

International Workshop on
The Balance Sheet of Social Security Pensions

Accounting for Implicit Pension Liabilities

By

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Alongside the discussions on the reform of the pension systems due to the ageing of the population of OECD countries, is a specific debate regarding the “accounting” of this issue, in particular how to record the “liabilities” versus the future retirees. When they are pure financial liabilities (such as life-insurance) there is no problem of recording. But these “liabilities” do not always take the form of ordinary financial liabilities. The present paper covers such cases, which are here referred to as “implicit” pension liabilities.

The business accounting recommendations more and more push pension sponsors to record these liabilities, even implicit, in their core accounts. Indeed, shareholders are to be informed on the amount of obligation created by the employers’ promises. Therefore, in business accounting, these liabilities tend to be more and more explicit, rather than implicit.

This discussion is now extending to the System of National Accounts (SNA 93), which, at the moment, imposes restrictive rules that do not allow for the recording of implicit pension liabilities. Many national accountants think that there is an opportunity to make macro-economic statistics move in parallel with the private sector’s micro-economic accounting in the framework of the review of the SNA 93.

The SNA 93 review process

In March 2003, ten years after the publication of the SNA 93, the UN Statistical Commission decided that it was time that a review is made of the relevance of the existing recommendations in light of new economic trends. A list of nearly fifty “issues” to be re-discussed was elaborated. Various task forces and Electronic Discussion Groups make proposals of change. A committee of 25 international experts, called the AEG, makes a first decision, which will be confirmed at the end, in 2007, by the UN Statistical Commission. This should allow a new SNA to be published in 2008. “Pension scheme recording” is one of the issues of this list of fifty. It is essentially discussed in the IMF sponsored Electronic Discussion Group (EDG): <http://www.imf.org/external/np/sta/ueps/>

The present paper has the objective of explaining the current status of the debate within the SNA community. It uses summaries of papers that were drafted by Philippe de Rougemont (formerly IMF, now Eurostat) and Francois Lequiller (OECD) for a special OECD workshop on June 4, 2004. The original papers are available on the web page of the Electronic Discussion Group (EDG). When the present paper refers to the “position of the EDG”, it refers to the position of the moderator of this EDG, itself reflecting the majority view of the participants in this EDG.

The paper is organized in the following way. Section 1 describes the current proposals of the EDG. Section 2 describes the reactions, in part negative, of economists to these proposals. Section 3 describes a compromise proposal reflecting the personal view of the author of the present paper. The conclusion explains how and when a final decision should be taken on this issue.

Section 1. Proposals of the EDG.

1.1 Reasons to change the current SNA.

The *1993 SNA* recognizes retirement pension obligations as liabilities only for employer schemes and only when they are “funded”, i.e., when they maintain “segregated reserves” (widely interpreted as segregated assets). Such a position creates an unhealthy situation where mere differences in financing arrangements lead to noticeable differences in recording, with substantial associated risks of biasing against reform, notably of civil servants pensions. It also leads to numerous accounting anomalies, notably at time of transfers of pension rights from one scheme to another, including at time of liquidation or assumption of entire schemes (France Telecom or Belgacom cases¹).

At a more conceptual level, the current criterion laid down in the *1993 SNA* for pension liability recognition deviates from the fundamental asset recognition criteria otherwise followed in the *1993 SNA* (and from most business accounting frameworks, see IAS² recommendations below), which rely on whether a promise or obligation is enforceable and whether future economic benefits will flow from it. This creates an unhealthy situation where households’ SNA net worth depends on the financial arrangement of the scheme, instead of the solidity (legal as well as economic) of the claim, which would appear more logical. The measure of households saving is also distorted in so far as the economic behavior of households depends on their perception of the solidity of their pension claims.

The *1993 SNA* pension recording rules seem neither to follow an accrual principle (actual contribution measurement) nor the market valuation principle (residual obligation of the employer to the fund).

- a. The *1993 SNA* measure of cost of labor is noticeably distorted and deviates from GAAP³: (1) it includes actual pension contributions of funded schemes, so that

¹ The France Telecom (France) and Belgacom (Belgium) cases are similar. In both cases, the government wanted to privatize a former public telephone company. In order to do it, it takes over the future “overcost” of the better-than market pension benefits of these companies, in exchange of a lump sum received from the company which, in principle, represents the present value of the future stream of benefits. On a pure accrual basis, this lump sum should not affect the net borrowing/net lending of the government. But the lack of clarity of the current SNA on these implicit liabilities has allowed those European countries and Eurostat to treat the lump sum as a capital transfer reducing the government deficit in the period it is received.

² International Accounting Standards (IASs) from the International Accounting Standards Board (IASB).

³ Generally Agreed Accounting Principles, i.e. business accounting principles. As an example, in IAS 19, the cost of employment is decomposed in a *current service cost*, which captures the actuarial value of new entitlement rights accrued by staff employed during the period, a *past service cost*, the *interest cost* (interest on pension obligations), the *expected return on (net) assets* minus/plus the *amortization of the cumulated unrecognized actuarial gains/losses*. The expected return on assets is currently reported in income and the difference between the expected return and the actual return is treated as an “actuarial gain and loss”, the recognition of which is currently allowed to be deferred. Hence, IAS 19 currently allows enterprises to delay the recognition of *net plan assets* on their balance sheet and therefore the impact on their operating statements, by way of imputing an *expected return on plan assets* (IAS 19 Para 105–107) and defining a

contribution holidays or supercontributions impact the cost of labor⁴ (despite the fact that they often originate from overperformance or underperformance of fund's assets); (2) the *1993 SNA* allows accounting for the cost of labor of unfunded schemes using the amount of pension benefits provided, a poor proxy. In contrast, the GAAP cost of labor focuses on the actuarial value of additional promised benefits. Such a SNA labor cost valuation distorts the measure of GDP (when the employer is nonmarket) or the gross operating surplus (when it is market).

- b. Recent falls in the price of companies' shares originating from adverse news related to the underfunded position of their pension funds have triggered a further rethinking on how to account for pension promises. This has inspired a trend amongst accountants favoring immediate recognition of employer pension liabilities and abandoning the deferment option (see IASB project on IAS 19 revision).

Leading business accounting standards — such as FAS 87 (US) or as IAS 19, which will be enforceable in 2005 for all listed companies in the EU and is applied in some other OECD countries — require the recording of a pension liability even for unfunded employer schemes, although they allow delayed recognition of liabilities arising from actuarial profits/losses. It is worth noting that the UK standard, FRS 17, has already dropped such a deferment option and instead prescribes immediate recognition (starting 2005), with actuarial gains/losses being entered directly against equity (and only gradually transiting thereafter through the profit and loss account).

The new IMF sponsored *Government Finance Statistics Manual 2001 (GFSM 2001)*, which otherwise closely aligns with the *1993 SNA*, recognizes unfunded pension obligations as liabilities. The IFAC PSC⁵, producer of the International Public Sector Accounting Standards (IPSAS), recognizes IAS 19 as appropriate in relation to employer pensions (i.e., civil servant schemes) and has established a project on public pensions (Steering Committee on Social Policy Obligations⁶). The current SNA puts national accountants in a strange position: their system would not recognize a liability that is nonetheless recognized by the economic agents themselves in their own accounts. Such a contradiction already led countries (Australia, Canada) to not strictly follow the *1993 SNA*, thus decreasing international comparability.

At a time when aging of population is of matter of great concern and having in mind a renewed interest for international comparability as well as for proper accountability by government of their commitments, the statistical community examines again – at the occasion of the on-going review of the *1993 SNA* – how the unsatisfactory existing SNA pension treatment can be reviewed. Discussion is being conducted via an Electronic

cumulated unrecognized actuarial gains/loss to be amortized gradually over time (outside of a corridor of +/-10 percent).

⁴ See Enrica Detragiache's EDG contribution and her IMF Working Paper WP/03/222 dated November 2003, *Company Pension Plans, Stock Market Returns, and Labor Demand* (at: <http://www.imf.org/external/pubs/ft/wp/2003/wp03222.pdf>).

⁵ International Federation of Accountants – Public Sector Committee.

⁶ See exposure draft at: <http://www.ifac.org/Guidance/EXD-Details.php?EDID=0031>

Discussion Group (EDG), accessible at:
<http://www.imf.org/external/np/sta/ueps/index.htm>.

1.2 EDG propositions currently examined

The EDG proposes (1) abandoning the funded/unfunded delineation; (2) using actuarial valuations for both stocks and flows; and (3) allocating the funds' net assets to employers. Propositions center on defined benefit schemes (no proposition of change concerns defined contribution schemes⁷).

As a first step, the EDG proposal is restricted to employer schemes, because the benefit provided is clearly of a nature of a deferred compensation (in contrast to other pension schemes, such as those by social security), and because the *1993 SNA* already treats employer schemes differently. Some accountants consider that accrual accounting does not encompass social security obligations. However, recent classification difficulties linked to new cases (e.g., Polish case) have led others to believe that a more wide-ranging rethinking of *1993 SNA* may be warranted to ensure better international comparability; in addition, they note that the observed anomalies linked to the treatment of transfers of pension entitlements between schemes probably cannot be fully clarified if the extension to public pensions was not made.

The proposal applies to all employer schemes: private employers as well as government, because, in the *1993 SNA*, institutional sector considerations are generally not an appropriate justification for differences in recording. The most visible impact for users of national accounts data will be on general government accounts.

1.2.1 Liability recognition

The EDG proposes recognizing a scheme's pension liability (an asset for the households) when there is a legal obligation or when the obligation is such that it would be a "constructive obligation" under GAAP. Constructive obligations are (according to the IASB) "obligations that derive from an enterprise's actions where: (a) by an established pattern of past practice, published policies or a sufficiently specific current statement, the enterprise has indicated to other parties that it will accept certain responsibilities; and (b) as a result, the enterprise has created a valid expectation on the part of those other parties that it will discharge those responsibilities". Liability recognition would not depend on whether the scheme is funded or not, i.e., unfunded schemes would be treated as if funded.

The recognized liability is to be limited to the rights accrued to date, i.e., originating from work done in the past. Since those additional pension promises originating from future work are not recognized as schemes' liabilities, by the same token, expected future contributions are not recognized as schemes' assets.

1.2.2 Immediate consequence on unfunded schemes.

⁷ While in need of clarification, the recording of defined contribution schemes is satisfactory in the *1993 SNA*: a liability is systematically recognized, equal to the (market value of) fund's assets.

Recognizing a liability for unfunded schemes changes substantially the pension mathematics. From the point of view of the employer, the recognized expense associated to an unfunded pension would considerably increase: while the net impact of a change in treatment on the cost of labor may be positive or negative (it is a function of the maturity of the scheme and of the expected growth rate / discount rate differential), a new property income on the pension liability appears as a new expense. Supposing unchanged actuarial assumptions, the degradation in net lending/net borrowing corresponds to the trend increase in scheme liabilities; under a steady state regime involving a 20% of GDP pension debt and 6% nominal GDP growth rate, the published deficit increases by 1.2 points of GDP. The following tables illustrate the impact of the change for an unfunded *general government* employer scheme.

Example of unfunded general government scheme for its own employees

Current SNA: The government imputes 14 of social contributions (D122) to its employees (households) as part of compensation of employees. In principle, the 1993 SNA recommends that this represents the present value of future benefits to be paid that have been gained by employees during the accounting period (actuarial calculations). We will suppose here that this principle is implemented⁸. The government receives 1.5 of employee contributions (D6112) and 14 of employer contributions (which is equal to the 14 paid as part of compensation of employees: see footnote 8). It pays 11 in pensions (D62). The net lending/borrowing (surplus/deficit) is 9.5, which corresponds to the net disbursement in cash (F2).

⁸ In fact, the 1993 SNA allows this amount to be equal in practice to benefits paid (11 in our example). This gap between theory and practice is not important in the context of this example, as the convention is to record this (imputed) payment (D122) to employees but at the same time to record an equal (imputed) payment (D612) from the employees to the employer. Thus the two flows compensate each other, and whatever the amount, it will not affect the deficit.

General government unfunded employee scheme: current SNA recording

<i>Imputed flows are in italics</i>		General government	
		uses	Resources
<i>D122</i>	<i>Imputed employer contributions</i>	<i>14</i>	
D6112	Employee contribution		1.5
<i>D612</i>	<i>Employer contribution</i>		<i>14</i>
D62	Pensions	11	
B9A	Net lending/ net borrowing	-9.5	
	<i>Financial accounts</i>	<i>ΔAssets</i>	<i>ΔLiabilities</i>
AF2	Cash	-9.5	
B9B	Net lending/ net borrowing		-9.5

Proposed change: The essential difference with the previous account originates from the fact that we now record flows as if the arrangement was a saving scheme⁹, with the recognition of a debt / liability. In particular, contributions are considered to increase the debt, payments of pensions decrease the debt.

Let us describe all the lines. First, the same amount of imputed social contributions is recorded as part of compensation of employees. However, the big difference with the previous accounting system is that there is no more a corresponding resource/receipt of imputed contributions; instead, employer contributions received are recorded as an increase in debt, and appear in the financial transactions (below the line of net lending/borrowing). As a result, the actuarial social contributions fully impact the deficit, which is therefore increased by this amount compared to the previous situation. Second, the pension payments disappear as a use/expense above the line and are recorded below the line, as a decrease of the pension debt. Third, an imputed charge of property income (interest) of 6 (D44) appears in relation with the recognition of the liability (also called “contribution supplement”). Fourth, employee contributions are also recorded under the line. Overall, the deficit is thus increased by 10.5 (14 – 11 + 6 +1.5), reaching 20.

In the financial accounts, a change of 10.5 in debt in “net equity of households on pension funds” appears. It corresponds to an increase of the liability corresponding to all contributions (1.5 + 6 + 14) minus payments of pension benefits (11).

⁹ An exhaustive presentation would have shown additional lines of employer contributions (D.612) and pensions (D.62), plus an adjustment, called “adjustment for net equity of households” (D.8), just before the line B.9A. The sum of these additional entries is equal to zero. They have therefore no impact on the balancing item under review and are less essential in the context of this presentation. They have been omitted here, as they could confuse readers.

General government unfunded employee scheme: new SNA recording

	<i>Imputed flows are in italics</i>	General government	
		Uses	Resources
D122	<i>Imputed employer contributions</i>	14	
D44	<i>Imputed property income</i>	6	
B9A	Net lending/ net borrowing	-20	
	<i>Financial accounts</i>	Δ Assets	Δ Liabilities
AF2	Cash	-9.5	
	Net equity of households in pension funds		10.5
AF612			(1.5+6+14 – 11)
B9B	Net lending/ net borrowing		-20

It is important to understand that this new account rightly reflects the impact of the new commitments that the employer made during the period. In the long-term, and taking into account a whole cycle of pension debt creation *and extinction*, the cumulated deficit of the previous account and of this one are equal. The timing is however different, the last one giving a better picture in terms of structural deficit.

1.2.3 Actuarial valuation

The EDG proposes following business accounting for the **valuation of compensation of employees** (as well as for property income attributable to property holder), taking the present value of additional rights accrued (actuarially estimated) due to the work service delivered during the period.

The proposition merely extends throughout the whole sequence of flows the *1993 SNA* reference to actuarial valuation, in a way that reduces inconsistencies. The *1993 SNA* refers to actuarial valuation of unfunded schemes' social contributions and requires actuarial valuation for stocks of pension liabilities.¹⁰

In this context, actual contributions become merely financial transactions, without impact on the cost of labor. Changes in stocks of pension liabilities originating from changes in discount rate and in other actuarial assumptions would be recorded not as transactions but as revaluations or in a special account called "other changes in volume", with the consequence of avoiding any impact on the main balancing items (income, saving or net lending borrowing) of the revenue and expense accounts. Hence, the EDG proposition will not increase the volatility of income and instead has the potential of reducing it.

1.2.4 Allocation of the fund's net assets to the sponsor

¹⁰ Respectively: SNA 7.45, ESA 4.99 and SNA 13.76, SNA 13.78, ESA 5.101, ESA 7.59.

The EDG proposes allocating the fund net assets to the employer/sponsor: when it is underfunded, the employer has a liability; when it is overfunded, the employer has (generally) an asset. It more correctly represents the extent of the employer obligations. The net worth of the sponsor does not depend on whether the scheme is consolidated or not with its accounts, avoiding the impact of obscure debates on the classification of schemes. This allocation is also the logical consequence of the fact that contributions are now measured when accrued and that further employer obligations originate from other changes too (e.g., performance of assets, change in actuarial assumptions).

1.3 Implementation issues

The switchover to actuarial valuation for flows and the recognition of unfunded flows in national accounts will require that national accountants familiarize with pension recording and actuarial questions but also use new source data.

In relation to schemes/funds organized by **private enterprises**, the relevant information exists, both in the accounts of the enterprise and in that of the scheme/fund. On the other hand, (unfunded) **civil servants** schemes may not yet produce reports with the necessary information. This situation is unsustainable and governments need to appoint actuaries to inform them about the extent of the obligations towards the pensioners (civil servants). Flexibility may be advisable for a transition period: when no information is available for unfunded schemes, a liability may be estimated using same-scheme ratios; and a property income would then be calculated using domestic interest rates.

On the conceptual side, one issue is the choice of the appropriate discount rate and the income volatility in the accounts it may impart. Such a choice should be consistent with built-in actuarial inflation assumptions. Some prefer using a nominal discount rate instead of a real discount rate (the rate of government inflation-indexed bonds), others prefer using a fixed rate instead of a market rate. Another issue is the exact basis for compiling projected benefits. Finally, some issues relate to the recording of changes in benefit structure (to expense or not?), as well as some other actuarial changes. The EDG report describes those issues in further detail.

Section 2. The reactions of economists at the OECD workshop

As explained in the first section, the proposals of the EDG to extend the borderline of the recognition of liabilities to “implicit” or “quasi liabilities” of unfunded pension schemes has major implications, in particular for general government accounts. Headline aggregates, such as the net lending/borrowing of the general government would be significantly changed. Even when restricted to employer schemes (but including general government schemes) these proposals lead to changes of between 0.5 to 2% of the net lending/borrowing of the general government for countries where unfunded schemes are the rule for civil servants. In Europe, this would obviously need an adaptation of the Maastricht criterion of 3% government deficit to GDP.

As the national accounts framework is more and more used for the monitoring of public finances, especially in Europe, it was essential that these proposals were presented and discussed by the economists who are the main users of these data. The workshop organized by the OECD on June 4, 2004 had precisely this objective¹¹.

Participants at the workshop included many representatives of the OECD Economics Directorate’s network of experts on the impact of ageing populations. Their reactions were split into two groups. The first one, including representatives from continental Europe, was strongly opposed (Belgium) or very prudent (France) regarding the proposals. It is fair to say that also the European Union DG-ECFIN¹² share very serious concerns about the proposals, as is the case with some economists from the OECD Economics Directorate. The second group includes countries such as Australia, USA, Norway who support the change. The Japanese delegate indicated that the Japanese government already published estimates of the stock of implicit pension obligations, but that these estimates were tentative and should be clearly separated from the core accounts, as they are by definition not as strong obligations as the rest of the debt. They are also approximate and depend on the assumption made of the discount rate.

The main arguments from the critical camp were:

1. Official economists from OECD countries already make, under the aegis of the OECD network on ageing, complete projections to analyze the impact of aging on the sustainability of government pension and social security schemes. These projections are significantly richer, in terms of informational content, than what is proposed for the national accounts. They include the timing, year by year, of the potential problems. They include future obligations, while national accountants limit themselves to the present value of future benefits created by past obligations. What is, in this context, the usefulness of the proposed change in the national accounts?

¹¹ The papers presented at the workshop are available on http://www.oecd.org/document/16/0,2340,en_2825_495684_2494416_1_1_1_1,00.html#23_pension_funds

¹² DG-ECFIN is the “ministry of finance” of the European Union. As such, they monitor the “Maastricht” criteria of deficit and debt in the European Union.

2. Can one consider that there is a real liability for pension obligations when these obligations can be changed by a reform? Such reforms were made recently in France and Belgium. They resulted in changing future benefits of past services. It was not therefore a liability, by definition.
3. There is no difference for a government between future pension obligations and future health cost obligations. What is the rationale that allows national accounts to focus on the first and ignore the second?
4. The proposed recording of pay as you go schemes as if they were a saving scheme introduces an asymmetry between the recognition of the liability (the future benefits) and the non recognition of an asset (the future contributions or taxes).
5. The proposal could lead to a difference in the treatment of “social security systems” and “employer schemes”, and in particular general government employer schemes. This difference appears artificial in countries such as Belgium or France. All recent reforms concerned government employees and employees of the private sector who participate in the social security scheme. In fact, in some cases, it is difficult to find any difference between the commitments to pay future benefits in the two cases. This means that simple administrative changes, for example changing the administrative arrangement of the general government employer scheme to make it part of the social security system, would have the strange impact of eliminating the very large liabilities that were recorded when it was an “employer scheme”. This could indeed call for creative accounting, making the headline aggregates of the national accounts useless for policy monitoring.
6. The actuarial estimations would introduce into the national accounts estimates of a very doubtful quality, subject to arbitrary big changes. This could lead to economists demanding data excluding these estimates. A solution would be to avoid affecting the core accounts with these estimates, but reserve them for satellite tables.

Section 3. A compromise proposal

The objective of this section is to propose a compromise accommodating the main criticisms that were expressed. This compromise is purely personal, and does not commit neither the OECD or the national accounts task forces. It is based on two ideas: (1) abandon the idea of separating the cases of “employer schemes” and “social security schemes” and try to include both systems in the new proposals; (2) avoid including the massive imputations, implied by the proposals, in the core accounts by developing special tables devoted to the treatment of these quasi-liabilities. The first idea is essential to maintain a minimum of international comparability. The second one will be seen by some as a bad half-baked compromise that will satisfy neither of the parties. However, I think it answers a strong message from economists not to introduce too many imputations in the core national accounts. Both these solutions have as their main objective to allow for national accounts to be more comparable on an international basis, which is obviously one of our main concerns at the OECD.

I will discuss now what are, in my view, the three main criticisms exposed in section 2:

(1) should one record as liabilities promises that can be changed? (point # 2 of the list of critics of the previous section),

(2) is it appropriate to separate the cases of employer schemes and social security? (point # 5), and,

(3) can we introduce in the core national accounts estimates that are very approximate ? (point # 6).

3.1 The main criticisms from the user-economists

2: Are liabilities that can be changed real liabilities?

National accountants should clarify the precise situation when they would want to recognize a liability. Some experts, as reported by the OECD Public Governance directorate, interpret “accrual” accounting (the SNA is supposed to be an accrual accounting system; accrual accounting means accounting for rights and obligations as they occur) as only recognizing as liabilities those obligations that are *enforceable by law and/or those where individual rights cannot be changed retroactively, but only for future periods*. Under this interpretation of liabilities, the pension obligations of the French government to its civil servants are not liabilities, as they have been changed recently (changes were made to future obligations resulting from past rights). With this interpretation, the range of recorded liabilities would be narrow.

Should that be the view adopted by national accounts? I think not. First, this interpretation is not the one adopted by private business accounting. The recognition of a liability in the balance sheet of private business does not depend on whether the obligation can or cannot be changed retroactively. There are even clauses in the

accounting standards that precisely describe what to do when there is a change of the benefits structure (i.e. generating a change of the liability). The second argument is that the narrow definition would introduce a too “legalistic” criterion in the compilation of national accounts. National accounts are not completely bound by legalities. To confirm that such and such an obligation can be enforceable before a court, would put national accountants in the situation of legal experts, and thus would be difficult to implement. It would also probably put in danger the international comparability of the accounts, as some minor differences in legal arrangements would dominate the choice of whether or not to recognize a liability. It is better to adopt a more economic criterion.

The criterion proposed is the concept of “constructive obligation”. It is inspired directly by the concept used in the international accounting standards (IAS 19). A constructive obligation is “*an obligation that derives from an enterprise action where: (a) by an established pattern of past practices, published policies, or a sufficiently specific current statement, the enterprise has indicated to other parties that it will accept certain responsibilities; and, (b), as a result, the enterprise has created a valid expectation on the part of other parties that it will discharge these responsibilities.*” This definition is less narrow than the one based purely on legalities. It does not exclude those liabilities which may change in value over time by a reform. Under such a definition, the pension obligations of the French government, even if changeable through reform, would be recorded as liabilities. Seen from a macro-economic point of view and also in terms of international comparability of households’ assets, this seems a reasonable result.

5: *Is it appropriate to separate employer schemes from social security schemes?*

It appears to me that there are two extreme groups of OECD countries regarding the organization of pension schemes. The first one comprises countries such as the USA, Australia, Canada, UK, the Netherlands, where the pension arrangements are centered on employer schemes, with, in addition, a ‘safety net’ collective system called “social security” which could be considered in fact “social assistance”.

By construction, these countries have no second thoughts about the current proposal of the EDG to (potentially) limit the recognition of liabilities to “employer schemes”. It seems normal for them to record all the liabilities of employer schemes, including the general government as an employer, and, at the same time, possibly, to not recognize the liability of the so-called “social security”.

At the extreme opposite, there are countries such as Belgium and France where the global pension arrangements are based on one major collective system. This system is also called “social security”, but it is not the same as the one for the first group of countries. In this second group of countries, pure employee schemes are minor (except for general government). In a country such as France, all private employees are part of the social security system that can be seen therefore as a global multi-employer scheme, but organized within the control of the general government. Because of history, only government employees’ pension obligations are organized outside the social security system.

It therefore appears strange to these countries to recommend the recognition of the quasi liabilities of the employer schemes but not those of social security schemes. This would mean that the civil servants would be shown as having an asset but not private employees. The situation would look even more arbitrary within general government, because central government employees are all in an employer scheme and some local government employees are attached to the social security system.

As can be seen, for the second group of countries, the borderline between “social security” and “employer schemes” is not the same as it is for the first group. In this context, “social security” is a poor and insufficiently precise terminology for systems that differ in their content. In the first group, there is a difference in content and in commitment between employer-based pension schemes and social security schemes. In the second group, the difference between the two is based on administrative arrangements. It is not impossible, for example, that the French government could decide to create a special unit, attached to the social security system, to administer the pensions of its employees. This would mean that, if the national accounts were to have a borderline for liability recognition based on “employer scheme” versus “social security”, it would result, as if by a miracle, in the disappearance of a massive public debt (civil servants pension debt is estimated to be 50% of annual GDP in France).

It is unsustainable to introduce such an arbitrary borderline in the national accounts, which would seriously hamper international comparability of the macro accounts, because it is based on administrative arrangements and not on the commitment of the sponsors vis à vis the beneficiaries.

I think therefore that the current strategy of two steps (the first on employer schemes and the second on social security) is inappropriate. My proposal is to link the two steps, and to accept from the start an extension of the borderline to include the liabilities of social security schemes.

The proposal can be expressed as: base the recognition of the liability on the existence of “constructive obligations” whether or not this obligation is organized under a pure employer system, or a multi-employer system called “social security”. Some may consider that this is too ambitious, and that this extension would unduly include in the borderline obligations for which the commitment of the sponsor is really too low. It is possible to imagine better definitions of the borderline. One possibility may be to record all obligations linked directly (through an employer scheme) or indirectly (through a collective system or multi employer scheme) to the deferment of employee compensations. But, in any case, the strategy to accept potentially that “employer schemes” and “social security schemes” be treated separately is unsustainable.

My solution will increase by an enormous amount the pension liabilities recorded in the macro-accounts. But its advantage is a better rationale and better international comparability.

6: Should these liabilities be recorded in the core accounts?

The impact of the envisaged change for countries with big unfunded employer schemes can be massive: the amount of unfunded general government implicit liabilities reaches, for example, 20% of annual GDP in Australia and Canada, and 50% for France. If, as proposed in the previous section, the borderline is extended to all schemes, including social security, the numbers become frightening, something from 200% to 400% of annual GDP!

This therefore focuses the attention on the quality of these estimates and their reliability. The discussions at the workshop showed that, first, the estimates depended on parameters that can be arbitrary (discount rate) and/or not fully mastered (population of beneficiaries, life expectancies, etc.). There is therefore a real concern regarding the quality of the flows that will be recorded in the accounts.

There will be two major non-financial flows affected by the change: (1) the actuarially based contributions, (2) the imputed property income (obtained as the stock of debt multiplied by the nominal interest rate). It may be seen as very disturbing to put these estimates on the same level as flows that are really observed, with the implications that it could have on the credibility of the headline aggregates of the national accounts, in particular for general government. Of course, when the actuarial calculations are made by professional actuaries, national accountants would be on a safer ground. But this will not happen immediately for all schemes, and in particular for social security schemes.

It would be therefore more prudent to separate the entries that would result from the new proposals from the core accounts. The idea is not however to consider that these calculations would be pure memorandum items. The problem with memorandum items is that they are generally not compiled by national accountants (in fact, the current SNA already recommends to compile implicit liabilities of unfunded defined benefits schemes as memorandum items, but nobody does it).

3.2 A compromise proposal

My proposal is a mixture of core financial accounting, by creating a specific category of “pension quasi liabilities” in the core financial accounts, and of satellite accounting, by creating a special table, below the line of net lending/borrowing, where the flows linked to the newly created “pension quasi liabilities” would be recorded completely separately. Such a system would have the advantage of being able to deliver to economists both sets of data, the one excluding “pension quasi liabilities” and the one including “pension quasi liabilities”. Other presentations are possible, including the one which would create completely parallel accounts, one in “cash” accounting and one in “accrual” accounting.

This proposal may be seen as a bad, half-baked compromise, which finally does not decide on what is the really “good” treatment. However, it answers to a strong message from economists in the workshop asking statisticians to avoid including too many imputations in the core accounts or, at least, to allow economists to be able to “debundle”

the two types of figures. Also, my proposal includes the creation of new balancing items which would be strictly equal to those generated by a fully fledged recognition of pension liabilities, thus satisfying those who think it is the way forward. These figures would be preferable for international comparability than the existing ones.

I give below two examples of the recording under the system that I propose. The first one covers the example of an unfunded employer system, where the pension scheme is non autonomous. Its accounts are therefore embedded in the employer's accounts. The second one covers the case of a pay as you go social security system. Both these examples use the same basic data. They illustrate a case where the current cash flows (contributions, pensions) underestimate the "accrual" flows, thus a situation of greater deficit in "pure accrual" accounting.

Case 1: unfunded employer system

The first table (Case 1, current SNA recording) illustrates the current SNA accounting framework for an unfunded employer scheme.

The account starts by the employer "paying" an imputed pension contribution of 11 (D122). This amount is included in the compensation paid to its employees (households). These employees pay back to the employer (i.e. in fact to the embedded pension scheme of the employer) this contribution (D612) and also their own "employee" contribution (D6112). The employer then pays the pensions of 11¹³. The net lending/borrowing (B9A) of the scheme is a "cash" figure, equal to -9.5. In the financial accounts, only one entry is recorded: the corresponding cash movements (pensions paid (11) minus employee contributions (1.5)).

The second table (Case 1, New recording) illustrates my proposal. All flows above B9A are strictly equal to the previous ones. Thus net lending/borrowing is not changed compared to the current SNA, it remains a "cash based" net lending/borrowing. But I create, below the line of B9A, a "special account for pension quasi liabilities". In this account one finds on the use side the amounts that correspond to full accrual accounting regarding the quasi-liabilities. First an amount of 14 for actuarial contributions, which is here superior to actual pension paid, illustrating the change in the demographics of this pension scheme. Then there is an amount of 6 for the imputed property income, which is generated by the existence of the pension quasi-liability. On the resources side of the account, one finds an "adjustment for cash recording" which corresponds to the opposite number of the cash-based B9A.

¹³ One can note that, in this example, I have taken the imputed contributions (D122) as equal to pensions paid (D62). However, this is not an important assumption in the context of this account. I could have taken another amount. The result would have been the same on net lending borrowing because D122 is mechanically compensated by D612.

I introduce a special balancing item (B9S) for this special account. This item exactly corresponds to the addition to the net lending borrowing B9A of the change in the pension quasi liabilities.

In the financial accounts, one records a specific line which I called “F6X” which corresponds to the estimate of the change of the pension quasi liability towards households. Its value is equal to accrued rights (14) + reinvestment of imputed property income (6) + employee contributions (1.5) – payments of pensions (11).

The financial accounts end with two balancing items: the traditional one, B9B, excluding quasi liabilities, and a new one, B9X, which is equal to the sum of the cash B9B and the quasi-liability B9S. One can note that B9X is exactly equal to the net lending borrowing that would result from the implementation of the proposed changes in the core accounts. The advantage of this presentation is that economists have both sets of numbers at the same time: the traditional one, excluding quasi-liabilities, and the new one, including quasi-liabilities.

Case 2: pay as you go social security.

Case 2- Current SNA illustrates, using more or less the same numbers, a pure pay as you go social security system. This unit receives contributions from employers¹⁴ and employees, and pays pensions. The “cash” net lending/borrowing of the scheme, as recorded in the current SNA, is equal to +1.5, the difference between the actual flows received and the pensions paid.

I show then the new accounts, under my proposal (Case 2, new recording). As in the previous case, nothing is changed above the line of B9A: the numbers remain “cash” accounting. As in the previous case, a special account for pension quasi liabilities is created. It includes, on the use side, the amount of “actuarial addition to cash contributions” (i.e. the difference between the current contributions and the actuarial contributions), which is equal to 3 in my example (14-11), and the amount of imputed property income generated by the recognition of the quasi liability (6). On the resource side, appears the number opposite to the “cash” B9. The balancing item B9S shows a deficit of 10.5, corresponding to the increase in the debt in pension quasi liabilities. The financial accounts record the cash movements, and the line F6X, the change in pension quasi liabilities, which is obtained exactly as in the employer’s scheme example. The accounts show the new balancing item B9S, equal to -9, the sum of the “cash” surplus of the social security (+1.5) and the “pure accrual deficit” of -10.5.

Why is this number (-9) different from the first case (-20)? The answer is that we have here separated the unit organizing the system from its “sponsors”. The implicit net lending borrowing of the sponsors is equal to 11, the amount of employers’ contributions. If we add both deficits, thus consolidating the accounts, we obtain -20.

¹⁴ In this system, employers have completely discharged their debt on pension by paying their contribution.

Case 1. Unfunded employer system.

Current SNA recording

	<i>Imputed flows are in italics</i>	Employer	
		Uses	Resources
D122	<i>Imputed employer contributions</i>	11	
D6112	Employee contribution		1.5
D612	<i>Employer contribution</i>		11
D62	Pensions	11	
B9A	Net lending/ net borrowing	-9.5	
	<i>Financial accounts</i>	Δ Assets	Δ Liabilities
AF2	Cash	-9.5	
B9B	Net lending/ net borrowing		-9.5

New recording

	<i>Imputed flows are in italics</i>	Employer	
		uses	Resources
D122	<i>Imputed employer contributions</i>	11*	
D6112	Employee contribution		1.5
D612	<i>Employer contribution</i>		11*
D62	Pensions	11	
B9A	Net lending/ net borrowing	-9.5	
	<i>Special account for pension quasi liabilities</i>		
	<i>Adjustment for cash recording</i>		9.5
	<i>Actuarial contributions</i>	14	
	<i>Imputed property income</i>	6	
	<i>B9S</i>	<i>-10.5</i>	
	<i>Financial accounts</i>	Δ Assets	Δ Liabilities
AF2	Cash	-9.5	
F6X	Pension quasi liabilities		10.5 (14+6+1.5- 11)
B9B	Net lending/ net borrowing excluding quasi liabilities		-9.5
B9X	Net lending borrowing including quasi liabilities		-20 (-9.5- 10.5)

* I have avoided to record as the imputed contributions the actuarial contributions of 14, to avoid complicating the debate. However, it is possible to record 14 here rather than 11. This does not change anything in the financial accounts or for net lending borrowing. It would raise GDP in the case the employer is the government, and reduce gross operating surplus in the case of private business.

Case 2: social security system

Current SNA recording

<i>Imputed flows are in italics</i>		Social security	
		Uses	Resources
D6112	Employee contribution		1.5
D612	Employer contribution		11
D62	Pensions	11	
B9A	Net lending/ net borrowing	+1.5	
	<i>Financial accounts</i>	Δ Assets	Δ Liabilities
AF2	Cash	+1.5	
B9B	Net lending/ net borrowing		+1.5

New recording

<i>Imputed flows are in italics</i>		Social security	
		uses	Resources
D6112	Employee contribution		1.5
D612	Employer contribution		11
D62	Pensions	11	
B9A	Net lending/ net borrowing	+1.5	
	<i>Special account for pension quasi liabilities</i>		
	<i>Adjustment for cash recording</i>		-1.5
	<i>Actuarial additions to contributions</i>	3	
	<i>Imputed property income</i>	6	
	B9S	-10.5	
	<i>Financial accounts</i>	Δ Assets	Δ Liabilities
AF2	Cash	+1.5	
			10.5
F6X			(14+6+1.5-11)
B9B	Net lending/ net borrowing excluding quasi liabilities		+1.5
B9X	Net lending borrowing including quasi liabilities		-9.0 (+1.5-10.5)

Conclusion

The recording of the pension obligations of private businesses is evolving towards the recognition of implicit liabilities and their calculation under actuarial rules. This paper shows that the issue regarding general government obligations and macro-economic accounts is more complex.

First, the government has two functions regarding the future benefits of retirees: one of being an *employer* (as any other employer), and second as being responsible for the *collective* safety net of retirees. If it seems that private business recommendations could apply to government as from its first function, there is still a debate regarding how to deal with its second function. The current proposal of the EDG is to treat the first issue and to leave open the second. The present paper argues that this strategy could have serious drawbacks for the international comparability and the relevance of macro-economic accounts. In particular, a situation where a liability would be recognised for the first function but not the second would make essential national accounts variables dependant on pure institutional arrangements. This is particularly unsustainable. As a solution, the present paper proposes to record liabilities for both of the two functions. This may be seen as a too ambitious way to go. There may be other solutions, but these solutions should, at the minimum avoid any situation that would make national accounts variable dependant of pure administrative arrangements.

Second, the producers of macro-economic accounts are in a difficult situation. The recognition and compilation of implicit liabilities for pensions make them enter into a world of actuarial accounting which is not familiar to them. It uses a major parameter which is the value of the *discount rate*. Not only this parameter would govern the value of the stock of liabilities, but determine, under the current proposals of the EDG, the savings and net lending/borrowing of employers, of which the general government. Thus a major public finance variable would be very significantly affected by the choice of a variable which value is still seen as affected by arbitrariness. The international comparability of the national accounts variable will be also at stake. Indeed, we do not know how it will be possible to ensure that the discount rate is comparable between countries. It is therefore normal that there is a message of prudence from the part of the users, who would like at least that these imputations are made separately from the rest of the accounts. The proposals of the present paper allow this to happen.

I am conscious that this is a compromise which may satisfy none of the parties. However, it would be fair to my proposals to recognise that they will allow the users to have both information: the one based on observed flows and the one based on imputed flows and stocks. It would be then up to the users to decide which macro-variable they want to choose to analyse the situation of the macro-economic agents. In this sense, the national accounts would have “done their job”.

What will happen now? In principle, this issue was scheduled for a meeting of the AEG (see box in the introduction) in December 2004. However, European countries have sent a request to the organizing bodies of the SNA review to delay this decision. It is therefore

expected that the decision will be taken sometime during 2005. In the context of an international discussion on accounting standards, this is tomorrow. Producers and users of national accounts who are interested in this issue should therefore express their opinion as soon as possible to the EDG.