

Statistics on Insurance Corporations and Pension Funds: the Bundesbank Experience

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Summary

In an era of ageing societies and pension reforms, the economic importance of insurance corporations and pension funds (ICPF) is increasing and their role in financial markets growing. Users of financial statistics thus require more timely and more complete data on this (sub-)sector for monetary and financial stability analysis than currently provided in the quarterly financial accounts. To meet these demands without adding to the statistical response burden of the ICPF sector, the European System of Central Banks (ESCB) is at present working on a short-term approach to improve ICPF statistics, making maximum use of available sources with only limited harmonisation at this stage. However, the provision of data under this approach poses challenges, especially given that source data used are often collected for purposes other than ICPF statistics or even from other (supervisory) authorities. The paper presents the evolution of ICPF statistics at the Bundesbank in the context of financial accounts and the ESCB short-term approach, with special emphasis on the institutional arrangements, the enhanced use of national statistical sources (ICPF supervisory statistics, securities deposits statistics) and possible future improvements.

1. Statistics on ICPFs in the ESCB

To support the tasks of the ESCB, the European Central Bank (ECB) and the national central banks (NCBs) collect statistical information as stipulated in Art. 5 para.s 1 and 2 of the Statute of the ESCB and the ECB. The (potential) reporting population is further specified in Article 2.2 of Council Regulation (EC) No 2533/98 as in particular “legal and natural persons falling within the sub-sectors ‘central bank’, ‘other monetary financial institutions’ and ‘other financial intermediaries, except insurance corporations and pension funds’”. Thus, at present ICPFs cannot be directly addressed by ESCB legislation. However, NCBs are obliged to report data on ICPFs to the ECB in the field of quarterly financial accounts under Guideline ECB/2002/7 (as amended).

1.1 ICPF Sector as (Sub-)Sector in Quarterly Financial Accounts

Quarterly financial accounts show how the domestic sectors and the rest of the world are interrelated. They link the analysis of monetary aggregates with that of all financial investments in the economy. Therefore all financial transactions and financial balance sheets are compiled for all (main) sectors outlined in the European System of Accounts (ESA 95).²

Financial accounts are compiled using data from various existing statistics. These source data collections may be based either on European (ESCB or EU) law or on national law and may be run by NCBs or other national (statistical) authorities, depending on the national division of labour. Hence, in the case of ICPFs, data are often directly reported to the National Supervisory Authority (NSA). Additional “indirect” (counterpart) information on ICPFs, e.g. loans granted to ICPF, can be provided by NCBs using other financial statistics, e.g. MFI³ balance sheet statistics.

While all institutional sectors as well as all financial assets and liabilities are covered in quarterly financial accounts, less information is available on instrument, maturity and geographical breakdowns and on counterpart sectors (“whom-to-whom” information). Further, under Guideline ECB/2002/7 (as

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² ESA 95 sectors: Non-financial corporations (S.11); Financial corporations (S.12), Sub-sectors: The central bank (S.121), Other monetary financial institutions (S.122), Other financial intermediaries, except insurance corporations and pension funds (S.123), Financial auxiliaries (S.124), Insurance corporations and pension funds (S.125); General government (S.13); Households (S.14); Non-profit institutions serving households (S.15); Rest of the world (S.2). S.14 and S.15 merged in quarterly financial accounts.

³ Monetary financial institution (MFI) as defined in Regulation ECB/2008/32.

amended) data are transmitted by NCBs to the ECB with a timeliness of 110 calendar days after the end of the quarter to which the data relate. For monetary and financial stability analysis, on the other hand, users of financial statistics demand more timely and more complete data on the ICPF sector than currently provided.

1.2 ESCB Statistics on ICPFs: the Short-Term Approach

To meet evolving user needs, the ESCB is at present working on a short-term approach to improve data availability for ICPFs. In order to achieve these goals, maximum use is being made by the NCBs of all available sources, with only limited harmonisation at this stage. The ECB and NCBs have jointly developed a reporting scheme that is considerably more detailed than requirements for ICPFs under quarterly financial accounts. In particular, these new balance sheet statistics contain further information on the counterpart area (domestic, other monetary union member states, rest of the world), counterpart sector (S.11, S.121+S.122, S.123+S.124, S.125, S.13, S.14+S.15) and maturity breakdowns, also reflecting their use for both monetary and economic analysis. Moreover, the timeliness was enhanced to t+85 calendar days for national contributions and to t+90 calendar days for euro area early estimates.

Again, there is a trade-off between timeliness/scope and quality as the compilation draws on already existing sources, without increasing the statistical response burden of reporting agents. In that respect, more data are estimated under the short-term approach and data differences in comparison to the quarterly financial accounts may arise due to (i) the enhanced timeliness, (ii) different valuation criteria⁴ and (iii) the balancing process in financial accounts. The application of appropriate estimation techniques is essential under the short-term approach. Although compilation is harmonised only to a limited extent, the common reporting scheme was defined and some conceptual issues such as the treatment of reinsurance operations, non-consolidated reporting or host vs. home approach have been agreed as preferred common standards.

2. Statistics on ICPFs at the Bundesbank

In Germany the statistical basis for financial accounts and the ICPF statistics under the short-term approach is provided by a variety of already existing statistics, many of which are compiled at the Bundesbank⁵ (monetary and financial statistics, balance of payments statistics, international investment position, security deposit statistics, enterprise balance sheet statistics etc.). However, one of the main sources of data on the ICPF sector is provided by Germany's Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht, better known by its abbreviation BaFin), which is responsible for insurance supervision. As the ICPF supervisory statistics of BaFin and the securities deposits statistics at the Bundesbank are the main statistical sources for the compilation under the short-term approach, they and their (enhanced) use are described in the following, after a short description of the German ICPF market.

2.1 German ICPF Market⁶

For a better understanding of ICPF statistics, some data on the German ICPF market might be helpful:

- The reporting population for ICPF supervisory statistics (under BaFin supervision)⁷ in 2008 consisted of 413 insurance corporations, 153 pension undertakings, 41 reinsurers and 27 pension funds⁸.

⁴ Deposits and loans should be reported at nominal value (excluding accrued interest).

⁵ While the financial accounts section is located in the Economics Department, Monetary Policy Division, the ICPF statistics under the short-term approach are compiled in the Statistics Department, Banking and External Stock Statistics Division.

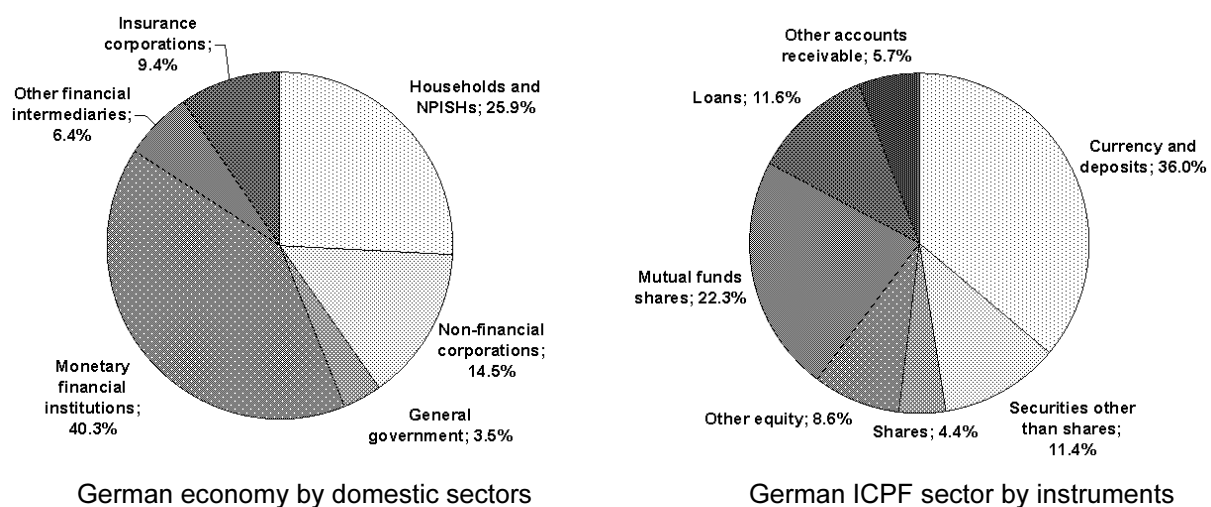
⁶ For data on reporting population and on market shares, see Jahresbericht der BaFin '08 and Statistik der BaFin – Erstversicherungsunternehmen '07. For data on total financial assets and instrument breakdowns, see Financial Accounts for Germany 1991 to 2008 (Deutsche Bundesbank).

⁷ Small mutual societies which operate on a mainly regional basis are not included.

⁸ In Germany, pension undertakings and pension funds (under German law) constitute the ESA 95 statistical category "(autonomous) pension fund".

- The market share of the ten largest groups was 50.6% in life insurance, 68.3% in health insurance and 44.3% in casualty, property and accident insurance in 2007. For reinsurance the largest group covered 42.3%, the five largest groups covered 79.2% and the ten largest groups 91.9% of the market.
- In Germany, the market share of business lines (without reinsurance) measured by gross premiums in 2007 was 47.0% for life insurance (incl. pension undertakings), 17.2% for health insurance and 35.8% for property and casualty insurance.
- The percentage breakdown by domestic sectors of the German economy's total financial assets⁹ at the end of 2008 is shown in Graph 1 (left side).
- In Germany, total financial assets¹⁰ for ICPFs at the end of 2008 were 1594.8 billion euro. The respective percentage breakdown by instrument category¹¹ is shown in Graph 1 (right side).

Graph 1 (Percentage) Breakdowns of Financial Assets (2008)¹²



2.2 ICPF Supervisory Statistics

ICPFs send quarterly and annual reports directly to BaFin, Germany's Federal Financial Supervisory Authority, mainly for supervisory purposes. BaFin then uses these individual reports to compile ICPF supervisory statistics. At aggregated level these statistics are shared in a spirit of good cooperation with the Bundesbank in order to fulfil statistical requirements of the latter in, for instance, the field of (quarterly) financial accounts or ESCB ICPF statistics under the short-term approach.

As data are collected for supervisory (non-statistical) purposes, statistical requirements can be met to only a limited extent. Most asset-side items are available on a quarterly basis, whereas liabilities are available only annually. The major caveats refer to the timeliness of data and available breakdowns. Aggregated data are provided by BaFin to the Bundesbank 9 months after the reference year (for annual data) and about 100 calendar days after the reference month for quarterly data. Breakdowns are only available for instruments (approx. ESA 95 classifications) but cannot be provided by the BaFin for counterpart sectors, residency (domestic, euro area, rest of the world) or maturity. To a degree, counterpart sectors can be derived from the particularities of the underlying instrument, e.g. some instruments can only be issued by specific sectors. The implications of the "home approach"

⁹ Insurance technical reserves are netted out in the compilation of total financial assets and shown under "Liabilities". (Under the short-term approach insurance technical reserves are shown gross.)

¹⁰ See Footnote 9.

¹¹ ESA 95 instruments: Monetary Gold and special drawing rights (SDRs) (AF.1); Currency and deposits (AF.2); Securities other than shares (AF.3); Loans (AF.4); Shares and other equity (AF.5), Sub-categories: Shares and other equity, excluding mutual funds shares (AF.51), Mutual funds shares (AF.52); Insurance technical reserves (AF.6); Other accounts receivable/payable (AF.7).

¹² Financial Accounts for Germany 1991 to 2008 (Deutsche Bundesbank) and own calculations.

typically used for supervisory purposes rather than the statistical “host approach” are regarded as relatively minor.¹³

In order to enhance timeliness and data breakdowns of ICPF supervisory statistics, the Bundesbank is in contact with BaFin. Although in the current institutional setting agreements on transmission dates can not be binding, BaFin might in the future provide (preliminary) ICPF supervisory statistics to the Bundesbank with an enhanced timeliness. The Bundesbank plans to incorporate these more timely data in the regular production of ICPF statistics once the new transmission cycle has stabilised. Amendments to the national reporting schemes are envisaged for 2010 to gain more information on counterpart sector, geographical and maturity breakdowns. Although improvements are not easy to be achieved, in particular, as reporting agents and policy makers prefer a reduction in the (statistical) response burden.

2.3 Securities Deposits Statistics at the Bundesbank

The securities deposits statistics (SDS) at the Bundesbank are legally based on two ECB Guidelines relating to external statistics and financial accounts and national law.¹⁴ Data are collected via a security-by-security (s-b-s) system, the core of which is the combination of issue/issuer and holder information. Holder data (on individual securities) provided by reporting agents are matched via a unique identifier (International Securities Identification Number (ISIN)) with data in the Centralised Securities Database (CSDB)¹⁵. For SDS, the CSDB is the single source of price and reference data.

S-b-s production of SDS at the Bundesbank started with the fourth quarter of 2005. Holder information for debt securities and (mutual fund) shares is collected from custodians on a quarterly basis. About 2,000 reporting agents (MFIs and other custodians) in Germany provide information on their own holdings and those of their customers. The latter are reported in partial aggregates by holder sector and country. About 400,000 unique securities are processed per reporting period – they are initially grouped by ISIN number and then further aggregated on the basis of CSDB data. Holdings of securities, shares, other equity and mutual fund shares are aggregated by sector (according to ESA 95 classifications). The information stored in the CSDB can be broadly classified into two categories: i) reference data; i.e. issuer attributes (ESA 95 Issuer Sector, Issuer Country etc) and instrument attributes (ESA 95 Instrument Classification, Nominal Currency etc) and ii) price data.

SDS data are available with a timeliness of t+70 and thus much earlier than ICPF supervisory statistics (ICPF). As holder information collected from reporting agents and reference data (on issues and issuer) stored in the CSDB can be matched and compiled on an s-b-s basis, SDS can provide detailed counterpart sector, geographical and maturity breakdowns. For the compilation of ICPF statistics under the short-term approach the counterpart breakdown and the geographical breakdown (domestic, non-resident) are already available. The geographical breakdown (other monetary union member states, rest of the world) and the enhanced maturity breakdowns (beyond ESA requirements) are currently being implemented. However, the totals derived from SDS do not cover all holdings of ICPFs, as securities not held at MFIs or other custodians or held abroad are not included in SDS. The totals are therefore smaller than those provided by the ICPF supervisory statistics and have to be adjusted, yet they represent valuable and timely input for the derivation of best estimates for counterpart sector, geographical and maturity breakdowns.

¹³ Under the host approach the residential criterion is followed and only business in the reporting country should be included. In contrast, under the home approach (in EU insurance supervision), also business abroad by branches of domestically owned entities and foreign owned entities (subsidiaries) is included, but business in the reporting country by branches of foreign (EU) owned branches is excluded.

¹⁴ ECB/2002/7 (as amended) in the field of quarterly financial accounts and ECB/2004/15 (as amended) in the field of balance of payments and international investment position statistics, and the international reserves template. Bundesbank Act, Section 18 “Collection of statistics”.

¹⁵ The CSDB has been established and is maintained by the ESCB to be the single reference securities database in the ESCB. It aims to cover all debt securities, shares and mutual fund shares issued or held by euro-area residents, as well as all instruments denominated in euro.

2.4 Estimations for ICPF Statistics under the Short-Term Approach

ICPF supervisory statistics are one of the main sources of information for the production of ICPF statistics. Still, despite enhancements in timeliness and breakdowns of this source, significant data gaps remain. Under the short-term approach, anchor data (instrument totals) for the reference quarter are at present extrapolated (by applying an ARIMA model) from supervisory data relating to the preceding quarter. The size of revisions for these estimated totals differs between series. In general, for less volatile series, e.g. insurance technical reserves, estimates are satisfying, but for more volatile series, e.g. securities, the results are mixed. However, if BaFin were to transmit data more timely on a regular basis, reported anchor data could be used.

Under the short-term approach the Bundesbank broadens the use of existing sources and enriches data with estimations on an ongoing basis. In particular, to compile securities positions, the Bundesbank uses data collected for the SDS. Further breakdowns are estimated by applying proportions derived from SDS to estimated anchor data derived from supervisory data. Geographical breakdowns of insurance technical reserves are estimated based on premiums collected for balance of payments statistics.

3. Summary and Outlook

The ESCB is currently working to improve the availability of ICPF data, in particular by improving the timeliness and increasing the level of detail. Source data are being exploited to a larger extent and estimation techniques refined.

In Germany, the timeliness and the availability of breakdowns have also been enhanced, although data are largely estimated and there is still room for further improvement. Additional (estimated) breakdowns (geographic, maturity) derived from the SDS are envisaged. Nevertheless, the trade-off between timeliness and quality also applies for ICPF statistics at the Bundesbank. On the other hand, if BaFin data were available on a timelier basis, quality could be improved considerably, even at a timeliness of t+85 calendar days.

Up to now, the work under the short-term approach at the Bundesbank has focused mostly on the provision of stock data. However, efforts in the area of financial transactions (some based on SDS) are also intensified, in particular because users are very much interested in deriving meaningful growth rates based on that data.

Given the existing institutional arrangements and the current legal basis, there are limits to the ICPF statistics at the Bundesbank under the short-term approach. Still, enhanced national contributions might give valuable input towards deriving and estimating meaningful euro area aggregates.

References

1. BaFin (2009a), *Statistik der BaFin – Erstversicherungsunternehmen '07* (German only).
2. BaFin (2009b), *Jahresbericht der BaFin '08* (German only).
3. Deutsche Bundesbank (2009), *Financial Accounts for Germany 1991 to 2008*, Special Statistical Publication 4, June.
4. Council Regulation (EC) No 2223/96 of 25 June 1996 on the *European system of national and regional accounts in the Community*. [European System of Accounts, ESA 95]
5. Council Regulation (EC) No 2533/98 of 23 November 1998 concerning the *collection of statistical information by the European Central Bank*.
6. Guideline of the ECB of 21 November 2002 on the *statistical reporting requirements* of the European Central Bank in the field of *quarterly financial accounts* (ECB/2002/7) (as amended).
7. Guideline of the ECB of 16 July 2004 on the *statistical reporting requirements* of the European Central Bank in the field of *balance of payments and international investment position statistics*, and the *international reserves template* (ECB/2004/15) (as amended).
8. Regulation (EC) No 25/2009 of the European Central Bank of 19 December 2008 concerning the *balance sheet of the monetary financial institutions sector* (Recast) (ECB/2008/32).