

Box 2

STRUCTURAL AND SYSTEMIC RISK FEATURES OF EURO AREA INVESTMENT FUNDS

In addition to remarkable growth in the euro area shadow banking sector over the last years, its structure has also been evolving.¹ By mid-2014, investment funds domiciled in the euro area had grown to a large size – with money market funds (MMFs) and non-MMF investment funds (IFs) representing almost half of the €19.6 trillion euro area shadow banking sector. Clearly, these structural changes require an adaptation of financial stability monitoring, to understand the role of the investment fund sector and its prospective role in originating or transmitting systemic risk. To this end, this box uses granular data for a sub-sample of all euro area investment funds to further characterise the euro area investment fund universe (including MMFs and IFs but excluding hedge funds).² This sample excludes hedge funds and covers roughly half of the euro area investment fund population. Within the aggregated assets under management (AuM) of the analysed sample, equity funds represent the largest share of this total (33.1%) followed by bond (29.8%), money market (17.6%) and mixed (14.7%) funds (see Chart A).

The analysis in this box provides evidence of concentration of investment funds managed by individual asset management companies at both the asset class and the aggregate portfolio

1 This approximation follows the Financial Stability Board's broad measure adding together data on the assets of MMFs and other financial intermediaries (OFIs). The ECB's 2014 Banking Structures Report reviews in detail the different components of the euro area non-bank financial sector (including the shadow banking sector) at the aggregate level.

2 The box uses end-June 2014 data from Lipper for Investment Management (LIM) covering 26,392 domiciled investment funds in the euro area and managing approximately €5.4 trillion of assets. By comparison, ECB statistics indicate that IFs (including hedge funds) managed almost €10 trillion of assets as at the second quarter of 2014 (see <http://www.ecb.europa.eu/stats/money/mfi/html/index.en.html>).

levels. This, combined with significant cross-border retail flows, calls for a close financial stability monitoring, not least given the open-ended nature of much of this sector and its associated vulnerability to run risk.

Euro area investment funds are open-ended funds commonly subject to early redemption claims...

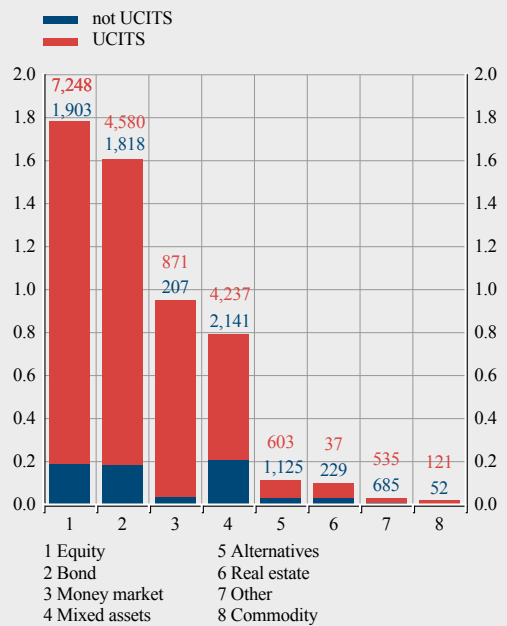
Investment funds invest in assets – equities or debt instruments with predominantly medium to longer-term maturity – while being financed by liabilities (commonly shares/units issued) redeemable at short notice. In a scenario of systemic stress, the structural aspects related to this redeemable-on-demand feature, the use of leverage and knowledge of the ultimate risk bearer are particularly relevant. Within the analysed sample, 69% of funds and 87% of AuM are regulated by the UCITS (Undertakings for Collective Investment in Transferable Securities) Directive.³ The UCITS label is only applicable to (and hence a proxy for the predominance of) open-ended structures. It implies a primarily EU investor base not necessarily corresponding to the fund domicile. Due to their intra-day tradability and specific liquidity features, the early redemption risks of exchange-traded funds (ETFs) are considered even higher. Within the analysed sample, euro area-domiciled ETFs – 95% of which are regulated as UCITS – account for 5% of funds and 6% of AuM. They predominantly invest in less liquid assets as reflected in a preponderance of structures with an investment policy linked to commodities, other assets and equities. For the analysed sample of euro area investment funds, only 1.4% of AuM and 2.5% of funds are potentially leveraged, a reflection of the high proportion of UCITS funds which face restrictions as regards their use of leverage and the exclusion of hedge funds from the sample.⁴

... and are predominantly owned by retail investors not necessarily residing in the fund domicile jurisdiction

From a financial stability perspective, information on the investor base is important to identify the ultimate risk bearer and to assess the likelihood of contagion to other parts of the financial system under stressed conditions. It also provides a gauge for the likely reaction speed of the investor base to market developments. For example, the experience from the period surrounding

Chart A Size and number of funds in the euro area investment fund universe by investment policy

(Q2 2014; EUR trillions; number of funds by underlying regulatory framework)



Sources: LIM and ECB calculations.

Note: The UCITS label proxies the predominance of open-ended fund structures within an investment policy category.

³ Directive 2014/91/EU of the European Parliament and of the Council of 23 July 2014.

⁴ LIM allocates a leverage flag to investment funds foreseeing as part of their investment mandates to borrow money or to invest based on anticipated future returns.

and including the money fund crisis of September 2008 indicates that, for MMFs, institutional investors tended to react more quickly to deteriorating market conditions and prospects of perceived liquidity shortfalls than retail investors did.⁵ Within the analysed sample of euro area investment funds, 80% of assets on average are held by retail investors, compared with 13.8% by institutional investors and 6.2% by other investor types.⁶ Only in the MMF category do institutional investors own a relatively higher share of assets (41.5%) compared with retail investors (53.1%) and other investors (5.4%).

Large fund size variation with big players in each asset class...

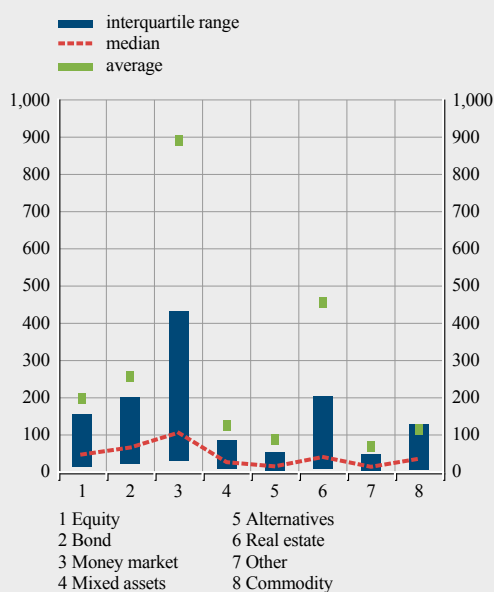
While large investment funds can be economically efficient, their size naturally determines the market impact of any investment decisions they take. The distribution of euro area-domiciled fund sizes points for each investment policy to a concentration of assets managed in a number of bigger funds (see Chart B). This feature is particularly noteworthy for MMFs, where the average size is 8.4 times the median fund size, compared with 3.9 and 4.1 times for bond and equity funds respectively.

... and funds managed by a small number of large management companies shape market developments

The concentration at individual fund level is further augmented by the concentration of assets managed (across investment policies) at the individual management company level. The combination of size, range of funds managed and consequently importance in different market segments leads these institutions – through investment, portfolio allocation or rebalancing decisions – to define or to drive market developments in normal and in stressed conditions. A Lorenz curve representation illustrates the dominance of a limited number of asset management companies (see Chart C). This concentration has potential consequences: (i) developments at an individual fund could have an adverse impact on the reputation of a specific management company as a whole; or (ii) it could drive market developments or spread market shocks in the financial system. The footprint of a small set of large asset management companies in the euro area investment fund sector (representing 40% of AuM and 21% of funds) is particularly noteworthy in this context (see Chart D).

Chart B Investment fund size distribution by investment policy

(Q2 2014; EUR millions)



Sources: LIM and ECB calculations.

Notes: Only interquartile ranges, medians and averages are represented. High average figures indicate the presence of very large funds.

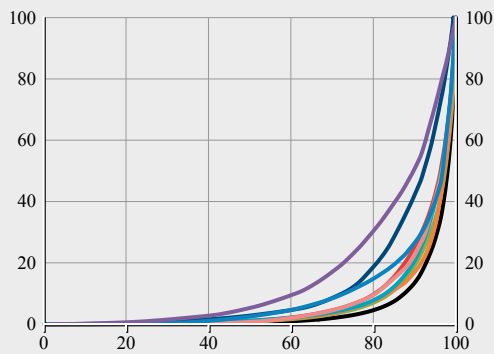
⁵ Schmidt, L., Timmermann, A. and Wermers, R., “Runs on Money Market Mutual Funds”, working paper, 2 January 2013.

⁶ LIM defines institutional funds as funds targeting institutional investors and likely to require a large minimum investment. Other funds are defined as insurance funds (i.e. an insurance product) plus private funds (i.e. a fund with less than 50 investors). Retail funds are approximated by subtracting institutional and other funds from the total number of funds.

Chart C Lorenz curve for the distribution of assets by management company parent

(Q2 2014; x-axis: percentage of fund management company parent; y-axis: percentage of assets managed; Gini coefficient (percentage))

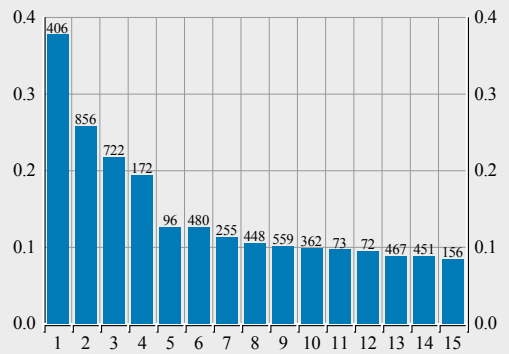
- total (Gini coefficient: 90.5)
- equity (87.8)
- bond (84.7)
- mixed assets (86.1)
- real estate (85.5)
- commodity (67.5)
- money market (87.8)
- alternatives (75.4)
- other (81.9)



Sources: LIM and ECB calculations.

Chart D Assets and number of euro area funds managed of the top-15 management company parents

(Q2 2014; EUR trillions; number of funds)



Sources: LIM and ECB calculations.