deficits may have a lot of negative aspects, at least they provide jobs. In fact the evidence is quite to the contrary.

Keynes versus the Keynesians

Even if one were to accept the Keynesian view of the role of deficits, it is clear that Keynes was much more conservative in his estimates of what can be accomplished by government "pump priming" than are his followers.

An article by Keynes in the London Times of January 13, 1937 is very instructive about both the extent to which he thought his theory ought to be applied and about his view of what constituted the level of employment attainable by employing aggregate demand type policies. The article entitled, "How to Avoid a Slump," was a plea that the time had come to level off spending.

> We have climbed out of the slump. We are in more need today of a rightly distributed demand than of greater aggregate demand. Three years ago it was important to use public policy to increase investments. It may soon be equally important to retard certain types of investment, so as to keep our most easily available ammunition in hand for when it is more required ... just as it was advisable for the government to incur debt during the slump, so for the same reasons it is now advisable that they should incline to the opposite ... just as it was advisable for local authorities to press on with capital expenditure, so it is now advisable that they should postpone whatever new enterprises can reasonably be held back.

Keynes and the invisible hand

When Keynes wrote this article the unemployment rate in the United Kingdom was around 11-12 per cent. I think that it is reasonable to infer from this that Keynes really did see the deficit spending cure as, at most, a device to lever the economy back to the general vicinity of full employment. His remark that the distribution of demand, and not its total level, was the problem when the unemployment rate was in the 11-12 per cent range suggests that he would not endorse the further expansion of the deficit in the current circumstances. Rather, it is likely that he would want policy makers to focus on maladjustments in the structure of relative prices and impediments to the operation of "deep under-currents at work, natural forces, one can call them, or even the invisible hand, which are operating towards equilibrium." "I find myself moved, not for the first time, to remind contemporary economists that the classical teaching embodied some permanent truths of great significance, which we are liable to overlook because we associate them with other doctrines which we cannot now accept without much qualification."

The foregoing are some of the last words that Keynes published (The Economic Journal, June 1946) and are of obvious significance in any attempt to ascertain what Keynes would have done in current circumstances. Moreover, these comments of Keynes of what can be achieved by deficit financing and about restructuring demand are crucial. They lend moral and analytical support to those who would suggest that in present circumstances further expansion of the government sector would be ill-advised and that a reallocation of demand from the public sector to the private sector is probably more in the nature of a solution to current problems. In any event it cannot be claimed that those who are, in current circumstances, calling for more deficit spending in order to cure our unemployment problems have a clear claim to orthodoxy and those, including the Institute, who would call for restraint in government sector activities reflect purely reactionary sentiments.

APPENDIX B

THE DEFICIT AND THE PUBLIC DEBT

One of the most prominent features of the public discussion of government finances is the confusion between the deficit and the public debt. As recently as the Fall Conference of the Provincial Premiers, the airways of the country were festooned with a variety of colourful misinterpretations of these central concepts. It is appropriate in a essay dealing with the notion of the balanced budget that we should therefore consider the differences between the budgetary deficit and the public debt.

What the deficit is

As indicated in the main body of the text the deficit is the difference between the government's current expenditures and current revenues. In a household context this is equivalent to saying that the household's deficit is the difference between the household's income during the year and its expenses during the year. Of course, the attempt to extract this essentially simple concept from statistical publications, including the government's budget documents, is often difficult. The reason is that there are several statistical bases upon which expenditures and revenues can be and are calculated and governments are prone to utilize each of several methods in the process of disseminating information. The casual observer might conclude that the purpose of these various approaches was to confuse the issue. For the most

part, however, the differences rise out of legitimate accounting framework differences and imply nothing sinister on the part of the government.

The public debt and 'how it growed'

When the government incurs a deficit in a particular year it will very often take the recourse of deferring the extra taxation or the extra printing of money which the deficit requires. Governments do this by issuing debt in the form of government bonds of various kinds. Canada Savings Bonds are a very popular form of government financing as are Treasury Bills. Provincial governments also issue Treasury Bills and a variety of bonds with differing terms to maturity. In effect, these bonds are loans or promises to pay in a future period. In the context of the household analogy government debt is like a consumer loan taken out to cover the cost of a vacation or to consolidate other debts or to finance family expenditures during a period of unemployment.

The public debt is the accumulation of these promises to pay or these loans which the government has outstanding. When the government issues new promises to pay, the total amount of public debt outstanding is increased and when the government redeems some of its bonds, the total amount of public debt outstanding is reduced.

In addition to these outstanding debts the government of Canada as an employer and as "the operator of a business" acquires certain other liabilities such as, for example, those associated with the civil service superannuation program. These serve to greatly increase the total liabilities of the Government of Canada outstanding. Thus, for example, as can be seen from Table C1 in Appendix C, while in 1981 the total unmatured public debt outstanding was $83.149 billion other liabilities amounted to $35.312 billion yielding a total liability of $118.461 billion. In the period since 1960 the total liabilities of the government of Canada have increased 464 per cent. During the same interval, the per capita debt has increased from $1,174 to $4,905, the latter figure repre-

sents a total debt per family of four of nearly $20,000. The anticipated deficit of 1982-83 will add nearly $20 billion to the liabilities of the government -- an amount equal to $3,313 per family. Charts 2A and 2B provide a graphical depiction of the situation.

CHART 2A

FEDERAL GOVERNMENT LIABILITIES

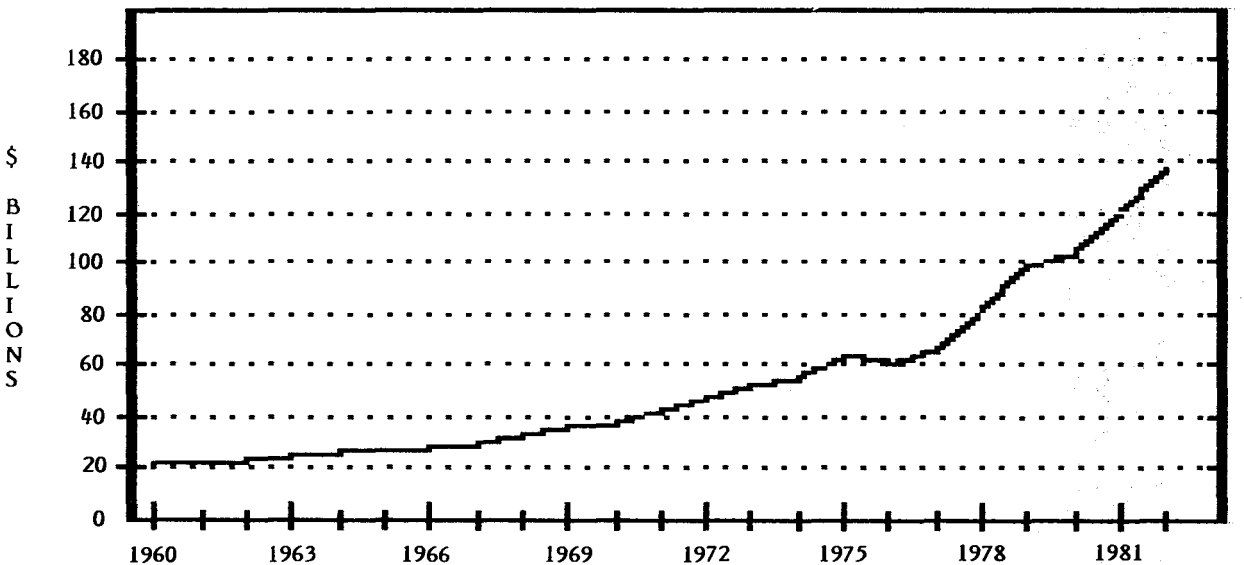
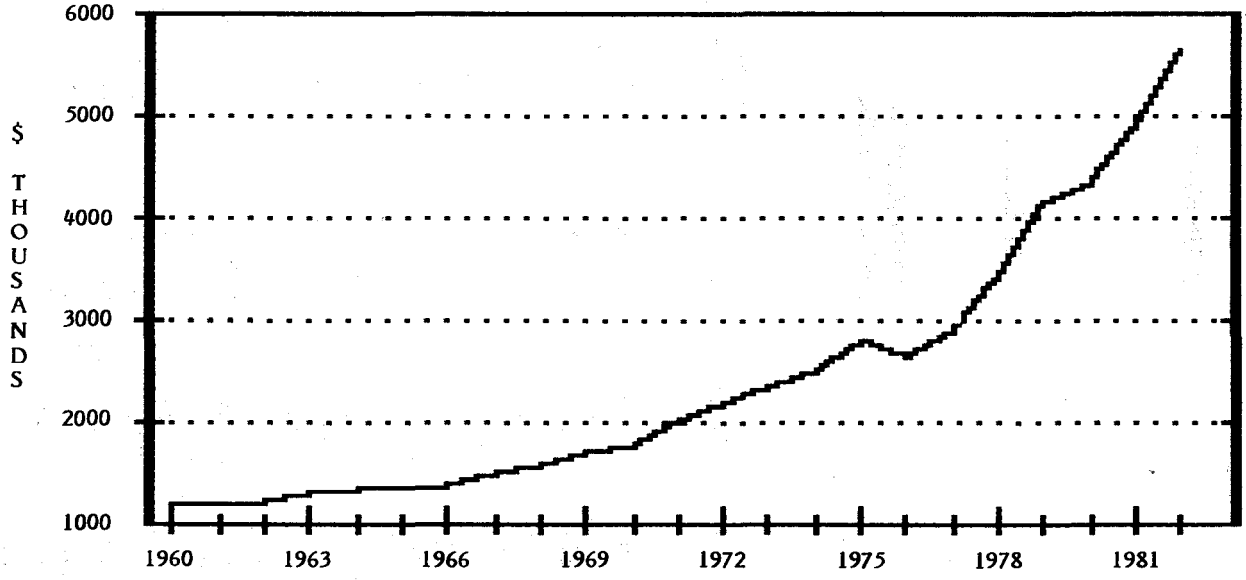


CHART 2B

FEDERAL LIABILITIES PER CAPITA



APPENDIX C

TABLE C1

PUBLIC DEBT
(millions of dollars)

Year	Debt	Other Liabilities	Total Liabilities	Per Capita Liabilities
1960	15,890	5,096	20,986	1,174
1961	16,068	5,535	21,603	1,184
1962	16,946	5,962	22,908	1,234
1963	17,962	6,837	24,799	1,312
1964	18,740	7,183	25,923	1,348
1965	18,978	7,586	26,564	1,357
1966	19,110	8,373	27,483	1,380
1967	19,940	10,400	30,340	1,492
1968	20,580	12,344	32,924	1,591
1969	22,101	13,818	35,919	1,710
1970	22,637	15,513	38,150	1,785
1971	25,201	17,775	42,976	2,011
1972	27,259	20,428	47,688	2,192
1973	29,038	22,677	51,716	2,351
1974	29,171	26,386	55,557	2,491
1975	33,086	29,614	62,700	2,770
1976	37,697	22,105	59,802	2,606
1977	42,519	24,556	67,075	2,889
1978	51,567	28,481	80,048	3,415
1979	66,591	31,432	98,023	4,147
1980	72,121	31,505	103,626	4,342
1981	83,149	35,312	118,461	4,905
1982	101,688	35,312	137,000	5,607

Source: Public Accounts

TABLE C2

FEDERAL GOVERNMENT DEFICIT
(millions of dollars)

Date	Deficit	Inflation Adjusted Deficit*	Date	Deficit	Inflation Adjusted Deficit*
1926	68	186	1955	202	311
1927	68	188	1956	598	887
1928	105	300	1957	250	363
1929	56	158	1958	-767	-1,099
1930	-96	-289	1959	-339	-476
1931	-160	-532	1960	-229	-318
1932	-154	-520	1961	-410	-566
1933	-114	-380	1962	-507	-691
1934	-93	-309	1963	-286	-382
1935	-121	-389	1964	345	450
1936	-37	-116	1965	544	688
1937	9	28	1966	231	280
1938	-87	-272	1967	-84	-98
1939	-2	-6	1968	-11	-12
1940	-140	-423	1969	1,021	1,103
1941	-27	-76	1970	266	275
1942	-1,723	-4,619	1971	-145	-145
1943	-1,943	-5,034	1972	-568	-541
1944	-2,709	-6,807	1973	360	314
1945	-1,832	-4,480	1974	1,109	840
1946	-245	-583	1975	-3,805	-2,601
1947	687	1,503	1976	-3,391	-2,117
1948	765	1,491	1977	-7,303	-4,258
1949	484	905	1978	-10,654	-5,841
1950	650	1,186	1979	-9,213	-4,577
1951	971	1,592	1980	-10,697	-4,803
1952	195	306	1981	-7,504	-3,063
1953	151	237	1982	-19,800	-7,347
1954	-46	-71			

Source: National Accounts

*The deficit is adjusted for inflation by converting the figures in 1971 dollars. The Gross National Product price deflator from the National Accounts is used to make this adjustment.

NOTES

1 James M. Buchanan and Richard E. Wagner, Democracy in Deficit, Academic Press, Inc., p. 10.

2 Cited in Buchanan and Wagner, ibid.

3 Buchanan and Wagner, op.cit., p 9.

4 Buchanan and Wagner, op.cit., p. 14.

5 Harry G. Johnson, "Living with Inflation," The Banker, 125 (August 1975):863-864.

6 Of course to make this point rigorously one would have to know to what extent the health care system was operating at capacity, to what extent increased expenditures on health care produced more jobs, to what extent it led merely to the concentration of benefits in the hands of health care workers already employed, and to what extent the decline in private investment or other private expenditures resulted in unemployment in the private sector.

7 This is not to say that some or all of the deficits won't at some time result in the printing of money and so to be entirely accurate we should say that bond issues are deferred taxes and/or deferred printing of money.

8 The source of this data is the Budget of the Government of Canada, June 28,1982.

9 Illusion of Wage and Price Control, M. Walker (Ed.), The Fraser Institute, 1976.

10 Budgets of the Government of Canada, Minister of Finance for Canada, November 1981 and June 1982.