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Insurance

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A Introduction

1 The task force on insurance that made recommendations for the update process dealt in depth with a number of important issues, which have been addressed in the update process. In the process of drafting, however, it became clear that there were some aspects that only became clear when looking at the insurance industry as a whole and its interaction with the rest of the economy and the rest of the world that would benefit from some more investigation. The purpose of this note is to describe them, seek the opinion of the AEG on whether they are indeed significant enough to merit more investigation and if so, make suggestions for the process and possible time scale for further work.

B Non-life insurance

1. The dilemma on capital transfers

2 A major focus of the task force's work was how to take account of the impact of a disaster on the output of the insurance industry. This has been addressed by moving away from actual claims to expected claims in the formula for deriving the output of the insurance industry.

3 Another consequence of large claims made in response to a disaster is that the level of claims shown as transferred to households (this time actual claims not expected claims) increases household income very considerably at a time when households are actually feeling a significant loss in well-being. The task force suggested, and the AEG supported, the proposition that in such circumstances a proportion of these claims could be treated as capital transfers rather than current transfers.

4 Because these two recommendations had been made independently, drafting the story line for insurance corporations was difficult. No guidance had been given about what constituted a disaster or what proportion of the large claims should be treated as capital transfers. Should the amount of claims treated as capital be related in some (as yet unspecified) way to the difference between actual claims and expected claims? Without some such guidance, the text of the SNA reads very much as saying "if you don't like the results for households, feel free to make whatever adjustment you feel is necessary by treating some claims as capital". I find this position a very uncomfortable one.

5 The rationale for removing some current transfers from household income was that the apparent increase in income to households was misleading to analysts. However, a consequence of reducing household income and saving was necessarily to increase the income and saving of insurance corporations at the very time that they were facing increased

costs. Further, because insurance corporations only ever paid capital transfers to policy holders and never received any offsetting capital transfers from policy holders, the reallocation of income and saving from households to the insurance corporations was not one that was corrected over time but a once and for all effect that was never reversed. Not only was there no specific guidance on the way to determine the amount of claims to be treated as capital, there was an implicit value judgement that the figures for household saving were politically sensitive; those for insurance corporations were not. At the present time, this judgement seems debateable. Would the financial crisis the insurance corporations are facing be reason to treat some claims as capital in order to improve their current account? Presumably the answer is no but there is no easy theoretical reason to say yes for households and no for insurance corporations.

2. The cause of the problem

6 There are two suppositions underlying the derivation of insurance output that give rise to this dilemma. One is that premiums are set to cover expected claims on a year by year basis. The other is that claims are recorded when the events giving rise to the claims occur.

Cyclical variation

7 Suppose that the variation of actual claims is about 10 per cent of the level of expected claims. In such a case, it might be a better model to say that 10 per cent of premiums are intended to cover longer term trends. While the service level associated with a policy would not be affected by this since it is earned year by year, 10 per cent of the net premiums would be treated as capital transfers made to the insurance corporations and as additions to insurance technical reserves. Excess claims could then be treated as capital transfers, as desired, but within a framework where over time capital transfers receivable and payable would (more or less) balance. (Such a process would bring back the necessity to have property income accruing to non-life policy holders unlike the present simplifying assumption that this can often be ignored.)

8 Some thought has been given to whether it is possible to identify lines of insurance business that might be treated as candidates for this treatment and while there may be exceptional types of insurance (against an earthquake in California for example), in the main the types of claims are not exceptional, only the number of them. We thus have the situation that five house fires are treated as current claims but one hundred are treated as capital. What we need is some sort of guidance to determine how many house fires are current and how many are capital. Is it 20, 50, 80?

9 One suggestion therefore is to re-examine the rationale for treating some claims as capital in nature to enable an objective recommendation on how to distinguish one from the other to be made and one that deals even-handedly with policy-holders and the insurers.

Long-tail business

10 In part the dilemma over claims following a disaster is that although the insurance corporation is clear immediately that it will face large claims, there may be less certainly on the part of policy-holders and for both there is uncertainty, possibly for some extended time period, over the size of those claims. More worryingly, the fact that an event covered by an insurance policy has occurred may be unknown until some long while after the event that caused it happens and even the date at which it happened may be uncertain. The classic case is of asbestosis where inhalation of asbestos dust over several years may not produce

symptoms of illness for quite some time. This situation is referred to in the insurance business as “long-tail”. (The “tail” refers to the amount of claims unsettled at the end of a year.)

11 Asked about the time of recording for claims arising under long-tail business, the AEG response was immediate; at the time the event took place. However, there are practical difficulties with this proposal. One is that fact that the date of the event may be unknown. Another is the fact that the amount of the claim, when known, may represent an initial claim and compensation for the delay in payment, that should be recorded as interest. Partitioning the payment into an initial claim and subsequent interest would be difficult. It may also imply involving interest payments for delayed claims in the formula to determine insurance output.

12 It is possible for one insurance corporation to sell its “tail” business to another corporation. In such a case, the new corporation may be involved in making a payment in respect of an event that occurred when it did not yet exist.

13 More obviously, the same problem with interpreting household income and saving arises as in the case of a disaster. A household where a member has suffered long-term health disorders will be shown as having significant income and saving over time, quite differently from their perception of their financial position at the time.

3. Reinsurance of non-life policies

14 Though the task force considered the measurement of reinsurance output and the way in which reinsurance premiums and claims should be recorded, it did not consider how these changes affected the model underlying the calculations for direct insurance.

15 When a direct insurer calculates expected claims, he must consider not the claims made by the policy holders but the claims he has to meet once he has received the reimbursement of some of these claims under any reinsurance policy he has taken out. He then sets his premiums to cover this plus the cost of reinsurance rather than simply actual claims.

16 Suppose a direct insurer is affected by a disaster but all the claims he is liable to pay are covered by an excess of loss reinsurance policy. By treating the claims as capital rather than current transfers, as noted above, the income and saving of the insurance corporation is higher than otherwise. However, if the claims payable by the reinsurer to the direct insurer continue to be treated as current transfers, the income and saving of the direct insurer are further inflated by this.

17 It may be thought that because much reinsurance is specifically directed at excess claims, there may be little case for ever treating reinsurance claims as capital transfers. However, the data do not bear out this approach; reinsurance claims may also be quite volatile from year to year. A possible alternative simplification is that when the direct insurance claim is to be treated as a capital rather than current transfer, then the matching part of any reinsurance claims should be similarly treated. However, while this assumption removes the extra inflation of the direct insurers, this benefit comes at a significant cost. The decision on whether to treat reinsurance claims as exceptional or not would not be decided on the basis of the whole of the reinsurance business but on the basis of individual policy holders. Given the international nature of reinsurance, this could create serious imbalances internationally.

C Life insurance

4. Identifying premium supplements

18 The formula for calculating the output of life insurance is the following:

Actual premiums earned plus premium supplements less benefits due less increases (plus decreases) in actuarial reserves and reserves for with-profits insurance.

19 Grouping the two sets of reserves together as technical reserves, the change in the technical reserves will be equal to actual premiums earned less claims payable plus property income earned on the reserves plus holding gains on the reserves less holding losses on the reserves less the service charge (equal to the value of output) to the policy holders, owners of the reserves. In the SNA it is stated that both premium supplements and changes in technical reserves should be measured excluding holding gains and losses. Suppose that premiums earned are equal to benefits due and that there is no property income earned on the reserves. In this case, the value of output would appear to be zero. Neither of the propositions are improbable. Since many reserves will be invested to attract holding gains rather than property income, a healthy life insurance corporation might find itself in such a position. However, the outcome that they have zero output is not plausible.

20 The result derives from assuming that the holding gains increasing the technical reserves are the same as the total amount of holding gains made by the insurance corporation on the reserves. However, this needs examination.

21 If a bank handles a portfolio of shares, they will make a charge for their services and this will be deducted from the increase in value of the portfolio attributed to the client without regard to whether the amount is deducted from property income or holding gains. Similarly, in determining the premium supplements for defined benefit pensions, it was agreed that the property income accruing to the pension beneficiary should be estimated as the discount rate times the liability.

22 In order to achieve consistency of measurement of asset management, whether as a financial service, as management of a pension scheme or as a life insurance policy, it would seem appropriate to consider the following proposition.

23 Measure the income of life insurance companies as the increase in value of reserves from property income, holding gains and losses and possibly net operating surplus from rentals of buildings less that part that is allocated to the reserves belonging to the policy holders. This is not equating the generation of holding gains with output. It is saying that management of assets produces income to the manager that may be paid for out of holding gains accruing to the owner of the asset; it is not including in the value of output holding gains on assets belonging to and used by the manager in the course of production. It can be shown that this proposed formulation of the measurement of output is exactly equivalent to that in the SNA except for the removal of the stricture about excluding holding gains from both premium supplements and reserves.

5. Reinsurance on life policies

24 Reinsurance on life policies does take place but is managed on a year by year basis so that it is treated in the same way as reinsurance on non-life policies.

25 For neither direct life insurance nor reinsurance on life policies does the question of excessive claims arise.

D Other questions on reinsurance

26 Chapter 17 discusses two types of reinsurance. The first is proportionate reinsurance where a given proportion of all premiums are ceded to the reinsurer and the same proportion of claims is met by the reinsurer. The second is referred top as "excess of loss" reinsurance where the reinsurer meets all claims above a certain threshold (possibly up to an agreed limit). There are no problems with proportionate reinsurance but a number of points arise with excess of loss reinsurance.

27 The first concerns terminology. Excess of loss is a UK (possibly European) expression. In the US finite reinsurance is the usual terminology. Introducing the alternative terminology is desirable and straightforward.

28 It is noted in chapter 17 that under excess of loss/finite reinsurance payments described as profit sharing may be made. What this means is that in a year when the claims made are low, the reinsurer makes a payment to the direct insurer. This may look like a rebate on premiums (which is currently how the SNA recommends it is treated).

29 In addition to the two previously described forms of reinsurance, there is also an arrangement known as financial insurance or reinsurance. Like the forms of reinsurance described above, this also is a mean of transferring risk. Such products are referred to as Alternative Risk Transfer (ART). They combine aspects of the insurance, banking and capital markets.

30 Four types of risk can be identified. These are described by the UK Revenue and Customs as follows:

> These include:
>
> - Underwriting Risk. This flows from the uncertainty as to the ultimate amount of the payments that will need to be made in settlement of claims. Inherent in the concept of underwriting risk is the idea that the events giving rise to the claim payments must be fortuitous and outside the control of the parties to the insurance contract.
> - Timing Risk. This is the risk that arises from uncertainty about the time at which payments will have to be made under the contract. Because money has a time value an earlier payment is more onerous to the payer than a later one.
> - Investment Yield Risk. This is the risk that the investment return that is actually earned on the net funds passing under the contract will differ from the expected amount.
> - Expense Risk. This is the risk that the insurers or reinsurers operating expenses may exceed the amounts expected when the premium was established.
>
> The entering into of the contract also creates a new category of risk, which is the risk that the amount due under the contract may not be fully collectible. This so-called credit risk is not, however, transferred by the contract.

31 This is where problems creep in. Various accounting bodies have expressed concern that products described as ART may be more directed at smoothing profits over time and thus being able to achieve beneficial effects for tax liability. To the extent this is so, the contracts should not be treated as insurance. So far international standards vary on the interpretation here. For example in the US both underwriting risk and timing risk must be transferred if a contract is to be treated as insurance. (This is a necessary but not sufficient condition.)

32 Given the complexity and lack of standardisation in this area, it in not probable that hard and fast recommendations can be made to national accountants about how to teat all these sorts of contracts but it would seem advisable that some words of caution are included that not all contracts containing the word insurance are to be treated as such and local accounting practices should be followed in restricting the coverage of insurance to those contracts that involve "the spreading of losses of the few among the many rather than the spreading of one's own losses across a series of fiscal periods" (This quote is again from HMRC).

E Summary

33 There is unfinished business on insurance. The remaining questions are tricky and will probably require more research. The AEG is asked for its opinion about whether the following items should appear on the research agenda as a more detailed description of the work to be undertaken. Further, it would be helpful to give an indication of the way forward and a possible time scale for the work to be done.

- Claims as capital transfers: How should the model for the payment of premiums and claims for direct non-life insurance be adapted to allow for a satisfactory treatment of excessive claims in response to a disaster? What are the implications for non-life reinsurance?

- Life insurance premium supplements: Exactly how should the possible retention of some holding gains and losses arising on clients' reserves be treated in assessing the services provided by financial institutions in managing these reserves? Can consistency between life insurance, pension management and financial services be achieved?

- Other forms of risk transfer (ART): How much guidance should the SNA give on the treatment of such contracts?