The statistical recording of implicit pension liabilities and its impact on household wealth and general government obligations

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1. Introduction

Pension schemes provide retirement benefits based on contractual employer-employee relationships. They may be funded, unfunded, over-funded or under-funded, they may be mandated by private entities or by government, and they may be autonomous or non-autonomous. In the System of National Accounts (1993 SNA), promises to pay future pension benefits are recognised as liabilities for funded employer pension schemes, but not for unfunded employer pension schemes and for social security schemes. This is done so because such pension obligations are not seen as liabilities in a strict sense, because they can be altered unilaterally at any time. Pension obligations not yet acknowledged as (explicit) liabilities of the scheme - and as financial assets of households - in the current SNA are defined as implicit pension liabilities. They have to be distinguished from implicit liabilities as specified in the context of intergenerational accounting models.

The statistical recording of implicit pension liabilities as well as of the corresponding implicit pension assets of households is one of the key issues of the current review of the 1993 SNA. Recent methodological work has concentrated on the question whether such implicit pension liabilities should be recorded in the core accounts of the new SNA or in a supplementary table on pensions.[2]

The paper discusses current developments in the area of statistical recording of implicit (unfunded) pension liabilities and their impact on household saving and financial wealth. First, it describes the current recording of employer pension schemes and social security pension schemes in the 1993 SNA in section 2. In the third section, the main reasons are described for changing the 1993 SNA in this respect. The proposal to record implicit pension liabilities in the core account of the SNA is described in the fourth section. Section 5 outlines the arguments for introducing a supplementary table for the accounting of pensions, while the sixth section presents such a table. In section 7, some methods are described which are used to estimate implicit pension liabilities, together with some empirical results presented in literature. The final section concludes.

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[2] Donaghue, B. (2006), The treatment of employer pension schemes and other defined benefit pension schemes, paper presented at the fourth meeting of the Advisory Expert Group on National Accounts, Frankfurt (on the basis of the conclusions of the September 21-23, 2005 meeting of the IMF Task Force on Employer Retirement Schemes); and Committee on Monetary, Financial and Balance of Payments Statistics, CMFB, (2005), Unfunded employer and social security schemes, Luxembourg.

2. Recording of employer pension schemes and social security pension schemes in the 1993 SNA

Employer pension schemes are schemes organised by employers for their own employees, which maybe either funded or unfunded. A funded employer retirement pension scheme belongs to the sector holding the funds, either the sector of the employer if it concerns a non-autonomous pension fund or the sector insurance corporations and pension funds if it concerns an autonomous pension fund. Unfunded schemes may be organised for civil servants, for instance, and belong to the employer's sector - often general government.

The 1993 SNA does not recognise implicit (unfunded) pension liabilities either as liabilities of the scheme, operated by general government or corporations, or as financial assets of households. This treatment reflects the fact that implicit pension liabilities are not seen as liabilities in a strict sense, because they can be altered unilaterally at any time. This also refers to social security pension schemes. Furthermore, their estimation is highly dependent on series of assumptions subject to major revisions. As liabilities for unfunded pension schemes are not recorded in the 1993 SNA, the impact on the sector's net lending/net borrowing is determined by the size of the payment of pensions to retired employees minus current employee contributions, while no financial asset or liability is recorded in the financial account. However, to increase comparability between such funded and unfunded schemes, the 1993 SNA proposes to show, as memorandum items, the net present value of such obligations in the form of assets of households and liabilities of the employer's sector. The IMF's Government Finance Statistics Manual (GFSM 2001) even recommends to explicitly record the liabilities of unfunded government employer pension schemes in the government accounts.

3. Reasons for changing the 1993 SNA

There are three main reasons for changing the treatment of unfunded employer pension schemes and of social security pension schemes in the 1993 SNA. First, the different accounting for funded and unfunded schemes leads to different "effects" on key variables like household income, saving and wealth and government deficit and debt. 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 national accounts.

As shown in Table 1 this different accounting for funded and unfunded schemes is also reflected in the data currently reported in the financial balance sheets of households for their net equity in life insurance reserves and in pension fund reserves. Countries with large private funded pension schemes like the Netherlands, the United Kingdom, the US and Japan show a rather high net equity ratio as a percentage of GDP. The opposite is the case for countries with pay-as-you-go systems for major parts of the population like in Germany, France or Italy.

Second, unfunded employer pension schemes and social security pension schemes are particularly significant for general government and for 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.[3] This also

[3] In line with the conclusions of the October 2003 Economic Policy Committee (EPC) report on the impact of ageing populations on public finances, the EPC discussion in September 2004 and the recent conclusions by the ECOFIN Council, further work on how to take into account implicit/contingent liabilities in the budgetary

refers to the impact of pension reforms being undertaken and/or being at the political agenda in many countries.

Table 1

Net equity of households in life insurance reserves and pension fund reserves

Country/area	% of GDP, end 2005
Euro area	53
Of which: Germany	*53*
France	*59*
Italy	*38*
Netherlands	*167*
United Kingdom	140
US	96
Japan	86

Sources: ESCB, ONS, Federal Reserve Board, Bank of Japan, and OECD.

Third, the convergence of international statistical standards and international accounting standards (IAS) is aimed at. The treatment of unfunded employer 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 pension obligations as liabilities - at least in the private sector.[4]

Accordingly, the current treatment of unfunded employer pension schemes and also of social security pension schemes in the 1993 SNA is criticised. It is argued that, for reasons of comparability, obligations of unfunded employer pension schemes that appear to be liabilities should be reflected in the 1993 SNA. Furthermore, their reporting as memorandum items, as recommended by the 1993 SNA, has not yet been applied in practice. Therefore, the new SNA should inform on the financial assets and liabilities of such schemes.

There are essentially two views on how to integrate such statistical information into the new SNA. First, it is proposed to treat unfunded employer pension schemes and social security pension schemes similar to funded schemes, despite their quite different legal status and economic meaning. This would mean that employer unfunded pension obligations and social security pension obligations are recognised as if they were irrevocable liabilities, which would imply the recording of corresponding financial assets and liabilities in the core accounts. Second, taking into account the various reasons why funded and unfunded schemes are quite different in an economic sense, it is recommended to record unfunded pension obligations in a supplementary table on pensions. Based on the work of the IMF's Task Force on pensions, the CMFB, the AEG and the ISWGNA it can be considered that viewpoints on how to record implicit pension liabilities in the new SNA have been maturing and converging, and that the basis for a common orientation exists encompassing the two options as described below

surveillance exercise will be required by the end of 2006. See Report of the ECOFIN Council to the European Council, Improving the implementation of the Stability and Growth Pact, 21 March 2005.

[4] The IAS 37 and the IPSAS 19 deal with provisions, contingent assets and contingent liabilities.

4. Recording of implicit pension liabilities in the core account of the SNA

The recording of implicit pension liabilities in the core account of the SNA would mean that the accounting of unfunded pension schemes operated by governments for their employees would be the same as if they were funded schemes. Starting with a stock of financial assets as insurance technical reserves at the beginning of a period t, social contributions are paid by the households of the employees concerned. Another part of the social payments is made by the employer and is recorded via rerouting. Additions to the reserves also emerge from the accrual of reinvested property income received from their investment. Social benefits are paid to households with retired members. In addition, fees have to be paid by households for the financial services provided by the scheme. A balancing item, the adjustment for the change in net equity of households in pension funds reserves, is equal to the amount increasing the net equity of households in pension funds based on transactions. Finally, holding gains or losses, for instance due to a change in the pension formula or in the long-term interest rates, might contribute to an increase or decrease of the reserves.

Accordingly, the balancing item deviates from the net lending/net borrowing of an unfunded scheme (contributions minus benefits) essentially due to the effect of including the property income attributed to households and subtracting the financial services provided by the scheme and paid by households.[5] As the property income reinvested into the scheme might be higher than the financial services provided by the scheme, the net lending of the household (and accordingly the net borrowing of the sector to which the scheme belongs) might be larger than the corresponding figures derived under the assumption of a pay-as-you-go scheme.

5. Recording of implicit pension liabilities in a supplementary table on pensions

The recommended solution in the new SNA for the recording of stocks and flows related to unfunded pension schemes operated by governments for their employees and to social security pension schemes is to show them in a supplementary table for pensions. In this context, the same rules are applied as for funded schemes, but the underlying model assumptions should be made explicit. Preferably, a sensitivity analysis should be conducted. As a result, the current treatment of unfunded schemes in the core accounts does not change, while all additional model estimates are recorded in a supplementary table showing the flow accounts and the balance sheets.

There are various reasons for recommending the coverage of unfunded employer and social security schemes in a supplementary table. First, measurement issues arise if no stock and flow data are available that are calculated according to the actuarial criteria used by insurance corporations and autonomous pension funds. For instance, the appropriate "pension formula" has to be chosen for the calculation of the pension obligations, which is far from self-evident and may lead to widely varying outcomes depending on the assumptions chosen. The amount of pension obligations might be derived from data occasionally received if employees change from one scheme to another implying that the pension rights are calculated and the corresponding funds transferred. More generally, the pension formula

[5] The households pay a specific amount as purchase of a financial service from the pension scheme. This is recorded in the production account as payable by the households as intermediate consumption and receivable in the production account of the pension scheme as output.

might also be specifically applied to a group of households belonging to the same class in terms of income, age, size and gender. On that basis, the fictious property income and the pension provisions might be compiled for schemes where no funding exists and, therefore, no property income is earned and reinvested. Other actuarial assumptions needed relate to the average life expectancy of the scheme members and their final salaries. Particularly the latter can hardly be estimated with some degree of reliability. The compilation of pension entitlements based on such assumptions may have to be revised continuously and substantially. As a consequence, fiscal variables such as government deficit and debt would be surrounded by a high degree of uncertainty and be prone to manipulation.[6]

Second, unfunded social security and employer schemes should be treated equally, because the choice to cover only implicit pension liabilities of unfunded employer pension schemes is quite arbitrary. This is especially valid for economies in which a large proportion of the pensions is organised and financed on a pay-as-you-go basis. These pensions are thus organised in general like social security schemes, which are imposed, controlled and financed by general government. They usually cover the entire population, or large sections of it. Their receipts mainly consist of social contributions paid by individuals and by employers on behalf of their employees, but they may also be partly financed out of taxes or other government revenue. Participation in social security schemes is usually compulsory. The social benefits paid to individuals are not necessarily determined by the amounts they previously paid as contributions. At most a small amount of financial assets might be held as a liquidity reserve. Normally, it is not possible to clearly distinguish between unfunded employer pension schemes and social security pension schemes. Besides, individuals who are not eligible for the old-age pensions may be entitled to other forms of social assistance, for which the government anyway pays.

Third, from an analytical perspective it appears inappropriate to impute funds for a pension scheme that is unfunded. Following the quadruple-entry principle in national accounts, financial assets for an unfunded system would then be recorded in the household accounts and liabilities in the accounts of the employer's sector implying the same economic behaviour as if a funded pension scheme existed. However, it is questionable whether households paying unfunded pension contributions and governments that maintain a pay-as-you-go system behave similarly to households and governments in an environment of a funded pension scheme. In fact, if this were the case, there would be no rationale for advocating reforms of the pension systems in countries with substantial unfunded schemes.

Finally, funded schemes carry out financial investments depending on their financial conditions and the legal framework. It would be nearly impossible to reflect such a scenario also for unfunded schemes and it would in any case not describe economic reality. Moreover, the current recording of unfunded schemes organised on a pay-as-you-go basis describes rather accurately the economic behaviour of both sides as well as the associated risks and rewards related to such a system.

To conclude, there is a well-founded interest in showing comprehensive model simulations of future commitments of governments derived from unfunded pension schemes. Because of the similarity of unfunded employer pension schemes and social security pension schemes, a set of supplementary estimates is recommended, in which stocks and flows are modelled for unfunded employer schemes and for social security schemes, but not for social assistance.

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[6] Please notice that additionally the entitlements may be unilaterally changed by the employer (e.g. the government), for instance because they appear to be non-sustainable in an ageing society. In this context, the ongoing work of the EPC and of its Working Group on Ageing Populations (AWG) reveals the significant differences in outcomes that result from using different model assumptions. Related to the comparability and transparency of the future assessments between Member States it is said that a reliance on data produced by national institutions hampered comparability due to different definitions and measurement techniques. See European Commission (DG ECFIN), 13 April 2005 and also the report on "The impact of ageing on public expenditure" prepared by the EPC and the European Commission (DG ECFIN). February 2006.

6. The design of a supplementary table on pensions

Recently, broad agreement has emerged on how to conceptually treat the employer pension schemes in the updated SNA. According to this, the new SNA will include a supplementary table on pensions which will become a standard requirement in the updated SNA. In this table, all flows and stocks of all pension schemes (autonomous pension funds, segregated non autonomous employer schemes, pension part of social security, etc.) will be shown. This table will thus include details of pension flows and stocks that are recorded in the core accounts plus those that are not included in the core accounts also giving a complete view of implicit and explicit household pension "assets". Furthermore, it is suggested that this supplementary table would become compulsory for European Union member states through the updated regulation on the European system of national and regional accounts in the Community (1995 ESA).

The recommendation of the new SNA regarding the recording of unfunded pension schemes sponsored by government for all employees (whether private sector employees or government's own employees) will be flexible. Given the different institutional arrangements in countries, the updated SNA will also permit recording these pension entitlements in the core accounts. However, in any case the criteria between those schemes carried forward to the core accounts, e.g. because the pension promise is of a sufficient strength, and those only recorded in the supplementary table should be more explicit.

Table 2

Stylised sequence of accounts for pension schemes

	Line number	Households		Schemes	
		Uses/ Assets	Resources/ Liabilities	Uses/ Assets	Resources/ Liabilities
Opening balance sheet	**1**				
Financial services	2				
Contributions (households)	3				
Contributions (employer, rerouting)	4				
Benefits	5				
Property income earned on the scheme's assets	6				
Property income distributed to households and reinvested	7				
Adjustment for the change in net equity of households in pension fund reserves	8				
Net lending/net borrowing	**9**				
Cash	10				
Pension entitlements	11				
Other flows	12				
Change in net worth	**13**				
Closing balance sheet	**14**				

Source: Compiled by authors.

According to these principles, a double entry table will be designed to show, for instance, in the rows the various transactions, other flows and stocks in a sequence of accounts, and in the columns the various types of pension schemes. Concerning the accounting entries, actual social contributions to the scheme (lines 3 and 4 of Table 2) and paid pensions

(benefits as line 5) will have to be recorded as non-financial transactions in the accounts of the employers and the employees' households, in parallel to the financial transactions (lines 10 and 11). Corresponding adjustments will have to be made for the change in net equity of households in pension fund reserves (line 8). Increases or decreases in the accrued pension rights may also emerge from changing the entitlements from the scheme, which can be done at any time as no legally binding obligations are involved, or when individual employees, or groups of employees, join or leave the scheme.

The changes in the assets and liabilities for pensions are also due to revisions of the actuarial assumptions. They would then be recorded as other volume changes because they are not the result of the employer's actions. Changes in the scheme benefits as a result of government decisions should also be recorded in the same way. Recording them as other volume changes would mean that such changes, which could be very large, would not affect the transaction figures or balancing items like net lending/net borrowing.

Further entries are shown for the opening and the closing balance sheet. Given an initial stock estimate, it is thus possible to work from this to develop a time series of stock levels from estimates of the changes in each year. Finally, balancing items might be included like net lending/net borrowing and the change in net worth.

Table 3

Typology and sector classification of pension schemes

Collective or individual?	For whom?	Funding and control?	Sector classification	Example	Collective or individual?
Collective: Social insurance scheme for certain groups who are obliged to participate	Organised by employers for own employees	Funded	Funds held by employers	Employer's sector	Non-autonomous pension fund
			Funds held by other units[1]	Pension fund	Autonomous pension fund
		Unfunded		Employer's sector	Scheme organised for civil servants
	Other groups	Funded	Controlled by government[2]	General government	Defined benefit funded pension scheme
			Controlled by other units	Pension fund	Defined contribution funded pension scheme
		Unfunded	Controlled by government	General government	Social security scheme
			Controlled by other units	Sector of controlling unit	Unlikely
Individual insurance	Individuals	Funded		Pension fund	Life insurance contract

[1] Contributions are paid to insurance corporations and autonomous pension funds that are separate units (see 1995 ESA, annex III, and paragraph 5). [2] General government is responsible for the institution in respect of the settlement or approval of the contributions and benefits, irrespectively of its possible general role as a supervisor of pension funds (see 1995 ESA, paragraph 2.74 and annex 3, paragraph 4).

Source: Compiled by authors.

For the typology of pension schemes, it might be useful to start with the current classification of such schemes in the 1993 SNA and in the 1995 ESA. Table 3 distinguishes pension schemes by their coverage - either for certain groups who are obliged to participate (social insurance) or for individuals.[7]

Combining these groupings of pension schemes with the accounting entries, a supplementary table on pensions can be derived like Table 4. Entries marked by an asterisk (*) are those where there is agreement that entries should appear in the core accounts and where there is agreement on the way to estimate the entries. This covers all private schemes, those government schemes which are funded to some extent and some entries affecting compensation of employees for both unfunded pension schemes and social security.[8] The discussions so far have provided agreement on how to take account of private employer schemes - including the unfunded schemes sponsored by corporations. As they will be shown in the core accounts (C), some amendments will have to be made for unfunded schemes as indicated in the table.

Table 4

A supplementary table for pension schemes

Sector		Non-financial corporations		Financial corporations (except insurance corporations and pension funds)		Insurance corporations and pension funds			General government			
Accounting entry	Line number	Funded employer pension schemes (non-autonomous)*)	Unfunded employer pension schemes	Funded employer pension schemes (non-autonomous)	Unfunded employer pension schemes	Autonomous pension funds	Defined contribution funded pension schemes	Life insurance contracts	Funded employer pension schemes (non-autonomous)	Defined benefit funded pension schemes	Unfunded employer pension schemes	Social security pension schemes
Opening balance sheet	1	*	C	*	C	*	*	*	*	*	S	S
Financial services	2	*	C	*	C	*	*	*	*	*	S	S
Contributions (households)	3	*	*	*	*	*	*	*	*	*	*	*
Contributions (employer, rerouting)	4	*	*	*	*	*	*	*	*	*	*	*
Benefits	5	*	*	*	*	*	*	*	*	*	*	*
Property income earned on the scheme's assets	6	*	C	*	C	*	*	*	*	*	S	S
Property income distributed to households and reinvested	7	*	C	*	C	*	*	*	*	*	S	S
Adjustment for the change in net equity of households in pension fund reserves	8	*	C	*	C	*	*	*	*	*	S	S
Net lending/net borrowing	9	*	C	*	C	*	*	*	*	*	S	S
Cash	10	*	*	*	*	*	*	*	*	*	*	*
Pension entitlements	11	*	C	*	C	*	*	*	*	*	S	S
Other flows	12	*	C	*	C	*	*	*	*	*	S	S
Change in net worth	13	*	C	*	C	*	*	*	*	*	S	S
Closing balance sheet	14	*	C	*	C	*	*	*	*	*	S	S

*) Autonomous schemes involve institutional units separate from employers, while non-autonomous schemes are managed by employers, with or without segregated reserves. Autonomous schemes are units of the pension fund sub-sector of the financial corporation sector; non-autonomous schemes are included in the sector of the sponsor unless quasi-corporations can be established for pension funds in which case they are sectored in the same way as autonomous pension funds.

Source: Compiled by authors.

[7] See 1995 ESA, paragraphs 4.87 and 4.86(a).

[8] The financial services (if actually paid for) must also appear in the core accounts.

Entries marked by (S) should appear in the supplementary table but not in the core accounts, even though any estimates for them may be quite speculative. Whether it is possible to separate unfunded government employer pension schemes and social security pension schemes will depend on a number of factors such as the strength and immutability of the pension commitment and whether there are institutional arrangements which permit their separation.

It is intended that the supplementary table on pensions be a standard requirement as well as information on which items are carried forward to the core accounts. The complete supplementary table would show how much is covered by existing data. Even though there are more cells with asterisks than with an (S), the values for the cells with asterisks may be small compared with those with an (S). This would open the way to various sorts of analysis. Users could delete entries for some countries if entries were not available for all. Alternatively they could make their own estimates for the missing entries. The table is shown with all possible details to facilitate discussion. At the implementation stage some aggregation may be inevitable. For example, it is unlikely that other flows will be detailed as shown in the table.

7. Compiling data for implicit pension liabilities

As discussed above, the statistical recording of implicit pension liabilities requires model estimates of the outstanding stock of these liabilities and their evolution. In the pensions literature, three alternative definitions of implicit pension liabilities have been proposed, differentiated by the scope of liabilities included in the estimation.[9] The first definition, *accrued to date liabilities*, includes only the present value of liabilities arising from already accrued pension rights in the estimate. For example, this includes pension entitlements due to already paid pension contributions by current workers and remaining pension entitlements of existing pensioners. The second definition, *projected current worker and pensioner's liabilities*, expands the first definition by covering in addition the present value of pension entitlement that will accrue to current contributors due to their future contributions. I.e., the underlying assumption for this calculation is that the pension system is closed to any new entrants, while all current contributors can remain in the system and continue to accrue pension entitlements. Finally, the third definition, *open system liabilities* incorporate the present value of future contributors' pension entitlements in addition to the second definition. In other words, the estimation is based on the assumption that the pension system will continue under unchanged rules. For practical purposes, the estimation can introduce a time horizon for the calculation of the present value, e.g., fifty years. Alternatively the present value can be computed over an infinite horizon, which requires strong assumptions regarding the behaviour of the demographic and economic variables entering the estimation.

The usefulness of the alternative definitions depends on the specific purpose of the estimation. For example, an assessment of the long-term sustainability of the current pension arrangements should take as a baseline the widest possible estimate of the liabilities. This would point to using open system liabilities for this purpose. By contrast, policy questions concerning the possible termination of an operating pay-as-you-go pension system should be addressed on the basis of the first or the second definition, depending on the remaining time horizon of the system.

From a statistical perspective, only the first method is appropriate for national accounts purposes. The method is based on observable past events and transactions, such as

[9] See R. Holzmann (2004), World Bank Social Protection Discussion Paper No. 403 for details.

membership in the pension system and paid contributions. Nevertheless, also this method requires some heroic assumptions regarding future developments, notably regarding the discount rate for future pension disbursements. For the derivation of actuarial estimates under the accrued-to-date approach, there are two main valuation approaches that have been applied to corporate pension schemes, the projected benefit obligation (PBO) and the accrued benefit obligation (ABO) method. The ABO is calculated for years of service to date based on the current wage and salary rates, i.e. future salary increases are disregarded. By contrast, the PBO is calculated including assumptions on what the employee will earn during his entire career. The PBO exceeds the ABO, with a substantial difference in early years and decreasing towards retirement date.

In the accounts, the accumulated value of benefits should be based on only service to date (ABO) figures. Accordingly, projected future wages and salaries should not be taken into account (as would a PBO calculation do). If appropriate, PBO estimates could be provided as a memorandum item. The reasoning is analogous to the one underlying the choice of the accrued-to-date definition as the preferred method for statistical purposes. In particular, the ABO approach relies on past observable events and minimises the need for assumptions regarding future developments.

Estimates in the literature point to the importance of implicit liabilities from pay-as-you-go pension systems. Studies conducted in the mid-1990s using the accrued-to-date methodology find implicit liabilities between 70% (United Kingdom) and 350% of GDP (Italy).[10] While different methodologies (e.g. regarding ABO v. PBO) and different assumptions, notably with regard to discount rates, have an a very sizeable impact on the results, the estimates show that implicit liabilities in general exceed the stock of outstanding explicit general government debt obligations. More recent studies have tended to take a wider focus, computing open system liabilities covering pension and health care and also offsetting factors, such as lower education and unemployment expenditures. For example, the study by the Economic Policy Committee's Working Group on Ageing and the European Commission (2006) points to ageing-induced fiscal burdens equal to an infinite horizon budgetary cost of more than 4% of GDP for more than half of the euro area countries, reaching up to around 8% for some countries. Converting this into a net present value at a discount rate of 3% yields burdens between 130% and 270% of GDP, with the largest part of the burden attributable to pension system obligations. It should be noted that given the somewhat optimistic assumptions regarding labour market developments in these calculations, the actual burdens could even be higher.

Summing up, irrespective of the applied estimation methodology or definition, implicit liabilities from pension systems are very large for many euro area countries. Results diverge across countries, mainly reflecting different demographic prospects and different public pension system arrangements. The order of magnitude of upcoming fiscal burdens is important, even if estimates are sensitive to the underlying assumptions, e.g. regarding the discount rate. From a methodological point of view, projections of future pension system obligations generally require detailed country-specific data on contribution and benefit arrangements and further work will be necessary to generate homogenous projections for a large set of countries.

[10] See Holzmann (2004) op. cit. for an overview.

8. Conclusions

From a users' point of view there is a need to provide data on implicit pension liabilities. They should be compiled based on SNA standards. It means that the current standards for the treatment of pension schemes do not change in the core accounts. However, it is foreseen to compile a supplementary table on pensions as described above. This table covers the details of pension flows and stocks that are recorded in the core accounts but also includes those that are not covered by the core accounts. Thus, it will also give a complete view of household pension "assets."

In order to compile this table, harmonised actuarial compilation methods and data sets will have to be provided. It is intended that such statistical work will be undertaken for EU countries by a Eurostat/ECB Task Force which was recently launched. Two related issues will have to be investigated: (i) A further analysis of the measurement of implicit pension liabilities of general government as an input for the new SNA; and (ii) an assessment of the sources and methods to measure these liabilities on a harmonised basis for all EU countries.

The supplementary table on pensions will provide the users with a rather consistent and comparable set of pension data as well as with additional information regarding household wealth and the size of total general government sector obligations. In this context, it takes into consideration the different institutional arrangements in countries concerning funded and unfunded pension schemes, and explains the distinction between those schemes carried forward to the core accounts, and those recorded only in the supplementary table.