

Information paper

Summary Quality Report for Insurance Companies, Pension Funds & Trust survey releases

1 Introduction

This report is part of a rolling programme of quality reports being introduced by the Office for National Statistics (ONS). The full programme of work being carried out on [Statistical Quality](#)¹ is available on the National Statistics website. Summary Quality Reports are overview notes which pull together key qualitative information on the various dimensions of quality as well as providing a summary of methods used to compile the output.

The report relates to quarterly and annual surveys of insurance companies, pension funds and trusts conducted by ONS. There are 17 surveys covered by this report:

- Quarterly Insurance Companies: Long Term Funds: Transactions
- Quarterly Insurance Companies: General Funds: Transactions
- Quarterly Insurance Companies: Long Term Funds: Income & Expenditure
- Quarterly Insurance Companies: General Funds: Income & Expenditure
- Quarterly Pension Funds: Transactions
- Quarterly Pension Funds: Income & Expenditure
- Quarterly Unit Trusts: Transactions
- Quarterly Investment Trusts: Transactions
- Quarterly Property Unit Trusts: Transactions
- Annual Insurance Companies: Long Term Funds: Balance Sheet
- Annual Insurance Companies: General Funds: Balance Sheet
- Annual Insurance Companies: Long Term Funds: Income & Expenditure
- Annual Insurance Companies: General Funds: Income & Expenditure
- Annual Pensions Funds: Balance Sheet
- Annual Unit Trusts: Balance Sheet
- Annual Investment Trusts: Balance Sheet
- Annual Property Unit Trusts: Balance Sheet

Quarterly financial transactions surveys collect information on the acquisition and realisation of financial assets (investments) and some balance sheet information on short term assets and liabilities. The quarterly transactions surveys are complemented by annual balance sheet surveys which provide information on the value of assets and liabilities at the end of the calendar year. Quarterly and annual income and expenditure surveys provide information on, for example, insurance premiums and claims; pension contributions and benefits; and investment income.

2 Summary of quality

2.1 Relevance

The degree to which the statistical product meets user needs for both coverage and content.

The surveys are conducted on a sample, not census, basis. Information is collected from businesses on paper questionnaires on a statutory basis under the [Statistics of Trade Act 1947](#)².

Insurance Companies

The figures for long-term funds include items relating to shareholders' funds in respect of pure life groups of companies. For other companies these items are consolidated into the figures for general funds.

Pension business of insurance companies includes both 'insured funds' and 'insurance managed funds' business. 'Insured funds' belong to pension schemes where the scheme's trustees hold, as a sole asset, an insurance policy contract or an annuity contract. All the scheme's assets are held in one insurance company and have a guaranteed level of return. Fully insured funds are excluded from the pension funds surveys. 'Insurance managed funds' are also included in the pension funds statistics.

Pension Funds

These statistics relate to the self-administered pension and superannuation funds of the private sector and to the funded, self-administered schemes of local authorities and employees previously employed in the nationalised industries. The main superannuation arrangements in central government are unfunded and these are excluded from the statistics. Fully insured funds are also excluded but their activity is included in figures for insurance companies' long-term business. A self-administered pension scheme is defined as an occupational pension scheme with units invested in one or more managed schemes or unit trusts. The trustees of these types of schemes can employ either an in-house fund manager to make the day-to-day investment decisions or they can opt to use an external manager to manage the investment. Respondents are asked to make returns covering financial assets of funds whose investment policy is managed from within the United Kingdom.

Trusts

Unit trusts statistics include open ended investment companies but they do not cover other unitised collective investment schemes (eg unauthorised funds run on unit trust lines by, for example, securities firms and merchant banks, designed primarily for the use of institutional investors) or those based offshore (Channel Islands, Bermuda etc.) or in other EU Member States.

The primary use of data from the insurance companies, pension funds and trusts surveys is in the Financial and Sector Accounts and the compilation of Gross Domestic Product (GDP) estimates within the UK National Accounts and the Balance of Payments. There are numerous other users within and outside government who use the data to produce various financial analyses and to inform policy decisions. Such users include:

- Bank of England
- HM Treasury
- Department for Work & Pensions
- Association of British Insurers
- Scottish Executive
- Department for Business, Innovation and Skills
- European Union's Statistical Office (Eurostat)
- Organisation for Economic Co-operation & Development (OECD)
- European Central Bank
- City analysts, forecasters, institutional investors and fund managers
- Academics and students

2.2 Accuracy

The closeness between an estimated result and the (unknown) true value.

Questionnaires for the quarterly insurance companies, pension funds and trusts surveys are despatched at the end of the period to which they relate. Questionnaires for the annual insurance companies and pension funds surveys are despatched in the March after the end of the reference year, whereas the annual trusts survey questionnaires are despatched in the January after the end of the reference year. To try to minimise non-response bias, all quarterly and annual surveys issue one paper reminder letter followed by telephone/fax response chasing. There is also the possibility of using the legal powers of the [Statistics of Trade Act 1947](#)² to force response, though ONS prefers to work together with businesses to produce the necessary information.

Returned respondent data are run through a series of validation tests to try to identify potential errors. The tests are designed to check whether all of the data required have been provided; whether the period of returns meet certain criteria; and that the returned data are credible. The tests also compare returned data with previous data for each respondent. Data that fail the tests are identified for further action. Where failures are judged potentially significant to survey results, they will be queried with respondents, with the aim of correcting (editing) or confirming the original data.

Data revisions and survey response rates are available in the Investment by [Insurance Companies, Pension Funds and Trusts Statistical Bulletin](#)³

The introduction of annual survey results leads to revisions, both to income and expenditure, and to transactions data. For income and expenditure, the revisions are due to the incorporation of the annual insurance survey results, which are based on larger samples and also, generally reflect audited accounts. Revisions to transactions data are in the main, due to problems with quarterly misreporting of data by businesses, which are identified as part of the quality assurance of the annual survey data.

For each 'set' of surveys (for example, quarterly transactions and quarterly income and expenditure surveys for pension funds) there is a common sample, but each survey is conducted independently, which can result in different response rates. In some instances individual survey questionnaires are completed by different people within the business, and with limited linkage within existing systems between the surveys at the individual respondent level. Therefore, there can be discrepancies at an aggregate level between the numbers emerging from the transactions and income and expenditure surveys. The set of annual surveys includes balance sheet data from the insurance companies and pension funds sectors. This allows the data to be 'aligned' so that transactions, income and expenditure and the balance sheet are consistent. The alignment process assumes that the transactions data are the weakest of the three strands of information and therefore take the necessary adjustment. This has been confirmed by contact with respondents when data have been queried.

A table in the [Investment by Insurance Companies, Pension Funds and Trusts MQ5 Business Monitor](#)⁴ shows the average values and revisions, over the last five years, arising from the take-on of the annual survey results.

2.3 Timeliness and Punctuality

Timeliness refers to the lapse of time between publication and the period to which the data refer. Punctuality refers to the time lag between the actual and planned dates of publication.

The [National Statistics Release Calendar](#)⁵ is available on the National Statistics website and provides twelve months advance notice of releases. The insurance companies, pension funds and trusts surveys consistently meet publication deadlines.

The [Investment by Insurance Companies, Pensions Funds and Trusts Statistical Bulletin](#)³ is published just under three months after the reference period, and a more detailed [Investment by Insurance Companies, Pension Funds and Trusts MQ5 Business Monitor](#)⁴ publication a couple of weeks later.

The survey results timetable is geared to meet the requirements of the National Accounts. Results of the surveys are used in the [National Accounts Statistical Bulletin](#)⁶, which is published a day after the Insurance Companies, Pension Funds and Trusts Statistical Bulletin.

2.4 Accessibility and Clarity

Accessibility is the ease with which users are able to access the data, also reflecting the format(s) in which the data are available and the availability of supporting information. Clarity refers to the quality and sufficiency of the metadata, illustrations and accompanying advice.

The quarterly transactions and annual balance sheet data are published initially in an [Investment by Insurance Companies, Pension Funds and Trusts Statistical Bulletin](#)³ which is freely available from the National Statistics website.

More detailed quarterly and annual data (including income and expenditure) are available in the [Investment by Insurance Companies, Pension Funds and Trusts MQ5 Business Monitor](#)⁴ which is also freely available from the website.

There are various start dates for different data series across the surveys. The net investment headline figure on Investment by Insurance Companies, Pension Funds & Trusts Statistical Bulletin is available from 1987 Quarter 1.

All data contained in the Statistical Bulletin and Business Monitor publications are released to the Time Series area of the National Statistics website on the day that the Statistical Bulletin is published.

Further queries can be addressed to the named contacts on the Statistical Bulletin and Business Monitor publications.

Various data series from all the surveys also contribute to publications covering GDP; the Balance of Payments; and Financial and Sector Accounts. These include the [Blue](#)⁷ and [Pink](#)⁸ Books; [Financial Statistics](#)⁹; and the [Annual Abstract of Statistics](#)¹⁰.

2.5 Comparability

The degree to which data can be compared over time and domain.

From the first quarter of 1998, in order to comply with the requirements of the [European System of Accounts \(ESA\(95\)\)](#)¹¹, all the financial institutions survey questionnaires were changed to collect additional asset breakdowns.

Insurance Companies

A Pension Contributions Statistics Review was carried out in 2002. One of the main drivers behind this review was to address the problem of double counting within the total pension contributions data series. Total pension contributions made to funded schemes cannot be derived by summing pension premiums reported by insurance companies and contributions reported by pension funds. To do so would result in double counting since pension business premiums from insurance companies include any premiums (including transfers) received from pension funds and any transfers within the long-term insurance sector. More information on this and on other work undertaken to improve pension statistics as part of the [2002 Pension Contributions Statistics Review](#)¹² is freely available on the National Statistics website.

As part of the action plan following the [2002 Pension Contributions Statistics Review](#)¹² the questionnaires used to collect data from businesses were updated, from the first quarter of 2004, to include more detailed questions and new guidance. The background to these changes was discussed in an article "[Private Pension Estimates and the National Accounts](#)"¹³ which was published on 30 June 2004. The article presented preliminary estimates of total pension contributions from 1995 to 2002 on a new definition that embraces all private pensions. The estimates showed substantial changes compared with previous statistics but remain subject to a high degree of uncertainty. The article also described the main sources of statistics on flows of pension contributions and examined changes to pensions components in the National Accounts and the potential impact of all changes on the main aggregates, gross domestic product and the saving ratio.

This article was first updated in July 2005 and published under the title "[Private Pension Contributions: Updated Estimates, 1996 – 2004](#)"¹⁴. The article was updated again in April 2007, and was entitled "[Private Pension Contributions, Updated Estimates, 1996 – 2005](#)"¹⁵. The updated articles describe work undertaken since the initial publication and include more recent data.

The main changes in relation to pension questions on the quarterly surveys were to the long term insurance funds income and expenditure questionnaires and are summarised below:

- New questions on premium income and claims from insurance managed funds business;
- Separate data on minimum contributions received from the National Insurance Contributions Office (formerly known as Department of Social Security or DSS rebates) and bulk buyouts;

- More detailed guidance on what should be reported under personal and occupational pensions business.

The revised questions and guidance provide a fuller and more accurate breakdown of income.

In addition to the changes to the quarterly questionnaires, new questions were included in the annual survey of long-term insurance funds' income and expenditure. The new questions are:

- A breakdown of:
 - individual/personal pension premiums by type of pension: personal pensions; stakeholder pensions; group personal pensions and other pensions;
 - occupational pension premiums by type of pension: defined benefit; defined contribution and hybrid;
- Transfers in of:
 - individual/personal pension business included in premiums figures;
 - occupational pension business included in premiums figures;
- Transfers out of:
 - individual/personal pension business included in claims figures;
 - occupational pension business included in claims figures.

The ONS is continuing to work with the insurance industry to improve the level and quality of response to these questions. Response to the questions on transfers (listed in the last two bullet points above) is still too unreliable to be published as a reliable estimate of the activity.

Given the quality of the response to the transfers questions, the figures included in the ["Private Pension Contributions, Updated Estimates, 1996 – 2005"](#)¹⁵ article remain the best estimates of overall net pension contributions.

More information on the reporting issues was published in an article ["Response to consultation on insurance companies' recording of pensions transactions"](#).¹⁶ The article summarised the response to a consultation note published in January 2004. The note was circulated widely to the Association of British Insurers (ABI), the National Association of Pension Funds (NAPF) and to academics and policy researchers in the pensions field. Meetings were held with insurance companies and the ABI, and with NAPF and members of their Investment Council.

Pension Funds

In 1998/9 there was a project to review the methodology of the surveys into pension funds. The work concentrated on establishing a definitive source of information on all self-administered pension funds and generating a new sample design based on this population. The resulting population estimate was based on information from a variety of sources including the National Association of Pension Funds (NAPF) and the Occupational Pensions Regulatory Authority (OPRA).

Further work was conducted on the pension funds series in 2002 following work on the sampling frame and population. The resulting series represent the best estimates from the survey but, given the uncertainty of the register, they are less reliable than other series derived more conventionally by weighting sample estimates to register totals. A technical note on the [Pension Funds Survey](#)¹⁷ is available on the National Statistics website, and describes some of the methodological issues surrounding the pension funds surveys and the basis of the figures published in 2002.

During 2008, a review of the quarterly and annual insurance companies and pension funds surveys was completed. The aim was to better reflect European requirements and new international

accounting standards, while also taking the opportunity to improve aspects of the survey methodology. Following the review, improved quarterly questionnaires were introduced in respect of the first quarter of 2009. The new annual questionnaires will come into force in respect of the 2009 survey year.

The changes from this review are

- Cash Liquidity funds are now included in 'any other liquid deposits'.
- Banks and building societies have been merged into single questions.
- Derivatives – the annual series split between UK and overseas counterparties will be replaced with a split between products (assets and liabilities) and the quarterly series split between products will be replaced with a split between UK and overseas counterparties. The position of these questions has also changed on the quarterly questionnaire to the beginning of the transaction section.
- Gilts – change in maturity breakdown.
- Additional category for other UK mutual funds.
- Removal of loan question - of which loans to financial institutions.
- Changes to the fixed asset questions and fixed assets and investment required for all categories.
- The revised income and expenditure questionnaires take a more logical approach which is more comparable to accountancy standard reporting

2.6 Coherence

The degree to which data that are derived from different sources or methods, but which refer to the same phenomenon, are similar.

There are various external organisations that collect data for the insurance companies, pension and trusts sectors, such as the Association of British Insurers (ABI); the National association of Pension Funds (NAPF); and the Investment Management Association (IMA). The information collected by these organisations differs to that collected by ONS. The ONS surveys for these sectors are the only sources of data that collect the level of financial detail required to satisfy the requirements of the National Accounts.

3 Summary of methods used to compile the output

Quarterly financial transactions survey information includes the acquisition and realisation of financial assets (investments) and some balance sheet information on short term assets and liabilities. The quarterly transactions surveys are complemented by annual balance sheet surveys which provide information on the value of assets and liabilities at the end of the calendar year. Quarterly and annual income and expenditure surveys provide information on, for example, insurance premiums and claims; pension contributions and benefits; and investment income.

Sample size

Quarterly Transactions:

- Insurance Companies – 125 per quarter
- Pensions Funds – 350 per quarter
- Trusts – 140 per quarter

Quarterly Income & Expenditure:

- Insurance Companies – 125 per quarter
- Pension Funds – 350 per quarter

Annual Balance Sheet:

- Insurance Companies – 160 per year
- Pension Funds – 350 per year
- Trusts – 150 per year

Annual Income & Expenditure:

- Insurance Companies – 160 per year

Sampling frame

The ONS's Inter-Departmental Business Register (IDBR) is used to hold the finalised list of insurance companies, pension funds and trusts for selection, and to control the mechanics of questionnaire despatch for the surveys. It is not the source of the population or sample used in the surveys. The populations are held on standalone registers, which are part of the survey processing systems.

Insurance Companies:

The survey population is provided by the Financial Services Authority (FSA).

Pension Funds:

The sampling frame is created from the membership list of the National Association of Pension Funds (NAPF) as the main source, topped up with any non-NAPF members in the current ONS sample. However, the coverage of this population has been compared to the register of the Occupational Pensions Regulatory Authority (OPRA), in order to estimate for non-members of NAPF. The estimates from the survey for non-local authority funds are scaled up by a factor of 22 per cent to account for the under-coverage of the population.

Trusts:

The trusts survey populations are provided by the relevant trade associations: Investment Management Association (IMA); Association of Investment Companies (AIRC); Association of Property Unit Trusts (APUT).

Sample design

Insurance Companies:

A stratified random sample is used, with the value of premium income as the stratification variable. Insurance companies engaged in long-term business, whose premium income is £1 billion or more are always included in the sample. Similarly, insurance companies engaged in general business are always included in the sample if their premium income is £600 million or more. Composite insurance companies engaged in both long term and general business are always included in the sample if their premium income is £500 million or more. Stratified random sampling is used below these thresholds.

Pension Funds:

A stratified random sample is used, with fund membership as the stratification variable. All private and public corporation pension funds with a membership of 20,000 or more are always included in the sample. Funds with less than 20,000 members are sampled on a random basis. All local authority pension funds are included in the sample.

Trusts:

A stratified random sample is used, with market value of funds under management as the stratification variable for unit and investment trusts. All unit trusts fund managers with funds under management with a market value of £500 million or more are always included in the sample. Similarly, all investment trusts management companies with trusts under management with a market value of £200 million or more are always included in the sample. Stratified random sampling is used below these thresholds. The property unit trusts sample is not stratified due to the total population being small.

Weighting

Each sampled business across the insurance companies, pension funds and trusts surveys is used to represent a number of similar businesses or funds based on premium income (insurance companies), membership (pension funds) or funds under management (trusts).

Imputation

Across all the quarterly insurance companies, pension funds and trusts surveys, period on period movements are used to impute returns for non-responding businesses who have returned data for the previous period. If newly selected businesses fail to return data they are treated as non-selected and taken into account in the estimation procedure. In the case of the annual surveys, imputation takes into account equivalent quarterly data from individual businesses that might be available.

Estimation

Across all the insurance companies, pension funds and trusts surveys, after imputation for non-responders, ratio estimation is applied to produce estimates for the entire population by individual data variable.

Outliers

Across all the insurance companies, pension funds and trusts surveys, businesses supplying atypical or extreme returns are automatically identified as outliers and are treated using a one-sided winsorisation method. As some questions on the survey questionnaires can have both positive and negative returns, separate cut-off values for the winsorisation process are calculated for each sign.

4 References

	Title of Reference	Website location
1	Statistical Quality	http://www.ons.gov.uk/about-statistics/methodology-and-quality/quality/qual-info-economic-social-and-bus-stats/index.html
2	Statistics of Trade Act 1947	http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=14121&Pos=&ColRank=1&Rank=272
3	Investment by Insurance Companies, Pension Funds and Trusts Statistical Bulletin	http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=2351&Pos=1&ColRank=1&Rank=272
4	Investment by Insurance Companies, Pension Funds and Trusts MQ5 Business Monitor	http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=502&Pos=&ColRank=1&Rank=224
5	National Statistics Release Calendar	http://www.statistics.gov.uk/ReleaseCalendar/currentreleases.asp
6	National Accounts Statistical Bulletin	http://www.statistics.gov.uk/statbase/product.asp?vlnk=818
7	Blue Book	http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=1143&Pos=1&ColRank=1&Rank=272
8	Pink Book	http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=1140
9	Financial Statistics	http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=376&Pos=1&ColRank=1&Rank=422
10	Annual Abstract of Statistics	http://www.statistics.gov.uk/statbase/Product.asp?vlnk=94&More=N
11	European System of Accounts (ESA(95))	http://forum.europa.eu.int/irc/dsis/nfaccount/info/data/ESA95/en/esa95en.htm
12	2002 Pension Contributions Statistics Review	http://www.statistics.gov.uk/about/Methodology_by_theme/pensions_review.asp
13	Private Pension Estimates and the National Accounts	http://www.statistics.gov.uk/ci/article.asp?ID=910
14	Private Pension Contributions: Updated Estimates, 1996 – 2004	http://www.statistics.gov.uk/ci/article.asp?ID=1198
15	Private Pension Contributions: Updated Estimates, 1996 – 2005	http://www.statistics.gov.uk/ci/article.asp?ID=1776
16	Response to consultation on insurance companies' recording of pensions transactions	http://www.statistics.gov.uk/about/Methodology_by_theme/downloads/Response_May2004.pdf
17	Pension Funds Survey	http://www.statistics.gov.uk/downloads/theme_commerce/Pension_Funds_Survey_Technical_Article.pdf

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