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Draft Chapters of the 1993 System of National Accounts Revision 1

Questions on Chapter 17, parts 1 and 2 (insurance and guarantees)

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Note by the editor: *In general the questions on the text for discussion by the AEG are those raised by the commentators on the draft text. In the case of chapter 17, most of the questions are ones that the editor encountered in trying to cover a wide-ranging topic exhaustively. For insurance and guarantees, some of the ISWGNA have also offered comments and some of these are added also. For pensions, even the ISWGNA has not had a chance to review what is presented here for lack of time. The objective of these questions is to find answers so that the text may be completed and posted for comment in the usual way.*

Please note that the file for the chapter contains, at the end, material Francois and John Walton suggest that could form either an electronic annex on implementation questions or feed into a more extensive implementation guide.

1. The formulae for the measurement of insurance output

The issue of non-life insurance was discussed at the first AEG in Washington in February 2004 and decisions were taken (see annex 1 of the present paper). The discussion document for February 2004 put forward two formulae for the determination of output. One was described as a statistical approach whereby output would be determined as premiums earned plus expected premium supplements less expected claims due. The other was described as an accounting approach whereby output is defined as premiums earned plus premium supplements less (claims due and changes to equalisation provisions and changes to own funds, if necessary). In addition, as a result of discussion, the AEG supported the inclusion of a third approach consisting of the sum of cost plus normal profit approach.

> Q1: Would the AEG accept the following suggestion for incorporating the three options for determining output of non-life insurance? (Immediately before para 17.33 there is explanation of premium supplements and adjusted claims.)

Add to 17.31   The term "adjusted" is used here to confirm that it is not observed claims, indeed the production of insurance services does not occur when the risk occurs. The concept of insurance service is the service of covering for the risk. As such, its measurement should not be affected by the volatility of the occurrence of the risk. Neither the volume nor the price of insurance services is directly affected by the volatility of claims.

17.33   The output of the insurance corporation represents the service provided to the policy holders. The output of direct non-life insurance is based on the principle of adding premiums and premium supplements and deducting adjusted claims incurred.

If a statistical approach is being used, the formula to calculate output takes the form of

> Actual premiums earned,

> Plus premium supplements,

> Less adjusted claims,

Where adjusted claims are estimated from past experience. In such a case, conceptually premium supplements should also be estimated on the basis of past experience. However, since premium supplements are less volatile than claims, in practice no such adjustment may be necessary.

If a statistical basis is to be used for estimating output, it is preferable to use information broken down by "line of business", that is for motor insurance, buildings insurance etc. separately.

Alternatively, an accounting approach may be used whereby output is calculated as

Actual premiums earned,

Plus premium supplements,

Less adjusted claims,

Where adjusted claims are determined by using claims due plus the changes in equalisation provisions and, if necessary, changes to own funds.

If the necessary accounting data are not available and the historical statistical data are not sufficient to allow reasonable average estimates of output to be made, the output of non-life insurance may be estimated as the sum of costs (including intermediate costs, labour and capital costs) plus an allowance for "normal profit". A similar approach may be used to estimate the output of life insurance in the absence of adequate accounting or statistical data. The preferred formula to calculate life insurance, though, is

Actual premiums earned

Plus premium supplements

Less claims due

Less increases (plus decreases) in actuarial reserves and reserves for with-profits insurance.

In all these formulae, premiums may be replaced by contributions and claims by benefits.

2. Equalisation provisions

2. The AEG agreed that there will no longer be a necessary match between adjusted claims and claims incurred. This suggests that the difference between the two shown in the secondary distribution of income account (which will carry through to affect saving) should be recorded in the financial account as a transaction affecting the equalisation provisions.

Q2 Does the AEG agree with this recommendation?

3. Life insurance

There was no discussion on life insurance involved in the 44 issues. As a consistency issue, it was agreed the editor should amend recommendations on life insurance to be consistent with the changes recommended on non-life insurance and on pensions.

The AEG agreed that the expression in the 1993 SNA that insurance reserves (provisions) are regarded as assets of the policy holders is inaccurate. They are assets of the insurance corporations but the insurance corporations have a liability of this amount towards the policy holders in respect of some of these provisions. In the case of non-life insurance, the property income earned on these provisions is only implicitly distributed to the policy holders and it was agreed in such a case holding gains and losses would be excluded. In the case of life insurance, it is a bit more complicated. Life companies do make declared bonuses to policy holders. These sums, once

declared, are unequivocally the property of the policy holders although they remain in the custody of the life company, and continue to earn property income and benefit from holding gains, until the claim is payable.

My view is that life insurance declared bonuses should be treated as property income payable to policy holders. Further, since this is an explicit payment, the decision to record explicit property income at the value declared and not according to the source of the funds paid out, I recommend that the property income payable to life insurance policy holders should be the declared bonuses (regardless of the source) representing an explicit payment plus any property income (excluding holding gains and losses) on the remaining provisions as an implicit payment.

> Q3 Does the AEG agree with this analysis of how property income payable to life insurance policy holders should be recorded?

4. Annuities

Annuities have never been discussed explicitly by the AEG. Under a discussion of consistency issues it was agreed that annuities should be treated in a manner similar to life insurance.

> Q4.1 Does the AEG agree with the principles explained in the section on annuities?

> Q4.2 In particular, does the AEG agree that the amounts payable under an annuity should be recorded as property income rather than as a reduction in a financial asset.?

5 Social insurance benefits other than pension

The discussion on employer pension funds has been confined strictly to pensions. There are other social benefits due under social insurance schemes and these have not been discussed.

At no stage in the discussion on pension schemes have we discussed the possibility of extending the recognition of liabilities to other sorts of social insurance benefits. It is not proposed to even suggest the recognition of liabilities for social insurance benefits other than pensions but without that, , there is a need to identify the liabilities for funded schemes for non-pension benefits. A possibility is to change the item "pension entitlements" to "provisions for social insurance benefits "consisting of two items, the first pension entitlements, the second provisions for other social benefits.

> Q5.1. How should provisions for the payments of these benefits by funded schemes be shown?

It would make analysis (and compilation of the accounts) easier if the items for social contributions and benefits were to be split between those applying to pensions and those to non-pension benefits.

> Q5.2. Is it desirable to make this split? If so, are payments for other social benefits to be described as premiums (because they parallel non-life insurance) or contributions (because they are part of social insurance)?

6. Pensions

Comment: The text in para 17.113 explains why the adjustment for pension entitlements for a defined contribution pension scheme is likely to be negative. Essentially this is because we eliminate holding gains from the contributions but the benefits are funded in part by them. This is one aspect that should be discussed under the item on income on the research agenda.

The three questions to be addressed all concern defined benefit pension schemes.

Q6.1 Does the AEG agree that the amount that is liable from the fund to the employer (or vice versa) is equal to the investment income payable to the employee less the investment income earned by the pension fund and less the holding gain made by the fund on the investment of the entitlements? How should this be recorded in the accounts?

Q6.2 Does the AEG agree with the text suggesting that, under an ABO scheme, the impact on entitlements resulting from promotions should be recorded in the revaluation account?

Q6.3 Does the AEG agree that the difference between aggregates PBO estimates and aggregates ABO estimates should be seen as a provision?

Decision of the AEG on the measurement of insurance and reinsurance in the 1993 SNA rev 1.

The task force on the measurement of insurance in the context of catastrophes (moderator: OECD) presented its recommendations to the February 2004 meeting of the AEG. The AEG has decided to adopt these recommendations for implementation in the SNA 1993 rev 1, except for two (see at the end) that will be finalized using a written consultation. The AEG recommended that the proposal be forwarded to the BOP Committee for its view. The full report of the task force (revised version after AEG meeting) is attached to the present decision. It includes a complete set of redrafted paragraphs for the 1993 rev 1 SNA.

Background.

Catastrophic events such as the 11 September terrorist attack, a major storm in France and in other European countries in 1999, hurricanes and major fires in Australia, or similar events in other countries, generate massive claims for non life insurance companies. The mechanical use of the current SNA recommendation leads, particularly in these cases, to absurd movements of the production and, therefore, of the consumption, of insurance services at current price in the national accounts. There is therefore a strong need to change this situation. This change will be welcome by users of national accounts.

Main recommendations.

The first recommendation of the task force was to propose to set as a general principle that the production of insurance services does not occur when the risk occurs. The concept of insurance service is the service of covering for the risk. As such, its measurement should not be affected by the volatility of the occurrence of the risk. Neither the volume nor the price of insurance services is directly affected by the volatility of claims.

The task force proposed to continue to use a formula based on the difference between premium (plus premium supplements) and claims, but to use *adjusted* claims and, optionally, *adjusted* premium supplements in this formula in order to correct for the volatility of observed flows. **The AEG accepted this recommendation.**

The recommended formula for the measurement of output of non life insurance in the SNA 1993 rev 1 will therefore be: [Actual premiums earned [i.e. premiums receivable less changes in the reserves due to pre-payment of premiums] + Adjusted premiums supplements - Adjusted claims incurred. **The AEG proposed that the recommendation regarding the adjustment of premium supplements remains optional.**

There are three practical solutions to implement this general recommendation. The expectation approach (which uses statistical smoothing of past data), the accounting approach, and the sum of costs plus "normal" profit approach. **The AEG approved the reference to these three solutions in the new SNA.**

The *expectation approach* consists in replicating the *ex-ante* model used by insurers to price their premiums, on the basis of their expectations. When accepting risk and setting premiums, insurers consider both their expectation of loss (claims) and of income (premium supplements). This

expected margin (premiums plus expected premium supplements minus expected claims) is a much better measure of the concept of insurance service than the current formula applied ex-post. Its extreme version would be to use effectively the micro data transmitted by insurers. In the absence of this data, the proposal is to simulate this approach by (1) using macro statistics, and, (2) using smoothed past data to forecast the macro expected claim and/or macro expected premium supplement. In this case, the SNA formula becomes: *Formula (2) [Actual premiums earned [i.e. premiums receivable less changes in the reserves due to pre-payment of premiums] + Expected premiums supplements - Expected claims due.* In this formula, expected claims and expected premium supplements are estimated using past smoothed data, and applying a special treatment in the case of major catastrophes. Description of statistical methods to derive a good estimate of expected claims and expected premium supplements will be included either in the new special annex on insurance or an implementation manual.

The *accounting approach* consists in (1) extending the scope of the technical reserves (called "technical provisions" in the new SNA), (2) apply an extended formula including, when necessary, changes in own funds : *Formula (4): [Premiums earned + premium supplements] – [claims due + addition to, less withdrawal from, equalization provisions + addition to, less withdrawal from own funds, when necessary].* Contrary to the expectation approach, the accounting approach uses ex-post data, thus observed claims incurred. However, the volatility of claims incurred is expected to be compensated by the movements of the equalisation provisions and, in the case of catastrophes, of own funds. It is to be noted that if changes in own funds are introduced in one given period to dampen the volatility of a claim in case of catastrophe, the rebuilding of own funds after this period will also intervene (with an inverse sign) in the formula for the next periods.

The AEG approved the extension of the SNA definition of provisions for unearned premiums, and provisions for bonuses and rebates, and in the SNA definition of provisions for claims outstanding the provisions for incurred but not (enough) reported incidents and equalisation provisions. These extended technical provisions will be considered assets of policyholders or beneficiaries, depending whether they are classified as provisions for unearned premiums or provisions for outstanding claims. All income from these provisions will be considered as premium supplements.

The *sum of costs plus "normal" profit* approach consists in obtaining a measure of output as the sum of costs (a variable which is generally well mastered) plus an estimation of "normal" profit. The estimate of "normal" profit generally implies the use of smoothed past actual profits. Thus this approach is, in practice, similar to the expectation approach. "Normal" profit is indeed equal to premiums + adjusted premium supplements – adjusted claims – costs.

The change of the measure of production necessitates an adjustment in the distribution accounts. **The AEG supported the recommendation of the task force to decouple net insurance premiums (D71) and non life insurance claims incurred (D72) in the distribution accounts.** The latter would not change in the SNA. D71 would be still calculated as Premiums earned + Premium Supplements – Output but the change in the calculation of output will result in its disconnection with D72. It will now represent adjusted claims plus (optionally) the difference between actual premium supplements and adjusted premium supplements. The positive or negative difference between D72 and D71 will represent a transfer from insurance companies to policy holders. **The AEG agreed that, in exceptional cases, such as catastrophes, part of this transfer is classified as a capital transfer (D99).**

The task force made a recommendation to adopt a new treatment of reinsurance in the national accounts, where all reinsurance flows are treated gross and the same formulae (using adjusted variables) are used as for direct insurance. **The AEG supported this recommendation**.

The AEG requested some clarification before deciding on two other proposals of the task force: (1) the inclusion of income from own funds in the calculation of production, (2) the treatment of profit sharing and bonuses. A consultation of the AEG is in process on these two detailed points. A revised version of this decision will be disseminated in May 2004, taking into account the view of the AEG regarding these two points.

Addendum after written consultation of the AEG:

Non-life insurance ("outcome of the AEG consultations")

The consultation revealed a majority in favor of:

   i.   excluding income from own funds in the calculation of output of non-life insurance;
  ii.   treating commissions and rebates as negative premiums, and profit sharing and bonuses as other income transfers; and
 iii.   treating payments resulting from exceptional claims as capital transfers.

The AEG agreed this consultation represents their final position.