**8th Meeting of the Advisory Expert Group on National Accounts,**
**29-31 May 2013, Luxembourg**

**Agenda item: 5**
**Topic: Pension entitlements**

Introduction

At a workshop organized by the OECD and the Australian Bureau of Statistics (ABS) (Canberra, 22-24 April 2013), standard requirements for the measurement and international reporting (common terminology, concepts and definitions) of pension entitlements of employment related pension schemes and social security schemes will be determined. The aim is to address the full sequence of the SNA accounts and the supplementary table, including the measurement of pension entitlements that are not recognized as such in the core system of national accounts.

Guidance on documentation provided

The attached report is a summary report of the discussions at the Workshop on Pensions.

Main issues to be discussed

The AEG is expected to consider and provide guidance on a number of issues, as listed on paragraph 18 of the attached summary report.

# OECD-ABS Workshop on Pension Entitlements
**Canberra, 22-24 April 2013**

## Summary Report

### Introduction

1. The OECD/ABS workshop on pension entitlements was held in Canberra, Australia from 22-24 April 2013. Over the three days, discussion covered conceptual, methodological and country experience in the measurement of employment related pension schemes (including social security) in the full sequence of the SNA accounts and the supplementary SNA table 17.10.

2. Overall discussion reinforced the importance of the measurement of pension schemes within the System of National Accounts. Funding retirement incomes with an aging population, understanding the obligations on government, increasing debt concerns and the sustainability of consumption patterns are common issues to all developed countries. Though the strategy of encouraging increased savings for retirement, via pension schemes and other initiatives, is common to most countries, there are substantial differences in how these strategies have been implemented across countries. The differences in the operation of pension schemes (and other arrangements to finance retirement) across countries result in difficulties in collecting and disseminating internationally comparable data.

3. Similarly the prioritisation of policy questions, and hence the information data set required to answer these questions, is different across OECD countries. The discussions emphasised that there are two broad priorities that are related but distinct and that respectively correspond to EU and to non-EU countries concerns:

   - the ability of general government to meet its obligations leading to a focus on the liabilities of the general government sector; currently captured in the supplementary SNA Table 17.10 ( ESA Table 29); and
   - the ability of households to fund their lifestyles in retirement leading to a focus on the assets of the household sector; currently not adequately captured in SNA Table 17.10 ( ESA Table 29).

4. Given the common and global nature of funding retirement, it is essential that countries and international organisations continue to work through these issues to produce standards that promote the full recording of international comparable data.

### Summary of Outcomes

5. The workshop agreed to the following outcomes.

***SNA Data Presentation - SNA Table 17.10/SNA Table 17.xx***

6. The workshop noted that the main purpose of table 17.10 is to provide comprehensive information on all pension schemes included and excluded from the SNA sequence of accounts, and supported the mandatory nature of the table in order to provide a clear picture of pension entitlements on an internationally comparable basis.

7. The workshop acknowledged that table 17.10 does not allow for a number of schemes which are designed to encourage household savings for retirement which are not part of social insurance and therefore does not present a complete picture of household preparedness for retirement and consequently of households financial wealth after retirement. For example, private savings schemes taken out by households solely on their own initiative and not linked to employment but which provide tax incentives for retirement savings. In Canada these schemes represent more than a third of all pension assets. The inability to report these schemes has revealed that a fundamental problem with Table 17.10 is that it was designed for economies where pension or social security schemes have not been funded. Another area not covered by table 17.10 and highlighted at the workshop was the importance of the old age pension (social assistance schemes) as a form of retirement benefit in some countries. For example, in New Zealand nearly three quarters of pension benefits received by current retirees comes from the old age pension (known as "New Zealand Superannuation").

8. Based on their experience in populating SNA Table 17.10, Statistics Canada agreed to draft an additional table (with appropriate fields but without data) showing this extended picture. The new table 17.xx "Household Retirement Resources" is included in Appendix 1. The purpose of this supplementary table is to display household resources available for retirement.

9. The new table 17.xx includes columns (A,B,C) for reporting retirement assets held directly by the household sector which are not covered in Table 17.10. The counterparty sector for the liability could be any other sector. For social assistance a new Column K has been created to report schemes such as the old age pension. See Appendix 1 for a detailed description of Table 17.xx. The workshop participants recognised that the table will require further work such as the inclusion of metadata to clearly describe the criteria for including particular schemes in the various columns of Table 17.xx. The draft version presented in this paper is intended to be the basis of AEG discussion on the proposal of an additional table.

10. While participants acknowledged the importance of Table 17.10, especially in capturing government liabilities relating to pension entitlements, a clarification of the purpose of Table 17.10 and the endorsement of the additional supplementary Table 17.xx will solve the reporting problems encountered by countries (described above) and therefore help define which pension/savings arrangements need to be included in each of the two supplementary tables.

11. Following the release of the USA national accounts for the third quarter of 2013, the new Table 17.xx will be filled in with USA data and presented for consideration during the next meetings of the OECD Working Party on Financial Statistics (WPFS) and Working Party on National Accounts (WPNA), to be held on 30 September - 4 October 2013.

***<u>Conceptual Issues for Immediate consideration by AEG</u>***

- **Imputed property income flows between employers and autonomous defined benefit pension funds**

12. The workshop recommended AEG to consider the treatment of imputations for under-funded and over-funded schemes. It is necessary to record interest accruing, on the unfunded liability, between the employer and the pension fund. For further detail see Appendix 2.

***Conceptual Issues for Long Term SNA Research Agenda***

13. The nature of income and the relationship with capital gains is an issue in the measurement of pension funds, as it is elsewhere in the SNA. Insurance (including pension) funds undertake their production processes with an explicit expectation of capital gains providing resources. To sensibly measure insurance output, these expected holding gains need to be considered in conjunction with property income flows. Workshop participants agreed that the issue of capital gains as income should be considered in the longer term SNA research agenda and in the short term requested a clarification of the exact meaning of SNA paragraph 17.18.

***Methodological Issues***

14. The Workshop made specific recommendations on the following issues:

- **Actuarial modelling**

The workshop agreed that best practice was to use estimates from actuaries/supervisory authorities wherever possible, rather than statistical agencies developing their own estimates. Actuaries have been specifically trained and employed to undertake these tasks and so are best placed to compile estimates. National accountants should be trained in order to understand the different actuarial concepts and to disseminate the relevant metadata on national pension entitlement estimates. In particular for government unfunded pension schemes (including social security) estimates from actuaries are often not available or suffer from inadequate assumptions. In these cases collaboration between all national institutions (e.g. social security, ministry of labour) should lead to proper modelling reflecting the fair value of pension entitlements. In this regard the workshop took note of the European Regulation (ESA 2010) and further recommendations for comparable calculations of pension entitlements for unfunded government pension schemes.

- **Review of assumptions (in particular, regarding discount rates and growth rates)**

Where statistical agencies undertake the estimation themselves, the workshop strongly recommended periodic reviews of assumptions underlying the estimates. These reviews are necessary to keep abreast of changes in the economy. However, the assumptions (such as discount rates, wage rate movements etc.) should be based on medium to long term averages and it is not recommended that they be reviewed annually.

- **Projected Benefit Obligation (PBO) versus Accrued Benefit Obligation (ABO)**

The workshop noted that the method used in countries for the measurement of defined benefit schemes (private or public schemes) depends on circumstances. Therefore, no specific recommendation is made, but methodological notes need to be provided to explain the choice of the method used.

***Data Source Issues***

15. Typically pension schemes are highly regulated. The workshop recognised the critical role of regulatory and Government Finance Statistics (GFS) data in providing information required for the System of National Accounts. GFS data is currently the

weakest point for many countries' estimates of pension schemes. It was acknowledged that the update of the GFS manual is an important step towards better measurement. The workshop recommended that in order to compile comparable and complete data across countries all statistical agencies should move to adopt the updated GFS standards as soon as is practical. In particular, National Statistical Offices (NSOs) should seek to influence the data collection activities of regulators and stress the importance of the requested data about pension schemes on the transparency and sustainability of current and future debt.

16. The workshop recognised the importance of working closely with Accounting Standards Bodies to influence standard settings and recommended the adoption of government data that adheres to the International Accounting Standards (IAS).

17. The Workshop recognised that it is difficult to collect data relating to migration (including data on migrant workers after retirement) and recommended better cooperation between countries regarding cross border related information.

## Issues for consideration

18. The AEG is requested to:

    a) Clarify the purpose of SNA Table 17.10.

    b) Endorse the draft supplementary Table 17.xx "Household Retirement Resources", to enable countries to report all pension schemes including schemes which are not part of social insurance.

    c) Introduce property income imputations for under-funded and over-funded schemes, that is to record interest accruing on the unfunded liability between the employer and the pension fund.

    d) If (c) is endorsed, does AEG have a preferred methodology (see paragraph 10 and 11 in Appendix 2).

    e) Put a high priority on the issue of capital gains as income which is already included on the longer term SNA research agenda. This includes the short term clarification of the exact meaning of 2008 SNA paragraph 17.18.

# Appendix 1: SNA Table 17.xx "Household Retirement Resources"

## DRAFT

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Liabilities appear in the core national accounts | | | | | | | | Liabilities do not appear in the core national accounts | | | | |
| | | Counterparty sector to Household Assets | | | Non-general government | | General government | | | | | | | |
| | | Directly Held Household Retirement Schemes | | | | | | General government employee defined benefit schemes | | | | | | |
| | Position / transaction / other flows | Directly Held Household Retirement Schemes linked to tax incentives | Directly Held Household Retirement Schemes linked to annuities | Directly Held Household Retirement Schemes - Other (Please Specify ___________ | Defined contribution schemes | Defined benefit schemes | Defined contri-bution schemes | In the financial corporation sector | In the general government sector | In the general government sector | Social security pension schemes | Social assistance schemes | Total Pension schemes | Pension entitlements of non-resident households |
| *Row number* | *Column number* | A | B | C | D | E | F | G | H | I | J | K | L | M |
| | **Opening balance sheet** | | | | | | | | | | | | | |
| 1 | Pension entitlements | | | | | | | | | | | | | |
| | **Transactions** | | | | | | | | | | | | | |
| 2 | Social contributions relating to pension schemes | | | | | | | | | | | | | |
| 2.1 | Employer actual social contributions | | | | | | | | | | | | | |
| 2.2 | Employer imputed social contributions | | | | | | | | | | | | | |
| 2.3 | Household actual social contributions | | | | | | | | | | | | | |
| 2.4 | Household social contribution supplements | | | | | | | | | | | | | |
| 2.5 | Less Pension scheme service charges | | | | | | | | | | | | | |
| 3 | Other (actuarial) accumulation of pension entitlements in social security funds | | | | | | | | | | | | | |
| 4 | Pension benefits | | | | | | | | | | | | | |
| 5 | Adjustment to the change in pension entitlements | | | | | | | | | | | | | |
| 6 | Change in pension entitlements due to transfers of entitlements | | | | | | | | | | | | | |
| 7 | Change in entitlements due to negotiated changes in scheme structure | | | | | | | | | | | | | |
| | **Other economic flows** | | | | | | | | | | | | | |
| 8 | Revaluations | | | | | | | | | | | | | |
| 9 | Other changes in volume | | | | | | | | | | | | | |
| | **Closing balance sheet** | | | | | | | | | | | | | |
| 10 | Pension entitlements | | | | | | | | | | | | | |
| | ***Related indicators*** | | | | | | | | | | | | | |
| | *Output* | | | | | | | | | | | | | |
| | *Assets held by pension schemes at end-year* | | | | | | | | | | | | | |
| | *Valuation Method for entitlements* | | | | | | | | | | | | | |

Empty cells show where entries appear in the main ("core") accounts. Black cells show where no entry is appropriate. Grey cells show where information is provided in the supplementary table only

Row 2 is the sum of rows 2.1 to 2.4 less 2.5

Row 3 is the analogue of employer's imputed contributions in the case where government has assumed the ultimate responsibility for any shortfall in pension provision

Row 5 is the sum of rows 2 and 3 less 4

More information on the components underlying rows 8 and 9 to be shown in a further supplementary table to allow an assessment of the degree of uncertainty in these estimates.

1. Column A would be used for assets of the household sector such as the Individual Retirement Account (IRA) in the USA or the registered retirement savings plan (RRSP) in Canada. Governments encourage households to save for retirement by offering tax incentives which permit the deferral of current income tax. As companies in Canada have evolved away from defined benefit schemes, households have been encouraged to save in these type of schemes in preparation for retirement and these assets are earmarked and held in trusts for individuals.

2. Column B would be used for retirement related annuities. In Canada (and the USA), money moves out of pension schemes (DB or DC) and into annuities. This can take place at retirement and the annuity represents a payment mechanism for the liquidation of assets which have accumulated during employment.

3. Column C would be used for other types of household savings plans which are not included in Column A or B. The type of plans in Column C should be specified by the respondent economy.

4. Column K would be used to report schemes such as the old age pension.

5. Row "Valuation method of entitlements" - This row is included to indicate the basis of valuation for the pension entitlements. Accumulated benefit obligation as well as projected benefit obligation are methods for the evaluation of DB plans. Other valuations should be noted such market value in the case of DC plans or directly held household retirement schemes.

6. Row 2.5 was added to deduct pension service charges (as is shown in the ESA Table 29). This corrects an apparent omission from Table 17.10.

7. For description of Columns D to J, L and M, see description for SNA table 17.10.

## **Appendix 2: Imputed property income flows between employers and autonomous defined benefit pension funds**

1. Chapter 17 of 2008 SNA provides a detailed description of the way in which employer sponsored pension schemes should be recorded. A clear distinction is made between defined contribution (DC) schemes and defined benefit (DB) schemes. There are no problems with the treatment of DC schemes. However, there is one aspect of the recommendations regarding DB pension schemes that does not seem appropriate. The issue relates to the need to record imputed property income flows between an employer and an autonomous pension fund if the schemes are underfunded or overfunded (in the case where the employer retains full responsibility for the benefits payable to his past and present employees).

2. Consider the case of an underfunded DB scheme with an autonomous pension fund where the employer retains full responsibility for the benefits payable to his past and present employees. 2008 SNA discusses and illustrates such an example in paragraphs 17.167 to 17.174 and in Table 17.8. In the last sentence of paragraph 17.169 it is noted that there is a difference between imputed interest payable to employees and the property income earned by the pension fund and ends with the statement "... but it is not shown in the current accounts." However, the reason for not doing so is not given.

   *17.169 In the allocation of primary income account, investment income is also shown. The increase in pension entitlement coming from past service, due to the unwinding of the discount factor because retirement is one year nearer, is 4. This is shown as an imputed flow of investment income from the pension fund to households. At the same time, the pension fund actually earns 2.2 from investment income of the funds they manage. At this point, therefore, there is a shortfall of 1.8 in the pension fund resources but it is not shown in the current accounts.*

3. In Table 17.8 the employer is not shown as being responsible for the difference between the past service increase and the actual investment income of the pension fund in either the income accounts or the financial account (i.e. an amount of 1.8 is not accounted for). This implies that this amount must be recorded in the reconciliation accounts as either a revaluation or an other change in volume. However, it is hard to justify treating this amount as either a revaluation or an other change in volume. The solution to this apparent anomaly is simple. Record an imputed property income flow from the employer to the autonomous DB pension fund of 1.8 in the allocation of primary income account. This treatment was recommended in Annex 1 of a paper by Francois Lequiller presented to the AEG meeting, 19 to 23 March 2007, in New York. A link to the paper is copied below:
   http://unstats.un.org/unsd/nationalaccount/AEG/papers/m5TFpensions.pdf

4. The need for such a treatment is reinforced by comparing how two similar DB schemes (one totally unfunded and the other significantly underfunded) are treated in 2008 SNA. In the case of a fully unfunded DB scheme two imputed flows to the household sector will be recorded in the employer's income accounts:

   (i) current service increase (imputed employer contributions) and

   (ii) past service increase (imputed property income)

5. However, in the case of a significantly underfunded DB scheme only one imputed flow will be recorded in the employer's income accounts:

(i) current service increase (imputed employer contributions)

6. There does not appear to be any justification for not showing an imputed property income flow from the employer to the pension fund in the latter case to allow for the fact that the employer effectively owes interest on his unfunded liability to the pension scheme. It could be argued that the employer's saving will be overstated if no imputed property income flow to the pension fund is recorded.

7. By analogy if a DB pension scheme is overfunded there may be a need for an imputed property income flow from the pension fund to the employer.

8. Brent Moulton, Bureau of Economic Analysis, raised this issue under Agenda Item II at the 7th Meeting of the Advisory Expert Group on National Accounts, 23-25 April 2012, New York. A link to the paper is copied below: http://unstats.un.org/unsd/nationalaccount/aeg/2012/M7-272.pdf

9. Marshall Reinsdorf, Bureau of Economic Analysis, also reiterated his concerns in two papers listed below at the workshop:

   *(a) Comment on the Treatment of Defined Benefit Pension Plans in the SNA*, and

   *(b) Adding Actuarial Estimates of Defined Benefit Pension Plans to National Accounts*, Dominque Durant, David Lenze and Marshall Reinsdorf, October 2012.

***How to calculate imputed property income flows between the employer and an autonomous DB pension fund***

10. There are two main ways in which the imputed property income flow between the employer and a DB pension fund could be calculated in the case of an under-funded DB scheme:

(i) net unfunded liability times the discount rate, or

(ii) total pension liabilities to households times the discount rate less actual property income earned by the fund (excluding capital gains).

11. The International Accounting Standards Board requires corporations to follow the treatment described in *IAS 19, Employee Benefits*. This accounting standard recommends the use of option (i) above, whereas Francois Lequiller's paper proposes using option (ii). In the forthcoming comprehensive revision of their national accounts BEA intends to measure transactions of defined benefit pension plans on an accrual basis for the first time, see attached link from March 2013 issue of the Survey of Current Business. Pages 21-25 in the article clearly illustrates BEA treatment to include imputed property income flows from the employer to an underfunded autonomous pension fund using option (i) above. http://www.bea.gov/scb/pdf/2013/03%20March/0313_nipa_comprehensive_revision_preview.pdf