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Insurance/Reinsurance Services and Financial Intermediation Services Indirectly Measured (FISIM)

Prepared by the
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The German co-ordinated approach by National Accounts and Balance of Payments

Paper prepared by the Balance of Payments Statistics Division
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1. Introduction

1.1. Institutional setting

In Germany, there is in general terms a clear distinction of labour between the Federal Statistical Office (FSO) and the Deutsche Bundesbank (BBk) in the area of macro-economic statistics. As in many other European countries the FSO is responsible for the establishment of National Accounts (NA), whereas the BBk is responsible for the compilation of the Balance of Payments (BoP) and the International Investment Position (IIP).

In this context it may be a good example to explain a bit more in detail how the co-operation of the two organizations works in general, before we come to the special topic of this paper. In our country we have a very well established “circle-distribution” of data. The BBk receives cross border data of Foreign Trade Statistics (including information on the nature of transaction) from the FSO. These data are converted into general merchandise of the BoP, which is based on the change of ownership principle, by making recalculations and estimations. For the compilation of the current account some items are developed in common like insurance and FISIM. The current account data are again delivered back to the NA to be included in the Rest of the World Account.

1.2. Treatment of insurance services and FISIM in BPM5 and SNA93

Following BPM5 in BoP a distinction was made between life insurance, other direct insurance and reinsurance. For direct insurance the services component was calculated as the medium- to long-term average between the gross premiums received and the claims paid. This estimate was based on information of the BAFIN, the supervisory agency, about the profit and loss statements of German insurance companies. The ratio was different for life insurance (currently 10%) and other direct insurance (currently 25%) and was dated up from time to time. For the import side the same ratio was used. Net premiums (=gross premiums minus services) for non-life direct insurance as well as all claims were booked as current transfers. For life insurance net premiums and claims were booked in the financial account - other investment. In contrast, reinsurance services were booked completely on a net basis as services.

At the same time in NA a differing treatment was followed. It was in general terms (for other direct insurance) identical with the now requested methodology for BPM6, but for the Rest of the World Account the simplified version of the BoP was accepted.

With regard to FISIM the situation was relatively clear: BoP did not have the obligation to calculate FISIM and to include it into BoP, whereas it was included in NA.

1.2.1. Changes in BPM6 and SNA2008

Compared with the previous situation a complete harmonization between the concepts has taken place with regard to the both new Manuals. Therefore the situation is the following:

- We need in any case for the same methodological background the same figures in both sets of data.
- The FSO has the longer term experience in the compilation of the basic concepts, but the BBk needs more timely and more detailed data.
- There is an urgent need for a not only continued, but even expanded close co-operation to come up with proper and especially consistent solutions.
- In the past data sources were to some degree different. Now they become the same and – what is most important – data cannot be derived solely from primary data collection any more.
- Therefore, a coordinated approach is needed which leads to the same results at common levels of detail.

The present ideas may still be amended in special points. But they form the common basis for developing harmonized information in the areas of insurance and FISIM.

2. Insurance services

For insurance services different estimation procedures are needed for exports and imports. In both cases some information is available, but from different sources and in a different frequency, and it has to be combined with each other and adjusted in proper time.

2.1. Insurance exports

Since there is now a need to compile insurance services not only on the basis of premiums and claims we will have to conduct our calculation on the basis of supervisory information which stems from balance sheets and profit and loss accounts. This information is only available at a relatively late stage (11 to 12 months after the end of the year). Some figures are also available on a quarterly basis, but they are too late for BoP purposes and do not cover all information needed.

This leads to a situation where we will have overall annual (and maybe quarterly) figures for NA, which are used as a framework, but estimates for BoP purposes for monthly figures with a geographical breakdown are needed.

On practical grounds we will include two different types of information in our calculations:

1. Supervisory data from annual profit and loss accounts, which will be used to calculate the overall service for Germany as a whole from
   + premiums earned
   + premium supplements
   – claims payable
   – adjustments for claims volatility (equalization fund).

Table 1: Supervisory data (profit and loss accounts data) used by NA – overall business for non-life insurances

Item	Rule	Amount in million € (2010)
Premiums earned	+	57,744
Premium supplements	+	7,986
Claims payable	-	35,921
Adjustment for claims volatility	-	208
SERVICE	**=**	**29,601**
Memorandum Items:		
Premiums received		57,823
Claims paid		36,111
Change of insurance technical reserves		-111

2. To make these data usable for BoP purposes we need to come back to data collected via the external sector statistics. They give us the information on cross border transactions with respect to countries. This information will serve us to make a distinction between national and international business and to provide us with a geographical breakdown.

Table 2: Reported data on premiums received from the external sector statistics of the BoP

Cross border transactions (2010)	Premiums received (in million €)
Overall	1,075
United Kingdom	245 (23%)
USA	148 (14%)
Austria	83 (8%)
Netherlands	74 (7%)
Swiss	68 (6%)
France	53 (5%)
…	…

International business is derived by calculating the share of premiums received reported to BoP in the overall premiums received.

In our example that leads to a share of

1,075 / 57,744 = 1.86 %

The result for BoP is shown on the right column of table 3.

Table 3: Calculation of international business

Item	Rule	Amount in million € overall (2010)	Amount in million € external (2010)
Premiums earned	+	57,744	0,0186x57,744=1,074
Premium supplements	+	7,986	148.5
Claims payable	-	35,921	668.1
Adjustment for claims volatility	-	208	3.9
SERVICE	**=**	**29,601**	**550,6**
Memorandum Items:			
Premiums received		57,823	1,075
Claims paid		36,111	671.7
Change of insurance technical reserves		-111	-2.0

Since supervisory data are only available relatively late, it is our intension to estimate monthly figures as well as the geographical breakdown on the basis of a moving average for external sector statistics' information. As soon as more complete data are available we will revise the provisional figures in line with NA. This should not lead to bigger revisions since the development of the contracts and the payments related to it are relatively stable.

In addition to the services identified there will be bookings in the primary income account for the premium supplements and bookings in the secondary income for the net premiums and claims payable. Changes of the technical reserves will be put into the financial account, the stocks themselves in the IIP.

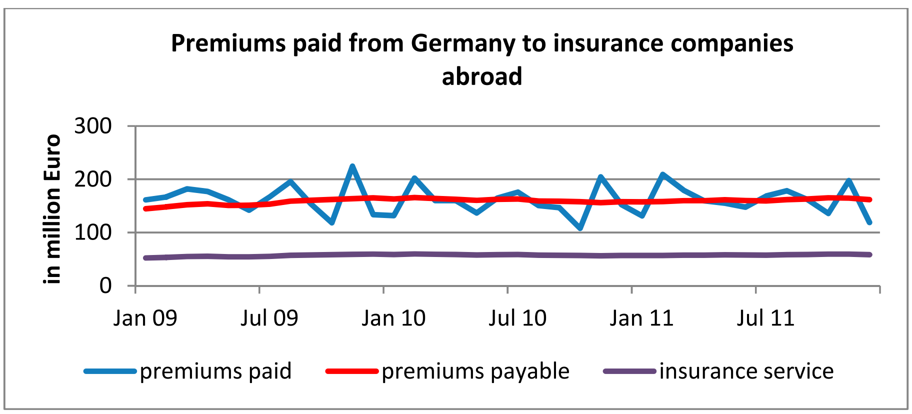
2.2. Insurance imports

In case of insurance imports the situation is completely different from the one described above. NA are lacking any kind of administrative data. Therefore the data available from the external sector statistics are those to be used and are immediately available on a monthly basis. They are, however, not detailed enough and need to be supplemented by several types of estimates:

– Adjustments for premiums paid to premiums payable
– Estimates for premium supplements
– Estimates for changes of insurance technical reserves
– Estimates on the stock of insurance technical reserves.

1. The first step is to smooth the premiums paid, which are relatively volatile, to premiums payable by using a 12 months moving average. The decision is related to the fact that premiums usually are paid in advance for one year.

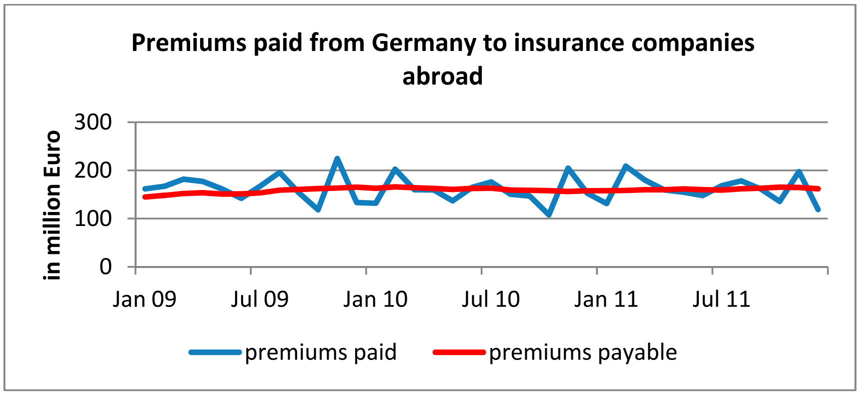
2. The second step is to apply the ratio of premiums earned to service derived from the export side to the smoothed premiums of the import side, which is in line with suggestions of BPM 6.



3. The technical reserves represent the amounts identified by insurance companies to account for prepayments of premiums and claims occurred, but not yet paid.

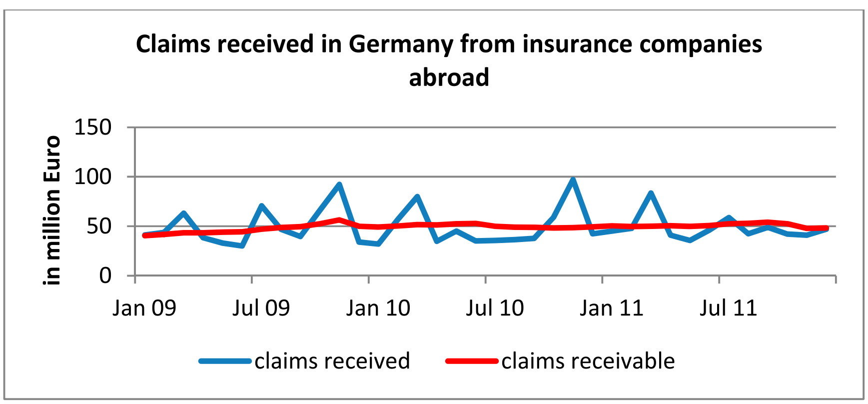
   We intend to use the same approach as for smoothing premiums paid to premiums payable for the two components which contribute to the development of technical reserves, the premiums paid to insurance companies abroad and the claims received.

Premiums received but not yet earned



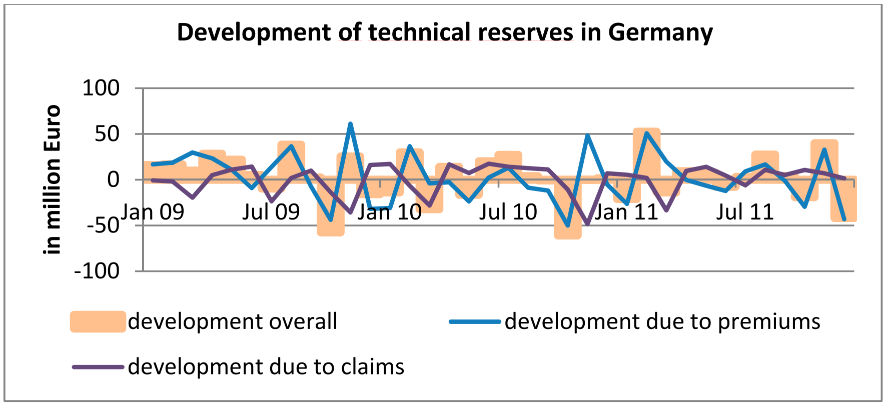
If the premiums paid are bigger than the premiums payable the technical reserves increase, if it is the other way round, they decrease.

Claims occurred but not yet settled



If the claims received are bigger than the claims receivable the technical reserves decrease, if it is the other way round, they increase.

The sum of the changes of technical reserves will have to be recorded in the financial account.



4. There is still a need to estimate premium supplements as the interest on technical reserves. There are two ways to make this calculation:

   – Calculation interest on the estimated stock of technical reserves
   or
   – Applying a ration on the premiums payable derived from the export side.

   Our intention is to make use of the second possibility since it is immediately available.

3. Financial intermediation services indirectly measured = FISIM

As mentioned at the very beginning of this paper NA have compiled FISIM since 2005, whereas BoP did not have to do it according to BPM5. We now both face the same requirements. In the meantime a lot of discussions have taken place, different Task Forces have been created to decide upon the final way to calculate FISIM appropriately. This paper is not the prepared to report on the whole developments, it presents the solution we have decided upon in Germany.

The current conventions are the following:
FISIM are only produced by the sub-sectors "Other monetary financial institutions" and "Other financial intermediaries" excluding insurance corporations and pension funds. The production of FISIM is solely based on loans and deposits. FISIM result as difference between actual interests and fictive interests calculated on the basis of a reference rate. This reference rate is intended to be free of any service charge. It is normally equal to the average interbank rate, which should fulfill this requirement. But in the context of cross-border interest payments a special "external reference rate" should be used, depending on the currencies involved.

As a starting point for exports the balance sheets of the domestic banks are taken from the monetary and banking statistics, with regard to the sectoral breakdown they are rearranged in accordance with the financial accounts. Then a weighted average of overnight money, Euribor and bank bonds is applied on the adjusted stocks, and interest flows excluding FISIM are estimated. Compared with the observed respective interest flows of the BoP, the remaining figure is the value for FISIM. For the geographical breakdown the distribution of the BoP flows is used – similar to the approach in case of insurance services.

For imports the basis information is coming from the IIP, as reference rate the average rate of IMF deposit and lending rates is used.

Our colleagues from National Accounts have made calculations based on these methods for the year 2000. As a result they have come up with an overall amount of FISIM exports of 2,4 billion Euro and an import of 1.1 billon Euro. The following table 4 shows how these values are derived from assets and liabilities.

Table 4: Recording of FISIM

Bank services provided by	Adjustments to interest received or paid	Value in bn. € (2000)
Domestic banks to foreign borrowers	Interest actually received has to be reduced by FISIM	minus 4.2
Foreign banks to domestic depositors	Bank services provided by	plus 1.1
Balance	Total adjustment of of crossborder interest received	minus 3.1
Foreign banks to domestic borrowers	Interest actually paid has to be reduced by FISIM	minus 1.0
Domestic banks to foreign depositors	Interest actually paid has to be increased by FISIM	plus 2.4
Balance	Total adjustment of of crossborder interest received	plus 1.4

4. Summary

To sum up: In preparation of the change-over to BPM6 the general decisions have been taken how to estimate insurance services and FISIM. This has been done in close cooperation between the two institutions involved, the Federal Statistical Office and the Deutsche Bundesbank. As it has been mentioned many times in the BOPCOM the European countries are preparing a big bang for 2014. That means in practice from our side: changes in the legal basis have been brought forward to the respective bodies involved in the process, a completely new compendium of transactions/stocks to be reported has been prepared, the companies have been contacted by individual letter (about 50.000 companies). The technical processes are under review. SDMX is prepared as basis for data delivery. In 2013 the last details will have to be clarified for the transition process.

For insurance and FISIM the technical procedures will have to be developed how to estimate especially data for the current month and for a geographical breakdown and they will be tested. In general terms the BoP will rely on framework data of NA for insurance exports and FISIM and will provide information to the NA for insurance imports. A continued close cooperation will assure the consistency of the results.