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Part of Chapter 17: Crosscutting and Special Issues

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Chapter 17: Cross-cutting and other special issues

Part 1 The treatment of insurance and social insurance other than pensions

A. Coverage of this section

17.1 At its simplest, an insurance policy is an agreement between an insurance corporation and another institutional unit, called the policy holder. Under the agreement, the policy holder makes a payment (a premium) to the insurance corporation and, if or when a specified event occurs, the insurance corporation makes a payment (claim) to the policy holder. In this way, the policy holder protects itself against certain forms of risk; by pooling the risks the insurance corporation aims to receive more from the receipt of premiums than it has to pay out as claims. However, simply recording the actual premiums and claims paid in the accounts of the System would not reflect the links between premiums and claims. Instead, some actual transactions are decomposed and others are imputed in order to bring out the underlying economic processes actually taking place.

17.2 The most common form of insurance is called direct insurance whereby the policy is issued by an insurance corporation to another type of institutional unit but an important form of insurance is provided by one insurance corporation to another. This sort of insurance is called reinsurance.

17.3 In addition to insurance policies issued on a case by case basis by insurance corporations, an important set of contingencies are covered on a collective basis by social insurance schemes. Payments to social insurance schemes are described in the System as contributions, rather than premiums, and claims paid by the schemes are described as benefits. The most important benefit covered by social insurance schemes is income in retirement (pensions) but many other contingencies are covered also.

17.4 This part of chapter 17 is concerned with direct insurance, reinsurance and social insurance schemes other than provision of pensions. It attempts to bring together all the entries in the accounts connected with insurance and explain their interconnection. A separate section deals with pensions.

17.5 Defining some of the terms peculiar to the insurance industry is a helpful preliminary to further discussion. For direct insurance, the term premiums used for payment to the insurance corporation; payments by the insurance corporation are called either claims or benefits. For social insurance, payments to the social insurance scheme are referred to as contributions and payments by the scheme are referred to as benefits.

The actual premium (contribution) is the amount payable to the direct insurer or reinsurer, (social insurance scheme) to secure insurance cover for a specific event over a stated time period. Cover is frequently provided for one year at a time with the premium due to be paid at the outset though cover may be provided for shorter (or longer) periods and the premium may be payable in instalments, for example monthly. Contributions to social insurance schemes are frequently paid on a monthly or even more frequent basis as they are often made directly when wages and salaries are payable.

The premium earned is the part of the actual premium that relates to cover provided in the accounting period For example if an annual policy with a premium of 120 units comes into force on April 1 and accounts are being prepared for a calendar year, the premium earned in the calendar year is 90.

The unearned premium is the amount of the actual premium received that relates to the period past the accounting point. In the example just given, at the end of the accounting period there will be an unearned premium of 30, intended to provide cover for the first three months of the next year.

A claim (benefit) is the amount payable to the policy holder (social insurance beneficiary) by the direct insurer or reinsurer (social insurance scheme) in respect of an event covered by the policy occurring in the period for which the policy is valid. Claims become due when the event occurs, even if the payment is made some time later. In some contested cases the delay between the occurrence of the event giving rise to the claim and the settlement of the claim may be several years.

Claims outstanding cover claims that have not been reported, have not been settled or have been both reported and settled but not yet paid.

1. Direct insurance

17.6 There are two types of direct insurance; life and non-life insurance***.*** ***Life insurance is an activity whereby a policyholder makes regular payments to an insurer in return for which the insurer guarantees to provide the policyholder with an agreed sum, or an annuity, at a given date or earlier if the policyholder dies beforehand.*** The sum payable under the policy (benefit) may be fixed or may vary to reflect the income earned from the investment of premiums during the period for which the policy operates. For policies with varying returns, the terms "with-profits" life insurance or endowment policy are generally used. Although the date and sum may be variable, a claim is always paid in respect of a life policy***.*** ***Non-life insurance covers all other risks: accidents, sickness, fire, etc.*** A policy that provides a benefit in the case of death within a given period but in no other circumstances, usually called term insurance, is regarded as non-life insurance because as with other non-life insurance, a claim is payable only if a specified contingency occurs and not otherwise. In practice, because of the way in which insurance corporations keep their accounts, it may not always be possible to separate term insurance from other life insurance. In these circumstances, term insurance may have to be treated in the same way as life insurance for purely practical reasons.

Figure A.IV.1. Insurance and social insurance schemes

17.7 What life and non-life insurance have in common is that they both involve spreading risk. Insurers receive many (relatively) small regular payments of premiums from policyholders and pay much larger sums to claimants when the contingencies covered by the policy occur. For non-life insurance, the risks are spread over the whole population that takes out the insurance policies. For example, an insurance corporation determines the premiums charged for vehicle insurance in a year by relating them to the amount of claims it expects to pay on vehicle insurance in the same year. Typically, the number of claimants is much smaller than the number of policyholders. For an individual policyholder there is no relationship between the premiums paid and the claims received, even in the long run, but the insurance corporation establishes such a relationship for every class of non-life insurance on a yearly basis. For life insurance, a relationship between premiums and claims over time is important both to the policyholders and to the insurance corporation. For someone taking out a life policy, the benefits to be received are expected to be at least as great as the premiums paid up till the benefit (claim) is due and can be seen as a form of saving. The insurance corporation must combine this aspect of a single policy with the actuarial calculations about the insured population concerning life expectancy (including the risks of fatal accidents) when determining the relationship between the levels of premiums and benefits. Further, in the interval between the receipt of premiums and the payment of claims, the insurance corporation earns income from investing the premiums received. This income also affects the levels of premiums and benefits set by the insurance corporations.

17.8 Despite the similarity of the activity of life and non-life insurance, there are significant differences between them which lead to different types of entries in the accounts of the System.

17.9 One way on which a regular income stream can be obtained in return for an up-font payment of a lump sum is via an annuity. Annuities are usually offered by life insurance corporations and so a discussion of the recording for annuities in the System is given at the end of this part.

2. Reinsurance

17.10 Just as an individual institutional unit protects itself against the financial consequences of loss or damage, so an insurance corporation may also protect itself against the accident of an unexpectedly large number of claims, or exceptionally heavy claims, by taking out a reinsurance policy with another insurance corporation. All insurance corporations take out some form of reinsurance but there tend to be a few large corporations that specialise in reinsurance. Because these corporations are concentrated in a few financial centres, many of the flows associated with reinsurance involve transactions with the rest of the world. It is common for reinsurers to take out reinsurance policies with other insurance corporations to spread their risks further. This sort of reinsurance is called retrocession.

17.11 Reinsurance policies are most common for non-life policies but may also may to life insurance policies. They are of two types, proportionate reinsurance and excess of loss reinsurance. Under a proportionate reinsurance contract, the reinsurer accepts an agreed proportion of the risks; this proportion of the premiums is "ceded" to the reinsurer who then meets the same proportion of the claims. In this case, any reinsurance commission paid by the reinsurer to the policy holder (either a direct insurer or another reinsurer) is treated as a reduction in reinsurance premiums payable. In excess of loss reinsurance, the reinsurer undertakes to pay all losses over a given threshold. If there are no or few claims above the threshold, the reinsurer may pass a share of his profits to the direct insurer. The share in the profits is treated as a transfer from the reinsurer to the policy holder; it may be included with claims paid.

3. Social insurance schemes

17.12 ***A social insurance scheme is one where the policyholder is obliged or encouraged to insure against certain contingencies by the intervention of a third party.*** For example, government may oblige all employees to participate in a social security scheme; employers may make it a condition of employment that employees participate in an insurance scheme specified by the employer; an employer may encourage employees to join a scheme by making contributions on behalf of the employee; or a trade union may arrange advantageous insurance cover available only to the members of the trade union. Contributions to social insurance schemes are usually paid by, or on behalf of employees, though under certain conditions non-employed or self-employed persons may also be covered (see figure A.IV.2).

17.13 An insurance scheme is designated as a social insurance scheme in the System:

(a) If the benefits received are conditional on participation in the scheme and are as described in the next paragraphs; and

(b) If at least one of the three conditions following is met:

(i) Participation in the scheme is obligatory either by law for a specified category of worker, whether employer or non-employed, or under the terms and conditions of employment of an employee, or group of employees;

(ii) The scheme is a collective one operated for the benefit of a designated group of workers, whether employees or non-employed, participation being restricted to members of that group;

(iii) An employer makes a contribution (actual or imputed) to the scheme on behalf of an employee, whether or not the employee also makes a contribution.

Figure A.IV.2. Social contributions

Social benefits

17.14 Not all social benefits are provided by social insurance schemes. Some social benefits may be provided by government to the community at large without any qualifying payment being made, as is the case with social insurance benefits. Nonetheless, however they are provided, the characteristics of all social benefits can be described in the following general terms. Social benefits may be provided in cash or in kind. They become payable when certain events occur, or certain conditions exist, that may adversely affect the welfare of the households concerned either by imposing additional demands on their resources or reducing their incomes. There are six kinds of circumstances in which social benefits may be payable:

(a) The beneficiaries, or their dependants, require medical, dental or other treatment, or hospital, convalescent or long-term care, as a result of sickness, injuries, maternity, chronic invalidity, old age, etc. The social benefits are usually provided in kind in the form of treatments or care provided free or at prices that are not economically significant, or by reimbursing expenditures made by households. Social benefits in cash may also be payable to beneficiaries needing health care;

(b) The beneficiaries have to support dependants of various kinds: spouses, children, elderly relatives, invalids, etc. The social benefits are usually paid in cash in the form of regular dependants' or family allowances;

(c) The beneficiaries suffer a reduction in income as a result of not being able to work, or to work full-time. The social benefits are usually paid in cash regularly for the duration of the condition. In some instances a lump sum may be provided additionally or instead of the regular payment. People may be prevented from working because of

(i) voluntary or compulsory retirement;

(ii) involuntary unemployment, including temporary lay-offs and short-time working;

(iii) sickness, accidental injury, the birth of a child, etc., that prevents a person from working, or working full time;

(d) The beneficiaries suffer a reduction in income because of the death of the main income earner;

(e) The beneficiaries are provided with housing either free or at prices that are not economically significant or by reimbursing expenditure made by households. These are social benefits in kind;

(f) The beneficiaries are provided with allowances to cover education expenses incurred on behalf of themselves or their dependants: occasionally education services may be provided in kind.

17.15 The above are typical circumstances in which social benefits are payable. However, the list is illustrative rather than exhaustive. It is possible, for example, that under some social insurance schemes other benefits may be payable. Conversely, by no means all schemes provide benefits in all the circumstances listed above. In practice, the scope of social insurance schemes is liable to vary significantly from country to country, or from scheme to scheme within the same country.

17.16 It is convenient in this part of the chapter to exclude pensions from social insurance benefits. These are dealt with in a separate part of this chapter.

Individual policies qualifying as social insurance

17.17 Many social insurance schemes are organized collectively for groups of workers so that those participating do not have to take out individual insurance policies in their own names. In such cases, there is no difficulty about distinguishing social insurance from insurance taken out on a personal basis. However, some social insurance schemes may permit, or even require, participants to take out policies in their own names. The determinants for the insurance to count as a social insurance policy are the same as that the benefits must be of the social benefit type and an employer makes an actual or imputed contribution to the scheme on behalf of an employee.

17.18 The premiums payable, and claims receivable, under individual policies taken out under a social insurance scheme are recorded as social contributions and social insurance benefits.

17.19 The designation "other" is appended to individual insurance policies to distinguish those that do not qualify as social insurance.

4. The units involved

17.20 The institutional units involved in other individual insurance are pre-eminently insurance corporations. In principle it is possible for another type of enterprise to carry out insurance as a non-principal activity, but usually the legal regulations surrounding the conduct of insurance mean that a separate set of accounts covering all aspects of the insurance activity must be kept and thus in the System a separate institutional unit, classified to the insurance corporations and pension funds sub-sector, is identifiable. Sometimes government may conduct other insurance activities, but again it is likely that a separate unit can be identified. Having noted that exceptionally other sectors may be involved, in what follows it is assumed that all other insurance is carried out by insurance corporations, either resident or non-resident.

17.21 Social insurance schemes can be operated in a number of ways. They are usually organized either

a. by government for the population at large (social security schemes),

b. by employers on behalf of their employees and their dependants or

c. by others, for example a trade union, on behalf of a specified group.

The last two cases are here called employment-related social insurance schemes. They may be arranged with an insurance corporation as a group policy or series of policies or they may be managed by an insurance corporation in return for a fee. Alternatively, the schemes may be managed by an employer directly on his own behalf.

17.22 To follow: Para on the treatment of schemes for government employees

B. The measurement of output of direct insurance

17.23 As noted at the outset of this part, the process of recording insurance in the System involves decomposing actual transactions and imputing others. This section describes how the various transactions to be recorded in the System are derived. The transactions to be recorded are the same whether the type of insurance is an other individual policy or relates to the operation of a social insurance scheme. For this reason in this section the terms premium and claims should be understood to include contributions and benefits respectively.

17.24 Once the various transactions have been described in this section, their recording is described in section D after the methods of measuring and recording reinsurance have been discussed.

1. Property income attributed to policyholders/beneficiaries

17.25 For both life and non-life insurance, the total amount of claims payable in a given period often exceeds the premiums receivable. The insurance corporation can accept this because the contingencies covered by the policies do not occur, even for the whole population covered, at the same time as the premiums are paid. Premiums are usually paid regularly, often at the start of an insurance period, whereas claims fall due later, in the case of life insurance many years later. In the time between the premium being paid and the claim being received, the sum involved is at the disposal of the insurance corporation to invest and earn income from it. The income thus earned allows the insurance corporations to charge lower premiums than would be the case otherwise. An adequate measure of the service provided must take account of the size of this income as well as the relative size of premiums and claims.

17.26 The income concerned comes from the investment of the provisions of the insurance corporations, which represent liabilities towards the policyholders. For non-life insurance, even though a premium may be payable at the start of a period of cover, the premiums are only earned on a continuous basis as the period passes. At any point before the end of the cover, the insurance corporation holds an amount due to the policy holder relating to services to be provided in the future. This is a form of credit extended by the policyholder to the insurance corporation described as unearned premiums. Similarly, although claims become due for payment by the insurance corporation when the contingency specified in the policy eventuates, they may not be actually payable until some time later, often because of negotiation about the amounts due. This is another similar form of credit, described as reserves against claims outstanding.

17.27 Similar provisions exist for life insurance but in addition there are two other elements of insurance provisions, actuarial reserves for life insurance and reserves for with-profit insurance. They represent amounts set aside for payments of claims and benefits in future that exceed the receipts of premiums and contributions received to the current date. Usually the provisions are invested in financial assets and the income is in the form of investment income (interest and dividends). Sometimes, however, they may be used to generate net operating surplus either in a separate establishment or as a secondary activity. The most common example is from real estate.

17.28 It is common with life insurance policies for amounts to be explicitly attributed by the insurance corporation to the policyholders in each year. These sums are often described as bonuses. The sums involved are not actually paid to the policy holders but the liabilities of the insurance corporation towards the policy holders increase by this amount. This amount is shown as property income attributed to the policy holders. The fact that some of it may derive from holding gains does not change this designation; as far as the policy holders are concerned it is the return for making the financial asset available to the insurance corporation. In addition, all the income from the investment of non-life provisions, and any excess of income from the investment of life provisions (excluding holding gains) over any amounts explicitly attributed to the policy holders, is shown as property income attributed to policyholders, regardless of the source of the income.

17.29 All property income attributed to policy holders, whether explicitly by the insurance corporation or implicitly within the System, is shown as premium supplements or contribution supplements.

17.30 For direct non-life insurance, the property income attributed to the policy holders should, in principle, be made according to the proportion of provisions attributed to the different classes of insurance and policyholders. In practice, the usual method is to distribute the property income in proportion to the actual premiums payable. For direct life insurance and social insurance schemes, the property income is attributed to households (possibly including some non-resident households).

2. Non-life insurance claims

17.31 The level of claims made on non-life insurance policies vary from year to year but there may be exceptional events that cause a particularly high level of claims. However, the insurance company sets the level of premiums on the basis of past experience of claims and for this reason, the formula for the calculation of output should use not actual claims but an adjusted figure. The figure for adjusted claims may be derived statistically based on previous experience of the level of claims. Alternatively, an accounting approach may be used whereby figures from the accounts of insurance corporations including equalisation provisions may be used. The accounting allowance for equalisation provision is also an adjustment to reflect the variations in claims from one year to another. Whichever method is used, therefore, the adjusted claim figure approximates the expected level of claims.

17.32 Immediately after a disaster out of line with previous experience, the level of expected claims will be higher, consistent with the observation that after a disaster, premiums rise. There is never a reason to adjust the level of adjusted claims retrospectively in the light of the exceptional disaster; it is only future expectations that reflect the impact of this disaster.

3. Defining insurance output

17.33 The output of the insurance corporation represents the service provided to the policy holders. The output of direct non-life insurance is calculated as:

(a) Actual premiums or contributions earned;

(b) *Plus* premium or contribution supplements;

(c) *Less* adjusted claims or benefits due.

The output of direct life insurance is calculated separately as:

(a) Actual premiums or contributions earned;

(b) *Plus* premium or contribution supplements;

(c) *Less* claims or benefits due;

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

4. Net premiums/contributions and consumption of insurance services

17.34 The actual premiums or contributions payable and the premium supplements or contribution supplements are shown in the System divided between two types of transactions. The first is the value of the output of insurance, which is shown as either consumption or export of insurance services. The second is net premiums or contributions earned by the insurance corporations. ***Net premiums are defined as actual premiums plus premium supplements less the insurance service charge payable by the policy holders.*** Because of the way in which the value of the service output is defined, net premiums for non-life insurance are equal in total to adjusted, and not actual, claims. Any variation between adjusted and actual claims represents a transfer between the policy holders and the insurance corporation. Over time, a transfer in one direction is offset by one in the other.

17.35 Insurance services are consumed by those sectors (and the rest of the world) that pay premiums and contributions. Estimates of the value of consumption by sector are made by allocating the total value of the service in proportion to the actual premiums or contributions payable. Estimates of net premiums and contributions are then made by deducting the consumption of services from the total actual premiums and contributions payable plus the value of the premium and contribution supplements. (Because premium and contribution supplements are also allocated in proportion to actual premiums, this allocation of the service charge in the same way results in the net premiums and contributions being allocate din the same proportions as the actual premiums and contributions.)

5. Recording claims

17.36 The time of recording claims incurred is in the period in which the event to which the claim relates took place. This principle is applied even when, in the case of disputed claims, the settlement may take place years after the event concerned.

17.37 Claims are normally recorded as current transfers payable by the insurance corporation to the policy holder. However, when the level of claims is exceptionally large (as compared with the experience of the insurance corporation of the level of claims settled), the excess may be recorded as a capital transfer from the insurer to the policy holder.

17.38 Because the formula for output uses adjusted claims and not actual claims, only when the actual claims happen to be the same level as expected claims will net premiums and claims be equal in a given period. They should however be approximately equal over a period of years excluding a year in which a disaster is recorded.

6. Insurance services provided to and from the rest of the world

17.39 Resident insurance corporations frequently provide insurance cover to households and enterprises in the rest of the world, and resident households and enterprises may purchase cover from insurance corporations in the rest of the world. The property income attributed by resident insurance corporations to policyholders includes an allocation to policyholders in the rest of the world. These non-resident policyholders then also pay premium supplements to the resident insurance corporation. This information should be available for resident insurers and should be included in the rest of the world account

17.40 Similar considerations also apply to the treatment of resident enterprises and households taking out policies with non-resident insurers. They receive imputed property income from abroad and pay premiums and supplements to abroad. Estimation of the size of these flows is more difficult, especially when there is no resident insurer of the same type against which to make comparisons. However, very often the country providing the service will be known and it may be possible to use counterpart data to make estimated for the national economy. The level of transactions by residents should be known and the ratio of premium supplements to actual premiums in the economy providing the services could be used to estimate the property income receivable and premium supplements payable.

C. The measurement of reinsurance

17.41 Before discussing how the various elements contributing to the measurement of output of insurance are recorded in the System, it is necessary to describe how reinsurance is measured and recorded.

17.42 The transactions between the direct insurer and the policy holder are measured as described in the previous section without any reference to the transactions between the direct insurer and the reinsurer. The transactions between the direct insurer and the reisurer are recorded as an entirely separate set of transactions and no consolidation takes place between the transactions of the direct insurer as issuer of policies to its clients on the one hand and the holding of a policy with the reinsurer on the other.

17.43 The direct policy holder does not know, or need to know, whether a reinsurer is involved in protecting the direct insurer against loss on his policy. The direct insurer receives actual premiums from its policy holders. Some of these are ceded to a reinsurer. The premiums are shown as being first payable to the direct insurer and then some are payable to the reinnsurer. This non-consolidation is sometimes referred to as gross recording on the part of the direct insurer. The alternative (net recording) would be to show part of the direct policy holders premiums being paid to the direct insurer and part to the reinsurer but this option is not recommended either in commercial accounting or in the System.

17.44 The actual premium payable by the direct insurer to the reinsurer is used by the reinsurer to earn investment income. This is treated as property income payable to the direct insurer and returned to the reinsurer as a premium supplement. Property income is also due from reinsurers to the direct insurers (or other reinsurers) holding a reinsurance policy. Thus a direct insurer pays property income to its policy holders based on the whole of the premiums earned (or by approximation payable) to the direct insurer but receives as an offset property income from the reinsurer corresponding to the amount of the premiums it has ceded to the reinsurer.

17.45 Because the primary motivation of reinsurance is to limit the direct insurer's exposure to risk, a reinsurer deals with exceptionally large claims as a matter of normal business. For this reason, the claims payable by the reinsurer are not adjusted, either in the calculation of output or to allow some to be treated as a capital transfer rather than a current transfer.

17.46 Although both life and non-life direct insurance may be subject to reinsurance, all reinsurance policies are treated in a similar way to non-life insurance. AS noted earlier, they may be some payments peculiar to reinsurance. These are commissions payable to the direct insurer under proportionate reinsurance and profit sharing in excess of loss reinsurance. Once these are taken into account the output of reinsurance can be calculated as:

(a) Total actual premiums earned less commissions payable;

(b) Plus premium supplements;

(c) Less both claims due and profit sharing.

17.47 The whole of the output of the reinsurer represents intermediate consumption of the direct insurer holding the reinsurance policy. As noted above, many reinsurance policies are between insurance corporations resident in different economies. Thus the value of the output in these cases represent imports or exports.

D. The recording of direct insurance transactions

17.48 As explained above, the total of premiums (contributions) earned and the supplements payable by policyholders are decomposed into two elements, the part corresponding to the consumption of the service provided by the insurance corporations and net premiums. It follows that the entries for insurance in the accounts of the System consist of two types of transactions. The first set corresponds to the production and consumption of insurance services. The second set corresponds to the payments of net premiums (contributions) and claims (benefits). As explained above, there is an approximate equality between premiums and claims over the long run. These transactions are thus essentially redistributive and are mainly recorded in the secondary distribution of income account ascurrent transfers.

17.49 Because the interaction of these two sets of transactions can seem complicated, the entries associated with the different types of insurance schemes in the System are described in turn below in ascending order of complexity. The first two cases discussed are those of the social security schemes of government and employers' unfunded schemes where no insurance services are separately recorded. The next case considered is the most familiar case of insurance, other non-life insurance which covers accident, fire, vehicle, etc., insurance. The next case described is for other life insurance. Lastly, the two cases of social insurance under private funded schemes are described where more elaborate recording of contributions and benefits is required.

17.50 In each description the type of transactions and the sectors involved are specified. The only exception is for imported insurance services. Not to over-complicate the exposition, the possibility of transactions with non-resident insurers is not included explicitly below. It should be remembered however, that every transaction with an insurance corporation could in principle be with a non-resident rather than resident institutional unit in which case the transaction should be recorded in the accounts for the rest of the world rather than with the insurance corporation and pension fund sub-sector.

1. Social security schemes of government (excluding pensions)

17.51 Most governments operate a social security scheme where employees, the self-employed and occasionally non-employed persons make contributions. However, benefits are payable not only to those who have contributed but also to others, for example, surviving spouses and non-employed persons who have not contributed to the scheme. Contributions to the social security scheme may be made directly by employees, the self- and non-employed or on behalf of employees by employers. The value of these latter payments are treated in the System as part of compensation of employees, that is, payable by employers to employees and then by employees to government in addition to the contributions they make on their own behalf as employees.

17.52 In the System flows are recorded as follows.

(a) Employers' social security contributions are shown as payable by the sector in which the employer is located and receivable by households. The sector of the employer may be any of non-financial corporations, financial corporations, general government (as an employer), employer households, NPISHs or the rest of the world (when a resident works for a non-resident institutional unit). For resident employers the payables are shown in the generation of income account; payables by non-resident employers are shown in the primary distribution of income account for the rest of the world. Receivables by resident households are shown in the allocation of primary income account and by non-resident households in the primary distribution of income account for the rest of the world..

(b) In the secondary distribution of income account, the sum of employers' social security contributions and social security contributions by employees, self- and non-employed persons is shown as payable by households and receivable by government. Further, social security benefits in cash payable to households are shown as payable by government (or the rest of the world if from a foreign government) and receivable by households. Although not part of social insurance as defined in the System social assistance benefits in cash payable are also recorded in these accounts in a manner parallel to those of social security benefits.

An example of these flows is shown in table A.IV.1.

Table A.IV.1. Accounts for social security schemes

2. Unfunded social insurance schemes operated by employers

17.53 In this case, the flows are similar to those above but all flows are between households and employers.

17.54 In the System, an employer operating an unfunded scheme is regarded as making an imputed social contribution to the scheme on behalf of the employees. This contribution should be determined taking into account the composition of the labour force of the employer and the commitment to provide benefits in the future. In practice, however, it is usually set equal in value to the benefits payable in the period under consideration. The imputed contribution forms part of the compensation of employees and is also shown as being payable by the employees to the scheme together with any actual payments by the employees. However, it is not uncommon for unfunded schemes to be non-contributory for the employees.

17.55 Even if a scheme is unfunded, there are costs involved in administering it. Output equal to the sum of these costs should be imputed to the employer. The imputed contribution to employees should include these costs as well as the value of the benefits received by employees. The amount is then recorded in the use of income account as a purchase of a service by the employees from the employer.

17.56 There are two transactions recorded for the production and consumption of the services provided by the employer. Because the scheme is unfunded, there are no property income flows and no contribution supplements to be recorded. There are two sets of redistributive transactions recorded.

17.57 The production and consumption transactions are as follows.

(a) Output of services is imputed in the production account of the employer.

(b) Consumption of the service is recorded in the use of income account for resident households or as exports for non-resident households.

17.58 The redistributive transactions are as follows.

(a) Employers' imputed contributions to unfunded social insurance schemes are shown as a payable by the sector in which the employer is located in the generation of income account and a receivable by households in the allocation of primary income account.

(b) In the secondary distribution of income account, employers' imputed contributions and actual contributions by employees are shown as payable by households and receivable by the employer. Further, benefits payable to households by the employer are shown as payable by the employer and receivable by households.

An example of these flows is shown in table A.IV.2.

Table A.IV.2. Accounts for unfunded social insurance schemes (to be changed)

3. Other individual non-life insurance

17.59 Altogether six sets of transactions need to be recorded in respect of other individual non-life insurance; two relating to the measurement of the production and consumption of the insurance service, three relating to redistribution and one in the financial account. Under certain circumstances, a seventh transaction relating to redistribution may be recorded in the capital account. The value of the output of the activity, the property income to be attributed to the policyholders and the value of the service charge are calculated specifically for other non-life insurance in the manner described above.

17.60 The production and consumption transactions are as follows:

(a) Since all such activity by resident institutional units is undertaken by insurance corporations, the output is recorded in the production account of insurance corporations;

(b) The service may be consumed by any of the sectors of the economy or by the rest of the world; the value of the service is payable to insurance corporations. Payments by non-financial corporations, financial corporations, general government or non-profit institutions constitute intermediate consumption, recorded in their production account. Insurance clearly associated with the productive activity of an unincorporated enterprise is also recorded as intermediate consumption in the production account of households. Other insurance payments by households are part of final consumption expenditure, recorded in the use of income account. Payments by the rest of the world are recorded as exports in the external account of goods and services.

17.61 The redistributive transactions cover property income attributed to policyholders in respect of other non-life insurance, net non-life insurance premiums, and insurance claims:

(a) Property income attributed to policyholders in respect of other non-life insurance is recorded as payable by insurance corporations. It is recorded as receivable by all sectors and the rest of the world. Both payable and receivables are recorded in the allocation of primary income account.

(b) Net non-life insurance premiums are calculated as premiums earned plus premium supplements (equal to the property income attributed to policyholders) less the value of the services consumed. These net premiums are payable by all sectors of the economy or the rest of the world and receivable by insurance corporations.

(c) Insurance claims due are payable by insurance corporations and receivable by all sectors of the economy and the rest of the world. Both net premiums and claims are recorded in the secondary distribution of income account.

(d) If insurance claims are exceptionally large in a period as a result of a disaster, natural or man-made, the claims recorded in the secondary distribution of income account may be reduced to their normal or expected levels and the remainder recorded as a capital transfer payable by insurance corporations and receivable by all sectors of the economy and the rest of the world.

17.62 Net non-life insurance premiums should be recorded on the basis of the amounts due to obtain cover in the period of account, not the amounts due to be paid in the period. Insurance claims should be recorded on the basis of the amounts due at the date of the event concerned occurred. An entry in the financial account records any difference between premiums payable and premiums earned and claims due and claims payable:

(a) By convention, unearned premiums and provisions against outstanding claims is shown as a change in liabilities of insurance corporation (with a negative sign if necessary) and a change in assets of all sectors and the rest of the world.

An example of these flows is shown in table A.IV.3.

Table A.IV.3. Accounts for individual non-life insurance (to be changed)

4. Other individual life insurance

17.63 Other individual life insurance transactions take place only between insurance corporations and households, resident and non-resident. The production of the insurance services is matched by the value of the services consumed by households as part of final consumption expenditure and exports. The property income attributed to insurance policyholders is treated as premium supplements, but premiums and claims are not shown separately in the case of other life insurance. Rather they constitute components of a net transaction recorded in the financial account, the financial asset involved being the net equity of households in life insurance reserves.

17.64 Four transactions are recorded in the accounts; one each relating to production and consumption of the insurance service, one showing the attribution of property income to the property holders and one showing the change in the net equity of households in life insurance reserves:

(a) The output of the life insurance activity is recorded in the production account for the insurance corporations.

(b) The value of the services consumed is recorded as final consumption expenditure payable by households in the use of disposable income account or as payable by the rest of the world (exports to non-resident households).

(c) Property income attributed to insurance policyholders in respect of other life insurance is recorded in the allocation of primary income account. It is recorded as payable by insurance corporations and receivable by resident households or non-resident households in the rest of the world.

(d) In the financial account the item life insurance and annuities entitlements is shown as a change in assets of households and the rest of the world and a change in liabilities of insurance corporations. It is equal to actual premiums plus premium supplements (equal to the property income attributed to policyholders) less the value of the services consumed and less claims due.

An example of these flows is shown in table A.IV.4.

Table A.IV.4. Accounts for individual life insurance

5. Funded social insurance other than pensions

17.65 Funded social insurance covering benefits other than pensions may be carried out by insurance corporations or by employers on behalf of their employees. The output of this activity is measured in the same way as the output of other non-life insurance but the matching consumption of the services is payable only by the households of the beneficiaries. These will be resident households except where a resident producer employs non-residents. Similarly, the property income attributed to the beneficiaries of the social insurance schemes can only be receivable by the same households.

17.66 All contributions to the schemes are payable by the employee. The contributions include that part paid by the employer as part of compensation of employees in the generation of income account as payable by employers to employees. They also include contributions paid directly by the employee funded from wages and salaries. Further, the employee receives property income attributed to policyholders in respect of both these contributions and this is treated, in total, as contribution supplements. Two items of contributions appear in the secondary distribution of income account. The first, the employers' actual social contributions is exactly equal in value to the amount receivable by households from the employer in the generation of income account. The second item, called employees' social contributions includes the direct payment by the employees plus the contribution supplements less the service charge payable to the social insurance schemes.

17.67 Seven types of transactions must be recorded, one each relating to production and consumption of the insurance service, three relating to contributions and benefits, one to the property income attributable to policyholders and one to an adjustment in the financial account:

(a) The activity by resident units is undertaken by insurance corporations or by an employer; the output is recorded in the production account of the insurance corporations or in the sector of the employer as appropriate.

(b) Employers' actual social contributions to employment-related social insurance schemes are shown as payable by the sector in which the employer is located in the generation of income account and receivable by households in the allocation of primary income account;

(c) Property income attributed to policyholders (beneficiaries) in respect of these schemes is payable by insurance corporations and employers, and receivable by employee households. Both payable and receivables amounts are recorded in the allocation of primary income account;

(d) Net social contributions are shown in the secondary distribution of income account as payable by households and receivable by insurance corporations or the sector of the employer as appropriate.

(e) Employment-related social benefits other than pensions are also shown in the secondary distribution of income account as payable by insurance corporations or the sector of the employer and receivable by households;

(f) The value of the service is payable by households as part of final consumption expenditure, and is recorded in the use of income account, except for non-resident employee households where it is payable by the rest of the world;

(g) The entry in the financial account, provisions for other social benefits, records any difference between contributions payable and contributions earned and benefits due and benefits payable. This item is shown as a change (with a negative sign if necessary) in provisions for other social benefits of insurance corporations (or employer sector) and a change in assets of employee households.

An example of these flows is shown in table A.IV.5.

Table A.IV.5. Accounts for private funded social insurance other than pensions (to be changed)

E. Annuities

17.68 The simplest case of a life insurance policy is one where a stream of payments is made by the policy holder to the insurance corporation over time in return for a single payment received as a claim at some point in the future. With the simplest form of annuity, the equivalent to the policy holder, called the annuitant, pays a single lump sum to the insurance corporation and in return receives a stream of payments either for a nominated period or for the rest of the annuitant's life (or possibly for the rest of the life of both the annuitant and a nominated other person).

17.69 Annuities are organised by insurance corporations and are a means of risk management. The annuitant avoids risk by agreeing to accept a known income stream (known either in absolute terms or subject to a formula, such as being index-linked) in return for parting with a considerable sum. The insurance corporation takes the risk of making more from investing the sum than is due to the annuitant. The rates of annuities are determined taking life expectancy into account and long-lived annuitants may receive more than their original payment and the income earned on it. Those who die early, receive considerably less.

17.70 The recording of annuities is similar to recording life insurance. The initial payment is recorded in the financial account as an actual premium, initially all unearned. At the same time, the insurance corporation incurs a liability towards the annuitant based on the terms of the contract. Some annuities are for a fixed term, so the calculation of the liability is relatively straightforward. More generally, annuities are for life, in which case actuarial assumptions are made by the insurance corporation about how long the annuitant is expected to live. The liability of the insurance corporation towards the annuitant will exceed he actual premium because of the expected revenue to be generated by the insurance corporation by investing the funds.

17.71 Each year the annuitant receives the sum agreed in the terms of the annuity agreement. The liability of the insurance corporation decreases. For an individual annuity, the liability changes from year to year also as the actuarial assumptions about that person change. Premiums are earned in proportion to the change in the liability. In this way, the initial premium is earned gradually over the entire period that the annuity is operational. The final element of premium earned is exactly enough to exhaust the initial premium,. In the case where an annuitant dies unexpectedly early, there will be a large earned premium in that year. If an annuitant lives longer than expected, the rate at which premiums are earned will have slowed down as the liability towards that annuitant declines more slowly. (In practice it is probable that the calculations are undertaken for cohorts of people with similar actuarial expectations rather than individually.)

17.72 In addition, there is property income earned by the insurance corporation and this is treated as payable to the annuitant and can be referred to as premium supplements. As with life insurance, the value of output is then determined as

premiums earned

plus premium supplements

less claims due.

Because of the way premium earned is linked to the decline in liability of the insurance corporation, there is no need in this case to have an adjustment terms for the change in actuarial reserves.

17.73 Although annuities can be regarded as a special type of life insurance, there is one important distinction that affects the way transactions are recorded. For a normal life insurance policy, the policy holder makes a number of current transfers to the insurance corporation and ultimately receives a capital sum. It is in essence a savings scheme. An annuity is the reverse. The annuitant initially acquires a financial asset and subsequently receives an income stream. An annuity is thus an investment scheme. The amounts due each year should therefore be treated as property income, a return for making the financial asset available to the insurance corporation. The "withdrawals" of capital each year should thus be exactly sufficient to meet the claim due under the annuity arrangement plus the service charge due, calculated as above. In effect, therefore, the annuitant withdraws some of the unearned premium and pays it to the insurance corporation in that year as the premium relevant to that year.

17.74 The entries for annuities for all annuitants taken together are as follows:

(a) The actual premium is recorded in the financial account at the time it is made as the acquisition of a financial asset by the insurance corporation and a financial liability of the annuitant. At the same time a liability of the insurance corporation is established equal to the present value of the claims to be made under the annuity is established with a matching asset for the annuitant.

(b) Each year property income earned by the insurance corporation on the unearned premium together with the claim due in that year is shown as property income payable to the annuitant by the insurance corporation in the allocation of primary income account.

(c) In the use of income account, the service charge due for that year is shown as payable by the annuitant in the use of income account and receivable by the insurance corporation in the production account. The value is equal to the property income received in the previous step less the claim due for that year plus the value of the premium earned in that year.

(d) In the financial account the insurance corporation's asset in respect of the unearned premium decreases by the amount of premium earned that year and the liability towards the annuitant reduces according to the change in the present value of the remaining claims due. Corresponding changes are made in the entries for the annuitant.

An example of these flows is shown in table??

Table ??? here

Part 2 The treatment of loan guarantees in the System

F. Types of guarantees

17.75 A loan guarantee is normally an arrangement whereby one party, the guarantor, undertakes to a lender that if a borrower defaults, the guarantor will make good the loss the lender would otherwise suffer. Often a fee is payable for the provision of a guarantee though the form of this varies. Sometimes the guarantor will acquire some rights over the defaulting borrower.

17.76 Guarantees have a significant impact on the behaviour of economic agents, both by influencing their decisions on production, income, investment or saving and by modifying the lending and borrowing conditions on financial markets. Some borrowers would have no access to loans in the absence of guarantees, while others would not benefit from comparatively low interest rates. Guarantees are particularly significant for the general government sector and for the public sector as government activities are often linked with the issuance or activation of guarantees.

17.77 Three classes of guarantees be recognized. These apply only to guarantees provided in the case of loans. No special treatment is proposed for guarantees in the form of manufacturers' warrantees or other form of guarantee. (The cost of replacing defective merchandise is an intermediate cost of the manufacturer.)

17.78 The first of these is composed of those guarantees provided by means of a financial derivative, such as a credit default swap. These derivatives are actively traded on financial market. The derivative is based on the risk of default of a reference instrument and so not actually linked to an individual loan or bond. Incorporating the transactions connected with establishing this sort of financial derivative is discussed in chapter 11.

17.79 The second class of guarantees, standardized guarantees, is composed of the sorts of guarantees that are issued in large numbers, usually for fairly small amounts, along identical lines. There are three parties involved in these arrangements; the borrower (debtor), the lender (creditor) and the guarantor. Either the borrower or lender may contract with the guarantor to repay the lender if the borrower defaults. The classic examples are export credit guarantees and student loan guarantees. Here, although it is not possible to establish the likelihood of any one loan defaulting, it is not only possible but standard practice to estimate how many out of a batch of similar loans will default. If the guarantor is working on purely commercial lines, he will expect all the fees paid, plus the property income earned on the fees, to cover the expected defaults. This is exactly the same paradigm as operates for non-life insurance and a similar treatment is adopted for these guarantees, described as "standardized guarantees". This involves including transactions and balance sheet items parallel to those for non-life insurance, including the generation of output and payments of a fee supplement and a service fee by those taking out the guarantees.

17.80 The third class of guarantees, described as one-off guarantees, consists of those where the loan or the security is so particular that it is not possible for the degree of risk associated with the loan to be calculated with any degree of accuracy. In most cases, the granting of a one-off guarantee is considered a contingency and is not recorded as a financial asset/liability. (As an exception, one-off guarantees granted by governments to corporations in certain well-defined financially distressed situations and with a very high likelihood to be called are treated as if these guarantees are called when the financial distress is recognised.) If a fee is charged, this is recorded as a payment of a service at the time of payment. If a call is made under a guarantee, a capital transfer is recorded from the guarantor to the guarantee holder at the time of default or, in cases where the guarantor obtains an effective claim on the guarantee holder, a financial transaction (including increases in equity participation).

17.81 Standardised guarantees are to be distinguished from one-off guarantees based on two criteria: (1) They are characterised by often repeated transactions with similar features and pooling of risks; (2) Guarantors are able to estimate the average loss based on available statistics by using a probability-weighted concept. One-off guarantees are, on the contrary, individual, and guarantors are not able to make a reliable estimate of the risk of calls.

17.82 Only standardised guarantee scheme requires special explanation in the System.

1. Standardised loan guarantee schemes

17.83 Loan guarantees may be provided by a financial institution, including but not confined to insurance corporations. They may also be provided by government units. It is possible but unlikely that non-financial corporations may provide these sorts of guarantees; it is most unlikely that they would be provided by any unit to a non-resident unit. As indicated above, standardised guarantee schemes have much in common with non-life insurance. In the general case, similar recording is proposed as described below.

17.84 When a unit offers a guarantee, it accepts a fee and incurs a liability to meet the call on the guarantee. The value of the liability in the accounts of the guarantor is equal to the present value of the expected calls under the guarantee, net of any recoveries the guarantor receives from the defaulting borrowers. The liability is entitled provisions for calls under standardised guarantees.

17.85 A guarantee may cover a multi-year period. A fee may be payable annually or up-front. In principle the fee should represent charges earned in each year the guarantee holds with the liability decreasing as the period gets shorter. In principle the same sort of recording should be followed here as for annuities. The fee paid is earned as the future liability decreases. In practice, some units operating loan guarantees may have data only on a cash basis. This is inaccurate for an individual guarantee but the nature of the standardised guarantee scheme is that there are many guarantees of the same type, though not all for exactly the same time period nor all starting and finishing on the same dates. Unless there is reason to suppose that there is a major change in the nature of the guarantee holders over time, using cash based data should not introduce significant error.

17.86 Altogether six sets of transactions need to be recorded in respect of standardised loan guarantee schemes; two relating to the measurement of the production and consumption of the guarantee service, three relating to redistribution and one in the financial account.. The value of the output of the activity, the property income to be attributed to the guarantee holder (whether creditor or debtor) and the value of the service charge are calculated in the manner described above for non-life insurance with the concepts of fees replacing premiums and calls under a standardised guarantee scheme replacing claims.

17.87 The production and consumption transactions are as follows:

(a) The output is recorded in the production account of the sector or sub-sector to which the guarantor belongs.

(b) The service may be paid for by either the borrower or the lender of the loan being guaranteed. When non-financial corporations, financial corporations, general government or non-profit institutions pay fees to obtain a guarantee, the fees constitute intermediate consumption, recorded in their production account. Any fees for guarantees payable by households are part of final consumption expenditure, recorded in the use of income account.

17.88 The redistributive transactions cover property income attributed to policyholders in respect of standardised guarantee schemes, net fees, and calls under standardised guarantee schemes.

(a) Property income attributed to policyholders in respect standardised guarantee schemes is recorded as payable by the guarantor. It is recorded as receivable by the unit paying the fee. Both payable and receivables are recorded in the allocation of primary income account.

(b) Net fees are calculated as fees receivable plus premium supplements (equal to the property income attributed to the unit paying the fee for the guarantee) less the value of the services consumed. These net fees are payable by all sectors of the economy and receivable by the sector of the guarantor.

(c) Calls under standardised guarantee schemes are payable by the guarantor and receivable by the lender of the loan under guarantee, regardless of whether the fee was paid by the lender or the borrower. Both net premiums and claims are recorded in the secondary distribution of income account.

An example of these flows is shown in *a new* table.

Table ?? Accounts for standardised guarantee schemes

2. Loan guarantees provided by government

17.89 Governments often offer loan guarantees for specific policy purposes. Export credit guarantees are one example. The guarantees may be issued by a unit within government that can be treated as a separate institutional unit. When this is so, the normal rules for the allocation of government units to either publicly controlled corporations or as part of government apply in this case as in all others. If a guarantee unit charges fees that are economically significant (in this case this may be equivalent to saying that most of the calls plus the administrative costs are covered by the fees charged), then this is a market activity of government. It should be treated as a financial corporation and transactions should be recorded as described above. If the fees cover most but not all the costs, the recording is still as above. The loss made by agency offering the guarantees made be covered by government on a regular or intermittent basis but this is not passed on to those seeking the guarantees as a subsidy. Regular payments are recorded as a subsidy to the agency and intermittent payments, covering cumulated losses, are recorded as capital transfers only when such payments are made.

17.90 In general, when a government unit provides guarantees without fees or at such low rates that the fees are significantly less than the calls and administrative costs, the unit should be treated as a non-market producer within general government. However, if government recognises the probability of having to finance some of the calls under the guarantees to the extent of including a provision in its accounts, a transfer of this size from government to the unit concerned and a liability of this amount (under provisions for calls under standardised guarantees) should be recorded.

Part 3 The treatment of pensions in the System

A. Types of pensions

17.91 The means by which pensions are provided to persons in retirement varies considerable from one country to another. This part of chapter 17 describes the most common forms of pension provision though not all aspects may apply to all countries.

17.92 The first distinction that needs to be made is between a pension provided by the state to all qualifying citizens (or residents) and one that is provided to individuals as part of the contract of employment between the individual as employee and the employer for whom they work. The first sort of pension may be described as universal provision. It is frequently a flat rate pension and in some countries it may be the only pension provision available to many people, especially those who have been engaged in non-permanent employment or casual work. Even though the payment of the pension may be dependent on the fact that contributions have been made for a certain period of time, the entitlement to a universal pension is usually not seen as part of the compensation package since the employer has no discretion about whether to make it available to the employee or not. Universal pensions are usually provided out of social security funds along with some other social insurance benefits, for example unemployment benefits.

17.93 By contrast, the second type of pension, which may be described as employment-related pensions, are certainly seen as part of the compensation package and negotiations between employees and employers may focus on pension entitlements as much as on current conditions of service and pay scales. Often they are provided by private employers in funds that the employers control or contract to a third party such as an insurance corporation. These funds may also provide social benefits other than pensions, for example private medical coverage. In certain jurisdictions it is possible for a specialised unit to agree to assume responsibility for providing pensions for a number of employers. This arrangement is called a multi-employer pension scheme.

17.94 A characteristic of a number of European countries in particular is that there is little distinction between a pension provided by the state and one provided by the employer since the state assumes the role of a multi-employer pension scheme. Employers agree pension terms with their employees but pass the contributions collected and the responsibility for paying the pensions over to the state so that ultimately the state is responsible for most, or even all, pensions payable in the economy. The state fund from which the payments are made is still referred to as social security even though the pensions paid are more like the employment related scheme described above than the universal pension.

17.95 For clarity, this part of chapter 17 describes first the methods of recording the current period flows for universal pensions, then the employment-related schemes, assuming these are privately funded. Then the question of employment-related schemes covered by social security is addressed. This is followed by considerations of other entries affecting the balance sheet data.

17.96 Social assistance schemes are distinct from both social insurance schemes and social security. Social assistance schemes are the means by which the state provides benefits to individuals without sufficient other means of support. They are very often means-tested and they are necessarily not dependent on contributions having been made by the beneficiaries of the assistance. Benefits provided under social assistance are discussed in chapters 8 and 9.

B. Universal pension provision

17.97 It is common but not essential for both employers and employees to make contributions towards the universal pension. It is also common for the contributions to be compulsory. The amount of pension payable may be related to the length of time the contributions have been made but the amount of a full pension is seldom determined by the amount of contributions. Because the pension is available so widely, it may be described as some form of social safety net but, as noted immediately above, this does not necessarily mean that universal pensions are part of social assistance. It is uncommon for a universal pension to be available on a means-tested basis, that is to be available only to those with less than a specified low level of income.

17.98 Universal pensions are provided by means of social security and are typically funded on a pay-as-you-go basis. That is the contributions receivable in a period are used to fund the benefits payable in the same period. There is no saving element involved, either for the government operating the scheme or for the individuals participating in it. No liabilities for the scheme are recognised in the System although concern is often expressed that benefits may exceed contributions and this situation is likely to worsen in an ageing population.

17.99 The recording of the flows for universal pension schemes are simple. Any contribution made by the employer is treated as part of compensation of employees. It is recorded as payable by the employer in the generation of income account and receivable by the employee in the distribution of primary income account. The employee then pays an amount equal to what he receives from the employer together with any contribution he is liable to make on his own behalf to the social security fund. This amount is recorded as payable by households in the secondary distribution of income account and receivable by the government in the same account. Any contributions made by self-employed or non-employed people are also included with the contributions payable by households to government. Social security benefits are also recorded as payable by government and receivable by households in the secondary distribution of income account.

17.100 There are no entries recorded in the accumulation accounts for universal pension provision.

C. Employment related pension schemes

17.101 There are two forms of employment related pension schemes. One is called a defined contribution scheme, sometimes referred to as a money purchase scheme. The other is a defined benefit scheme, sometimes referred to as a final salary scheme, though this term does not accurately describe all defined benefit schemes. Typically both schemes are contributory, often by both the employer and the employee.

17.102 ***A defined contribution schemes is one where the benefits are defined exclusively in terms of the level of the fund built up from the contributions made over the employee's working life and the increases in value that result from the investment of these funds by the manager of the pension scheme.*** The entire risk of the scheme to provide an adequate income in retirement is thus borne by the employee.

17.103 ***A defined benefit schemes is one where the benefits payable to the employee on retirement are determined by the use of a formula, either alone or as a minimum amount payable.*** In this case the risk of the scheme to provide an adequate income in retirement is borne either by the employer or is shared between the employer and employee. In certain cases, the employer's risk may be borne by the multi-employer scheme that operates the defined benefit pension scheme on behalf of the employer.

17.104 For both types of schemes, pension entitlements of the participants are recorded as they build up. In both cases, there is investment income earned on existing entitlements and this is recorded as being distributed to the beneficiaries and re-invested by them in the pension scheme. There are, though, a number of different features of the two schemes, so the transactions relating to each are described in detail separately before turning to other changes in the levels of pension entitlements. The recording of transactions for a defined contribution scheme is less complicated than the defined benefit scheme and is described first.

17.105 For both types of schemes, a pension fund is assumed to exist. For a defined contribution pension scheme, a fund must exist. For a defined benefit pension scheme a fund may exist in reality or it may be a notional fund. If it exists, it may be part of the same institutional unit as the employer, it may be a separate institutional unit (an autonomous pension scheme) or it may be part of another financial institution, either an insurance corporation or a multi-employer pension scheme. In describing the recording of transactions, transactions with the pension fund must be attributed to the sector where the fund is located.

1. Defined contribution pension schemes

17.106 Recording the transactions related to a defined contribution pension scheme presents no conceptual problems. There are no associated imputations either for the flows concerned or for the values appearing in balance sheets for the pension entitlements of the beneficiaries nor any doubt as to which unit has a liability and which an asset.

Transactions recorded for a defined contribution pension scheme

17.107 The contribution made by an employer to a defined contribution pension scheme on behalf of his employee is treated as part of compensation of employees. It is recorded as payable by the employer in the generation of income account and receivable by the employee in the distribution of primary income account.

17.108 The investment income on the cumulated pension entitlements is also recorded as being distributed to (receivable by) the employee in the distribution of primary income account and is shown as payable by the pension fund. The investment income includes interest and dividends payable plus the distributed income of collective investment schemes if the pension fund holds shares in them. It is possible that the pension fund may own property and generate net operating surplus on this which is also included along with the investment income as being distributed to the pension beneficiaries. In this case, the term investment income is to be interpreted as being elastic enough to include this source of income if it exists. Holding gains and losses generated by the investment of the cumulated pension entitlements are not included in investment income.

17.109 Part of the income distributed to the pension beneficiaries is used to meet the costs of operating the pension fund. This cost is shown as the output of the pension fund in the production account and as an element of consumption expenditure by households in the use of income account. The remaining part of the distributed income is treated as pension contribution supplements paid back by households to the pension funds

17.110 In the secondary distribution of income account, social contributions are shown as payable by households and receivable by the pension fund. The total amount of the social contributions payable is made up of the actual contributions payable by the employers as part of compensation of employees, actual contributions by employees and possibly by other individuals plus the contribution supplements just specified. Those other than employees who contribute to a defined contribution pension scheme may be self-employed persons participating in a defined contribution pension scheme or may be persons not employed who participate in a defined contribution pension scheme by virtue of their profession or former employment status, for example.

17.111 Also in the secondary distribution of income account, the pension benefits payable to households by the pension fund are shown. However, the benefits payable under a defined contribution pension scheme usually take the form of a lump sum payable at the moment of retirement. It may be a requirement of the scheme that these sums are to be immediately converted to an annuity with the same or another financial institution but this is not a universal requirement. The appropriate recording of the benefits is to show the benefit as payable immediately on retirement and then, where appropriate, reinvested in terms of an annuity or other forms of financial assets.

17.112 For an individual, it is clear that the payment in full of pension entitlements is more in the nature of a withdrawal of saving than a current transfer. However, for a whole set of beneficiaries, the number reaching retirement in a single year and withdrawing all their entitlements can be seen as an approximation to all retirees withdrawing a year's worth of entitlements. Because of the collective nature of social insurance, therefore, the amount of benefits payable in a year are recorded as current transfers. The consequential financial transactions, such as the purchase of an annuity, are recorded as normal.

17.113 In the use of income account, there is an entry for the payment of the service provided by the pension fund (equal to the value of the pension fund's output) payable by households to the pension fund.

17.114 In the same account there is an entry showing the increase (or decrease) in pension entitlements caused by the excess of contributions payable less benefits receivable in the secondary distribution of income account. This amount is shown as payable to households by the pension fund. The rationale for this is that this increase (or decrease) in pension entitlements directly affects the net worth of households, it should be included in the saving of the household sector. Because much of the increase in the pension entitlement of participants in a defined contribution pension scheme, and thus ultimately the funding for the benefits, come from holding gains that are not included in the contribution supplements of participants in defined contribution pension schemes, the adjustment for the change in pension entitlements for these individuals will frequently be negative.

17.115 The same amount that is included in the use of income account as payable by the pension fund to households is shown in the financial account as payable by households to the pension fund. The other factors affecting the change in the balance sheet entry for the change in pension entitlements are shown in the other changes in assets accounts and are discussed below in section XX.

2. Defined benefit pension schemes

Differences between a defined benefit and a defined contribution pension scheme

17.116 The fundamental difference in accounting for a defined benefit pension scheme as compared with a defined contribution pension scheme is that for the defined benefit pension scheme, the benefit to the employee in the current period is determined in terms of the undertakings made by the employer about the level of pension ultimately receivable, whereas for the defined contribution pension scheme the benefit to the employee in the current period is determined entirely by the contributions made to the scheme and the investment income earned on these are previous contributions. Thus while there is (in principle) exact information available on the benefits for the participant in the defined contribution pension scheme, the benefits for the participants in a defined benefit pension scheme must be estimated. The source of these estimates is the actuarial estimates the employer is faced with in drawing up his own accounts.

17.117 There are four source of changes in pension entitlements in a defined benefit pension scheme. The first of these is the increase in entitlement associated with the wages and salaries earned in the current period, the current service increase. The second source is the increase in the value of the entitlement due to the fact that for all participants in the scheme, retirement (and death) are one year nearer, the past service increase. The third change in the level of entitlement is a decrease due to the payment of benefits to retirees of the scheme. The fourth source of change comes from other factors, factors that are reflected in the other changes in assets account.

17.118 As with a defined contribution pension scheme, both employer and employee may make actual contributions to the scheme in the current period. However, these payments may not be sufficient to meet the increase in the benefits accruing from the current year's employment. Therefore an additional contribution from the employer is imputed to bring equality between the contributions and the increase in current service entitlements. These imputed contributions are usually positive but it is possible for them to be negative if the sum of the contributions received exceed the increase in current service entitlements. The implications of this case are discussed below when examining the relationship between the employer and the fund.

17.119 At the end of an accounting period, the level of the pension entitlements due to past and present employees can be calculated by estimating the present value of the amounts due to be paid in retirement using actuarial estimates of the expected life length of the beneficiaries. This is the amount that appears in the balance sheet of the employer. One element in the increase of this amount year by year is the fact that the present value of the entitlements existing at the beginning of the year and still due at the end of the year have increased because the future is one year nearer and so one fewer discount factor must be used to calculate the present value. It is this unwinding of the discount that accounts for the past service increase in entitlements.

17.120 A further basic difference between a defined benefit pension scheme and a defined contribution pension scheme concerns the payment for the cost of operating the pension scheme. As already noted, under a defined contribution pension scheme all the risk is borne by the beneficiaries. The pension schemes is operated on their behalf and they pay for the cost of it. Since the fund may be operated by a unit other than the employer, it is appropriate to treat the operating cost as part of the investment income that is retained by the fund to meet its costs (and generate a profit). In keeping with accounting for insurance, the investment income is treated as being attributed in full to the beneficiaries, part being used to meet the cost and the remained being reinvested with the fund.

17.121 For a defined benefit pension scheme, the situation is somewhat different. The risk that the fund may be insufficient to meet the promises of entitlement is met in part or in whole by the employer (or a unit acting on his behalf) and not by the beneficiaries alone. The fund may be directly controlled by the employer and part of the same institutional unit or may be purely notional. Even in this case, there are costs associated with operating the scheme. Although there are initially borne by the employer, it is appropriate to regard this as a form of income in kind provided to the employees and for convenience it may be included with the employers' contributions. (There is an element of pragmatism in this since this assumes all the costs are borne by current employees and none by retirees. It also assumes that the attribution that must be made in the case of an unfunded schemes can be applied in other circumstances also.)

Transactions recorded for a defined benefit pension scheme

17.122 The total contribution made by an employer to a defined benefit pension scheme on behalf of his employee must be sufficient that together with any actual contribution by the employee and excluding the cost of operating the scheme it exactly matches the current service increase in the employee's pension entitlements. The contribution by the employer is divided into an actual and an imputed part, the latter being calculated so as to meet the need of an exact match between all contributions to the fund adding to the entitlements of the employee and the current service cost of these entitlements.

17.123 At various points in time, the investment of the pension entitlements has done so well that the employer has taken a "contribution holiday", that is he has not made an actual contribution towards new entitlements. Without the imputation of a contribution even in these circumstances, the total compensation cost appears to be lower in these circumstances than is really the case and value added, and hence GDP, is understated.

17.124 The sum of employers' actual and imputed pension contributions are treated as part of compensation of employees. It is recorded as payable by the employer in the generation of income account and receivable by the employee in the distribution of primary income account.

17.125 The increase in the present value of continuing employees (the past service increase) represents the investment income distributed to the employees. No deduction is made for any amount that may be funded from holding gains or that is not actually matched by existing funds. It matches the amount that is unequivocally due to the employee under the prevailing agreements; the means by which the employer may ultimately match this obligation is not relevant for the recording of this as investment income any more than the means by which interest or dividend are actually financed affects their recording as investment income. The investment income is recorded as payable by the pension fund and receivable by households. It is immediately reinvested by the households in the fund and in this guise is described as pension contribution supplements.

17.126 In the secondary distribution of income account, social contributions are shown as payable by households and receivable by the pension fund. The total amount of the social contributions payable is made up of the actual and imputed contributions payable by the employers as part of compensation of employees (excluding the amount of the costs of running the pension scheme), plus actual contributions by employees plus the contribution supplements just specified.

17.127 Also in the secondary distribution of income account, the pension benefits payable to households by the pension fund are shown.

17.128 In the use of income account, there is an entry for the payment of the service provided by the pension fund (equal to the value of the pension fund's output) payable by households to the pension fund.

17.129 In the same account there is an entry showing the increase (or decrease) in pension entitlements caused by the excess of contributions payable less benefits receivable in the secondary distribution of income account. This amount is shown as payable to households by the pension fund. The rationale for this is that since this increase (or decrease) is pension entitlements directly affects the net worth of households, it should be included in the saving of the household sector. In the case of a defined benefit pension scheme, the amount is unlikely to be negative unless it is scheme for a defunct employer and it is only paying benefits and not receiving new contributions.

17.130 The same amount that is included in the use of income account as payable by the pension fund to households is shown in the financial account as payable by households to the pension fund. The other factors affecting the change in the balance sheet entry for the change in pension entitlements are shown in the other changes in assets accounts and are discussed below in section XX.

Defined benefit pension schemes operated by other than employers

17.131 It is possible that some other organisation, such as a trades union, may operate a defined benefit pension scheme for its members that is in all respects parallel to an employer's defined benefit pension scheme. Exactly the same recording is followed as immediately described except that references to the employer should be understood to refer to the scheme organiser and references to the employee should be understood to refer to the participant in the scheme.

The relationship between the employer and the pension fund

17.132 As noted above, an employer may contract with another unit to mange the pension fund and arrange disbursements to the beneficiaries. There are two ways in which this may happen. The operator of the pension fund may simply act as the employer's agent and the responsibility for any short-fall in the fund (or the benefit of any excess) remains with the employer. However, it is not uncommon for a single unit to contract with several employers to manage their pension funds as a multi-employer pension fund. The arrangement are such that the multi-employer pension fund accepts the responsibility for any short-fall in the funds to meet the liabilities in return for the right to keep any excess funds. By pooling the risks over a number of employers the multi-employer fund expects to balance under and over funding so as to emerge with an excess over all the funds taken as whole in a similar way that an insurance corporation pools risk for many clients.

17.133 In the case where the employer retains the liability for any under-funding or benefit of any over-funding, at the time that investment income to the beneficiaries is recorded, a claim on (or liability towards) the employer by the pension fund should be recorded for any deficit or surplus.

There is an issue to discuss here – how exactly do we account for this?

The special case of government acting as a multi-employer scheme within social security

To follow in the light of the Eurostat/ECB task force looking into when it may be possible to identify liabilities for these schemes.

3. Other changes in the value of pension entitlements

17.134 For both a defined contribution pension scheme and a defined benefit pension scheme there are other changes to be recorded to the value of entitlements. Again the situation is much simpler for a defined contribution pension scheme.

Defined contribution pension scheme

17.135 The investment of the entitlements of a defined contribution pension scheme lead to holding gains (and possibly losses). These come about through the management of the assets held by the fund but an amount exactly equal to the holding gains and losses should be attributed as an increase in the pension entitlement of the beneficiaries. This should appear as an entry on the revaluation account.

Defined benefit pension scheme

17.136 At first sight it would seem that there are no entries to be made in the other changes in assets accounts for a defined benefit pension scheme since the two components recorded as the pension contributions and investment income are matched exactly to the increase in entitlements. However, because the nature of a defined benefit pension scheme is that the amounts due are determined by a formula, there are other factors that may intervene to change the level of entitlements. These factors include a price escalation clause, changes in the formula used to determine benefits and demographic assumptions about life length. The special case of the impact of promotions on entitlements is discussed separately below.

17.137 A pension fund invests the funds at its disposal. If they work on a fully funded basis, the investment income should be more than enough to cover any price escalation clause in the pension agreement. The excess may also be sufficient to cover some other adjustments to entitlements. However, a major source of revenue comes from holding gains on investments. These were assumed to be sufficient to cover most or all changes in entitlements. It has become clear that many schemes were under-funded in the expectation that holding gains would also make up this shortfall also.

17.138 Given these adjustments are funded in large part by holding gains which appear in the revaluation account, it seems reasonable to record the contingencies that they are assumed to cover in the other changes in the volume of assets account except for the price escalation factor that should appear in the revaluation account.

The issue of promotions

17.139 Many defined benefit pension scheme use a formula to set benefits that involves either the final salary or average salary as a key determinant. This implies that any promotion means that the total pension entitlements accrued to date are increased to take account of the new salary level. This is a significant benefit for the individual being promoted but what are the consequences for the employer's pension liabilities?

17.140 The accounting profession uses two actuarial terms that bear on this discussion. The accrued benefit obligation (ABO) records, as it name implies, only the benefits actually accrued to date. It represents the amount the employee could walk away with if he left the firm tomorrow and may be the basis of assessing a person's net worth in the case of a divorce settlement, for example. A projected benefit obligation (PBO) is a more prudent measure of what the eventual level of entitlement is likely to be. For an individual, the PBO makes assumptions about how many future promotions the person is likely to receive and calculates his final salary accordingly. Then, if he has in fact only worked 20 out of an expected 40 years, it halves the final salary and calculates pension entitlement for the individual as if this were his current salary. Where an individual's ABO increases in steps as he is promoted, the PBO increases steadily over time. For the individual, PBO is always higher than ABO until the moment of retirement when the ABO catches up with the PBO.

17.141 It would seem at first sight that the level of pension entitlements for a corporation should be the level of sum of all the pension entitlements of each of the employees and that therefore the sum of the PBO estimates would be considerably higher than that of the sum of the ABO and would evolve more smoothly over time. However, what is true for the individual is not necessarily true for the cohort of employees. Suppose the employer has five classes of people for whose pensions he is responsible, four grades of employees and one set of retirees and for simplicity there are the same number of each. Consider the situation where in a year the retirees die; the most senior set of employees retire, the next three sets of employees are all promoted and a new set of employees is recruited at the lowest level. Every current employee is better off after promotion but the overall liability of the employer has not changed. This is analogous to the fact that every previous employee, still working for the employer, has been promoted but there are still the same number of people in the firm and still the same number at every grade. The effect of aggregating ABOs is to smooth the total entitlement and while it will still be lower than the aggregate PBOs, it will not necessarily be more volatile. Indeed it may be more stable.

17.142 As long as the grade structure of the corporation stays the same, ABO and PBO will move roughly in step. If the firm expands and takes on many new employees at the lower grades, the PBO will be increase noticeably faster than the ABOs because the PBOs make estimated of how long the new employees will stay and hoe far they will be promoted while the ABOs record simply the pension accrued in their first year. If the firm decides to down size and reduces the number of their managerial staff, this will reduce the promotion prospects of the employees and a downward revision in PBO will be necessary. Because ABOs reflect simply the "locked-in" pension, this estimate is not affected.

17.143 The question arises, though, of how to record the impact of promotion on the employee if an ABO recording is used. Any version of treating the increase as a form of compensation of employees or investment income falls back into the assumption that the aggregate entitlements is the sum of the individual entitlements but without looking at other individual impacts on the aggregates such as when someone leaves and looses pension entitlement because not enough time has been served or when someone dies before retirement age. A simpler and adequate solution is to treat the rise in salary as a price change and record the change in the revaluation account.

17.144 If the PBO method of recording entitlements is chosen as the preferred valuation, a different question arises. The contributions made by the employee cover both regular elements of the ABO. How should the excess of the PBO over the ABO be recorded? It is a certain liability in the future but both the size and timing are uncertain. One possibility, therefore, is to treat this as a provision. The impact of changing patterns of promotions could then be absorbed in changes to this provision.

4. Transferring pension entitlements

17.145 One characteristic of the changing environment of pensions is the increasing possibility of having "portable pensions". Until recently, a person leaving one employer had his pension frozen at that point and had to start a new pension with the new employer. It is becoming more common now for a person moving jobs to be able to convert the pension entitlement with the former employer to one with the new employer. When this happens, the pension entitlement of the household concerned is unaffected but there is a transaction between the two pension funds as the new one assumes the liability of the former. In addition there will be a counterpart transactions in some assets to match these liabilities. If the new employer is running a fund that is actually unfunded, he may receive cash from the former employer. If this cash is then used by the employer for purposes other than the pension fund, his liability to the fund increases and his use of the cash appears as net borrowing.

17.146 Another way in which pension entitlements may be transferred between funds is when one corporation takes over another. In this case, assuming the take-over does not change the terms of the pension plan foe existing participants the transactions to be recorded for a group of employees (and retirees) is simply the aggregate of the position for each of the individuals.

Implementation issues on insurance

The following information was part of the submission on insurance. It is very useful but much more orientated towards implementation issues than is common for the main SNA text. Should we (i) include it, (ii) make it an electronic annex, (iii) consider a more comprehensive manual on insurance of which this might be part? There is much other useful information in the document used as the background for the discussion in February 2004 that could usefully be incorporated into a implementation guide.

The information system relating to premiums and claims flowing between direct insurers and reinsurers can be obtained from the accounts of both direct insurer and reinsurer, and is therefore complete even when one party is non-resident. However, in the case of the property income attributed which is associated with reinsurance services and the corresponding premium supplements, the information system is not complete, when one party is non-resident. The premiums supplements received by an insurer represent the property income on assets stemming from the investment of premiums not ceded to reinsurers. An amount representing the property income receivable by both the original insurer and the various reinsurers to whom premiums have been ceded can be estimated, however, in the manner indicated below, where all amounts other than estimated amounts (“estd.”) are to be found in the published accounts of insurance corporations [at least in Europe].

RESIDENT DIRECT INSURER

COUNTERPARTS

	GROSS OF REINSURANCE	REINSURERS’ SHARE	NET OF REINSURANCE		SUM OF REINSURERS*
Premiums earned	A.1	– A.2	A.3		A.2
Premium supplements	B.1 (estd.)	– B. 2 (estd.)	B 3		B 2 (estd.)
Claims incurred	C.1	– C.2	C.3		C.2
Intermediate consumption of reinsurance services	Σ (A.2 +B.2 (estd.) – C.2)				
Property income attributed to i.p.h :-					

……………………. Uses	– B.1 (estd.)	– B 2. (estd.)	– B.3.		– B 2 (estd.)
Resources		B 2 (estd.)			
Level of technical provisions	D1.	D 2.	D.3		

* Resident and/or non-resident.

The item B.1 (est.) is called "gross premium supplements". It is estimated as D1 /D3 x B3, which means making the assumption that the average rate of return of all the reinsurers in the sum of reinsurers is the same as the rate of return of the resident direct insurer on the investment of his technical provisions. [*Where intra-resident transactions in reinsurance services are a large proportion of the total, there is an option to base the total gross amounts of premium supplements payable to direct insurers on consolidation of the net of reinsurance figures of premium supplements (item B3 above combining both resident direct insurers and resident reinsurers in respect only of their resident to resident business. The contribution of premium supplements to the output of direct insurance services will then be the same as under the gross method, when summed over the whole economy. But this method fails to record the output of reinsurance services correctly, when these are considered separately. It also requires separation of all data relating to premium supplements when one party is non-resident, and is therefore not suitable when exports or imports of reinsurance services form a significant proportion of the total.] Part in italics to be confirmed.*

When micro-data on expected claims and expected premium supplements can be obtained from insurance companies and can be extensively treated, it is recommended to use this source to estimate expected claims and thus obtain a micro measure of the production of insurance that can be then aggregated. In most cases this will be impossible. It is therefore recommended to use a macro-estimate of expected claims using a statistical method whereby past data on claims due are smoothed and used to forecast the claims expected in the current period.

Two approaches are possible. The first is based on a direct smoothing of claims incurred. Direct smoothing of claims needs the use of a "reflator" to apply to past claims data. The second uses smoothed loss ratios (losses / premiums written) rather than smoothing claims themselves. The resulting loss ratio resulting from past information is then applied to actual premiums of the period, resulting in an estimate of expected claims. It is recommended that the smoothing method should not lead to built-in revisions of the data. It should use past data available at the moment of the theoretical decision by insurers of the level of their premiums. This includes the year under study. A possible smoothing method is a geometric-weighted moving average of the type $EVt = άVt + ά(1 - ά)Vt\text{-}1 + ά(1 - ά)^2Vt\text{-}2 + \ldots$, *where EVt is the expected variable (either claims or loss ratios) and Vt is the observed variable (either claims or loss ratios)* . The parameter ά should be chosen so that to optimize the prediction of future values, based on past experience.

It is essential to note that no "normal" smoothing method will be able to deal with exceptional events such as major catastrophes. Faced with such a situation, any "normal" smoothing method will induce a significant increase in claims due when the exceptional event enters in the formula of smoothing and a significant decrease when quitting the smoothing formula, thus affecting the measurement of insurance production in the national accounts.

Therefore, a pragmatic decision must be made to exclude these exceptional events from the first step of the calculations. The proposed method is the following: (1) determine what might be a set of catastrophic claims, for example on the basis of its size (a practical rule could be an event leading to claims reaching more than 0.1% of GDP), (2) determine on a pragmatic basis the amount of claims linked to the catastrophe and exclude these claims from the normal smoothing formula, (3) split these catastrophic claims over a very long period (twenty years), (4) reintroduce these additional claims in the compilation of expected claims for the long period (twenty years) **ahead** (not centered on) of the current year, taking into account expected inflation. In other words, a catastrophe that happened in the current year would have an impact on expected claims for the next 20 years but no impact on earlier years.

30 Imported reinsurance services appear as intermediate consumption of resident direct insurers. in this case, premium supplements may be based on the difference between the technical provisions of the importing direct insurer gross of reinsurance and the same net of reinsurance, adjusted if necessary for reinsurance services provided by other residents.

Exports of reinsurance services. It is preferable to base the estimates on accounting data relating to the resident reinsurance industry, by applying to the reinsurance premiums accepted from non-resident insurers the ratio, of reinsurance service charge to reinsurance premiums accepted, which is derived from the total of reinsurance activities of residents.

Imports of reinsurance services. The estimates can be based on the accounting data of the resident *direct* insurers who use reinsurance services, which show separately the share of all reinsurers, resident and non-resident in gross premiums, gross claims and gross technical provisions, from which estimates of their intermediate consumption of all reinsurance services are derived (see the Table in paragraph 6.138f). The ratios of reinsurance service charge to premiums ceded to reinsurers, for all reinsurance business, can be applied to the premiums ceded to non-resident reinsurers. The latter may be available from administrative sources or cash-based sources. Also, for countries where exports of reinsurance services are nil or minimal, premiums ceded to non-resident reinsurers can be derived as total premiums ceded less reinsurance premiums accepted by resident insurers acting as reinsurers, which data is usually available in administrative sources.

6.138e For simplicity, certain items to be found in the profit and loss accounts of insurance corporations are assimilated to others in the calculation of the value of direct and reinsurance services produced :

-- Gross premiums earned include changes in the provision for unexpired risks, as part of changes in the

provision for unearned premiums (see (a) below).

-- Gross premiums earned are recorded after deducting rebates paid to policy-holders when these result from

the experience of individual contracts. These rebates should be distinguished from bonuses paid or payable

in future to policy-holders, even though the two are often merged in the published accounts of insurance

corporations (see below).

-- In the case of a reinsurer accepting risks on proportional reinsurance contracts, gross premiums

earned are recorded after deducting the reinsurance commissions payable by him to the direct insurer.

-- Gross claims incurred include changes in the equalisation provision.

-- Gross claims incurred include bonuses actually payable in the accounting period.

-- Changes in the actuarial provisions and provisions for with profits insurance include the provision made for bonuses payable in future.