

---

## The treatment of unfunded public sector pension liabilities and debt in national accounts

January 2010

Dr Frank Eich

### Introduction

*Is there a difference between public sector pension liabilities and published debt?*

It has been argued that public sector pension liabilities are “*the UK’s second national debt*”<sup>1</sup>, and that the government should be transparent about it and account for this liability in its published debt figures. One consequence of reclassifying the estimated £1 trillion liabilities as “debt” would be a doubling of the official debt stock and hence also the debt to GDP ratio.

Commentators have also expressed views on what to do with this liability, ranging from curtailing future increases by making public sector pension promises less generous to fully funding the currently unfunded liability.

This briefing note discusses how the internationally-agreed System of National Accounts (SNA) treats public sector pension liabilities and what recent developments have taken place in that area. The note shows that the current version of SNA and its European version, the European System of National Accounts (ESA), exclude public sector pension liabilities from government debt but that there are also moves to greater disclosure. The fact that pension systems are so diverse across countries and that opinions differ on how to treat pensions in accounting means that progress has been and will continue to be slow.

The note also discusses whether fiscal policy should be predominately based on the public finance measures of debt and deficit, which exclude any consideration of the future. In most countries this remains the case. However, there have also been efforts to increase the role of future spending and revenue trends in shaping today’s fiscal policy settings.

### System of National Accounts

*A global standard for comparison*

The System of National Accounts (SNA) is an internationally-agreed standard, which is developed and updated by the United Nations Statistical Division. The latest, fully implemented version of the SNA is SNA93, which was established in 1993.

*The SNA “...consists of a coherent, consistent and integrated set of macroeconomic accounts, balance sheets and tables based on a set of internationally agreed concepts, definitions, classifications and accounting rules. It provides a...framework within which economic data can be compiled and presented in a format that is designed for purposes of economic analysis, decision-taking and policy-making... They provide a comprehensive and detailed record of the complex economic activities taking place within an economy...The SNA provides information...also about the levels of an economy’s productive assets and the wealth of its inhabitants at particular points of time...”<sup>2</sup>*

<sup>1</sup> *Public Sector Pensions - The UK’s second national debt*, Neil Record (Policy Exchange), 2009.

<sup>2</sup> See United Nations Statistics Division at <http://unstats.un.org/unsd/sna1993/toctop.asp>.

After consultation with its main partners, including the World Bank, International Monetary Fund and Eurostat, the United Nations Statistics Division launched the latest version of SNA in 2008 (SNA 2008), which includes a wide range of changes, including on the accounting of public sector pensions (see below).

It will take a number of years though before the SNA 2008 becomes the new national accounts standard around the world. It is planned that the implementation of SNA 2008 across the world will take place between 2010 and 2014, with European Union countries adopting the new system in 2014. This is because the current ESA (ESA95, which is based on SNA93) will, first, have to be updated to comply with the SNA 2008 and then, second, be adopted by the European Parliament and Council. This should be done by 2012, allowing the updated ESA to be implemented across EU member states by 2014.<sup>3</sup>

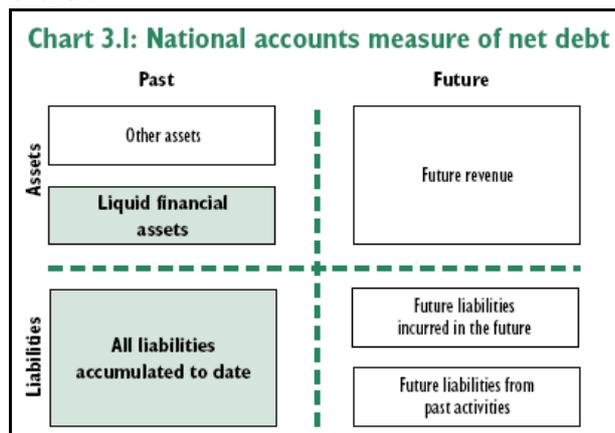
There is no reason to believe that the UK, as any other country, will not follow this timetable in the future.

**The treatment of public sector pension liabilities in national accounts**

*Current position in SNA93: cash flow rather than accruals*

The national accounts measure of debt is entirely backward looking and can be based on liabilities only (gross debt) or liabilities and liquid financial asset (net debt). This is depicted in Chart 1 below, which is taken from HM Treasury's 2003 Long-term public finance report.

**Chart 1**



This means that the current internationally-agreed definition of government debt does not include any future spending flows arising from the accrual of liabilities, whether they will arise from future or past activities. Public sector pension liabilities fall into this latter category as they are a future promise by government based on past activities. In other words, the current definition of debt is based on a cash flow rather than accruals concept.

Equally, non-financial assets (such as road infrastructure or social housing) are also excluded from net debt. Other government financial measures such as net worth capture these assets in their wider definition. As a result, net worth would remain unchanged if a government debt-financed the creation of new infrastructure. By contrast, the debt measure would record an increase in debt without acknowledging the value of the assets that might have been created.

More specifically, SNA93 does not recognise unfunded pension obligations as liabilities of unfunded employer retirement pension schemes (in the private or public sectors) as they can be altered unilaterally in the future. Moreover, their estimated value is highly dependent on a number of assumptions, which could also be revised in the future.<sup>4</sup>

*Rationale and options for changing the treatment of unfunded public sector pension liabilities in national accounts*

As part of the consultation exercise for NSA 2008, the European authorities (European Commission, Eurostat and the European Central Bank) submitted their views on why ESA93 should be changed with respect to the treatment of public sector pensions and offered a recommended solution. According to the European authorities there are:

*"...mainly three reasons for changing the treatment of unfunded employer retirement pension schemes...First, the different accounting for funded and unfunded schemes leads to different 'effects' on key variables like income, net lending/net borrowing, financial assets or liabilities. Accordingly, sub-optimal decision making in terms of economic efficiency might be a result as policy makers and economic agents plan, monitor and judge their activities based on data from*

<sup>3</sup> Follow-up Eurostat 2008 conference and Luxembourg Recommendations on National Accounts, at [http://www.eclac.org/deype/noticias/noticias/4/36184/CEA5\\_ppt\\_Eurostat\\_National-Accounts.pdf](http://www.eclac.org/deype/noticias/noticias/4/36184/CEA5_ppt_Eurostat_National-Accounts.pdf)

<sup>4</sup> Unfunded employer and social security pension schemes, The Committee on Monetary, Financial and Balance of Payments Statistics (CMFB). CMFB comprises Eurostat, ECB and national statistical offices. <http://unstats.un.org/unsd/nationalaccount/AEG/papers/m4pensionsEurostat.pdf>

*national accounts. Second, unfunded employer pension schemes are particularly significant for the general government and the public sector. In the light of demographic developments and the foreseeable fiscal burden from ageing populations in almost all developed economies, there is a well-founded interest in having available more comprehensive statistical information on future commitments of governments. This also refers to the impacts of pension reforms being undertaken and/or being at the political agenda in many countries. Third, the convergence of the international statistical standards and the international accounting standards (IAS) is aimed at, and the treatment of unfunded employer retirement pension schemes in the 1993 SNA deviates from the IAS and from the International Public Sector Accounting Standards (IPSAS). These accounting standards recognise unfunded employer retirement pension obligations as liabilities".<sup>5</sup>*

To deal with these issues, the European institutions suggested recording any stocks and flows to do with unfunded pension schemes in a set of supplementary accounts, using the existing rules for funded schemes. Moreover, the assumptions should be made explicit and a sensitivity analysis performed. The existing core accounts would remain unchanged.

#### **Pensions in SNA 2008**

*A small step towards greater transparency*

The final version of SNA 2008 follows these broad suggestions and includes a supplementary table on pensions. That pensions will not only be covered in the core accounts but also in a supplementary table has to a large extent to do with the fact that the role of social security and private pensions varies substantially across countries. This requires a great degree of flexibility to maintain cross-country comparability. Note that the definition of debt will remain unchanged. To quote the final version of SNA 2008:

*"...In recognition of the fact that social security is normally financed on a pay-as-you-go basis, entitlements accruing under social security...are not normally shown in the SNA. If all countries had similar benefits provided under social security and under private schemes, international comparisons would be relatively straightforward. However,...this is far from being the case..*

*There are two problems with...suggesting that entitlements from social security should be shown in the SNA. The first is that reliable estimates of the entitlements may not be readily available whereas it is*

*increasingly the case that such estimates exist for private schemes. Secondly,...such estimates are of limited usefulness where government has the possibility of changing the basis on which entitlements are determined in order to keep the entitlements within the bounds of what is budgetarily feasible. However, the consequence of simply accepting that entitlements for private schemes are shown and for social security are not is that some countries would include the greater part of pension entitlements in the accounts and some would show almost none.*

*In recognition of this dilemma, some flexibility regarding the recording of pension entitlements of unfunded pension schemes sponsored by government for all employees (whether private sector employees or government's own employees) is provided. Given the different institutional arrangements in countries, only some of these pension entitlements may be recorded within the main sequence of accounts (here referred to as the "core accounts"). In addition, however, a further table is to be presented that provides information disclosing the proportion of pension provision covered in the core accounts with some approximate estimates for the remaining schemes. It is a requirement, though, that a set of criteria be provided to explain the distinction between those schemes carried forward to the core accounts and those recorded only in the supplementary table....*

*By making this supplementary table and annotation a standard requirement for international reporting, analysts have the possibility of ensuring that cross country comparisons are not unduly clouded by the institutional variations from country to country. Further work on refining the criteria for the distinction between the pension schemes fully recorded in the core accounts and those where the entitlements are shown only in the supplementary table is to be part of the SNA research agenda..."<sup>6</sup>*

The latest set of SNA therefore represents a compromise, which allows every country to be included, and should be seen as work in progress. Future versions of the SNA might offer substantial innovations in this area.

#### **Choosing a discount rate**

One of the key assumptions, which ought to be made explicit in the supplementary accounts (and around which sensitivity analysis should probably be conducted) is that of the discount rate. The discount rate is of the utmost importance in this context as it converts a future flow of pension spending promises

<sup>5</sup> *ibid*, pages 4 to 5.

<sup>6</sup> *System of National Accounts 2008*, pages 369 to 370.

into a single stock number, which could be added to “normal” debt. Even small changes to the discount rate assumption will make a significant difference to the stock of liability. The fact that future public sector pension spending needs to be converted using a discount rate to derive a stock value adds a degree of uncertainty, which is not present with backward-looking debt more generally.

In 2008 the task force<sup>7</sup> instructed to assess the statistical measurement of government pension scheme assets and liabilities as part of the NSA 2008 updating process pointed to the International Public Sector Accounting Standards Board’s latest published standard (IPSAS 25) on the treatment of employee benefits.<sup>8</sup> IPSAS 25 leaves the choice of discount rate open, arguing more generally that the discount rate should reflect the time value of money (which the discount rate should always do). It does recommend the yields of either government or corporate bonds though, pointing out that in some countries the yield on government bonds would be the most appropriate benchmark. Crucially, the task force argues that public authorities should be fully transparent about the choice of discount rate and the rationale for this choice to aid international comparisons.

#### **The role of debt and deficit in setting fiscal policy** *“Rear-view mirror driving”*

As was shown in Chart 1, the current definition of debt (whether gross or net) is entirely backward looking as it does not take into account any future spending or revenue trends. A government’s deficit equally merely represents a “snapshot” in time and does not reveal anything about the future.

Despite these obvious limitations, in most countries fiscal policy remains predominately based on these two public finance indicators. Equally, the European Union’s Stability and Growth Pact is based on these two public finance measures, with the so-called Maastricht Criteria specifying a gross debt to GDP ratio of 60 per cent and a deficit of 3 per cent as benchmarks to guide fiscal policy. As a result, in most countries longer-term public finance trends – even those which are well understood and are almost certain to happen – generally only play a minor role, if that, in shaping today’s fiscal stance.

#### *Lifting the fog on what lies ahead: a better understanding of future fiscal challenges*<sup>9</sup>

Over the last ten years or so there have been increased efforts though, both in academia and in public policy, to address this issue. The main driving force behind this development has been the recognition that rapidly ageing populations could pose major challenges to the sustainability of the public finances in the longer term.

This effort can be split into two distinct parts. The first part has been to build up a much better understanding of the shape and size of future fiscal challenges (“fact finding”). Individual countries and international bodies such as the Organisation for Economic Co-operation and Development, International Monetary Fund or European Union institutions have produced detailed studies of the potential effects of ageing populations on economic growth or spending on pensions and health care.<sup>10</sup>

The second part has been to make sense of all these new insights. What should it actually mean – if anything - for policy making today? The main objective has therefore been to create a new fiscal measure to complement debt and deficit relevant for today’s policy making, which captures today’s outstanding debt as well as future trends in spending and revenue. From an economic efficiency and inter-generational fairness point of view, today’s policy settings should take account of these trends. Within this context, it seems reasonable that more certain developments should be given more weight than less certain developments when setting policy. This is not only limited to fiscal policy but also other areas of policy, including social security or the labour market.

Government spending can be grouped in legal and social obligations, and discretionary spending. Legal obligations are generally based on legally-enforceable contracts so that the associated projected spending flows are likely to materialise. Legal obligations include debt interest payments and, in many countries, also public sector pensions. Social obligations are generally a promise to the electorate, which can be renegotiated, for example by future governments. Social obligations generally include the social security

<sup>7</sup> *Final Report of the Eurostat/ECB Task Force on the statistical measurement of the assets and liabilities of pension schemes in general government to the CMFB. Background document to AEG paper SNA/M1.08/03: Pensions*  
[http://unstats.un.org/unsd/nationalaccount/AEG/papers/m6pensions\\_add1.pdf](http://unstats.un.org/unsd/nationalaccount/AEG/papers/m6pensions_add1.pdf)

<sup>8</sup> *International Public Sector Accounting Standard: Employee Benefits*, International Public Sector Accounting Board, 2008.

<sup>9</sup> To use the “rear-view mirror driving” analogy: in very dense fog looking into the rear mirror rather than ahead out of your windscreen will not make much difference to outcomes. So “lifting the fog” must be seen as a crucial first step towards better policy making.

<sup>10</sup> *The 2009 Ageing Report: Economic and budgetary projections for the EU-27 Member States (2008-2060)*, European Commission and Economic Policy Committee, 2009.

unfunded state pension, long-term care provision or health care. Discretionary spending covers all other spending, for example infrastructure projects.

While a number of indicators have been developed (e.g. generational accounts), one unresolved issue remains in what exact way they should influence today's fiscal policy settings.

For example, Molander (2009) argues that: *"The question of sustainability of fiscal policy has been in focus of the economical-political debate for several decades now. Initially, this interest was triggered by more or less acute financial problems in many industrial countries...For a number of years...there has been an increasing interest in longer-term outlooks, triggered by the public financial problems foreseen in most industrialised countries, mainly due to aging populations. The link between these projections and short- or medium-term budget documents ha[s] been rather weak, however..."*<sup>11</sup>

The European Commission has done more than most to address this shortcoming. The 2005 revisions to the EU's Stability and Growth Pact<sup>12</sup> include a greater emphasis on long-term budgetary developments when assessing the quality of the public finances in EU member states. To this end the European Commission is working on amending so-called medium-term budgetary objectives (MTOs) to take account of long-term budgetary trends resulting from age-related spending increases as well as short-term developments.

To quote the European Commission: *"Medium-term objectives are intended...to provide for sufficient room for manoeuvre to ensure that the government deficit does not exceed 3% of GNP during an economic slowdown without recourse to pro-cyclical fiscal policy. On the other hand, medium-term objectives allow Member States to reduce debt and to prepare for the budgetary impact of ageing populations..."*

*[A] medium-term objective can be based on current debt levels, taking into account their development over time. Furthermore, factors such as potential economic growth, inflation, the existing implicit liabilities related to ageing populations, the impact of structural reforms or the need for additional net investment should also be considered."*<sup>13</sup>

<sup>11</sup> *Net wealth analysis and long-term fiscal policymaking*, Per Molander, 2009, page 5.

<sup>12</sup> *Revising the Stability and Growth Pact: Public Finances in EMU 2006*, European Commission, 2006.

<sup>13</sup> See [http://europa.eu/legislation\\_summaries/other/125067\\_en.htm](http://europa.eu/legislation_summaries/other/125067_en.htm) (accessed 15 October 2009).

While there will inevitably be pros and cons to any specific formula used to translate long-term trends into medium-term budgetary objectives, these efforts should nonetheless be seen as a step in the right direction towards greater transparency and could help governments to pursue more appropriate policies in the future, given the challenges they face in the years ahead.

### Concluding comments

The British government has been criticised for not including its substantial public sector pension liabilities in its official debt measure. While there are good reasons to treat unfunded public sector pension liabilities in the same vein as outstanding debt more generally when considering the long-term sustainability of the public finances, this note showed that the UK follows international national accounting conventions when keeping pension liabilities and debt separate.

Even the latest System of National Accounts (SNA 2008), which will be implemented around the world between 2010 and 2014, does not prescribe countries to add unfunded public sector pension liabilities to debt. As countries have to comply with this standard, a country's stated debt will continue to exclude unfunded public sector pension liabilities for many years to come. In other words, debt will remain based on the concept of cash flow rather than accruals.

Instead, the SNA 2008 expects countries to provide supplementary accounts on pensions to aid international comparisons while still allowing for the huge variety of pension arrangements around the world. As the United Nations stresses, the treatment of pensions in national accounts remains a research issue and one can only speculate in which direction future innovations will go. Obviously, countries could choose to provide information on this issue going beyond what is required by the SNA. Countries such as Australia and New Zealand have done that for many years, though they admittedly encountered new challenges along the way. This could include complementing debt statistics with net wealth or other measures, which could cover the accrued liabilities from past activities but also a wider set of (non-financial) assets. This would not only raise transparency but managing assets and liabilities more closely together could also create synergies otherwise not available.

### References and data sources

European Commission: *Revising the Stability and Growth Pact: Public Finances in EMU 2006*, European Commission, 2006.

European Commission and Economic Policy Committee: *The 2009 Ageing Report: Economic and budgetary projections for the EU-27 Member States (2008-2060) Joint Report prepared by the European Commission (DG ECFIN) and the Economic Policy Committee (AWG)*, European Commission and Economic Policy Committee European Economy No 2/2009, 2009.

European Commission.

Eurostat/ECB Task force: *Final Report of the Eurostat/ECB Task Force on the statistical measurement of the assets and liabilities of pension schemes in general government to the CMFB. Background document to AEG paper SNA/M1.08/03: Pensions*, Eurostat/ECB Task force, 2008.

Eurostat: *Follow-up Eurostat 2008 conference and Luxembourg Recommendations on National Accounts*, Eurostat, 2008.

HM Treasury: *2003 Long-term public finance report*, HM Treasury, 2003.

International Public Sector Accounting Board: *International Public Sector Accounting Standard: Employee Benefits*, IPSAB, 2008.

Molander, Per: *Net wealth analysis and long-term fiscal policymaking*, Studier i finanspolitik 2009/5, 2009.

Record, Neil: *Public Sector Pensions - The UK's second national debt*, Policy Exchange, 2009.

System of National Accounts 2008.

The Committee on Monetary, Financial and Balance of Payments Statistics: *Unfunded employer and social security pension schemes*, (CMFB), 2006.

United Nations Statistics Division.

## About the author

Dr Frank Eich holds an MSc and PhD in Economics from the London School of Economics, and has worked as a professional economist both in the private and public sector. Before joining HM Treasury as an economic adviser in 2000, he worked for three years as a country economist for the Economist Intelligence Unit. In 2008 Frank worked on European and international economic policy issues in the German Finance Ministry in Berlin; he joined Pension Corporation as senior economist in October 2008.

Telephone + 44 (0)20 7105 2236

Email eich@pensioncorporation.com

## Disclaimer

This document is being delivered as an information only document by Pension Corporation LLP ("PC"). No offer is being made by PC by delivery of this document and no reliance should be placed upon the contents of this document by any person who may subsequently decide to enter into any transaction. Opinions expressed are opinions of the author(s) only.

This publication has been prepared for general guidance on matters of interest only and is intended for professional/corporate recipients and not for individual/retail customers or pension scheme members and should not be passed on to such without our prior consent and does not constitute professional advice of any kind. You should not act upon the information contained in this publication without obtaining specific professional advice.

No representation or warranty (express or implied) is given as to the accuracy or completeness of the information contained in this publication, and, to the extent permitted by law, Pension Corporation LP, its members, employees and agents do not accept or assume any liability, responsibility or duty of care for any consequences of you or anyone else acting, or refraining to act, in reliance on the information contained in this publication or for any decision based on it.

Facts and views presented in Pension Corporation Research have not been reviewed by, and may not reflect information known to, professionals in other Pension Corporation business areas. Pension Corporation Research is disseminated and available primarily electronically, and, in some cases, in printed form.

© 2010 Pension Corporation. All rights reserved. 'Pension Corporation' refers to the Pension Corporation LP and its affiliates each of which is a separate and independent legal entity.



**PENSION  
CORPORATION**

Pension Corporation, 14 Cornhill, London EC3V 3ND. Telephone +44 (0)20 7105 2000 Fax +44 (0)20 7105 2001  
Email [info@pensioncorporation.com](mailto:info@pensioncorporation.com) [www.pensioncorporation.com](http://www.pensioncorporation.com)