Government employer-sponsored unfunded pension plans
-- Revised treatment in the Canadian System of National Accounts

by Patrick O'Hagan – May 2003

I: Introduction

In 2000, the Canadian System of National Accounts (CSNA) at Statistics Canada revised its treatment of government sector unfunded pension liabilities (UPL). At that time, UPL were classified as liabilities of the government sector and as assets of the personal sector in the balance sheet accounts. Corresponding adjustments were made to sector accounts' income, expenditure and financial flows. Behind this change, was a lengthy consideration of the benefits of such a proposed revision. Practices in other countries as well as guidance provided in The 1993 SNA were also considered.

The groundwork for this revision was laid in the late 1980's. At that time, large government deficits and growing debt centered the discussion with respect to the treatment of unfunded pension plans to the appropriate measure of government debt. However, from about the mid-1990's, as the saving rate fell and as the post-war baby-boom generation aged, the debate shifted into the appropriate measurement of pension saving.

The 1993 SNA recommended that UPL be excluded from the balance sheet account; however, given their potential importance, it was recommended that UPL be reflected in a memorandum item (13.88). Few countries accounted for unfunded pension plans in their national accounts. When the 1997 historical revision to the CSNA was carried out, it was decided to delay this change until more countries had dealt with, or had begun to recognize, UPL. In 1999, the U.S. national accounts revised saving estimates with respect to government unfunded pension plans. This was a catalyst for the CSNA revision in 2000.

This note does not deal with the specifics/legalities of pension liabilities, nor does it attempt to interpret international standards, as these have been discussed in some detail by other contributors. Rather the focus is placed on harmonization of statistics, significance of UPL, and relevance of national accounts estimates of government debt (and deficit) as well as personal sector wealth (and saving). Given that circumstances are different across countries, this note largely confines itself to Canada for illustrative purposes, though the points raised are likely applicable to other countries. Pre and post treatments in the Canadian case are discussed.

II: Principal issues considered with respect to unfunded pension schemes

Unfunded pension arrangements and recognition of pension obligations

In the CSNA, prior to the afore-mentioned revision, pension amounts were included only if any liabilities were backed by invested assets. In general, this is an application of the rule that for each liability there must be a corresponding asset, and vice-versa. With respect to employer-sponsored plans, most were set up as autonomous funded entities (trusteed pension plans) with assets invested in a wide-range of marketable securities. For government unfunded pension plans there were three basic characteristics: First, no income-generating assets existed by which to meet future pension obligations of retiring employees, with the result that pension payments are met out of current revenue (often referred to as "pay as you go" plans); second, plans were non-autonomous in nature, remaining largely the responsibility of the employer to oversee and administer; and, third, the vast majority were defined-benefit plans.

An important consideration was the interpretation of the term unfunded in the case of UPL. Strictly speaking, UPL are unfunded as there are no invested assets. However, looking at this issue more broadly, recognition became an important factor. In the case of "pay as you go" plans in Canada it was felt that the treatment in official government accounts resembled more a funded scheme than an unfunded one. Given that governments recognized the liability and booked interest at a determined rate on a nominal bond it could be argued that these plans were accounted for "as if" they were funded and, as a result, were not materially different from funded plans.

A related point was whether, from the point of view of the employees, there was much of a difference between funded and unfunded plans. Otherwise stated, the issue was whether the funded-unfunded distinction for government employer-sponsored pension plans materially affected the economic behaviour of households. The view was that it did not, which reflects the general belief that the employers will meet their obligations.

Obligation and ability to pay

Employers have always had a legal and moral obligation to meet employee pension obligations. Recognition of pension liabilities in government official financial accounts in Canada provided clear evidence of this obligation as well as an indication of the intent on the part of governments to meet these obligations.

In the case of UPL there is a promise, but not necessarily the means to meet future pension obligations. However, government ability to raise tax revenue suggested that ability to pay would not be compromised and might not be a pivotal factor. In the case of Canadian governments the likelihood of default was considered to be negligible, even without considering the improvements in fiscal positions at the federal and provincial levels in recent times. In fact, it was argued by certain analysts that the unfunded pension liabilities, especially at the federal level, were "as good as" the funded pension liabilities in autonomous plans. Certainly, there is stability in UPL, compared to the recent losses incurred by funded pension plans on their equity investments.

Harmonization of government accounting systems

There is general agreement that measures of government financial position should be harmonized, to the extent possible, in order to enhance clarity and interpretability. At the present time, international guidelines are not in line. The IMF Government Finance Statistics manual recommends the recording of UPL as liabilities, while The 1993 SNA recommends a memorandum item treatment. This can give rise to differences internationally. Further, within countries, it is desirable to have official financial accounts of governments as well as data compiled from those accounts (e.g., SNA government sector estimates) on the same basis. This is not always the case.

Government debt information in Canada is available from three main sources: The audited public accounts of the federal and provincial governments; the Statistics Canada Government Finance Statistics (GFS); and, the balance sheet accounts of the CSNA. Prior to the 2000 revision both the public accounts and the GFS recognized UPL, but the CSNA did not. This led to confusion among users with respect to the interpretation of the resulting different measures of government gross and net debt as well as surplus/deficit. It was felt that this situation should be addressed. As work proceeded leading up to the 1997 historical revision, one objective became to achieve improved harmonization between government financial information and national accounts statistics.

In the audited public accounts of Canadian federal and provincial governments, UPL typically made up part of government debt. Notably, government accounting practice and valuation rules for pension liabilities varied somewhat. Pension amounts were shown at accrued (contributions + investment income) or at actuarial values (accrued +/- actuarial adjustment). Pension liabilities were always disclosed, but not always recognized in the financial statements, but rather were on sometimes relegated to footnotes. To the extent that the liabilities were recognized, interest was booked on the amounts, typically using an average of current bond rates.

Statistics Canada's GFS presented revenue, expenditure, assets and liabilities for levels of government. One of the objectives of the public accounts' based GFS was to integrate government data so as to be better able to compare provincial governments. Notably, however, GFS reflected some of the public accounts' differences across the governments with respect to UPL. One task in the historical revision to the CSNA was to standardize the classification of unfunded pension plans across governments, and this implied recognizing all forms of UPL. This was accomplished in 1997 in the GFS. A second task was harmonization of GFS and CSNA measures, and this implied inclusion of all government unfunded pension liabilities in the CSNA. This was accomplished in 2000.

Relevant measure of government sector debt

Closely related to government accounting systems was the issue of the appropriate measure of government debt. Given that government financial positions play an important role in macroeconomic analysis, providing the most accurate and consistent measure of government liabilities was a priority.

It is fair to say that government sector unfunded pension plans do give rise to clear obligations to make future payments and, as such, should be included in total liabilities. In fact, it was argued by some users that omission of a full accounting for pension liabilities, given their size, amounted to a misrepresentation of government gross and net debt in the CSNA. Further, given that governments themselves reported unfunded pension amounts in their public accounts, it seemed appropriate that these liabilities also be included in CSNA government balance sheets.

Evolution of government employer sponsored plans

In Canada there has been a clear movement, in government employee pension plans, towards funding. Over the last 15 years, a number of provincial plans have been converted from non-autonomous unfunded schemes to autonomous funded schemes. Most recently, in April of 2000, the federal government created a funded portion to its employee pension plan.

The transition of the plans from being unfunded to holding income-earning assets can take place in three basic ways; and, if we assume that the UPL are initially not recognized (as was the case in the CSNA prior to the revision), then the impact on government debt is clear in each case. First, governments can decide to issue marketable bonds to the general public and then use the proceeds to fund the plan. In this instance, the plans would receive an inflow of funds and could invest in marketable securities. Alternatively, governments can issue non-marketable bonds to the plan, and retire a specific amount in each year for a specified period of time. In this instance, the plans assets would move from non-marketable government bonds into marketable securities over the specified period of time. In both of these cases, government bond debt would jump by the amount of the pension liability on the day the plan is funded. Lastly, governments can chose to phase in the funding. They can issue bonds to the public in specified amounts over a period of time in order to supply funds to the plans for investment purposes. In this instance, the plans would have a funded and an unfunded portion. In all three cases, government bond debt increase.

A full accounting for pension obligations, however, ensures that total government liabilities do not spuriously increase when plans are converted from unfunded to funded schemes. In this case UPL amounts included in government liabilities are converted to either non-marketable or marketable bond debt when funding occurs.

International comparisons of government financial positions

Government debt of OECD and other countries is a closely monitored series. Government gross debt and net debt are typically shown relative to GDP as a rough indicator of burden in domestic economy analysis as well as in international comparisons. In the latter case, while comparing countries' public sector debt should be relatively straightforward, it is complicated by differential treatment of unfunded pension schemes. If certain countries do not recognize government pension obligations and other countries do, then the latter will have their government debt overstated relative to the former. A possible correction would be to adjust out UPL for all countries. However, this adjustment may only partially correct the situation. If a country, such as Canada, has been funding government pension plans over time then its government debt will reflect this. As a result, its liabilities can be overstated relative to countries that do not recognize or have not begun to fund government pensions' schemes.

Relevant measures of pension assets and saving

The issues surrounding the treatment of UPL in government liabilities are important considerations. However, there is another significant dimension to the treatment of UPL on the other side of the ledger – pension assets and saving. If, as stated earlier, there is no reason to believe that contributing employees covered under UPL behave differently than those covered under funded employer-sponsored plans, then there is little rationale for having a separate treatment of these two schemes.

A key consideration in this revision was also to have a complete, consistent and analytically meaningful set of CSNA statistics on personal saving (and net worth), in particular with respect to the growing amounts in various forms of pension saving. Having differences in treatment for employer-sponsored plans, or between individual retirement schemes and employer-sponsored schemes, did not seem desirable. Seen from this perspective of pension saving and assets, the distinction between funded and unfunded employer-sponsored pension plans seems somewhat artificial. This is reinforced by the earlier point that the economic behaviour of government employees covered under unfunded schemes is not materially different that those under funded pension plans.

Further, there has been renewed interest in Canada and elsewhere about the extent and nature of pension saving and assets. This interest has partly to do with the aging of the post-war generation, and evolves around the outlook for personal saving, as well as the question of whether there are sufficient resources to meet the retirement needs of this generation. In fact, on the latter point, the OECD initiated some work on sustainability in 2002 which identified pensions as an area to be examined. A consistent treatment of all forms of non-social program pension saving and assets, combined with a clear distinction between types of pension schemes, are important pre-requisites for most types of analysis in this area.

International comparisons of household sector financial positions

Personal sector saving/wealth is becoming an increasingly monitored series, both nationally and internationally. Meaningful international comparisons would argue for consistent treatment of pension saving and assets, as was the case for government debt comparisons.

Elimination of statistical breaks in economic time series

A related factor was that, over the years, the number of provincial unfunded plans was diminishing. Such plans were slowly being converted from unfunded to funded schemes. Each time such a conversion took place, the accompanying issue of bonds to an autonomous pension fund sharply increased government debt and personal sector assets in the CSNA. In addition, these conversions also resulted in significant breaks in CSNA flows. However, from the point of view of employee entitlements, nothing had changed. There was a desire to eliminate unnecessary breaks in series.

Other Considerations

The 1993 SNA recommended that UPL be excluded from the balance sheet account. One interpretation of an off-balance sheet liability item, is that it represents a contingent liability. This is not the case for UPL in Canada, given their disclosure and recognition in official financial statements of governments. Further, the relative significance of these plans in Canada seemed to warrant further consideration of the treatment of UPL. While The 1993 SNA did not recommend that unfunded obligations be added to government liabilities, it did recognize the potential significance of UPL by recommending that a memorandum item treatment for these amounts -- the net equity of households in employer-sponsored unfunded pension plans – be adopted and shown on the balance sheets of both households (asset) and governments (liability). The revision to the CSNA is viewed as an extension of current international standards on national accounts, as embodied in The 1993 SNA.

International comparability was also considered, since most OECD countries did not record UPL. However, once it had been decided that current measures of assets-liabilities, saving and surplus-deficits had to be revised to better reflect economic reality and enhance economic analysis, international comparability played a secondary role – affecting more the timing than the decision. With respect to timing, the U.S. Bureau of Economic Analysis revised its treatment of government unfunded pensions in 1999, altering saving in both the personal and government sectors. Given the importance of Canada-U.S. comparisons, this was no small matter in terms of the timing of the Canadian revision. Statistics Canada followed suit in 2000, further encouraged by the establishment of a new federal funded plan on April 1, 2000.

***III: CSNA c*onvergence in the treatment of employer-sponsored pension plans**

Pre-change treatment

Prior to the change, the CSNA treatment of funded employer-sponsored pension plans was different from that of public sector unfunded employer-sponsored pension plans, notably in terms of the impact on the personal sector. For funded pension schemes – both employer-sponsored and individual – contributions out of current income, as well as investment income, were part of personal saving and accumulated as financial assets in the financial account. Pension benefit payments amounted to dis-saving and as a draw-down of financial assets in personal sector.

Unfunded plans required a number of imputed transactions, and were accounted for as follows. Government employer contributions were treated as an expense, and both employer and employee contributions to pension funds were counted as part of the wages, salaries, and supplementary labour income of the personal sector. However, both contributions were transferred back to government revenue. In addition, while interest on the nominal liability was part of government interest charges, this amount was also revenue of the government sector. This implied that the pension liability was also an asset of government, though not treated as such in the balance sheet accounts[1]. Pension payments were current transfers to persons. In sum, contributions and investment income were not part of personal saving (but rather government saving) and benefit payments were treated as income under current transfers from government.

There was substantial dissatisfaction with the treatment for government unfunded plans.

Impact of the Change in Treatment

<u>Coverage of liabilities</u>

Unfunded pension liabilities now included in the CSNA covered both recognized and unrecognized amounts as per public accounts. In addition, under-funded portions (actuarial liabilities) of both funded and unfunded government pension plans were also included. Liabilities were valued at the higher of actuarial or accrued values. This broad approach harmonized the treatment of UPL across the national and provincial governments in both the GFS and CSNA systems. In addition, the recognition of actuarial liabilities ensured that public sector employers followed a similar accounting to those in the private sector.

<u>CSNA stocks and flows</u>

CSNA balance sheet accounts were revised in March of 2000 to include UPL. A prominent result of this change in treatment was a significant upward revision to government liabilities. Correspondingly, financial assets in the personal sector were also revised upwards, with the addition of an asset for "equity in unfunded pension plans". Sector estimates of net worth were likewise affected.

With respect to the flows, imputed transactions were largely eliminated. Employer and employee contributions to pension funds remained part of the wages, salaries, and supplementary labour income of the personal sector in both previous and current treatments. However, the income of the pension funds was now counted as the investment income of persons rather than of government. Public service pension benefits payments disappeared from personal income and were subsequently treated as a reduction in personal assets. On the outlay side of the personal sector the employer and employee contributions to pension funds were no longer transferred to government as part of contributions to social insurance plans. The net effect was increased personal saving resulting from higher personal income and reduced personal outlays. These changes were entirely offset in the government sector, resulting in decreased government saving. Personal saving, for example, in 1999 increased by $11 billion, saving rate

[1] This, in turn, caused problems for some users when linking interest flows to asset/liabilities.

increased from 1.9% to 3.6% and of course, government saving and balance[2] decreased by $11 billion.

Financial accounts recorded the transactions-based increases in the unfunded pension liabilities of government. Actuarial deficiencies arose as "other changes in assets", until offset by contribution flows.

IV: Related Issue

Some would argue that social security plans in Canada, which are at least partly funded, could also be considered part of the assets of the personal sector. Like employer-sponsored plans, at a specified point in time, Canadians will receive a pre-determined amount of funds on an ongoing basis. As such, retirement planning by individuals may take such future social security receipts into account. Similarly, contributions to such social insurance schemes may be viewed as a form of saving by individuals, substituting for further pension saving.

On the other hand, social security is a policy tool. As such, governments do not have the same obligations to the general population as they do with respect to employees. Contributions and benefits can be changed in the case of social security, depending on the economic circumstances. So while the inclusion of social security funds in personal sector net worth is of interest as an alternative and broader measure, no changes are advocated at this time. However, this is an area where a memorandum item treatment might be seen as useful.

V: Summary

Statistics Canada was motivated to revise its practice for a number of reasons. Most important among these was the desire to have a complete, consistent and analytically meaningful set of CSNA statistics on (i) employer-sponsored pension plans and on (ii) personal saving (and net worth) as well as government saving. A second purpose was to bring the national accounts measures of government debt and deficit/surplus more in line with those of the Public Accounts. In the end, the funded-unfunded distinction did not play a major role in the decision-making process behind this revision.

This revision is viewed as an extension of current international standards, as defined by The 1993 SNA. The factors considered behind the Canadian change, as well as practices elsewhere (Australia and the U.S.) bring into question the current internationally accepted conceptual treatment.

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[2] One drawback of the change was a step away from the cash requirements surplus/deficit. However, given the transparent nature of this revision, pre-revision totals can easily be re-constructed.
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