

Changes to the investment funds statistics: scope enhancements, results and outlook

The Bundesbank's investment funds statistics show the assets in which domestic funds are invested and the amounts of those investments, making it possible to identify structural changes over time, for example, and to analyse their impact. The data are also included in the national financial accounts. In addition, they form the German contribution to the investment fund statistics published by the European Central Bank (ECB) and are submitted to the analysis and data production system of the European System of Central Banks (ESCB) – the Securities Holdings Statistics Database – which records the securities holdings of financial and non-financial sectors on a security-by-security basis.

In July 2017, domestic investment companies managed assets worth €2,100 billion. Alongside monetary financial institutions and insurance corporations, with respective total assets of €7,800 billion and €2,000 billion at last count, they are therefore among the most significant financial intermediaries in Germany.

The assets of open-end investment funds amounted to more than €2,000 billion, with their share of the euro area aggregate standing at 18%. With holdings worth more than €1,500 billion, specialised funds reserved for institutional investors accounted for three-quarters of the assets of German open-end funds, while retail funds held the remaining €500 billion.

As a result of the changes to the Bundesbank's investment funds statistics, extensive data on domestic closed-end funds are now also available. These funds, which are particularly geared to the acquisition of commercial real estate, managed total assets to the tune of just under €80 billion, which corresponded to a 21% share of the value for the euro area.

Performance indices are now publicly available for the first time for securities-based retail funds; these funds have seen a 54% increase in value since the beginning of 2010. Broken down by category, equity funds grew by 100%, bond funds by 26% and mixed securities funds by 31%.

■ Investment funds statistics

Purpose of the investment funds statistics

The Bundesbank uses detailed information on investment funds for a variety of purposes. For example, the funds data are used for studies on the impact of monetary policy measures and for economic analyses¹ as well as for studies on the German shadow banking system in the context of the Bank's financial stability mandate². For instance, if liquidity and maturity transformation rates are high, the investment fund sector – being the largest player in this niche – may amplify potential shocks in the financial markets during a period of stress, especially if outflows of funds are unexpectedly high and liquidity buffers are low.³ Data on mutual fund industry trends additionally provide important information for capturing income and financial flows in the financial accounts and for determining cross-border capital liabilities for the international investment position. In addition, the data collected are passed on to the Federal Financial Supervisory Authority (BaFin) for the purpose of ongoing supervision and, in individual cases, forwarded to the Federal Ministry of Finance.

Statistical data collected also serve as the German contribution to the harmonised euro area investment fund statistics. Data on investment funds' holdings of securities are also included in the ESCB's Securities Holdings Statistics Database, which records the securities holdings of financial and non-financial sectors on a security-by-security basis.⁴

Legal basis

The reporting obligation for the investment funds statistics is based on the ECB Regulation concerning statistics on the assets and liabilities of investment funds (ECB/2013/38).⁵ By collecting these data, the euro area central banks are complying with their legal obligation to provide the ECB with data on domestic mutual funds for the calculation of the euro aggregates.

Data collected

For each fund established, investment management companies and externally managed investment companies within the meaning of the

German Investment Code (*Kapitalanlagegesetzbuch*) report large quantities of reference data. As a result, funds can be broken down according to different criteria, eg retail and specialised funds, or by type of investment, ie categories such as equity funds, bond funds, real estate funds, funds of funds, money market funds and hedge funds. Figures on the size and composition of each fund's assets, their share units outstanding and sold, issue and redemption prices, inflows and outflows of funds, and profit distributions are also to be reported on a monthly basis.⁶

Each month, the aggregated investment funds statistics are published on the Bundesbank's website.⁷ Besides data in a tabular form, 2,500 time series are currently available, as well as a factsheet with charts showing, for example, a breakdown of the securities held by investment funds. Moreover, anonymised micro data can be provided for academic research.⁸

Publication of data

¹ See Deutsche Bundesbank, Current developments in the mutual funds market: demand, structural changes and investor behaviour, Monthly Report, January 2013, pp 13-28.

² The German Financial Stability Act (Gesetz zur Überwachung der Finanzstabilität) can be found on the Bundesbank's website (www.bundesbank.de/en) under "Tasks, Financial and monetary system, Financial and monetary stability, Role of the Bundesbank".

³ See Deutsche Bundesbank, Risks in the German shadow banking system, Financial Stability Review 2015, pp 57-68.

⁴ See Deutsche Bundesbank, Securities holdings statistics for analysing holdings of securities in Germany and Europe: methodology and results, Monthly Report, March 2015, pp 95-107.

⁵ See Regulation (EU) No 1073/2013 of 18 October 2013 concerning statistics on the assets and liabilities of investment funds (ECB/2013/38) and Guideline ECB/2014/15 of 4 April 2014 on monetary and financial statistics (recast), including the amendments pursuant to Guideline (EU) 2017/148 of the European Central Bank of 16 December 2016 amending Guideline ECB/2014/15 on monetary and financial statistics (ECB/2016/45).

⁶ The reporting template for the specific data requested is available on the Bundesbank's website (www.bundesbank.de/en) under "Service, Reporting systems, Banking statistics, Investment funds statistics".

⁷ See the Bundesbank's website (www.bundesbank.de/en) under "Statistics, Banks and other financial institutions, Investment companies".

⁸ More details on the securities micro data for research purposes can be found on the Bundesbank's website (www.bundesbank.de/en) under "Bundesbank, Research and Research Data, Research Data and Service Centre, Research Data".

Collection of granular securities data

Until the end of 2008, reporting agents solely submitted aggregate reports. It was not until after the harmonised collection process for euro area investment fund data was introduced that important assets position data started being collected at the granular level. One example is the publication of securities holdings data reported on a security-by-security basis. The granular data collection allows for a comprehensive analysis of the portfolios of domestic mutual funds, broken down by type of security. The detailed data also make it possible to respond flexibly to new requirements as well as to perform individual *ad hoc* analyses, for example to determine the extent to which funds hold securities of particular issuers or how funds' investment behaviour changes over time in the wake of economic developments. The reporting procedure does not need to be adapted as often, which also means reporting agents save on costs. While reporting agents previously had to submit data on their securities positions for aggregate reporting broken down by type of underlying instrument, by maturity or by country of issuer, for example, they now normally only need to provide the international securities identification number and the notional value or number of securities held when reporting on a security-by-security basis. In addition, the prices used by the investment companies to determine their net asset values are to be reported. All other reference data on issuers and securities needed for conducting extensive analyses are provided via the Centralised Securities Database⁹ of the ESCB.

The open-end mutual fund sector

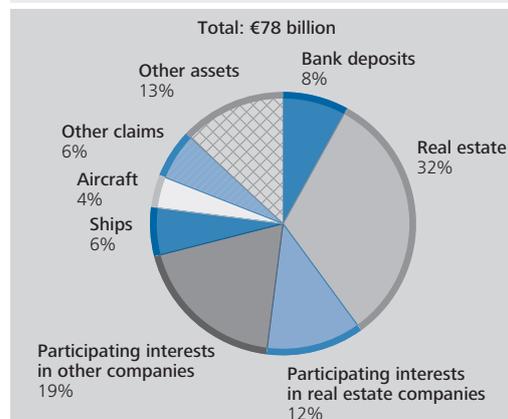
Major importance of open-end funds

Overall, open-end collective investment undertakings are dominating the domestic mutual fund market, with the 6,200 open-end mutual funds included in the investment funds statistics managing assets worth over €2,000 billion

⁹ See ECB, The Centralised Securities Database in Brief, February 2010.

Asset composition of domestic closed-end funds

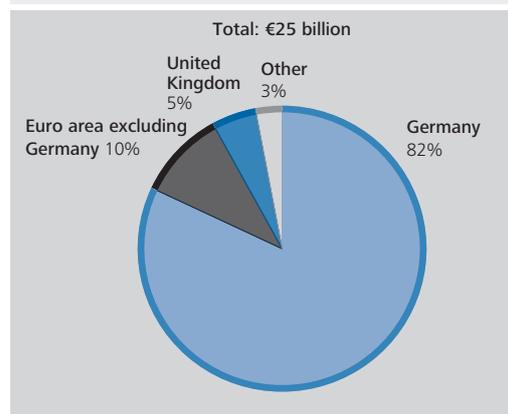
As at July 2017



Deutsche Bundesbank

Real estate assets of domestic closed-end funds, broken down by area

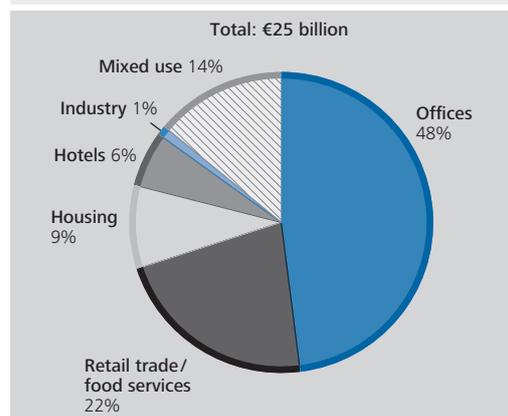
As at July 2017



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Real estate assets of domestic closed-end funds, broken down by type of use

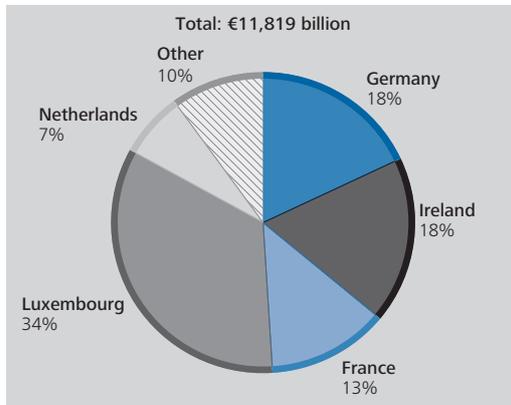
As at July 2017



Deutsche Bundesbank

Investment funds established in the euro area, broken down by country

As at 2017 Q2, quarter-end data



Sources: ECB and Bundesbank calculations.
 Deutsche Bundesbank

in July 2017. In principle, there is no limit to the number of share units an investment company can issue for open-end funds. Investors have the right to sell fund units back to the investment company at their current redemption price. The right of return can, however, be subject to certain conditions, such as a minimum holding period for share units in real estate investment funds.

Specialised funds dominating

With holdings worth more than €1,500 billion, specialised funds reserved for institutional investors accounted for three-quarters of the assets of open-end funds. This investor group includes, for example, credit institutions, insurance corporations, pension funds, churches and foundations. Funds open to the general public held the remaining €500 billion, the majority of which being attributable to retail investors.

Closing information gaps by enhancing scope of investment funds statistics

New statistics' scope from January 2015 onwards covers ...

Due to the increased importance of securities data for decisions relating to monetary policy, financial stability as well as microprudential and macroprudential issues, the scope of the statistics was revised at the beginning of 2015 in the context of the extended ECB Regulation

ECB/2013/38 and the introduction of the German Investment Code which also transposed the EU Directive on Alternative Investment Fund Managers (AIFM Directive¹⁰) into national law. With the inclusion of closed-end funds in the reporting, the amendments impacted the group of reporting agents covered, on the one hand, and the content of the reports, on the other. For example, the previous reporting scope was extended in respect of information concerning the purpose for which developed land was being used and also regarding securities lending and repurchase agreements.

The enhancements to the statistics' scope also included data on exchange-traded funds (ETFs).¹¹ These usually track the performance of stock market indices and thus do not involve active fund management. Considering their cost-effective fee structures and their ability to be traded simply and quickly, these kinds of products have high growth potential. In July 2017, the investment funds statistics included over 100 domestic ETFs. Almost three-quarters of these were established as equity funds, whereas the remaining share comprised predominantly bond funds. The bulk of domestic ETFs physically replicate the underlying index, while only a few synthetically reproduce it using swap transactions. Domestic ETFs managed assets worth a total of €53 billion in July 2017, compared with a figure of €580 billion for ETFs domiciled in the rest of the euro area.¹²

... exchange-traded funds ...

A significant change and challenge with respect to the extension of the investment funds statistics' scope was that closed-end funds, which were previously assigned to the "grey capital market", were regulated by the German

... and closed-end funds

¹⁰ See Directive 2011/61/EU of the European Parliament and of the Council of 8 June 2011 on Alternative Investment Fund Managers and amending Directives 2003/41/EC and 2009/65/EC and Regulations (EC) No 1060/2009 and (EU) No 1095/2010.

¹¹ See Deutsche Bundesbank, Liquidity risk in exchange-traded funds, Financial Stability Review 2013, pp 42-43.

¹² Provisional value as at the end of June 2017. The shares of ETFs reported in the European investment fund statistics can be taken from the ECB's Statistical Data Warehouse (<http://sdw.ecb.europa.eu>).

Calculating performance indices for securities-based investment funds

Performance indices make it easier to compare the performance of investment funds.¹ It is assumed that distributions and other payments to the investor are reinvested in the fund. The model for this is based on Deutsche Börse AG's methodology for calculating corresponding indices for shares² and assumes that the development of redemption prices of open-end investment funds can be equated to that of share prices of public limited companies. Profit distributions and asset payouts of investment funds are treated like dividend and bonus payments of listed companies.

The performance index of an individual collective investment undertaking is therefore calculated as follows:

$$Index_{f,t} = \frac{RNP_{f,t} \times KF_{f,t}}{RNP_{f,t=0}} \times 100,$$

where *Index* represents the index value, *RNP* the redemption price, *KF* the correction factor for capturing distributions and asset payouts, *f* the investment fund, and *t* the time of reporting.

The correction factor *KF* is calculated recursively as follows:

$$KF_{f,t} = \frac{RNP_{f,t-1}}{RNP_{f,t-1} - (AK_{f,t} + SUBK_{f,t})} \times KF_{f,t-1}$$

$$AK_{f,t} = \frac{A_{f,t}}{ANZU_{f,t-1}}, \quad SUBK_{f,t} = \frac{SUB_{f,t}}{ANZU_{f,t-1}}, \quad KF_{f,0} = 1,$$

where *AK* represents the distributions per unit share, *A* the total distributions, *ANZU* the total number of share units issued, *SUBK* the asset payouts per share unit, and *SUB* the total asset payouts.

The index of a particular class of investment fund is calculated as the average of the index values weighted by net asset values:

$$Index\ Fonds\ kategorie_t = \frac{\sum Fondsverm\u00f6gen_{f,t} \times Index_{f,t}}{\sum Fondsverm\u00f6gen_{f,t}}$$

This means that the index of a particular class of investment fund can change if the structure of the net asset values or the underlying indices vary.

¹ Index numbers show the change compared with an initial or base value, which is set at 100.

² See Deutsche Börse AG, Guide to the Equity Indices of Deutsche Börse AG, version 8.2.1, May 2017, available on the Deutsche Börse AG website (www.dax-indices.com) under "Resources".

Investment Code to the same extent as open-end funds and subject to the Bundesbank's statistical reporting obligations for the first time. The reports include data on legacy mutual funds which were issued before the German Investment Code entered into force and are not supervised by BaFin.

The closed-end mutual fund sector

In July 2017, the 3,500 closed-end funds included in the investment funds statistics managed assets worth €78 billion in total. As a form of long-term collective investment, they primarily invest in tangible assets, such as real estate, land, aircraft, renewable energy plants and ships. In contrast to open-end mutual funds, share units in closed-end funds are not issued continuously. Instead, equity capital is collected during a placement phase, in which the investor often knows what assets are

planned to be purchased. However, blind pools, ie funds which raise money for non-specified investment goals, are also common in the market. It is generally not possible to return the closed-end fund share units until the assets are liquidated. Investors in closed-end mutual funds are predominantly retail investors.

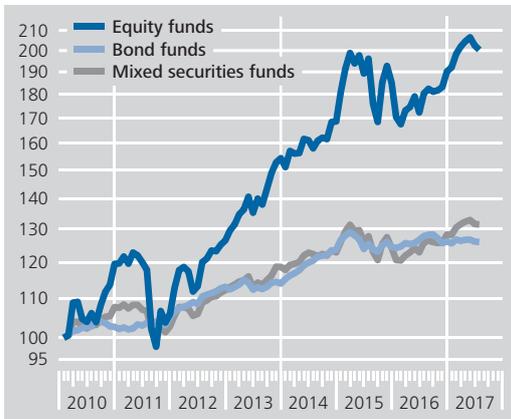
In July 2017, closed-end mutual funds held real estate worth €25 billion. With an investment amount of €20 billion, their focus was on domestic land and buildings. They invested €2 billion in real estate in other euro area countries. The participating interests and loans to real estate companies amounted to €11 billion, €8 billion of which was accounted for by domestic companies and €1 billion by the rest of the euro area, while their equity investment in other companies stood at €15 billion. The

Real estate proves most popular type of investment

Closed-end funds' investment focus on tangible assets

Performance indices of domestic retail securities funds

January 2010 = 100, month-end data, log scale



Deutsche Bundesbank

funds also owned ships and aircraft worth €8 billion.¹³

The investment funds statistics reporting also allows real estate data to be broken down by type of use. For example, a distinction can be made as to whether real estate is used mostly for office, residential or commercial purposes or for the sale and service of food. Ultimately, closed-end mutual funds mainly invested in office buildings, holding assets worth €12 billion. A further €5 billion was accounted for by buildings used for retail trade and food services, while €2 billion was invested in housing.

Significance of German mutual fund sector across Europe

Important role in the euro area as well

As at the end of the second quarter of 2017, euro area investment funds managed assets worth a total of €11,819 billion, with closed-end funds accounting for €367 billion. The respective shares in the euro area aggregate of domestic open-end and closed-end mutual funds were 18% and 21%, meaning that Germany makes up a significant proportion of the European investment fund sector.¹⁴

Outlook

This is the first report in which performance indices are published for selected retail investment funds (see the box on page 91 for calculation details). These indices illustrate the performance of funds over time assuming that interim distributions and other payments to investors are notionally reinvested in the funds. This facilitates the comparison of performance between the different mutual funds. In the period from January 2010 to July 2017, retail securities funds grew in value by a total of 54%, achieving an annual average return of 6%. Broken down by category, equity funds increased in value by 100% during this period, while bond funds appreciated by 26% and mixed securities funds by 31%. In terms of returns, this corresponds to average annual rates of 10%, 3% and 4% respectively. These indices are scheduled to be published regularly starting from the fourth quarter of 2017.¹⁵

Calculation of performance indices

Amongst other things, the aggregate data published on retail and specialised mutual funds are broken down by fund category according to their reported investment focus. The categories include equity funds, bond funds, real estate funds, funds of funds, money market funds and hedge funds. There are also plans to classify retail funds in future according to whether or not they comply with the UCITS Directive¹⁶. Undertakings are subject to

Introduction of an additional classification

¹³ Statistics on the assets of closed-end investment funds can be found in tabular form on the Bundesbank's website (www.bundesbank.de/en) under "Statistics, Banks and other financial institutions, Investment companies".

¹⁴ European investment fund statistics data are available on the Bundesbank's website (www.bundesbank.de/en) under "Statistics, ESCB statistics" and from the ECB's Statistical Data Warehouse (<http://sdw.ecb.europa.eu>).

¹⁵ The indices will be posted on the Bundesbank's website (www.bundesbank.de/en) under "Statistics, Banks and other financial institutions, Investment companies".

¹⁶ See Directive 2009/65/EC of the European Parliament and of the Council of 13 July 2009 on the coordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities (UCITS), and Directive 2014/91/EU of the European Parliament and of the Council of 23 July 2014 amending Directive 2009/65/EC on the coordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities (UCITS) as regards depositary functions, remuneration policies and sanctions.

the UCITS Directive if their sole purpose is to collectively invest capital raised from the public in transferable securities or in other liquid financial assets, according to the principle of risk-spreading, and to directly or indirectly debit the fund to repurchase or pay out their shares

at the request of unit holders. The new classification can be implemented using data which are already collected for the investment funds statistics. The first data in this format are expected in the fourth quarter of 2017.