

Interview of Anne Harrison on social insurance in the *1993 SNA*

by the Moderator of the EDG on Pension Schemes¹
April 2003

Philippe de Rougemont: Thank you Anne Harrison for taking time to answer to our questions.

1. Savings schemes and social insurance schemes

PhR: My first question relates to the delineation between saving schemes and social insurance schemes. The last sentence of paragraph 21 of the Annex to Chapter 2 of the *Government Finance Statistics Manual 2001 (GFSM 2001)* states: “It should be noted, however, that defined-contribution schemes are not social protection schemes because no insurance is involved.”

Anne Harrison: The *1993 SNA* defines social insurance schemes as ones where the policy holder is obliged or encouraged to insure by the intervention of a third party (see *1993 SNA* Annex IV para 5). This third party is often the employer, who insists on this as a condition of service, or it may be the government who insists that all employees, or even a larger set of the population, or a differently defined large section of the population, participate in such schemes in order to ensure entitlement to benefits in certain prescribed situations. In certain cases, these may encompass individualized policies intended to cover “social risks”. However, it is clear that participation in many of these schemes also entails a saving dimension which may need to be appropriately reflected by entries in the financial accounts (hence the dual recording and the need for an “adjustment entry” in the use of income account *1993 SNA* – D.8).

The link between “risk” and “insurance” in the case of social insurance schemes is not spelled out explicitly in the SNA. The implicit understanding, though, is that there is no certainty of any given individual needing to avail themselves of any given benefit, even a pension. The level of claims is determined actuarially, not person by person. In this sense there is a spreading of risk and thus an insurance element. I am not familiar with the discussions leading to the formulation in *GFSM 2001* you refer to, but I would assume this is

¹ On 27 January, the moderator of the EDG on Pension Schemes, on his way to a Luxembourg Eurostat Task Force on Pension Schemes, met Anne Harrison in Paris for a working lunch to discuss, among other things, six questions related to the *1993 SNA* view and terminology in the area of social insurance. This paper is structured minutes of the discussion; any mistakes are the sole responsibility of the interviewer.

Anne Harrison wrote the Annex IV of the *1993 SNA* on *The treatment of insurance, social insurance and pensions*.

on the basis that the benefit accruing to the participant in the scheme is of a strictly individual nature and relates only to pension (or lump sum) provision. The early part of that paragraph states that the entitlement to other social benefits a participant of a funded scheme enjoys is treated as coming from an unfunded scheme. Thus the risk spreading part of the scheme is separated from the individual savings element. (Speaking without detailed knowledge of the exact terms of all possible schemes, it would seem to me to hold necessarily only in the case of defined-contribution schemes and that some defined-benefit scheme might possibly draw on the funds to meet the benefits payable).

2. The distinction between defined-contribution and defined-benefit schemes

PhR: Now, assume a scheme managed by an employer for the benefit of the employees. All employees are obliged to participate in the scheme. Assume further that the employees make annual contributions and upon retirement receive a lump sum (or an annuity bought by it) equal to the contributions made plus a return tied to some kind of index (e.g., interest rate on government bonds, GDP index, consumer price index).

If I understand the *1993 SNA* correctly, this scheme should be classified as a social insurance scheme (of a defined-contribution type) (1), because it provides protection against the risk of insufficient income after retirement and it is obligatory, instead of as a mere saving scheme (2). However does it spread risks?

AH: Yes. Although one may indeed have a temptation to describe such an arrangement a saving scheme, it still has the nature of social insurance. The employer obliges participation in it. You assume the payment will be in terms of a lump sum. You do not state what would happen in the case of a participant dying before retirement age. Equally, such a scheme may give a fixed annual payment for the period the participant survives after retirement. In the latter case at least, there is risk spreading in that the extent of payment to any individual will depend on their actual survival pattern. However, whichever the way in which benefits are paid, I would not call such a scheme defined-contribution.

PhR: ..??. but is it not the case that such a scheme fixes contributions, and lets benefits to be determined by them?

AH: I think you are in danger of confusing a contributory scheme with a defined-contribution scheme. A contributory scheme is one where the employee and/or the employer make regular contributions to the scheme. Indeed, having an employer making contributions to a scheme is one sufficient condition for it to be classified as a social insurance scheme. Whether a scheme is contributory or not is linked to (but not the same as) whether it is funded or not. It is a classification relating to the source of contributions. The distinction between defined-benefit and defined-contribution (or money purchase) scheme relates to the manner in which the level of benefits are determined and can be quite independent of the source of contributions. In the case of a defined-benefit scheme, the policy holders have a pre-determined expectation of what the likely benefits will be: either a percentage of final wage (a very common and clear case) or even the sum of actual contributions plus a return which is somehow “fixed” or known. Defined-benefit schemes may be either contributory or

non-contributory and may be funded or unfunded. In contrast, a defined-contribution scheme is one where funds are placed with money managers and thus earn some kind of market return, but with substantial uncertainties and market risks. A defined-contribution scheme is necessarily exactly funded and its net worth is always zero. It is usually one the employee contributes to but it may be that only the employer makes a contribution. Note that in both cases there is uncertainty for the participant about the exact level of benefits receivable but only in the case of the former is there a possibility that there may be insufficient funds to meet the payments due.

PhR: Would it be a problem if such a scheme was not an employer scheme but a more general scheme covering large parts of the population? What would be the appropriate classification having in mind that *1993 SNA* seems not to recognize insurance technical reserves liabilities (AF.6) for Social security schemes (*1993 SNA*, Annex IV para 13). Is it a Pension Fund?

AH: It is possible that such a scheme could be a Pension Fund, but it should be checked whether the scheme is part of the social security schemes in the first place, that is “imposed and controlled by government units” (*1993 SNA*, para 4.111). More generally, an essential question is whether there is an obligation to participate in the scheme. If not, it may simply be personal savings.

PhR: Your explanation about the difference between a contributory and a defined-contribution scheme explains why defined-contribution schemes are then necessarily “funded” in the sense that assets must first exist so to be managed. This is indeed mentioned en passant in *1993 SNA* para 13.88.

AH: Exactly.

3. Funded and unfunded schemes

3.1 Segregated assets and notion of segregated “reserves”

PhR: This in turn leads us to the delineation between “funded” and “unfunded” schemes, crucial in *1993 SNA*. *1993 SNA* uses the criteria of “existence of segregated” (or “identifiable assigned”) “reserves” (or “funds”) to make such a distinction. However, sometimes “funded” seems to mean:

- (A) the "existence of assets" held by the scheme; or
- (B) the "existence of a provision" on the liability side in the own accounts of the unit managing the pension scheme (that is, the unit's internal recognition of an obligation by reason of the scheme, and its likely value).

Other potential interpretations would be (C) there exists a "Fund" and (D) funds to cover the scheme's expenses are provided by way of contributions. Option (C) can be rejected because it is the reverse which is true: the "Fund" exists by virtue of classifying the scheme as funded. Option (D) would more relate to the definition of Insurance versus Assistance, and even could be seen as circular because of the notion of imputed contributions.

What should we think?

AH: In the *1993 SNA*, funded means that there are assets which are attributable to the beneficiaries of the schemes and inalienable from them, that is option (A). The scheme operates by accumulating assets in order to pay benefits later out of those assets (and their likely return). The *1993 SNA* treatment of associated property income also clearly points to the criteria of the existence of assets. One may note that the existence of accumulated assets supposes contributory payments in the first place. But as noted above, not all contributory schemes lead to funded schemes so criterion D is ruled out. The most common form of “unfunded” scheme is a Pay As You Go (PAYG) scheme where current contributions are used to pay for current benefits instead of being invested.

PhR: I observe that such a definition of “funded” appears compatible with the definition seen above of defined-contribution schemes and with the statement that all “defined-contribution schemes are funded” (see para 13.88 of the *1993 SNA*).

AH: Yes.

PhR: But can't one recognize a notional Fund, where no asset exists?

AH: Even if the level of contributions is strictly defined, perhaps in terms of wages, the *1993 SNA* does not record a “notional” fund or “notional assets”. Unless there are actual assets and the benefits are specified in terms of the value of these assets, the fund is not a defined-contribution one. Even when there are actual assets (and there may not be) if the benefits are defined by reference to other criteria such as wage level or the level of actual contributions, then the scheme is still a defined-benefit one.

PhR: There are some countries where the benefits are based on the accumulated value of contributions (either actual, imputed or a combination of these) but the contributions are not actually put into a Fund.

AH: The *1993 SNA* would describe such schemes as unfunded and defined-benefit.

PhR: In some cases, in order to show that a liability has been incurred, a “notional fund” and corresponding “notional asset” may be recorded in the unit's own books. Does this make a difference to the *1993 SNA* classification of the scheme?

AH: Well, the concept of “notional bond” does not appear in *1993 SNA*, and may need to be explored further. In particular there would be a need to assess whether such so-called “notional bonds” meet the criteria of “economic asset” (i.e. being both a store of value from which economic benefits may be derived and whose ownership rights are enforceable at law). If it were to be so considered, the scheme might be called funded but it would still be a defined-benefit plan. Introducing the idea of a notional asset would itself be a change to the *1993 SNA*.

3.2 Funds invested in the employer's own assets

PhR: There appears another difficulty: should those schemes accumulating assets in the form of instruments issued by the same unit be considered funded or not?

AH: This is a very important point. *1993 SNA* para 4.98 specifies that schemes “organized by a non-government employer in which the reserves of the fund are simply added to that of the employer’s own reserves or invested in securities issued by the employer” are to be treated as unfunded. This is because investing in own instruments (such as bonds or shares issued by the employer) does not provide a satisfactory level of security to policy-holders. Looking at various scandals that have occurred recently underlines the importance of this exception.

3.3 Case of government schemes

PhR: But the para does not say that government schemes invested in government bonds would be seen as funded.

AH: The restriction of the sentence to “non-government employees” was meant to indicate that government schemes for their own employees were to be considered funded even if they were invested in government bonds, the assumption being that government bonds would always retain their value as a government could not go into liquidation.

PhR: Fine. But if the main issue is the solidity of the claim, while claims against government are to be deemed solid (by convention), doesn't this mean that any government schemes could *de facto* be seen as having a claim against the organizing unit? In this respect, all government schemes would *de facto* be considered funded. The fact that there is no material evidence of the instrument issued, though important, is not generally an overruling consideration in national accounts.

AH: Until now, the *1993 SNA* has not accepted that the conditional liability of government towards social insurance beneficiaries should be treated as a financial asset of the beneficiary. In my opinion, it is one of the important areas for discussion on the EDG. Shouldn't discussion of the government budget allow for the fact that ageing populations will increase future benefits to pensioners and shouldn't these increases be recorded as a liability in the accounts?

PhR: In this case the mere existence of a liability entry in the own accounts of the scheme (or unit) or of a legal claim should suffice to establish a claim of the scheme against the unit. For government employers, then the notion of funded could be either the existence of assets **or** the existence of a liability entry.

AH: That is one way in which the *1993 SNA* might be changed.

3.4 Own accounts of the unit and consolidation

PhR: There is another conceptual or terminological difficulty. Would the existence of “segregated assets” be by reference to the own accounts of the unit (i.e. its own financial statements), or by reference to the statistical balance sheet? This is important because “internal assets” are not to be considered in statistics: one clear implication, for instance, is that an outright purchase by a unit of its own securities has to be recorded as the redemption of a liability at the unit level and any interest accrued on such instruments is not recorded.

AH: Clearly the adequate criteria should be that assets of the segregated funds are identifiable in the own accounts of the unit. The fact that non-autonomous schemes are then shown consolidated within the main institutional unit is secondary. Again the question is about the financial solidity of the claim. The existence of segregated funds cannot be changed by the act of consolidation of the accounts; either there are inalienable assets or there are not.

PhR: By the way, should we refer to this process as “consolidation” or not, as it only involves the non-recognition of “internal links”? Shouldn’t we reserve consolidation for the elimination of links between two institutional units?

AH: I am not sure I make this difference.

PhR: One can also observe that when the scheme is an institutional unit in its own right (that is it is an autonomous fund or social security fund) the assets held would indeed be recorded as economic assets, but in the *GFSM 2001* or *1993 SNA* nevertheless be consolidated when compiling public sector or general government accounts, and therefore disappear.

AH: In such a case, consolidated accounts yield little information about future pension commitments and the ability to fund them. A question arises about exactly which items should be eliminated on consolidation and which should remain.

PhR: Another question relates to the nature of the segregation with reference to “segregated reserves” (i.e. “segregated assets”). Would we need some legal segregation, or would some mere administrative or accounting segregation sufficient?

AH: Because the main issue is about the financial solidity of the claim, I think a legal segregation would be necessary – at least for private employers.

4. Over and under funded schemes

PhR: The *1993 SNA* distinguishes between funded and unfunded schemes without elaborating on intermediate cases. At the same time *1993 SNA* discusses case where schemes are overfunded or underfunded. I think it might be useful to distinguish between the concepts of funded (or fully funded) versus partially funded on the one hand, and the concepts of

overfunded versus underfunded on the other hand. The distinction funded (or fully funded) versus partially funded would be a classification of schemes. The essential criterion would be: "at inception, are the contributions (or book-keeping entries) *intended* to fully cover or only partially cover the scheme's future obligations?" (by reference to actuarial estimates). In contrast, overfunded versus underfunded would simply refer to the *net worth* of the scheme at any given point in time (positive or negative respectively).

What do you think?

AH: As we touched on above, a defined-contribution scheme, by its very nature, is always fully funded and can never be under- or over funded. Its net worth is always zero. A defined-benefit scheme may be wholly funded, partially funded or unfunded and in the first two cases, the outturns may be higher or lower than originally expected leading to under or over funding, although cases of "overfunded partially funded funds/schemes" would not be common.

PhR: I take it that *1993 SNA* simply defines a "Pension Fund" as an Employer Pension Scheme that is funded.

AH: Well, the funds comprise the assets of pension schemes, whether these are fully funded or not.

5. The question of autonomy and segregation of funds

PhR: Another question relates to the notion of autonomous versus non-autonomous. Clearly the delineation is whether a scheme can be identified with an institutional unit or not. However the four *1993 SNA* criteria of para 4.2: complete set of accounts and the three others that are summed up in *ESA 1995* under the generic term of "autonomy of decision", may need to be interpreted in the case of "autonomous fund".

First, the existence of sets of accounts is likely to the extent that schemes should maintain "tables of obligations" (that is, it should keep track of likely obligations based on actuarial assumptions and the exact composition of the group of insured persons). In addition the existence of segregated assets or alternatively provisions ("reserves") would give some key elements of balance sheets.

AH: During the discussion leading up the 1993 revision of the *SNA*, it was deliberately decided not to use the concept of autonomy as part of the definition of an institutional unit because of the difficulty of being quite precise about what this means. Rather, the *1993 SNA* in para 4.2 spells out the attributes of these units. Clearly one implication is that there would also need to be a complete tracking of operating costs charged against the returns of the Fund.

PhR: This would then relate to a notion of the importance of some "operational" autonomy. However, the second element for an institutional unit – autonomy of decision – would preferably have to be assessed against the main function/activity of the unit, which one presumes is the scheme's "portfolio investment" strategy.

AH: I repeat, autonomy in this sense is not a *1993 SNA* concept. But of course, the autonomous fund must not only be able to invest in assets other than liabilities of the parent unit but actually do so, or, as we discussed above, the scheme becomes unfunded so cannot be autonomous. Similar conditions apply to pension funds which are non-autonomous but are segregated. The only exception is in the case of government as noted before.

6. Social security versus social insurance, and issues to be considered by the EDG on Pension Schemes

PhR: Some colleagues wish to play down the importance of the distinction between social security and social insurance made in the *1993 SNA* or redefine it where social assistance would mainly cover more means-tested supports with a clear redistributive dimension.

AH: The social security social assistance delineation is very important for the system and exclusively relies on the contributory nature of schemes. Equally there are other colleagues who would wish to explore the whole area of social protection in a more inclusive sense. I would hope that too would be part of the discussion on the EDG.

PhR: This is the second issue you have mentioned where you hope the EDG will open discussion on new aspects of the measurement of pensions. Are there other issues which you think should be raised?

AH: I think the overview paper on the EDG is excellent. It is very clear and useful but there are a number of other issues I would like to see flagged for discussion. The question of imputing liabilities for unfunded schemes is one, for government certainly but possibly in other circumstances also. The question of some extension to the concept of social insurance, for example to cover provisions made by self-employed persons, is another. Given the growing anxiety in at least some European countries about the difficulties of funding pensions for an ageing population, perhaps some more schemes which are specifically pension related could and should be included.

We discussed the question of over and under funded schemes above, but the question of who owns the element of over funding or of who is responsible for payments due but which are underfunded needs resolving.

The *1993 SNA* suggests that for unfunded schemes, contributions and benefits may be set equal but not if demographic conditions suggest this is imprudent. The exact means of recording an excess of imputed contributions over actual benefits should be explored. Clarification on these issues would help analysts study what is already a field of growing concern and whose importance is likely to increase in the future.

PhR: Thank you, Anne Harrison, for those very useful insights. We hope you will find time to contribute to the EDG.