B.4. Insurance, pension and financial services

B.4. Insurance, pension and financial services

Introduction

14.258. The present subsection describes the compilation of insurance and pension services as well as financial services, maintaining consistency with the recommendations of the *BPM6 Compilation Guide*. [1] Some of those services are provided without explicit fees, which are included in property income and other flows. Thus, the calculation of services needs a certain degree of estimation or imputation, based on balance sheet and/or profit/loss, which is often provided through supervisory reports. Other services, in particular auxiliary services, are provided with explicit fees.

14.259. According to MSITS 2010, insurance and pension services are disaggregated into four separate subcomponents: direct insurance, reinsurance, auxiliary insurance[2] and pension and standardized guarantee services.[3] Direct insurance is further broken down into life insurance, freight insurance and other direct insurance. Pension and standardized guarantee services is further broken down into pension services and standardized guarantee services.

Insurance and pension services

Introduction

14.260. The insurance and pension services reflect the output of specific industries whose calculation is best described in the context of balance of payments recordings. BPM6, appendix 6, provides some background to the operation of the insurance and pension schemes and the *BPM6 Compilation Guide,* appendix 2, provides more details on the overall recording of transactions in the balance of payments, including the relevant services. The present section summarizes the main aspects related to the calculation and data sources for insurance and pension services.

Compiling insurance and pension services

14.261. The estimation methods and necessary data for various insurance and pension services, if they are provided without explicit fees, are basically a variation[4] of those for direct insurance, as shown below and in the example in box 14.3. The insurance services are calculated on the basis of premiums earned and losses incurred pertaining to the accounting period:

Gross premiums earned (from direct business)

plus net income from investments attributable to policyholders (premium supplements)

minus estimated claims incurred (adjusted for claim volatility, if necessary)

equals insurance service charges

Box 14.3
Numerical example of direct insurance services

For resident insurers with separate data on policyholders abroad:

Premiums earned from abroad 100

Claims payable abroad 95

Income attributable to policyholders 20
(premium supplements)

Insurance service charge is .... 25 [=100+20-95]

14.262. For life insurance and pension services, the net increase in life insurance actuarial reserves or pension reserves (pension entitlement) should be further deducted, as such increase is regarded as asset accumulation to their policyholders.

Gross premiums earned

plus premium supplements

minus benefits due

minus net in life insurance actuarial reserves

equals life insurance service charges

14.263. To compile the *exports* of insurance services, compilers can generally obtain comprehensive data from surveying resident insurance enterprises, particularly in countries in which surveys are the major source of data for trade in services data collection (see paras. 6.46-6.59).

14.264. Alternatively, if comprehensive surveys are not feasible, compilers may be able to obtain information directly from domestic insurance corporations that would allow them calculate an approximate insurance service in a given reporting period. Specifically, if they can collect data on the breakdowns of premiums received from resident clients and those from non-resident clients, insurance services provided to non-resident clients can be calculated assuming that the service-to-premium ratio is the same between resident and non-resident clients. Such a ratio could also be used for estimating imports of insurance services, if payments of insurance premiums are captured through general enterprise surveys, as shown in box 14.4. Nevertheless, compilers should pay attention to possible differences between the service-to-premium ratio of domestic insurance companies and that of foreign insurance companies.

Box 14.4
Numerical example of exports of insurance services

For resident insurers with separate data on policyholders abroad for premiums only:

Total insurance services (to residents and non-resident clients combined)	50
Total premiums	200
Of which: premiums from residents	120
Premiums from non-residents	80
Estimated insurance services provided to non-residents are	20 [= (80/200)x50]

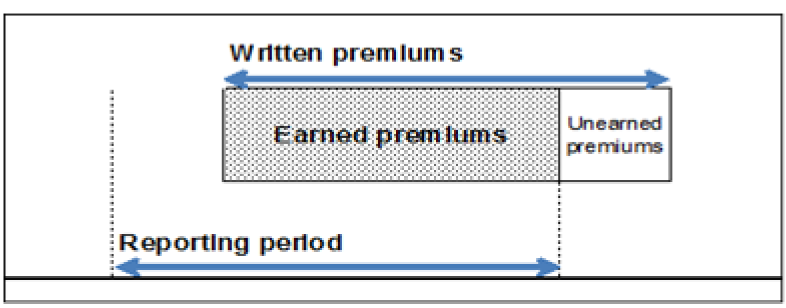
14.265. Compilers, depending on the ITRS as a main source data, may not be able to compile a comprehensive set of accounts to approximate insurance services exports. However, from the ITRS, compilers may obtain settlement data for insurance premiums received from abroad and insurance claims paid abroad. Also, compilers may also obtain settlement data for insurance premiums paid abroad and insurance claims received from abroad to estimate insurance services imports. Insurance services can be estimated by multiplying those data by a service-to-premium ratio (box 14.5). Premiums are a better indicator than claims for determining the service charge because claims are contingent on events incurred to trigger payments, and there may be periods without claims or with unusually large claims. The service-to-premium ratio needs to be fixed and revised periodically by checking financial reports of domestic insurance enterprises or direct inquiries to them.

Box 14.5
Numerical example of imports of insurance services

Premiums from residents	40
Ratio of service charge to premiums (average from data on insurers abroad)	25
Estimated insurance services from non-residents	10 [40x0.25]

14.266. The concept of accrual recording is an important aspect of calculating insurance services as insurance contracts may spread over different periods of time than the ones used in the compilation of statistics. In estimating insurance services on an accrual basis, compilers need to differentiate between the earned premiums and the written premiums. The estimation of insurance services should be based on the earned premiums, which are consistent with accrual recording. At the time that a policy is first written, the total of the premium may be unearned, as premiums are often fully paid at the inception of the policy. Direct written premiums are the amount charged to and actually paid over the life of a contract by the policyholders for insurance coverage. Each day thereafter, the premium amount accrues to the insurance unit until the end of the policy. At the end of the reporting period, the insurance corporation assesses the premium reserves representing the unexpired terms of the policy. The earned premiums plus the unearned premiums for a policy equal the written premium.

Figure 14.2 The relationship between earned premiums and written premiums



14.267.   For insurance services, major catastrophes that may require large payments of claims are expected to occur once in several years. When they do occur, the payments of claims in the year of the catastrophe could exceed the value of premiums. If only the claims incurred in the accounting period are used in the formula, the value of insurance services could be highly irregular and, in some cases, could even be negative. Therefore, an adjustment in claims due is required to reflect a more long-term view of the functioning of the insurance sector, in line with the decision-making process in the insurance industry. The adjustment for claims volatility shows the difference between the actual claims in the period and the normally expected value of claims, where the expected value of claims removes the effects of claims volatility. In periods in which large values of claims are incurred, the adjustment, if it is to be made, would be negative, while in other periods the adjustment would be positive.

14.268.   Regarding the adjustment for smoothing the amounts of claims by policyholders on insurance corporations, BPM6, appendix 6c, paragraph 22, proposes three methods: (a) the expectation approach, (b) the accounting approach and (c) the sum of cost plus "normal profit" approach.

14.269.   In the expectation approach, output is calculated as premiums plus expected premium supplements minus expected claims. That approach replicates the ex-ante model used by insurer corporations to set their premiums on the basis of their expectations. In accepting risk and setting premiums, insurers consider both their expectation of loss (claims) and of income (premiums and premium supplements). Ideally, the microdata of the insurance corporations accounts could be used in the expectation approach for estimating the output of the insurance corporation. However, that information is seldom available to the compiling agencies. In the absence of such data, a statistical technique to simulate that approach can be applied by using macrostatistics, to smooth past data to forecast the expected claims.

14.270.   In the accounting approach, output is calculated as actual premiums earned plus premium supplements less adjusted claims incurred, where adjusted claims are determined by using claims due plus the changes in equalization provisions and, if necessary, changes to own funds. In the sum of cost plus "normal profit" approach, the output is calculated as the sum of costs (including intermediate costs, labour and capital costs) plus an allowance for "normal profit".

Include pages:

Country experience: United States: insurance services (Chapter 14)

Country example: Japan: recording insurance services on an accrual basis (Chapter 14)

Country Example: Germany: smoothing of insurance premiums paid/received

Next: B.5. Financial services

---

[1] The *BPM6 Compilation Guide* provides recommendations on the treatment of insurance, pension and financial services, in particular, in its appendix 2, "Insurance transactions and positions and pension schemes" and appendix 3, "Financial intermediation services indirectly measured".
[2] According to MSITS 2010, auxiliary insurance services are included in insurance and pension services. That fact should not be confused with the sectoral classification of the 2008 SNA, whereby insurance brokers andalike are classified under "financial auxiliaries."
[3] MSITS 2010 does not recognize fees paid to administrators of pension funds as a separate category, while the 2008 SNA recommends that pension fund managers (administrators of pension funds, which only manage the activities of pension funds without taking ownership of the assets or liabilities), be classified as financial auxiliaries.
[4] The value of the output of standardized guarantee providers can be calculated in the same manner as that of non-life direct insurance. For reinsurance, commission payable should be further deducted from the premiums earned and the claims adjusted for profit sharing in excess of loss reinsurance.