Growing Household Indebtedness and the Plummeting Saving Rate in Canada: An Explanatory Note

Mario Seccareccia*

Abstract

Much as it has occurred in the United States, over the last two decades the household saving rate in Canada has fallen sharply to unprecedented levels, as it now hovers essentially about the zero rate. Accompanying this fall, we have witnessed a parallel rise in household debt ratios — a phenomenon that some have dubbed a state of "affluenza". The object of this article is to provide an explanation of this phenomenon by pointing especially to the role played by fiscal policy in shifting the burden of debt from the government to the household sector. Moreover, the article raises serious concern about the sustainability of this particular growth process.

Introduction

During the last two decades in North America, much concern has been expressed over the expansion of consumer credit and the plummeting household saving rate. In the United States, criticism over this trend in household consumption has come not only from most mainstream economists who believe in the virtues of a high saving rate for economic

* Professor of Economics, University of Ottawa, Ottawa, Ontario, Canada.

growth (see Gale and Sabelhaus 1999) but even from such heterodox authors, as Schor (1998), who point to, among other things, the disruptive social consequences of high household indebtedness, and the accompanying phenomenon of "overwork" reflected in the increasing hours of work and multiple job holding. Indeed, controversy over the consequences of a low or even negative saving rate reached its peak during the late 1990s when the personal saving rate, as measured in the national income and product accounts (NIPAs), had dropped below zero for the first time since the Great Depression. Though there has been much discussion over whether the NIPA measure of the saving rate is technically the most appropriate (Rippe 1999) and, in particular, over whether or not we should be including capital gains in the definition of income, there has been a much broader consensus among observers over the actual existence of this two-decade long general downward trend in the personal saving rate and of the growing household indebtedness associated with the decline in household savings.

Although this phenomenon of what some have facetiously described as "affluenza" (see De Graaf, Wann and Naylor 2001) has been less pronounced in Canada, with an analogous drop in the household saving rate witnessed since the 1980s, similar concerns have also been expressed north of the 49th parallel.[1] To neoclassical economists who subscribe to the traditional loanable funds view that savings are a necessary prerequisite to the financing of investment, a fall in the saving rate would be the ominous sign of an inevitable slowdown in the rate of accumulation and thereby in the pace of economic growth. For Keynesian economists who support, instead, a reverse causal link between saving and investment, a decline in the saving rate is not generally considered to be such an unhealthy signal of slower growth (see, among others, Block and Heilbroner 1992). On the contrary, a fall in the saving rate would not only sustain directly overall economic growth through increased consumer spending but also indirectly through increased investment spending *via* the usual accelerator effects. With increased cash flow to business enterprises and higher rates of capacity utilization, declining household saving would thus have positive stimulating effects on the rate of capital accumulation in the long run.

While the high growth experience of the American economy during the 1990s may have largely discredited the traditional neoclassical view that a declining rate of household saving is a constraining factor on the rate of capital accumulation, there are some within the Keynesian camp, however, who do envisage problems with the pattern of low saving rates and high household indebtedness experienced in North America over the last two decades. In particular, there exists a group of economists, sometimes dubbed "Monetary Keynesians" and followers of the late Hyman P. Minsky,

who do perceive some possible negative consequences of a long-term fall in the household saving rate and the concomitant rise in the debt-to-income ratio of consumers. Since the drop in the saving rate has been accompanied by a general increase in household debt ratios and a continued growth in consumer spending in excess of disposable income, difficulties of long-run sustainability can ensue. The concern of the Monetary Keynesians has nothing to do, however, with the neoclassical analytics about the relevance of the savings constraint on capital accumulation. As Tobin (1957) had speculated long ago, it has to do largely with the macroeconomic implications of a rapid build-up of household debt on the ability to sustain consumer demand in the long term.

Not unlike the 1920s in the U.S., the 1990s was a decade of tremendous growth largely fueled by expanding consumer demand and growing household indebtedness. Indeed, as shown by Brown (1997), the 1920s inordinate expansion of household debt ratios had a strong negative influence on the behaviour of consumer expenditures during the early years of the Great Depression. Indeed, when the Great Crash of 1929 in the North American stock markets had occurred, household spending behaviour

Figure 1. Trend of Personal Saving Rate and Consumer Credit/GDP
Canada, 1961-2003
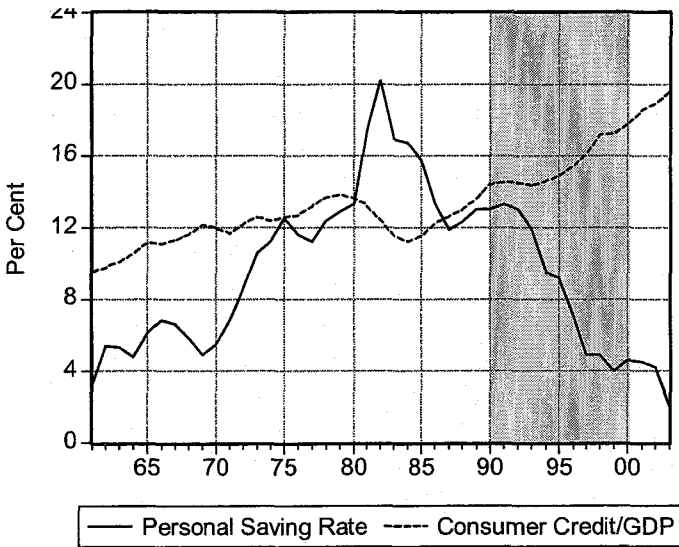
Source: Statistics Canada, CANSIM I Label no. D44956, and CANSIM II Series V122689 and V691783.

collapsed as households sought to allot a sharply increased proportion of their current income for debt repayment. As a result of the preceding large household debt load accumulated during the 1920s, the rise in the saving rate played, therefore, a pivotal role in the collapse of overall demand immediately following the 1929 shock. There are expressed fears that a similar scenario can befall both the American and Canadian economies nowadays. For instance, according to Godley (2000), a precipitous fall in asset prices of the type that did actually occur since the end of 2000 poses serious problems for U.S. economic growth because of the historically high levels of consumer indebtedness. At the same time, while greater household indebtedness does increase overall effective demand in the short run, interest payments on household debt tend to redistribute income away from debtors towards creditors having a higher propensity to save, thereby reversing somewhat its stimulating effect on growth in the longer term as the high consumer debt load persists (Dutt 2005).

In Canada, the phenomenon of growing household indebtedness coupled with a declining saving rate has been a characteristic feature of the economy during the last two decades. As shown in Figure 1, the trends in the saving rate and in the ratio of consumer credit to GDP began to bifurcate during the 1980s and the gap widened to historic highs at the end of the 1990s. While (as can be inferred from the series displayed in Figure 1) a mildly negative short-term relation between the consumer debt ratio and the saving rate is to be expected, the growing long-term gap between these two series since the early 1980s is of some concern. This is because, in an economy that is characterized by high and sustained growth in real income and a relatively stable structure of income distribution (as was the case in Canada, say, during the 1960s), one would expect the trend patterns of both the saving rate and household debt ratios to be upward. In other words, in a sustained growth scenario, households would more easily borrow on the basis of their growing expected future income, while concomitantly raising their saving rate as everyone's standard of living rises (thereby pushing more and more individuals into higher real income brackets that would be associated with lower propensities to consume). This was exactly the pre-1980s scenario in Canada (shown in Figure 1 above) during which period both ratios followed a sustained upward trend. The difficulty is with the post-1980s period, in which growth in real income has been slow, the saving rate has sharply declined, and the ratio of consumer debt to GDP has continued its upward trend. Any business cycle expansion in a demand-constrained economy that is fuelled primarily by declining saving rates and growing household indebtedness is, by its very nature, more fragile and destined to be confronted with greater difficulties of growth sustainability

in the long run, as the recent evidence of economic recession in both the U.S. and Canada would suggest.

What can explain the dramatic fall in the saving rate since the early 1980s in Canada?
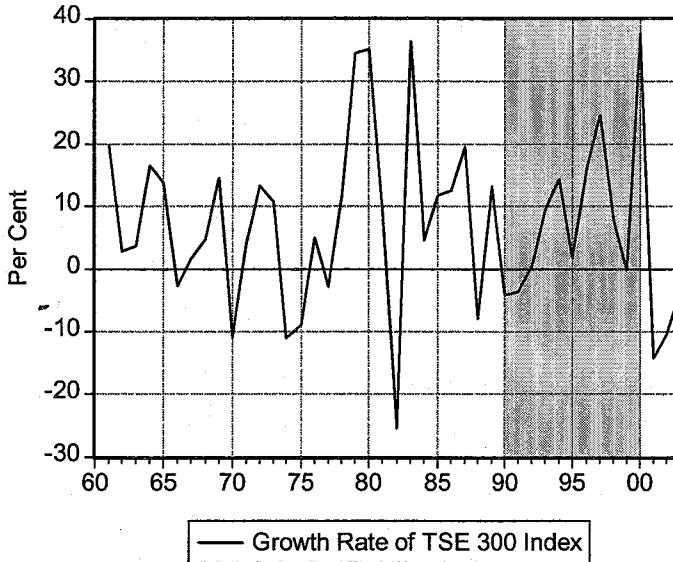
(a) Growth in Real Personal Disposable Income

As was shown in Figure1 above, the pattern of household saving has taken a significant plunge in Canada since the early 1980s. Going back to Keynes in the 1930s, economists have traditionally focused on the behaviour of personal disposable income as a critical variable in explaining why the saving rate fluctuates over time. Numerous Keynesian economists have argued historically that, at least in the short run, as real disposable income rises, this would put upward pressure on individuals' average propensity to save. While the long-run movement of real income on households' wealth position may have a mitigating effect on their average propensity to save,

Figure 2. Trend in Growth of Real Per Capita Personal Disposable Income Canada, 1961-2003
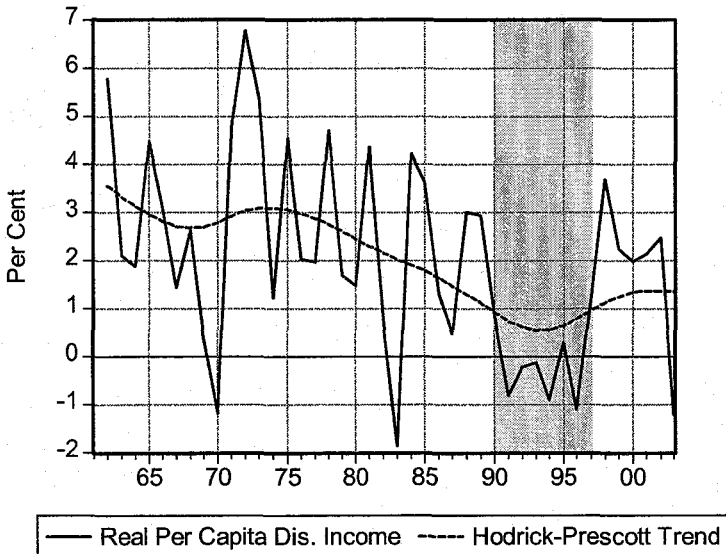
Source: Statistics Canada, CANSIM II Series V466668, V691803, and V3860248.

Figure 3. Rate of Change of TSE-300 Index
Canada, 1961-2003

Source: Statistics Canada, CANSIM II Series V7678.

the higher the short-term real income position of households, the greater ought to be the saving rate. As is displayed in Figure 2, the growth of per capita real personal disposable income has fluctuated a great deal cyclically, but its pattern changed significantly in Canada, especially during most of the 1990s when, with the obvious exception of the strong growth during the short interval between 1998 and 2001, it had become consistently negative. Consequently, one would expect that, as per capita real disposable income falls, it would have a clear negative impact on the saving rate and a positive impact on consumer debt as households seek to maintain some previously-established consumption norm. Such a positive relation would be compatible with mainstream theory that is largely based on the traditional permanent income hypothesis, but it would also be compatible with less well-known theories along institutionalist lines (*cf.* Bodkin 1993; Green 1991).

(b) Stock Prices and "Virtual" Wealth

There has also been much discussion in the United States over the impact that gains in the stock market may have had on household consumption behaviour. Households, who are holding shares, say, in a buoyant stock

market would be experiencing an upper re-evaluation of their existing assets. The yet unrealized capital gain would, in turn, induce them to increase their rate of consumer spending on the expectation of a future realization of capital gain. Conversely, persistent capital losses would induce a downward consumption spiral. Because of this "virtual" wealth effect, one would expect that gains in the stock market would have a significant negative impact on the saving rate.

This aspect of consumption behaviour arising from the significance of such virtual wealth effect creates obvious problems for those subscribing to the traditional permanent income hypothesis, especially since windfalls do seem to influence consumer behaviour over time. *A contrario*, among Monetary Keynesians, who reject the latter mainstream hypothesis, there has been much discussion about the positive effects that such transitory or "windfall" gains in the stock market may have on household consumption behaviour and household indebtedness. Figure 3 displays times series on the rate of change of such a representative index — the Toronto Stock Exchange index of 300 traded stocks (the TSE300 index). As seems to have occurred in Canada throughout most of the 1990s, therefore, the

Figure 4. Pattern of Saving Rate and Interest Share of GDP
Canada, 1961-2003
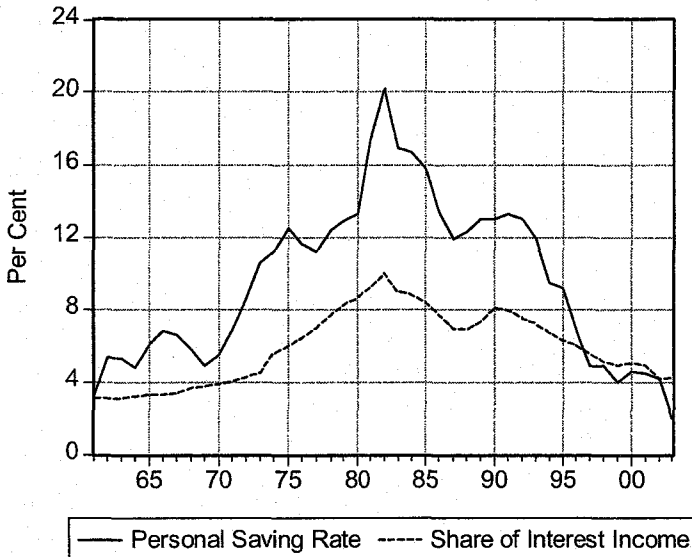
Source: Statistics Canada, CANSIM I Label No.d28605, and CANSIM II Series V498906, V498911 and V691763.

higher the appreciation of assets in the stock market, the lower was the saving rate.

As pointed out by Godley (2000: 2), however, it is not possible for the private sector as a whole literally to "spend" capital gains. This is because gains in the securities market can only be realized if someone else is willing to purchase. Collectively, the domestic private sector cannot realize such gains. Hence, in the context of unprecedented fiscal restriction (as had been the case throughout the 1990s), unless households as a group were somehow running down idle balances, additional funds would have had to be borrowed to sustain the higher personal consumption propensities resulting from the virtual wealth effect. This would thus be a further factor to explain why explosive household debt ratios have moved in tandem with a declining saving rate throughout this period and why there was a slight reversal in the behaviour of the saving rate when stock prices peaked and took a downward momentum in the early years of the twenty-first century.

Hence, to summarize, during the last decade we have witnessed the compounding effect of two significant trends in the private economy: (i) an absolute decline in per capita real personal disposable income whose previous peak value of 1989-90 was to be reached and surpassed almost a decade later by 1998 and which had brought about a dramatic lowering of the saving rate and an increase of household indebtedness during that period, and (ii) the major gains in the stock market throughout most of the nineties which fuelled a high-income consumption binge, thereby further reducing the saving rate.

(c) Income Distribution and the Rentier Share

In addition to these two key economic variables which, though indirectly impacted by government policy, may be considered primarily the result of underlying structural and institutional factors affecting the North American economy, there are at least two other variables that are instead very much public policy determined and which have also significantly shaped the behaviour of the saving rate. The first of these is a variable reflecting the changing pattern of the functional distribution of income between interest and non-interest income.

Since interest rates peaked because of restrictive monetary policy in the early 1980s followed by a further local peak in the early 1990s, the share of interest income has fallen significantly, especially during the last decade. This decline in interest rates has been the result of a concerted policy action on the part of the Bank of Canada as fears of inflation dissipated somewhat during the 1990s. As can be seen from Figure 4, this pattern of redistribution of income away from interest income earners during

the last decade has been closely followed by a parallel movement in the saving rate. However, unlike the usual neoclassical "loanable funds" explanation offered to explain the obvious correlation between two such variables (*i.e.* interest rate and saving rate), the reason has primarily to do with the propensity to save or what Keynes in the 1930s referred to as *rentier* versus non-*rentier* household income earners. As the share of national income has moved away somewhat from interest income earners, whose average propensity to save is high, to non-interest income households having a lower propensity to save, the effect of such redistribution has been to compound further the general decline in the saving rate.

Though empirical patterns of household consumption categorized according to the importance of investment income are not readily available, there is much indirect evidence from studying consumption expenditure behaviour which would suggest that household propensities to save are directly related to income levels. Tables 1 and 2 offer some useful cross-sectional statistics relating to the size distribution of income. Table 1 presents household saving rates according to income quintiles in Canada for 1996 and 2002, while Table 2 summarizes the average changes in the balance sheet position of Canadian households according to their income scales also for 1996 and 2002.

The reader should be aware of the fact that the statistics in Table 1 are not directly comparable to the national accounting estimates of the saving rate as displayed in Figures 1 and 4 above. In the national accounts, saving is defined residually as the difference between personal disposable income and personal expenditure on consumer goods and services. In the latter, there are also included implied expenditures out of income in kind (such as food grown and consumed on the farm and imputed rents on owner-occupied dwellings). Such imputed values are not included in the estimates to be found in row two of Table 1. Moreover, data from the Survey of Family Expenditure displayed in Tables 1 and 2 pertain only to household expenditures by Canadian residents both at home and abroad while the data from the national accounts also include expenditure of unincorporated business and refer to the personal expenditure of both residents and non-residents. These and other factors (for example, the fact that the Survey of Family Expenditure includes items such as public medical insurance and interest on consumer debt as part of total current consumption while being treated as transfers in the national accounts) would clearly account for the obvious discrepancy between the estimate of the saving rate in Table 1 and the series in Figure 1 from the national accounts.[2] To allow for easier comparability with the data presented in Figure 1, a "standardized" saving rate was calculated based on the value of the saving

Table 1. Distribution of Household Saving by Income Quintile
All Households, Canada 1996 and 2002

	All Classes	Lowest Quintile	Second Quintile	Third Quintile	Fourth Quintile	Highest Quintile
Average Household Income before Tax (Y)						
1996	51,433	13,365	27,278	43,111	62,363	111,151
2002	60,699	15,235	31,903	50,370	72,728	133,258
Δ%	*18.0*	*14.0*	*17.0*	*16.8*	*16.6*	*19.9*
Total Current Consumption (C)						
1996	34,024	15,115	23,841	31,749	40,885	58,530
2002	43,206	18,627	29,769	40,259	51,618	69,373
Δ%	*27.0*	*23.2*	*24.9*	*26.8*	*26.3*	*18.5*
Personal Taxes (T)						
1996	10,746	459	3,216	7,379	13,100	29,576
2002	12,025	774	5,583	7,967	14,037	33,764
Δ%	*11.9*	*40.7*	*73.6*	*8.0*	*7.2*	*14.2*
Household Saving (Y-T -C)						
1996	6,683	-2,209	221	3,983	9,378	23,045
2002	5,468	-4,166	-1449	2,144	7,073	23,740
Δ%	*-18.2*	*-88.6*	*-755.7*	*-46.2*	*-24.6*	*3.0*
(Y-T-C)/(Y-T) (Per Cent)						
1996	16.4	-17.1	0.9	11.1	19.0	28.3
2002	11.2	-28.8	-5.1	5.1	12.1	23.9
Δ	*-5.2*	*-11.7*	*-6.0*	*-6.0*	*-6.9*	*-4.4*
"Standardized" Saving Rate (Per Cent)						
1996	7.0	-7.3	0.4	4.7	8.1	12.1
2002	4.2	-10.8	-1.9	1.9	4.5	9.0
Δ	*-2.8*	*-3.5*	*-2.3*	*-2.8*	*-3.6*	*-3.1*

N.B.: Δ% = Percentage Change between 1996 and 2002, Δ = Absolute Percentage Points Change between 1996 and 2002. **Source**: Statistics Canada, *Family Expenditure in Canada 1996*, Cat. No. 62-555-XPB, July 1998; and Statistics Canada, *Spending Patterns in Canada 2002*, Cat. No. 62-202-XIB, June 2004.

Table 2. Net Changes in Assets and Liabilities by Income Class
All Households, Canada 1996 and 2002

Income Class	Average Household Income before Tax (Y)	Personal Taxes (T)	Y-T	Average Net Change in Assets and Liabilities (?K)	?K/(Y-T) (Per Cent)
All Classes					
1996	51,453	10,746	40,707	3,567	8.8
2002	53,996	10,413	43,583	1,660	3.8
Under $10,000					
1996	7,286	-22	7,308	-2,626	-35.9
2002	5,934	123	5,811	-5,088	-87.6
$10,000 -$14,999					
1996	12,631	321	12,310	-1,328	-10.8
2002	12,512	274	12,237	-1,356	-11.1
$15,000 -$19,999					
1996	17,401	838	16,563	-1,624	-9.8
2002	16,921	761	16,160	-1,621	-10.1
$20,000 -$24,999					
1996	22,366	2,157	20,209	-768	-3.8
2002	21,933	1,517	20,416	-2,738	-13.4
$25,000 -$29,999					
1996	27,462	3,072	24,390	-1,502	-6.2
2002	26,876	2,422	24,454	-1,684	-6.9
$30,000 -$34,999					
1996	32,420	4,420	28,000	193	0.7
2002	31,836	3,565	28,270	-1,452	5.1
$35,000 -$39,999					
1996	37,314	5,851	31,463	332	1.1
2002	36,854	4,677	32,177	-1,123	-3.5
$40,000 -$49,999					
1996	44,722	7,672	37,050	1,895	5.1
2002	44,187	6,510	37,677	-1,449	-3.8
$50,000 -$59,999					
1996	54,552	10,713	43,839	2,636	6.0
2002	54,219	9,100	45,119	-551	-1.2
$60,000 -$69,999					
1996	64,793	13,943	50,850	3,710	7.3
2002	64,100	11,885	52,215	2,026	3.9
$70,000 -$89,999					
1996	78,362	17,865	60,497	7,029	11.6
2002	78,497	15,509	62,588	4,419	7.1
$90,000 and over					
1996	131,533	37,058	94,475	20,217	21.4
2002	132,671	34,844	97,827	14,260	14.6

Source: Statistics Canada, *Family Expenditure in Canada 1996*, Cat. No. 62-555-XPB, July 1998; Statistics Canada, *Survey of Household Spending, 2002*, Cat. No. 62M0004XCB, May 2004 (calculated from micro data made available from the Income Statistics Division of Statistics Canada).

rate from the national accounts (a rate of 7.0 per cent in 1996 and 4.2 per cent in 2002).[3] This series is to be found in the last row of Table 1. While these household income-class statistics may not be easily reconciled with the national accounting definitions of the aggregate personal saving rates (as displayed in Figures 1 and 4 above), they do nonetheless substantiate the well-known Keynesian and institutionalist view that higher propensities to save are associated with higher incomes.

The data presented in Table 2 offers an alternative direct estimate of the saving rate (last column of Table 2) based on a measure of the net change in household assets and liabilities. This measure of the net change includes the net accumulation of both financial assets (such as bank balances, stocks and bonds, and net contributions to registered retirement savings plans) and the net acquisition of personal property and real estate. Since the ability to accumulate assets is strongly correlated with income (as shown in Table 2), it ensues that, as the share of investment income rises, so would the average propensity to save (as evidenced in Figure 4). Indeed, there exists a very strong correlation between the ability to accumulate assets and income (as shown in the last column of Table 2). At the same time, it is noteworthy that, over a period of merely six years (from 1996 to 2002), the average threshold level of income where household saving rates were moving from negative to positive territory had shifted sharply from the $30,000-$34,999 income class in 1996 to the $60,000-$69,999 income range by 2002 despite the low inflation environment of the period.

(d) Public Sector Balance and the Saving Rate

In addition to the three above factors that may have negatively impacted on the saving rate over the last decade, are there any other possible variables to explain the decline in the saving rate and the concomitant growth in household indebtedness in Canada which are not normally referred to in the mainstream literature? One possibility is the behaviour of fiscal policy.

Unlike some mainstream neoclassical literature based on the work of Barro (1997) that makes a bold, albeit completely unrealistic, assumption about a possible connection between public sector balances and the savings rate (on the basis of households' assumed knowledge and ability to predict and discount future taxes over their lifetime), there exists a well-known Keynesian/Schumpeterian conception of the economy which, *inter alia*, views expanding debt as a necessary feature of the growth process in a modern capitalist economy and points ultimately to the behaviour of the fiscal authorities (cf. Parguez and Seccareccia 2000; Bougrine and Seccareccia 2002). Without a rise in overall debt, whether it is public or

private, the growth process would come to a halt in a monetary economy. Hence, for an economy to expand, one or more sectors must incur debts *vis-a-vis* the banking and financial sector. Whether it is business enterprises, households, or governments, in a dynamic growth process someone must first borrow in excess of any "pre-existing" amount of financial resources. Indeed, as both Schumpeter and Keynes recognized long ago, in a dynamic capitalist economy with a strong entrepreneurial desire to invest, initial financial deficits would normally be incurred by the non-financial business sector. However, a financial deficit by one sector would have as counterpart a pecuniary surplus in one or more other sectors of the economy. For instance, as it has been argued elsewhere (cf. Seccareccia and Sharpe 1994, as well as, among others, Wray 1989), public sector deficits have historically contributed to the realization of private sector surpluses (in terms of positive flow of business and/or household saving). Within this analytical framework, the reverse would also apply. A policy of persistent public sector surpluses would have the effect of generating chronic private sector deficits (*i.e.*, increasing net indebtedness of households and/or firms).

To understand the logic of this approach, let us first manipulate some very simple macroeconomic relations that are particularly familiar to Keynesian/Kaleckian economists, such as Steindl (1982) and Godley and Cripps (1983). We shall begin by underlining a well-known Keynesian postulate regarding the primacy of macroeconomic expenditures in the determination of money income. In advanced monetary capitalist economies, expenditures flows (whether private or public) can be financed independently of monetary receipts, owing to the existence of bank credit that can emerge *ex nihilo* to finance either private sector spending (firms or households) or, via central bank advances, the expenditures of the state. In this sense, it can be said that it is such monetary expenditures in the various sectors that play a causal role in the determination of income receipts. Using symbols to be found in Godley (2003), we could define from standard national accounting relations:

$$Y = PX + G + (X\text{-}M) \tag{1}$$

where Y is the value of gross output or income, PX is domestic private sector expenditures, G is government expenditures, and $(X\text{-}M)$ is the current account balance (the net spending by non-residents). On the basis of the above-mentioned Keynesian/Schumpeterian logic regarding the causal role of money-financed spending in the determination of income, the latter (income receipts) must reflect the overall behavioural pattern of the former (aggregate expenditures). From this one can easily conclude, for instance, that, whenever there is a shortfall in private sector expenditures (PX) or in

Figure 5a. Net Lending/Borrowing by Major Sectors as Percentage of GDP (Household [incl. unincorporated business] and all levels of Government). Canada. 1961-2003

— Household Sector Balance   ---- Consolidated Government Bal.
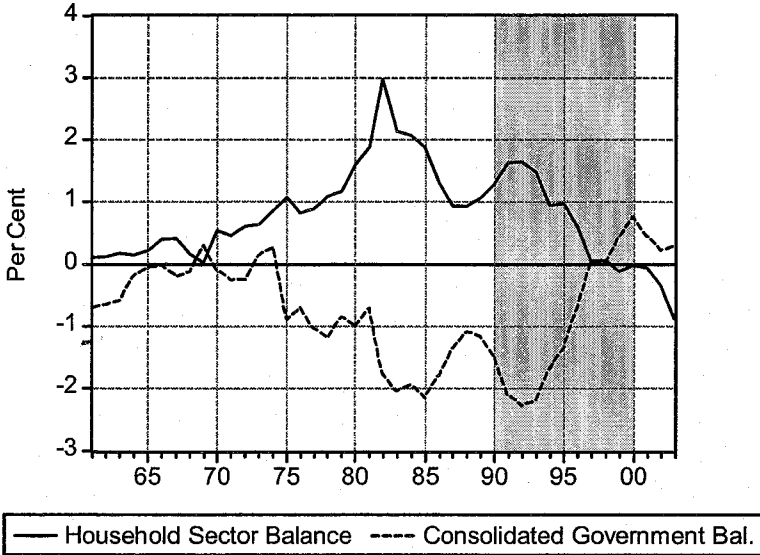
Source: Statistics Canada, Financial Accounts, CANSIM II, Series V31751, V33360, and V498086.

Figure 5b. Private Sector and Government Net Lending/Borrowing as a Percentage of GDP. Canada, 1961-2003

— Cons. Private Sector Bal.   ---- Consolidated Government Bal.
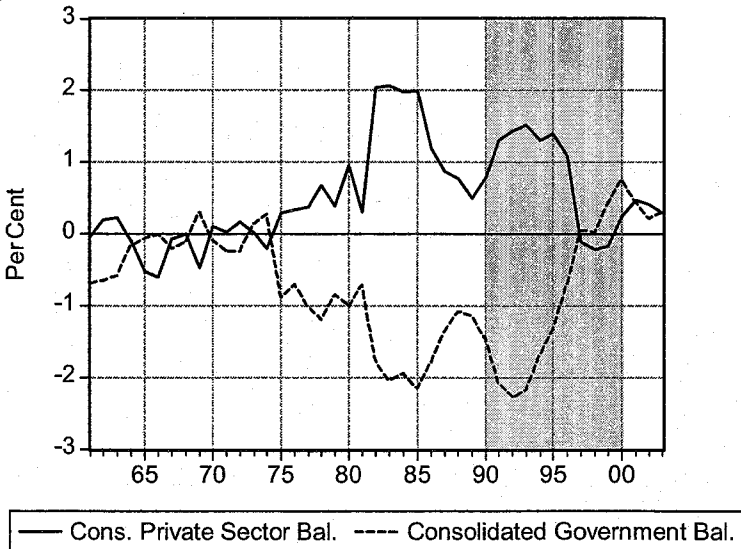
Source: Statistics Canada, Financial Flow Accounts, CANSIM II, Table 378-0001 and Series V498086.

foreign net spending (*X-M*), government expenditures (*G*) ought to increase so as to stabilize overall income or output (*Y*). Furthermore, if we deduct taxes (*T*) from both sides, and re-organize the equation, we obtain:

$$[(Y-T) -PX] = [G-T] + [X-M].$$ (2)

The first term on the left-hand side (the difference between private sector disposable income, (*Y-T*), and private sector expenditures, *PX*) defines the private sector net indebtedness position (as net lender/borrower), while the two terms on the right-hand side represent the net lending/borrowing position of the state and the foreign sector. It ensues that for a given net foreign trade surplus [*X-M*], which we could treat largely as exogenous in this context, there exists an inverse relation between private domestic sector net indebtedness and that of the state sector.[4]

To understand the implications of this Keynesian view of the growth process, let us look at Figure 5(a) where relevant accounting data from the major sectors was obtained from the financial flow accounts of Statistics Canada. The chart depicts the movement of the household (including unincorporated business) saving rate and the ratio of public sector deficits/surpluses (of all levels of governments) to GDP. As can be seen by both Figures5(a) and 5(b) [with the latter displaying data for the household sector, corporations and unincorporated business combined], the relation is strongly negative and essentially a mirror image of each other. Hence, a public sector deficit that had persisted until the mid-1990s generated significant private sector surpluses. Similarly, from the charts, it would appear that governments succeeded in reducing their accounting deficits and generating financial surpluses during the 1990s in Canada largely by forcing more and more households to reduce progressively their savings and to fall into debt. Regardless of whether these public sector surpluses were achieved via increased income and value-added taxes (which have cut significantly into household disposable income) or via cuts in program spending (which have further deteriorated the personal income of those Canadians who had previously depended upon those government programs), the ultimate byproduct of the governments' deficit fighting policies was to cut further personal saving and to increase household indebtedness. It can, therefore, be clearly asserted that, much like a Pyrrhic victory, governments in Canada were able to slaughter the "deficit dragon" largely on the backs of households, with overhanging public debt merely being transformed into burgeoning household debt.

Concluding Remarks

From our simple graphical analysis, there are some key conclusions that follow. In contrast to much of the research being done by orthodox neoclassical economists, the explanation of the phenomenon of a declining saving rate may not have very much to do with, for instance, the dynamics of demographics (based on the traditional life-cycle hypothesis) (cf. Gokhale, Kotlikoff and Sabelhaus 1996). Nor may it have much to do with social phenomena pertaining, say, to the divorce rate (see Brenner, Dagenais, and Monmarquette 1994), or about relaxed fears of nuclear war (cf. Slemrod 1990)! In much the same way, the other competing mainstream explanation based on Friedman's permanent income hypothesis has also partly been discredited by the facts (cf., among others, Viard 1993). The explanation that is being proposed here is a Keynesian one pertaining to the behaviour of sectoral expenditure flows and income distribution parameters.

Policy makers should, however, be careful to distinguish the "good" from the "bad" reasons for the decline in the saving rate. The fact that the saving rate has declined during the last two decades as a byproduct of a decline in the share of rentier income (because of a policy of lower interest rates) is a "good" reason for the decline in the saving rate and, therefore, ought not draw any serious attention by policy makers. Similarly, from the perspective of societal welfare, a luxury consumption binge fuelled by gains in the stock market ought to be of less concern to policy makers, as long as these gains were not achieved at the expense of other sectors (as would be the case in a relatively stagnant economy). However, this may have been cause for some concern during most of the 1990s, when real income growth lagged behind significantly.

On the other hand, if the cause of the fall in the saving rate and the growth in household debt ratios was a decline in real per capita disposable income, this ought to be a clear signal to policy makers that there are serious underlying problems, perhaps not unlike what had happened in the years leading to the Great Depression of the 1930s. In much the same way, since past crusades against public sector deficits and the present targeting of budget surpluses have probably rendered our growth more fragile because of the positive impact on household indebtedness, then policy makers ought to take more serious account of the possible macroeconomic consequences of their fiscal actions.

Notes

1. One has only to read the newspapers over the years. See, for instance, Charles Frank, "Canadians' Savings Rate Lowest in Three Decades", *Calgary Herald*, September 18, 1999, p. A1.
2. For further discussion, see Statistics Canada, "The Relationship between Estimates of the Family Expenditure Survey and Data in the National Accounts", *Internal document*, Income Statistics Division, Expenditure Surveys Section, Statistics Canada, Ottawa, October 1999.
3. The calculation of the statistics, displayed in the cells of the last row of Table 1, merely entailed setting the value of the first line of the second column of the fifth row (16.4 per cent) equal to the estimated value of the saving rate for 1996 from the national accounts (namely, 7.0 per cent) [with the 2002 value of 11.2 per cent becoming 4.2 per cent], and then re-scaling all the other values for the separate quintiles in the cells of the fifth row in proportion to the respective aggregate national accounting values for each year.
4. It should be pointed out that, while for simplicity, we have treated the sectoral net expenditures *[G-T]* and *[X-M]* as exogenous, the values of such variables as *M* and *T* would themselves depend on the most recent values of *Y* and therefore could feed back into the determination of the current and future values of these same net expenditures. For instance, an exogenous increase in *X* could lead to an increase in *Y* which would then bring about an increase in *M*. While these feedback effects could be very significant, an analysis of their implications is outside the scope of this paper.

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