



Commission de Surveillance
du Secteur Financier

UCITS Risk Reporting Dashboard

31 DECEMBER 2024

UCITS Risk Reporting Dashboard

TABLE OF CONTENTS

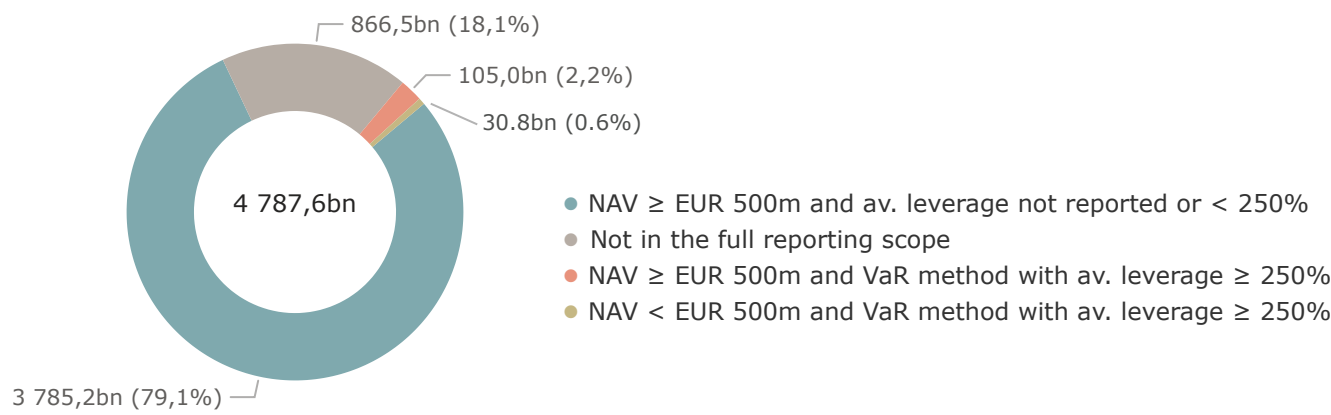
1.	Introduction	3
1.1.	Scope of the UCITS Risk Reporting	3
1.2.	Evolution of the full reporting scope and the coverage rate	4
1.3.	Coverage rate of the full reporting scope by investment policy type and global exposure calculation method	5
2.	Executive summary	6
3.	Overall UCITS population	8
3.1.	Main characteristics	8
3.2.	Realised leverage	9
4.	UCITS in the full reporting scope	12
4.1.	Main characteristics	12
4.2.	Global exposure and leverage	13
4.3.	Stress testing and other risk indicators	16
4.4.	Efficient portfolio management (EPM) techniques	19
4.5.	Counterparty risk and collateral in relation to EPM techniques / OTC and traded derivatives	23
4.6.	Liquidity	25
4.7.	Credit	31
5.	List of abbreviations	32



1. Introduction

1.1. Scope of the UCITS Risk Reporting

Net assets (EUR), by reporting scope



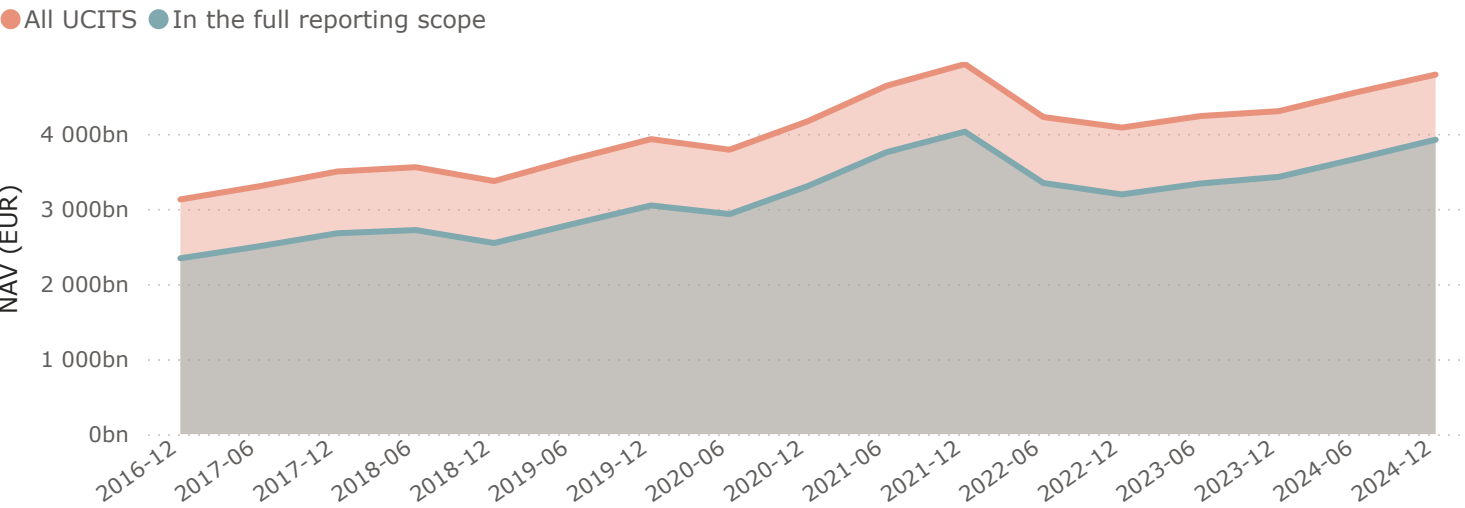
In the context of the UCITS Risk Reporting, all Luxembourg domiciled UCITS¹ authorised by the CSSF are required to provide some general information/basic functional data including the global exposure calculation method and the realised level of leverage, as well as, for UCITS under a VaR approach, the expected level of leverage. In addition, detailed information on risks is requested for UCITS falling in the "full reporting scope", i.e. UCITS fulfilling at least one of the following two criteria:

- net assets above EUR 500 million;
- use of VaR for the calculation of global exposure covered by Article 42(3) of the 2010 Law with an average gross leverage during the semester greater than 250%².

¹ In this report, the terms "UCITS" and "fund" will be used both for an entity in the case of a non-umbrella UCITS and for each sub-fund in the case of an umbrella UCITS.

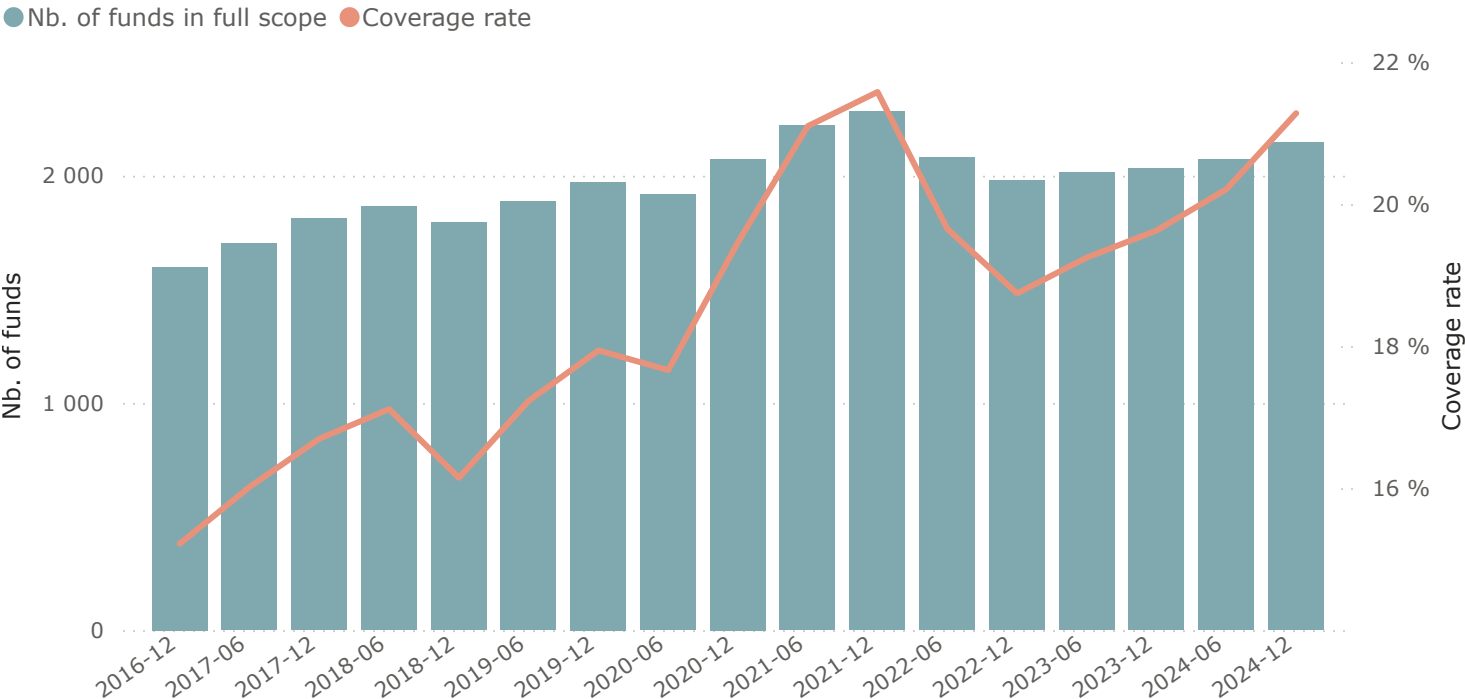
² In accordance with the rules set out in the applicable regulation, the gross leverage is calculated as the notional sum of the derivatives used.

Net asset value

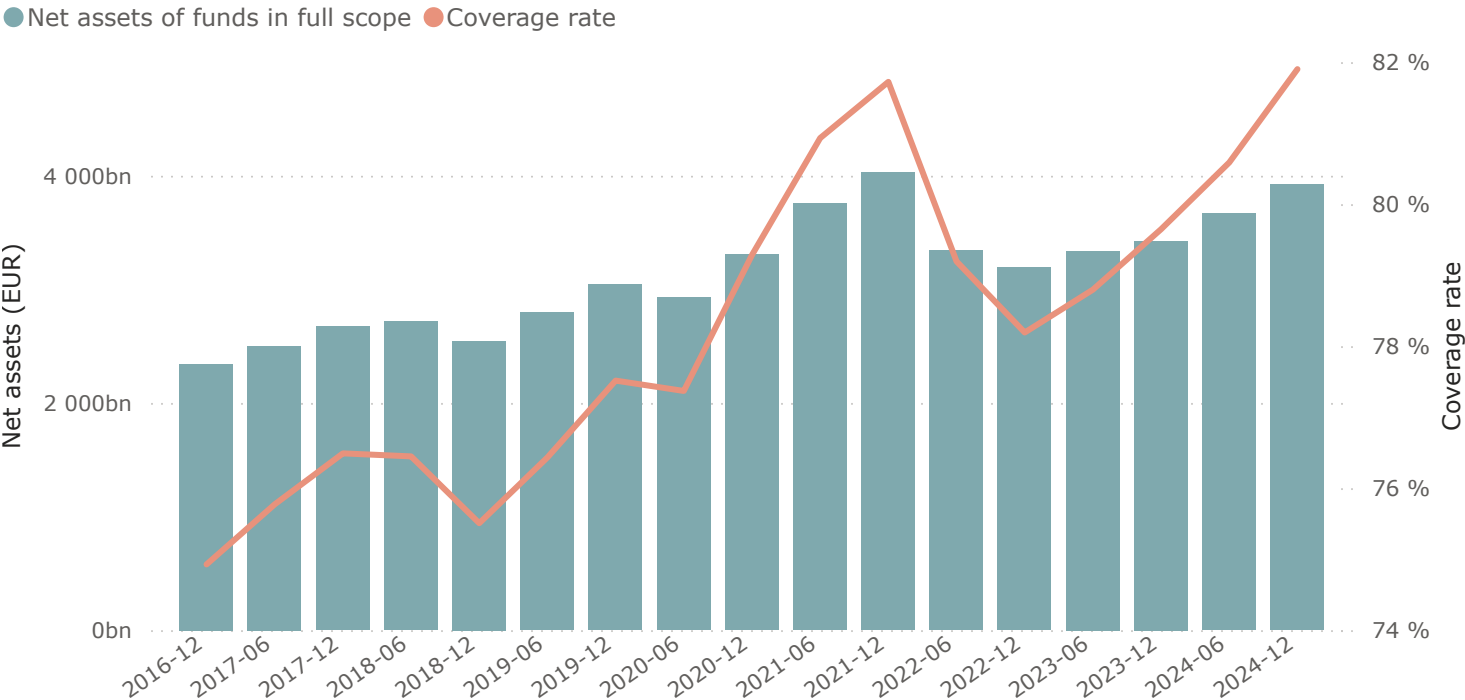


1.2. Evolution of the full reporting scope and the coverage rate

Coverage (nb. of funds)

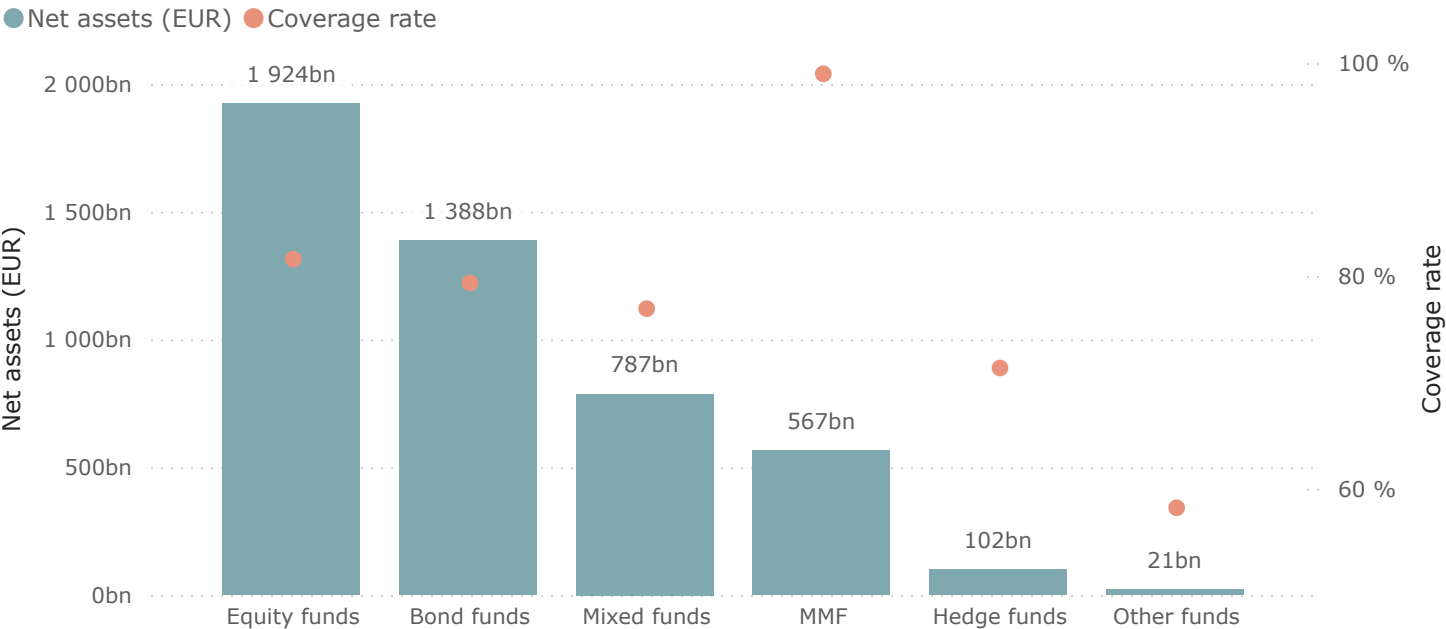


Coverage (net assets)

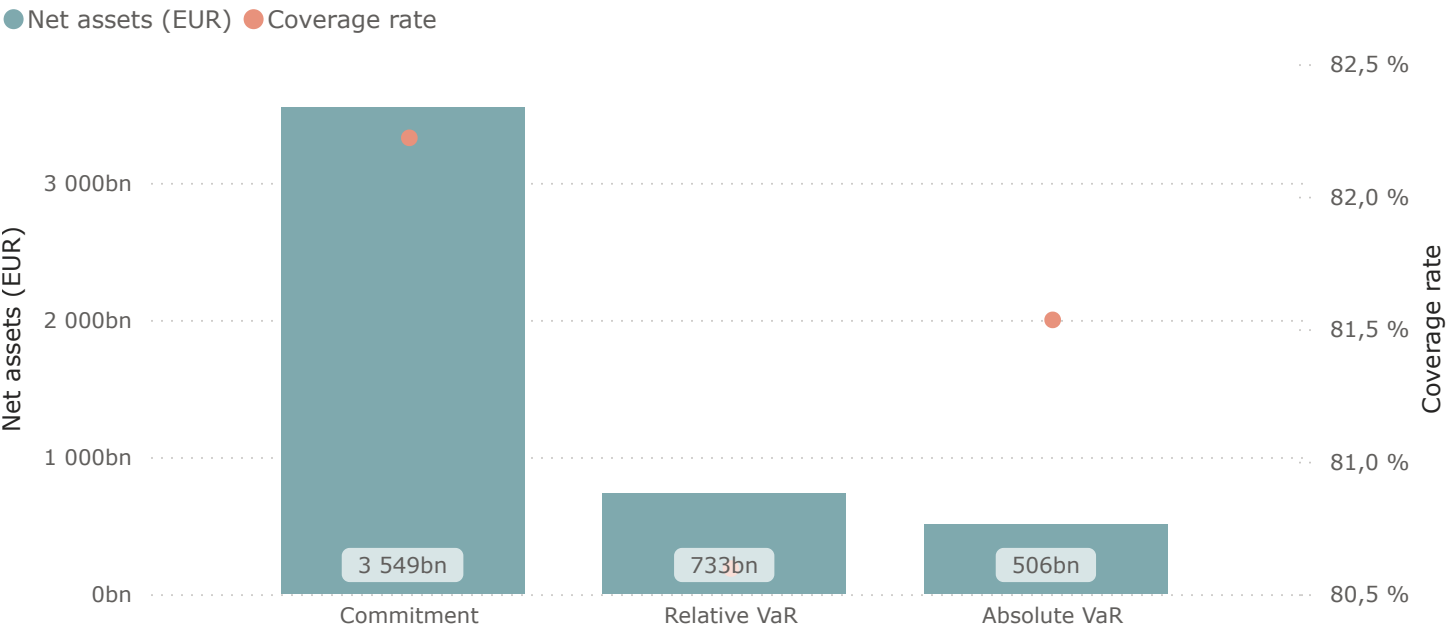


1.3. Coverage rate of the full reporting scope by investment policy type and global exposure calculation method

Coverage rate by investment policy type



Coverage rate by global exposure calculation method



Note: Fund classifications are based on the BCL investment policy types. The category “Hedge funds” includes funds that implement alternative strategies while respecting the UCITS regulatory framework (often referred to as “liquid alternative funds”). The category “Other funds” is much smaller than the others and concentrated on a limited number of funds (e.g. as of 31 December 2024, the 8 largest funds account for ~50% of its net assets), sometimes resulting in significant change in risk indicators over time.

2. Executive summary

Key indicators

Size	Bond funds	Equity funds	Hedge funds	Mixed funds	MMF	Other funds	Total
Number of funds	3 004	3 949	392	2 477	98	165	10 085
of which in the full reporting scope	736	840	117	368	68	17	2 146
Coverage rate (by number of funds)	25 %	21 %	30 %	15 %	69 %	10 %	21 %
Net asset value	1 388bn	1 924bn	102bn	787bn	567bn	21bn	4 788bn
of which in full reporting scope	1 101bn	1 569bn	72bn	605bn	561bn	12bn	3 921bn
Coverage (NAV % of UCITS of same policy)	79 %	82 %	71 %	77 %	99 %	58 %	82 %
Average fund size	0,46bn	0,49bn	0,26bn	0,32bn	5,79bn	0,13bn	0,47bn
Average fund size in the full reporting scope	1,50bn	1,87bn	0,62bn	1,64bn	8,26bn	0,71bn	1,83bn
Proportion of total market (% of NAV)	29%	40%	2%	16%	12%	0%	100%
of which in the full reporting scope (% of overall NAV)	23 %	33 %	2 %	13 %	12 %	0 %	82 %

Leverage

	Bond funds	Equity funds	Hedge funds	Mixed funds	MMF	Other funds	Total
Realised leverage (sum of derivatives' notional amount, overall UCITS population)	72,0%	16,2%	369,8%	68,1%	7,8%	113,1%	47,1%
Variation in p.p. since last year	0 %	2 %	29 %	1 %	1 %	6 %	1 %

Liquidity (normal conditions)

	Bond funds	Equity funds	Hedge funds	Mixed funds	MMF	Other funds	Total
% of portfolio liquid within 1W (normal conditions, UCITS in full reporting scope)	90 %	91 %	93 %	93 %	87 %	99 %	90 %
Variation in p.p. since last year	1 %	2 %	1 %	0 %	-0 %	-0 %	1 %

- The overall UCITS population, as at 31 December 2024, is made of 10,085 funds (incl. dormant / unlaunched funds) totaling net assets of EUR 4,788bn, mainly Equity and Bond funds (resp. 40% and 29% in terms of net assets).
- The Full reporting scope is made of 2,146 funds totaling net assets of EUR 3,921bn. It fairly covers the overall UCITS population. The predominant criterion for falling in the full reporting scope remains size (i.e. NAV above EUR 500M). The coverage rate increased slightly as a result of an increase in the size of equity and bond funds.
- The main events affecting financial markets in 2024 were (i) in the first half-year, the stickiness of inflation and the slower than expected reduction of interest rates together with a resilient economy in the US and EU, (ii) interest rate reductions by the ECB in June, September, October and December (-1% in total), and by the Federal Reserve in September, November and December (-1% in total), (iii) the end



of Japan's accommodative monetary policy and the resulting unwinding of yen-funded carry trades led to a global mini-crash in August, (iv) the US Presidential elections on November 5 followed by a rally in risky assets, (v) growing concerns about geopolitical risks, and (vi) capital reallocation with net outflows mostly from equity and mixed funds and net inflows to MMFs and bond funds.

The **key outcomes** for UCITS falling in the full reporting scope are the following:

- With regards to **market risk, leverage and EPM techniques**:
 - The average gross leverage from derivatives over all fund types remained stable at around 47%. The usage of leverage remained generally low in comparison to the regulatory limit (for funds under the commitment approach), respectively to the expected/maximum expected level of gross leverage disclosed in the prospectus (for funds under the VaR approach).
 - The annualised volatility also remained stable at about 8%.
 - The semester average of the absolute VaR in terms of net assets decreased slightly from 5.3% in the second semester 2023 to 4.6% in the second semester 2024.
 - The volume of EPM techniques increased by 20% to EUR 179.4bn over the year, which is the highest volume since the introduction of the URR reporting in 2016. EPM techniques consisted mainly of securities lending (EUR 93.5bn) and reverse repos (EUR 84.9bn), the latter being mainly originated by MMFs.
 - The results of the univariate stress tests (equity shock and interest rate curve parallel shift) remained stable on average over all asset classes.
- With regards to **liquidity risk** (based on self-assessments from the IFMs under non-harmonised models and processes):
 - On average, the share of net assets that fund managers expect to be able to liquidate within one week under normal market conditions increased from 89% to a record high level of about 90%. From an historical perspective, the 1-week liquidity projection of the high yield bond category has particularly risen, coming from around 70% in pre-COVID period to 85% afterwards.
 - The availability and use of Liquidity Management Tools remained broadly stable, the most used being swing pricing. On the basis of the reporting submissions, less than 1% of funds (in terms of net assets) do not have the possibility to apply temporary suspensions of redemptions or gates according to their constitutive documents.
 - The distribution of the highest net redemption on a single day during the semester remained broadly stable during 2024. The highest net redemption remained below 2.5% of net assets for more than 60% of all funds on average over all asset classes, with the notable exception of MMFs displaying higher levels which can be explained by their use as short-term cash management vehicles by investors.
- With regards to **credit risk**:
 - The credit risk exposure by internal ratings or by credit spreads improved, driven by the growth of MMF and a reduction of credit risk in bond funds. The share of net assets with a credit spread below 100bps reached 71% of net assets of those funds in the full reporting scope that have more than half of their assets exposed to credit risk.
 - The results of the univariate stress tests on credit spreads (scenario of a doubling of all credit spreads) also improved for bond funds from -6.7% to -5.5% of TNA.

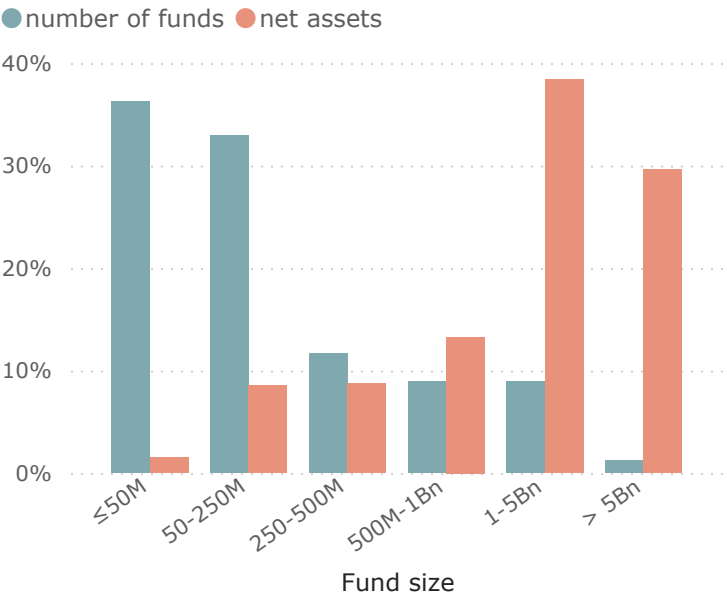


3. Overall UCITS population

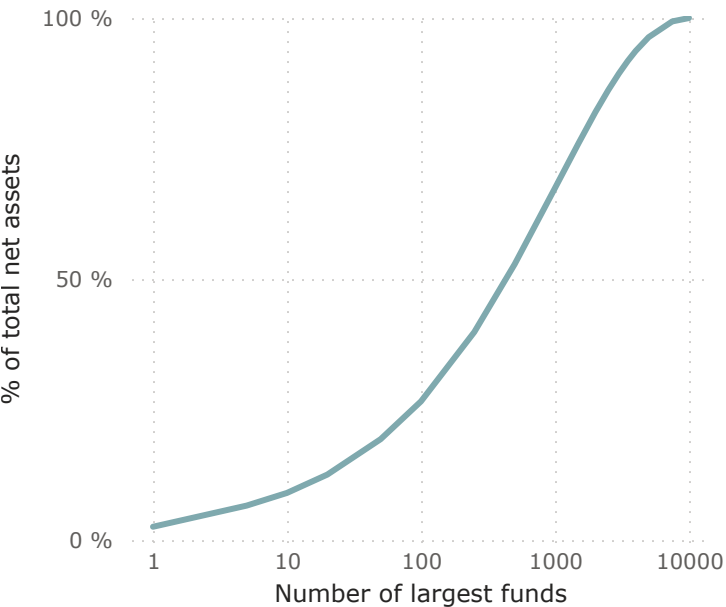
3.1. Main characteristics

3.1.1. Net assets

Market concentration

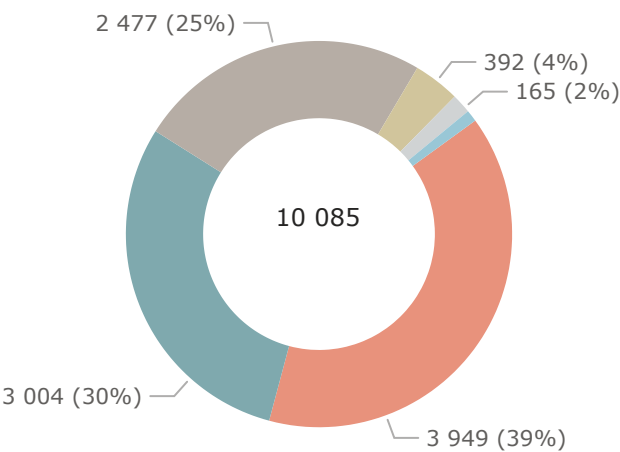


Market concentration

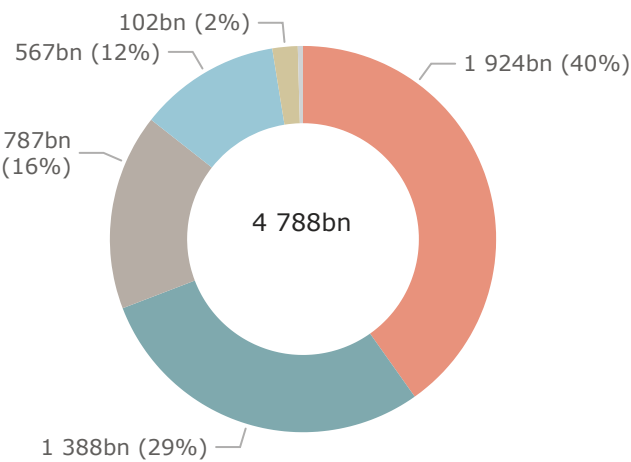


3.1.2. Investment policy types

Number of funds



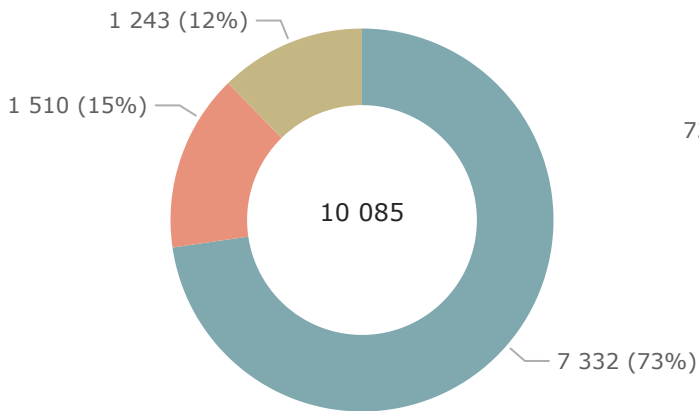
Net assets (EUR)



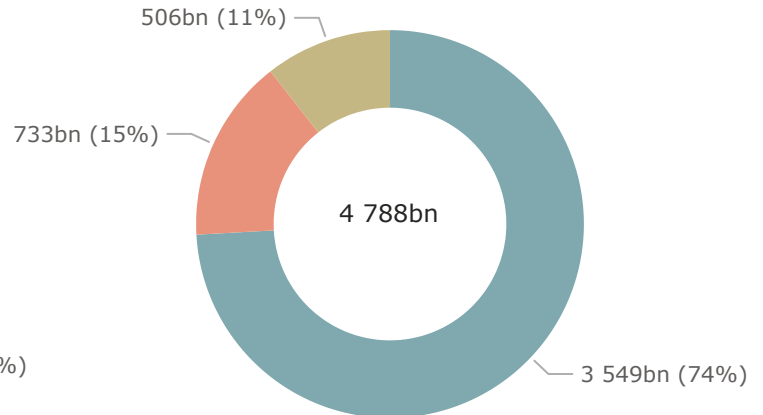
● Equity funds ● Bond funds ● Mixed funds ● Hedge funds ● MMF ● Other funds

3.1.3. Global exposure calculation methods

Number of funds



Net assets (EUR)



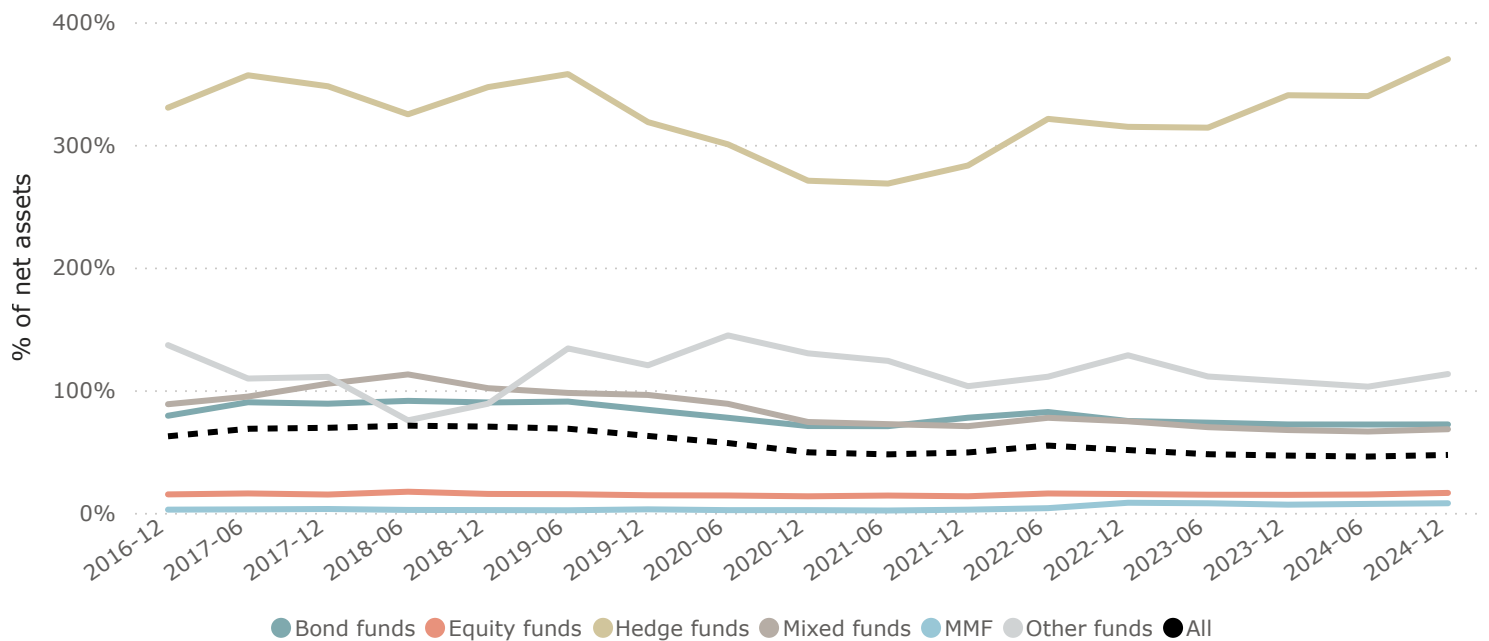
Commitment Relative VaR Absolute VaR

Commitment Relative VaR Absolute VaR

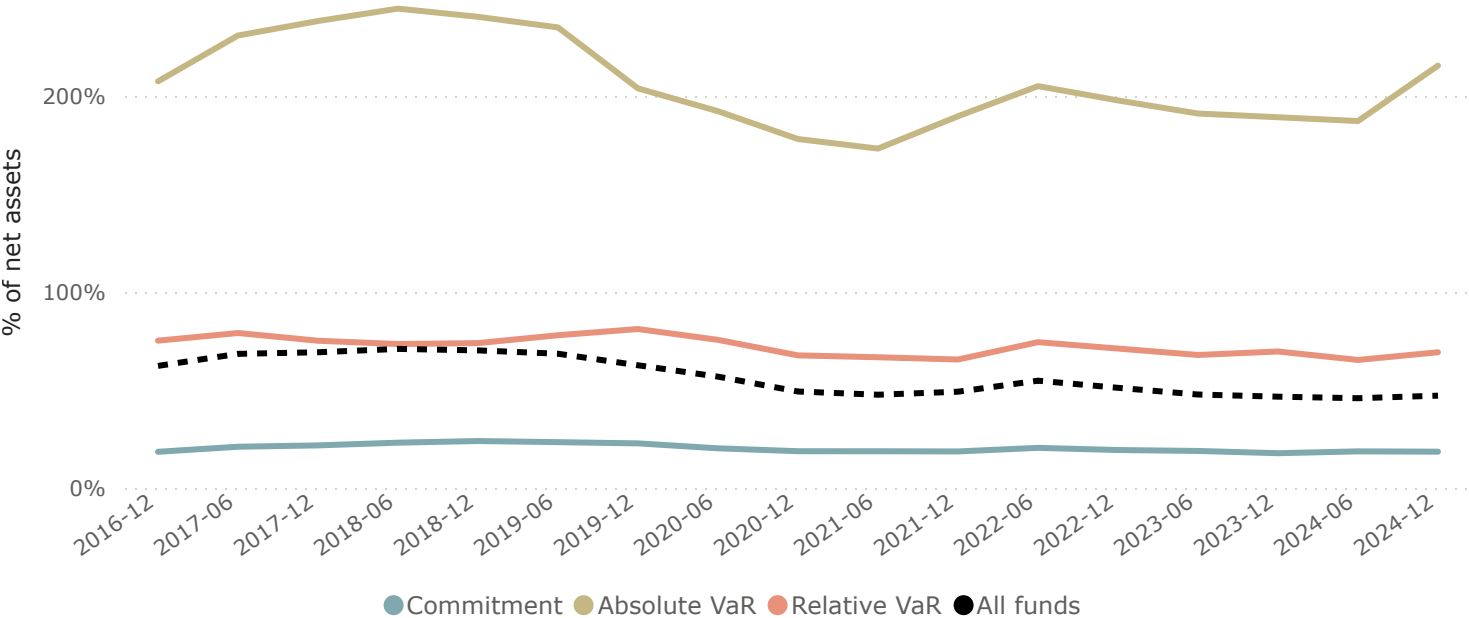
3.2. Realised leverage

3.2.1. Realised gross leverage by investment policy type and by global exposure calculation method

Realised gross leverage as share of net assets, by investment policy



Realised gross leverage as share of net assets, by global exposure calculation method

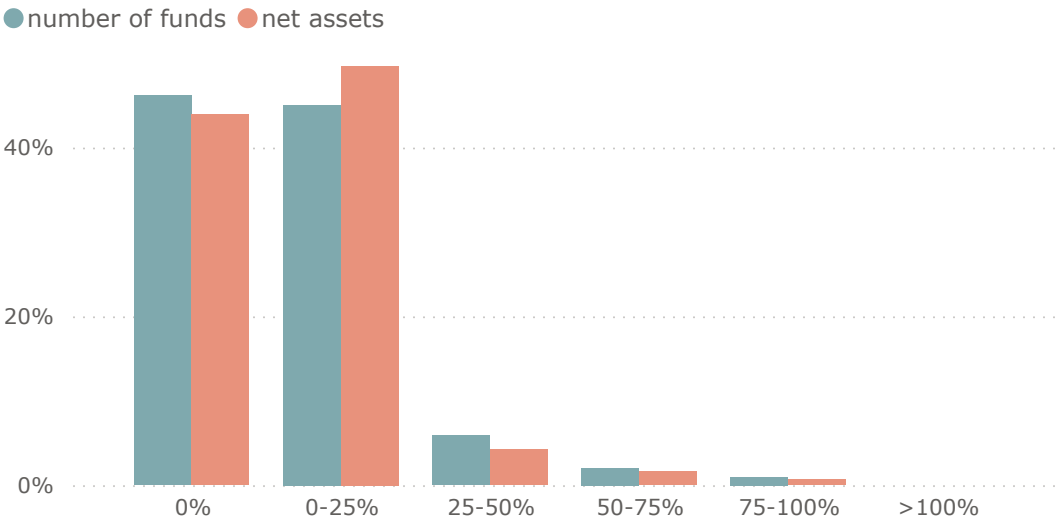


Methodology note: For the purpose of the 2 graphs above, the realised gross leverage is the sum of derivatives' notional amounts

- for funds under a VaR approach, the semester-average;
- for funds under the commitment approach and NAV above 500M EUR, the semester-end value; and
- for funds under the commitment approach and with NAV below 500M EUR, the weighted % of NAV average of the semester-end leverage of all funds in the same category under the commitment approach and with NAV above 500M EUR.

3.2.2. Realised leverage for funds under the commitment approach

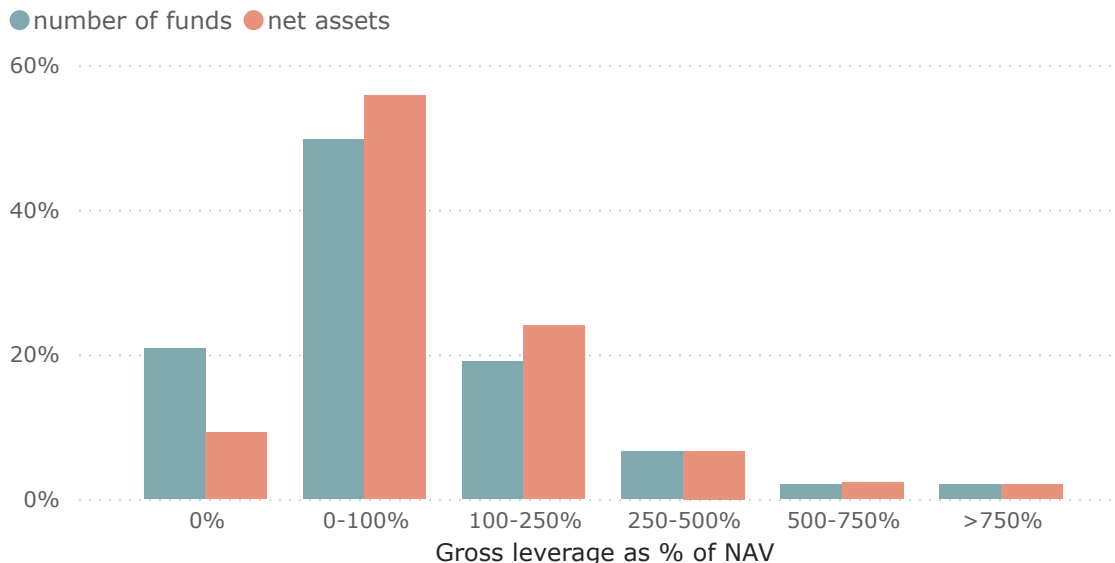
Realised leverage (Commitment)



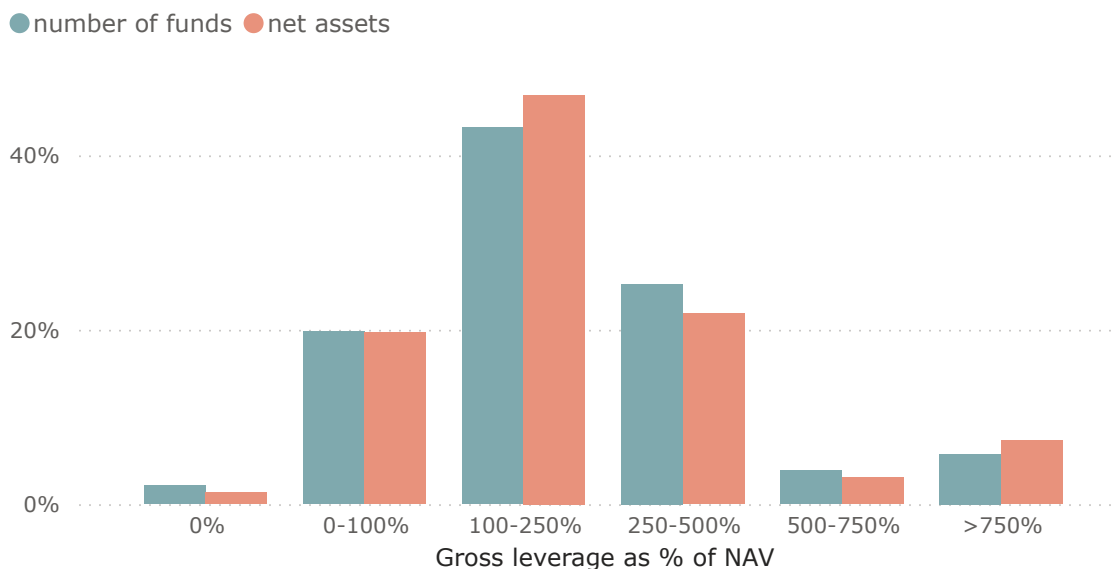
Methodology note: The realised leverage level is based on the commitment approach, as defined by CESR 10/788.

3.2.3. Realised and expected gross leverage for funds under the VaR approach

Distribution of realised gross leverage



Distribution of expected gross leverage



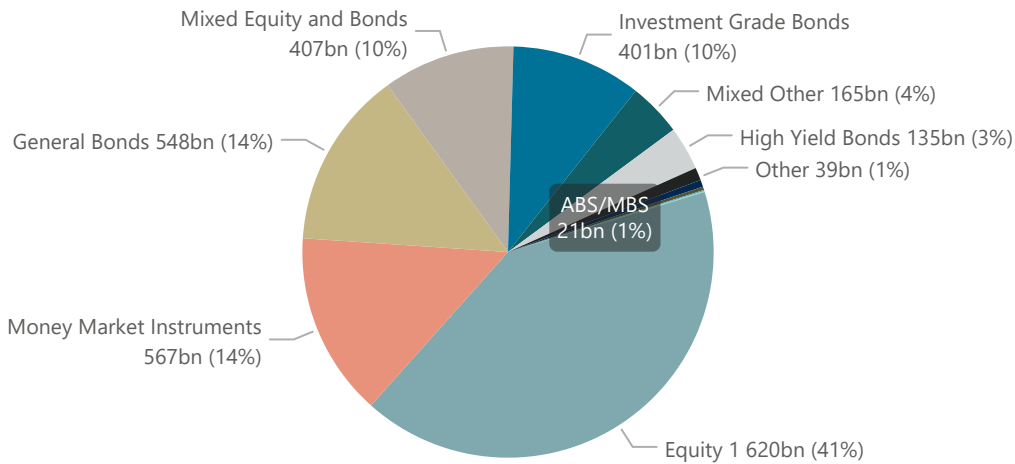
Methodology note: The realised gross leverage level is based on the sum of the notionals method as defined by CESR 10/788. Where several levels of leverage are disclosed in the prospectus (for example an expected and a maximum or a range with minimum and maximum), the expected leverage is the highest number.



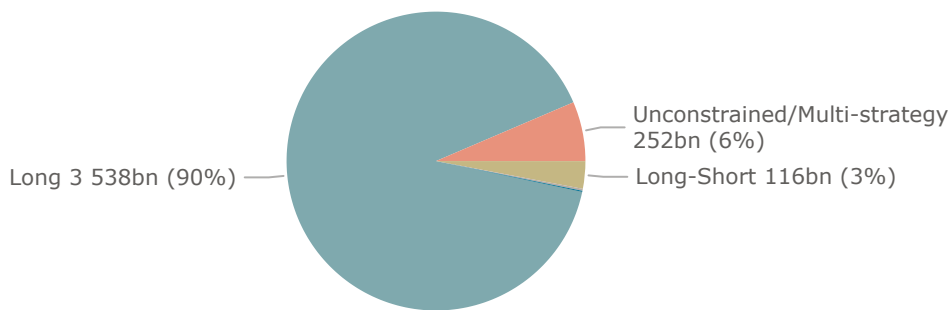
4. UCITS in the full reporting scope

4.1. Main characteristics

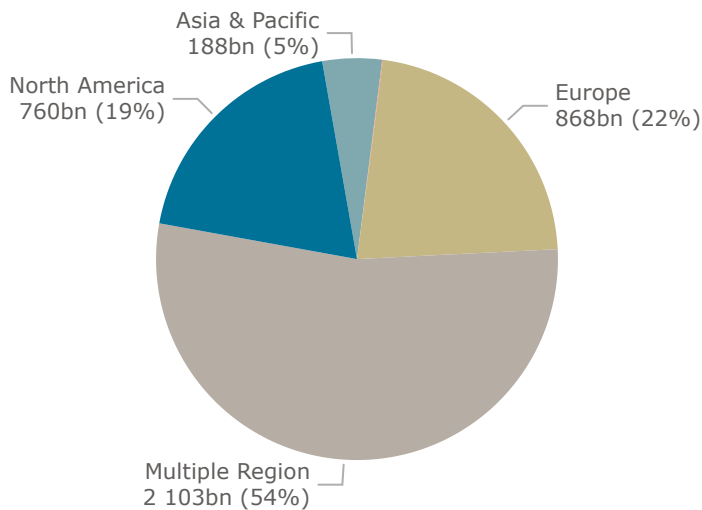
Principal asset classes (by net assets)



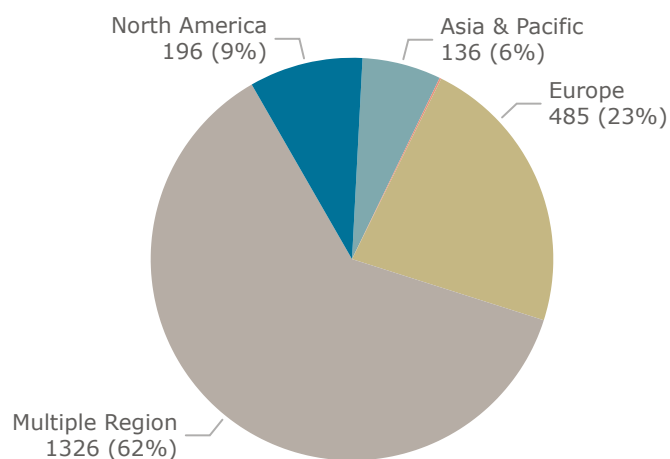
Principal investment strategy (by net assets)



Investment regions (by net assets)



Investment regions (by number of funds)

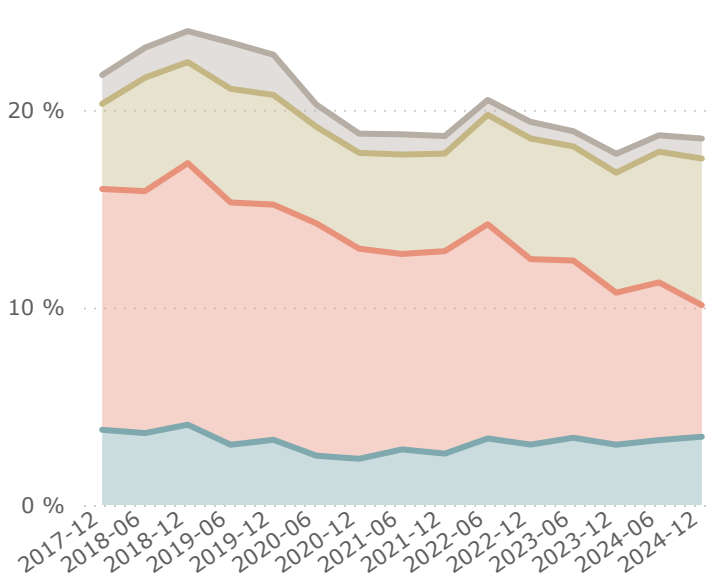


4.2. Global exposure and leverage

4.2.1. Funds under the Commitment approach

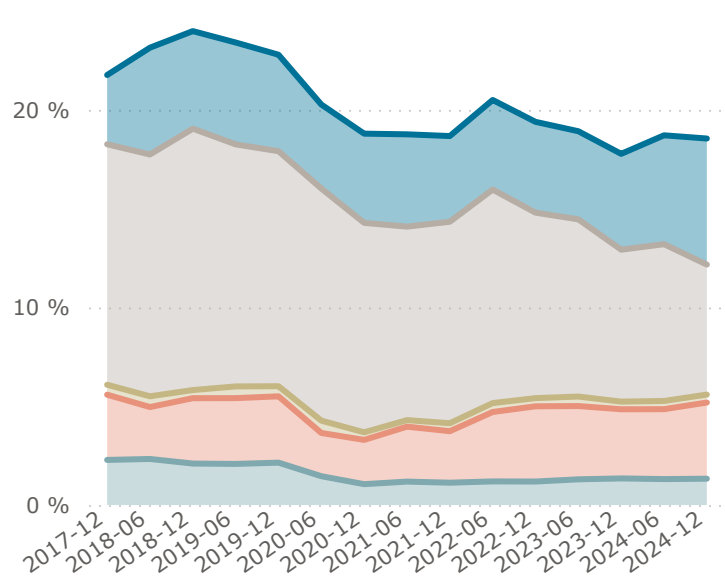
Gross leverage per derivative category as share of net assets

Futures Forwards Swaps Options



Gross leverage per risk factor as share of net assets

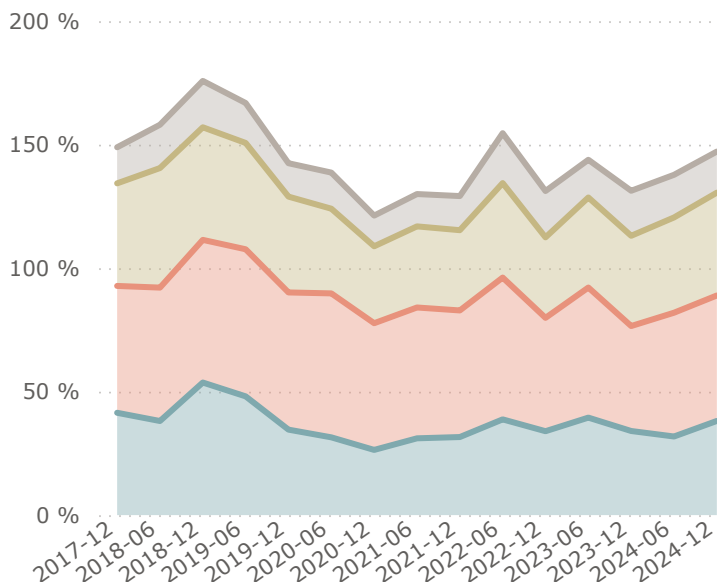
Equity IR Credit FX Other/unknown



4.2.2. Funds under the VaR approach

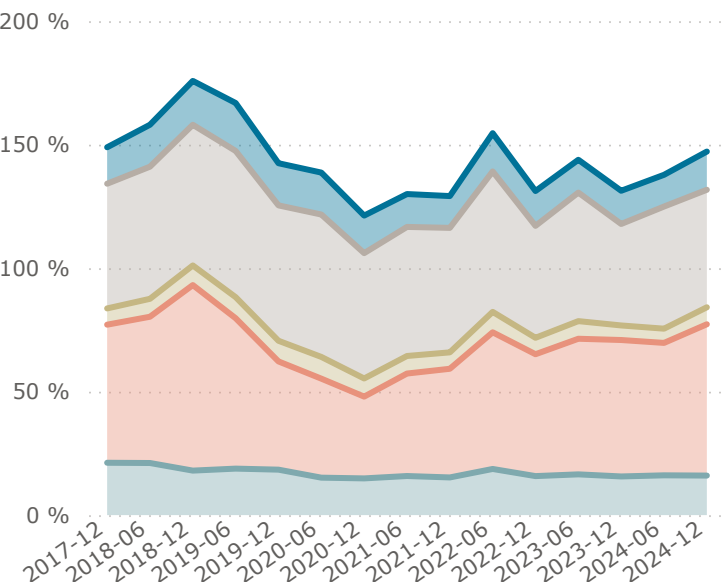
Gross leverage per derivative category as share of net assets

Futures Forwards Swaps Options

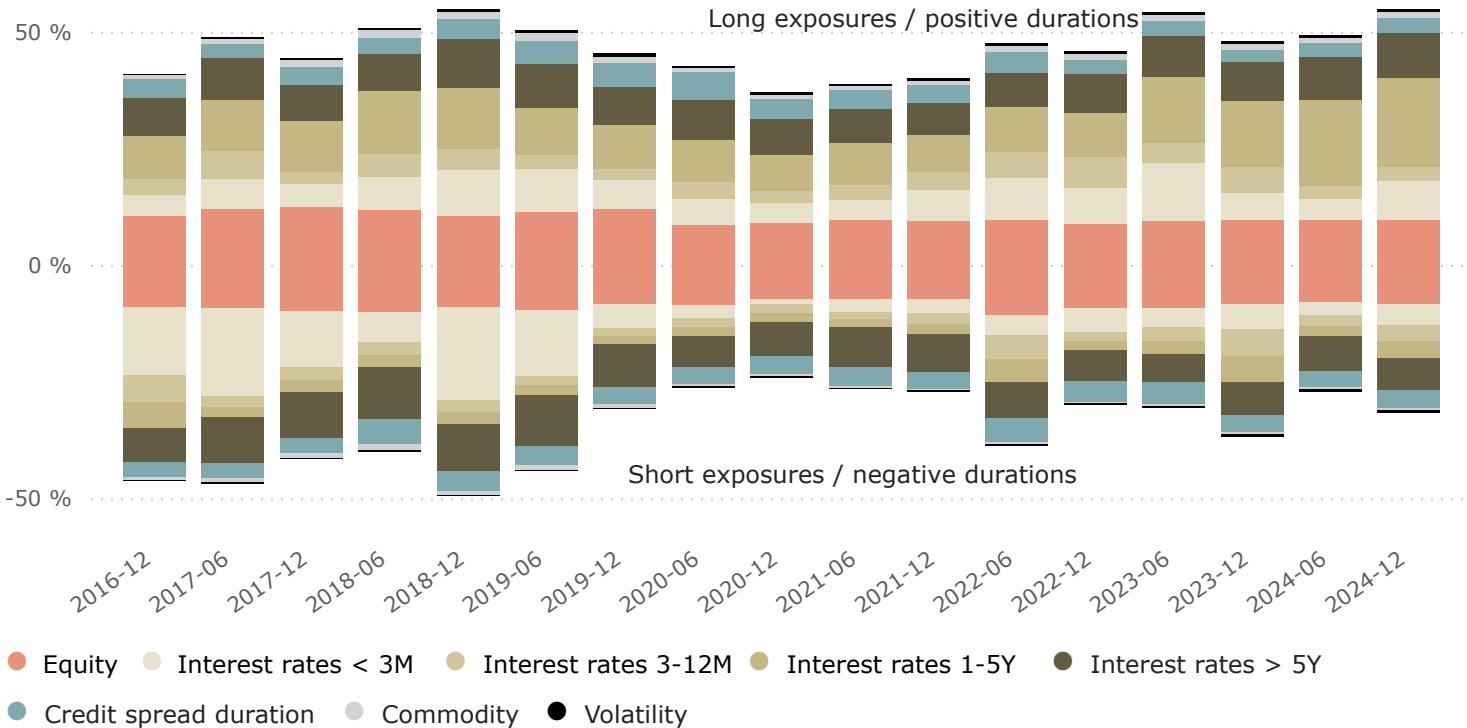


Gross leverage per risk factor as share of net assets

Equity IR Credit FX Other/unknown



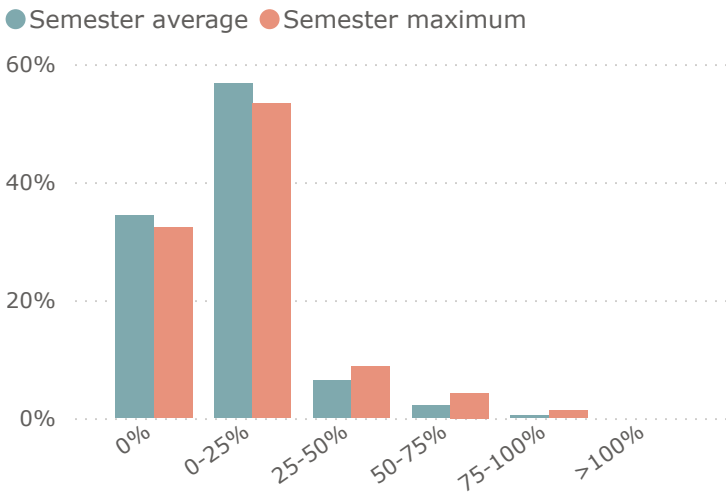
Gross leverage as share of net assets per risk factors (VaR funds) ex-FX and “Other”



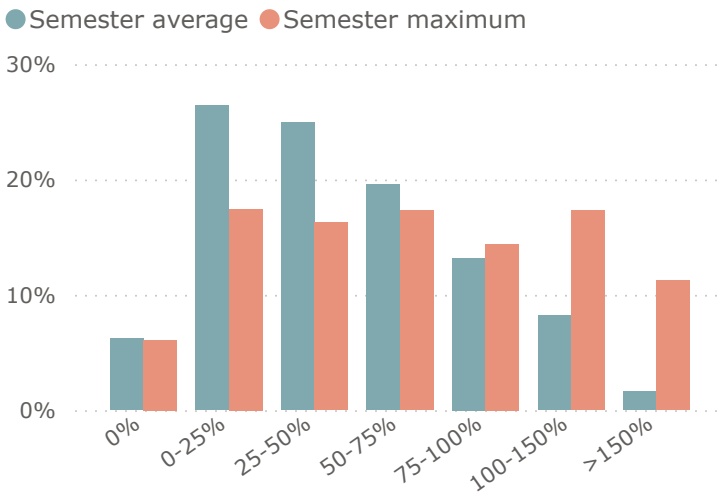
Note: As per the guidelines, “positive” interest rate and credit spread duration correspond to long exposure on bonds. It represents exposures such as fixed rate receiver of an IRS or protection seller of a CDS.

4.2.3. Usage of leverage of funds in the full reporting scope

Leverage usage distribution by number of funds using the commitment approach



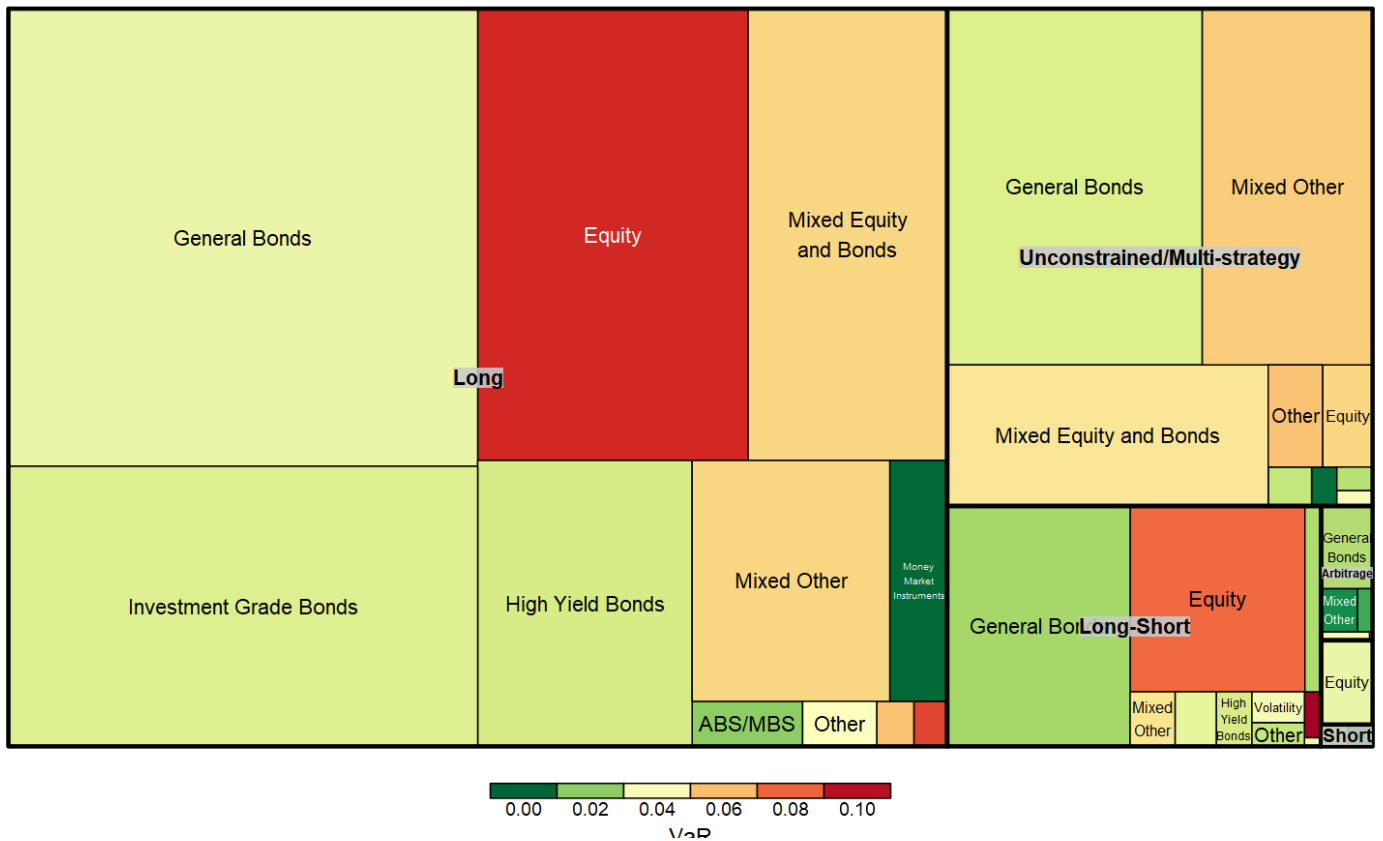
Leverage usage distribution by number of funds using the VaR approach



Note: For the purpose of this report, the usage of leverage is defined as the ratio of the realised leverage (according to commitment approach) to the regulatory limit for funds under the commitment approach, respectively the ratio of the gross realised leverage (sum of derivatives' notionals) to the expected level of gross leverage disclosed in the prospectus for funds under the VaR approach.

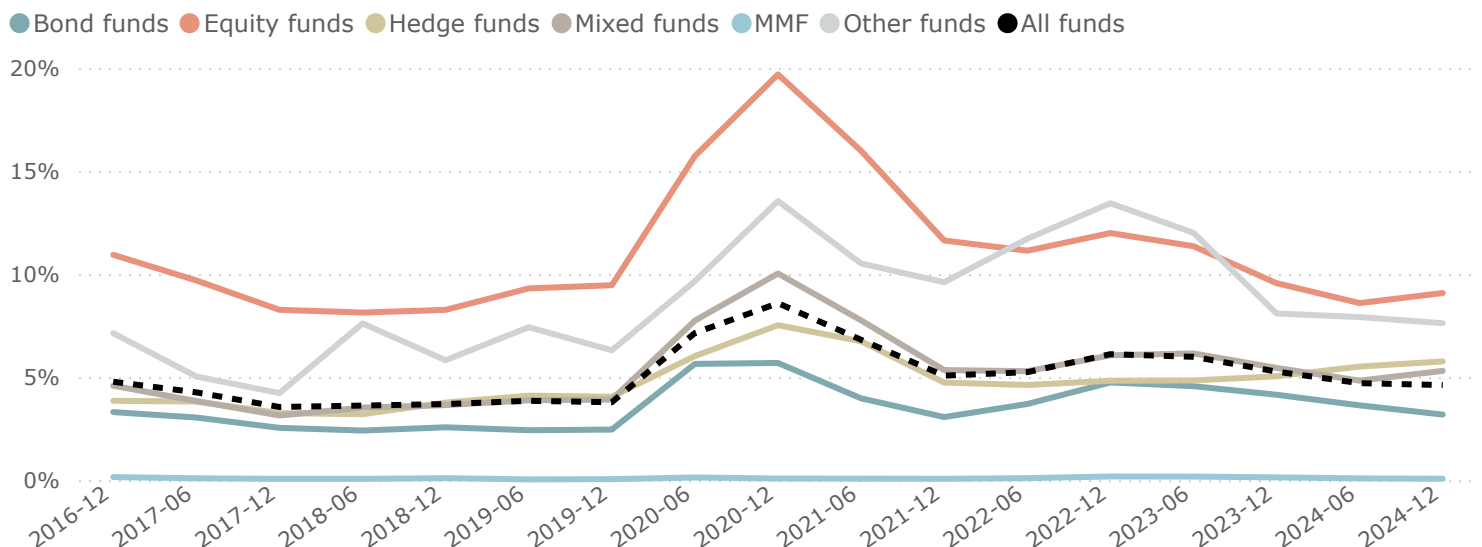
4.2.4. Value-at-Risk (VaR)

Net assets and NAV-weighted average absolute VaR (as share of net assets), by principal asset class and principal investment strategy



Note: The “heatmap” graph represents each fund category by a rectangle whose size is proportional to its net assets and whose colour reflects its average absolute VaR (confidence interval of 99% and holding period of 1 month). For the avoidance of doubt, the graph is based on the absolute VaR levels of both UCITS under an absolute and a relative VaR approach.

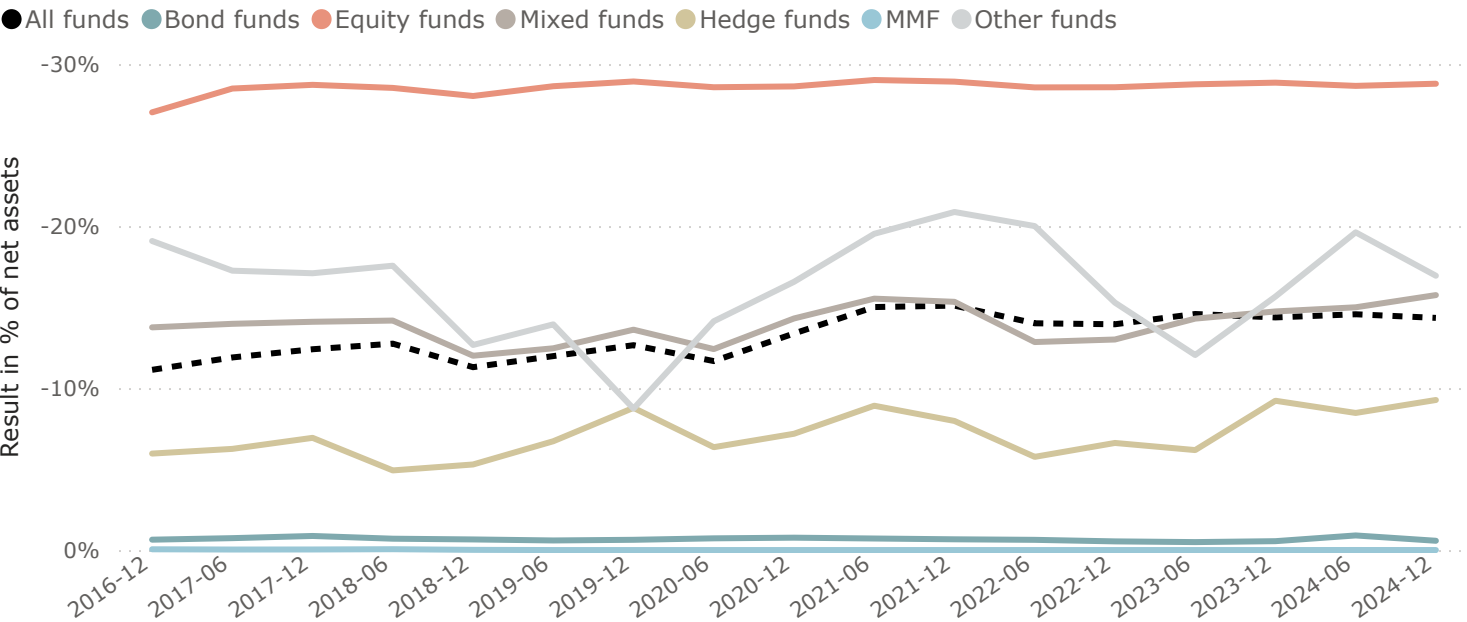
Average absolute VaR (weighted % of NAV)



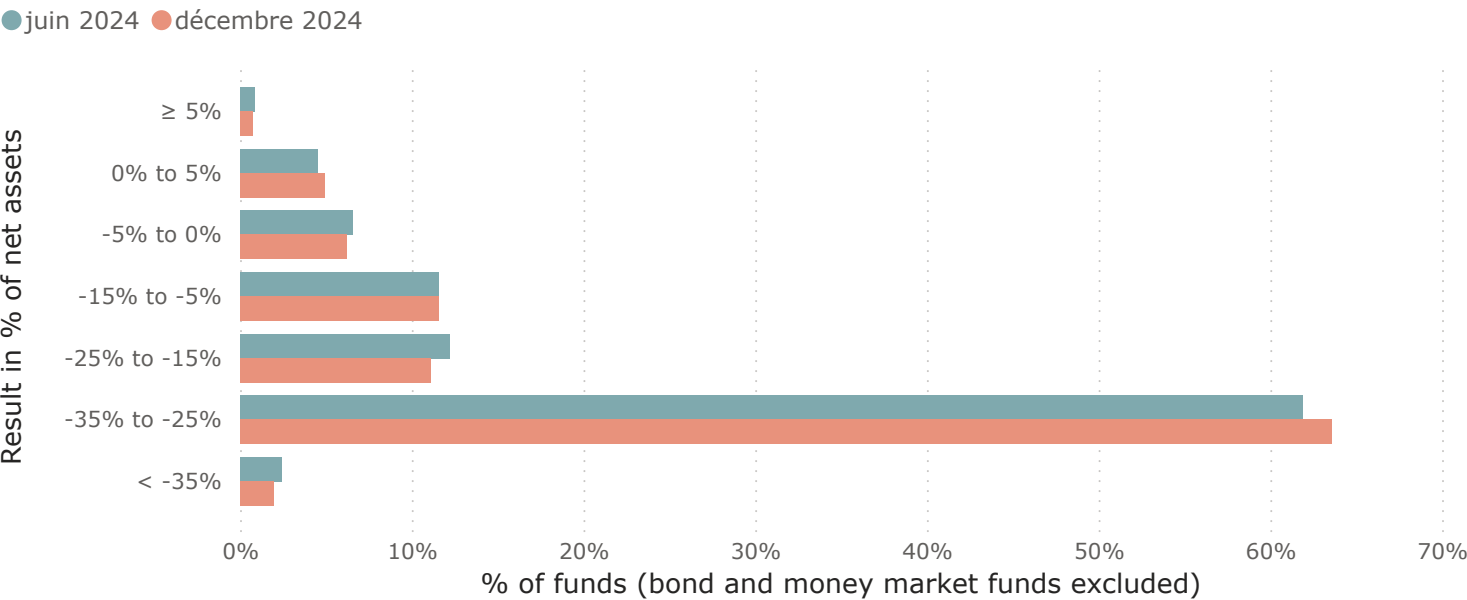
4.3. Stress testing and other risk indicators

4.3.1. Univariate stress test results

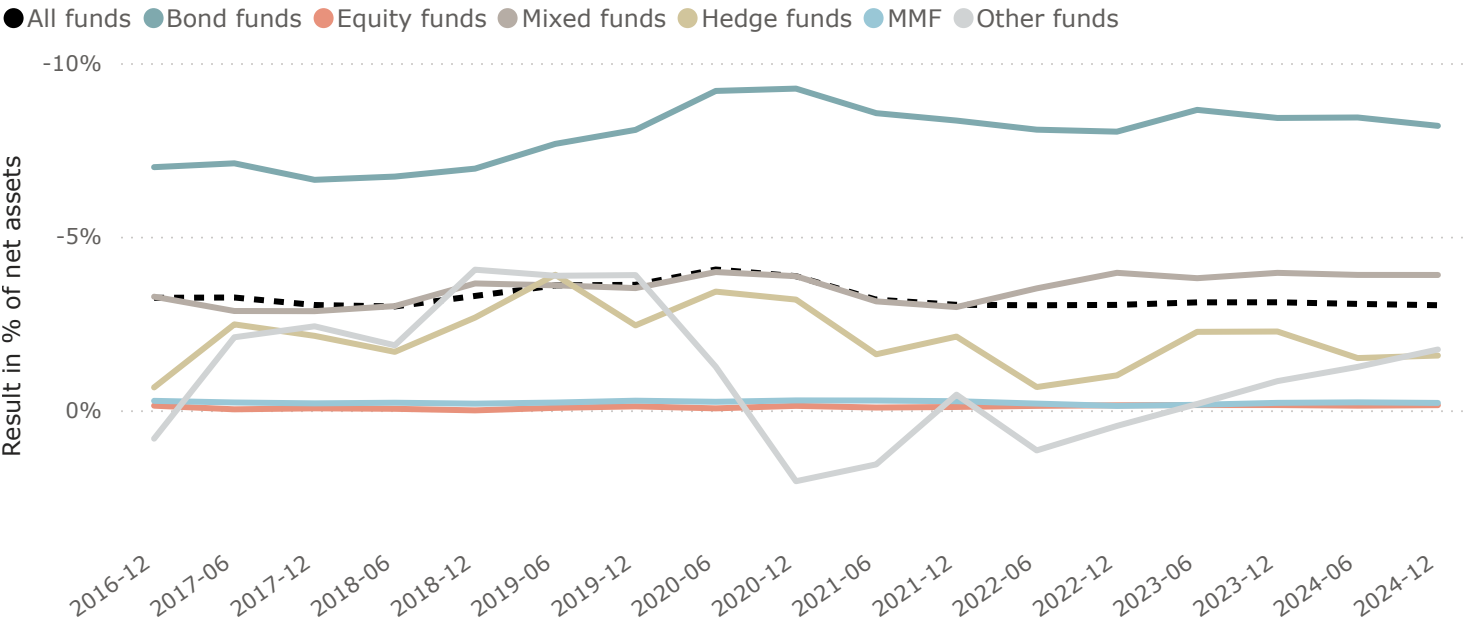
Equities -30%



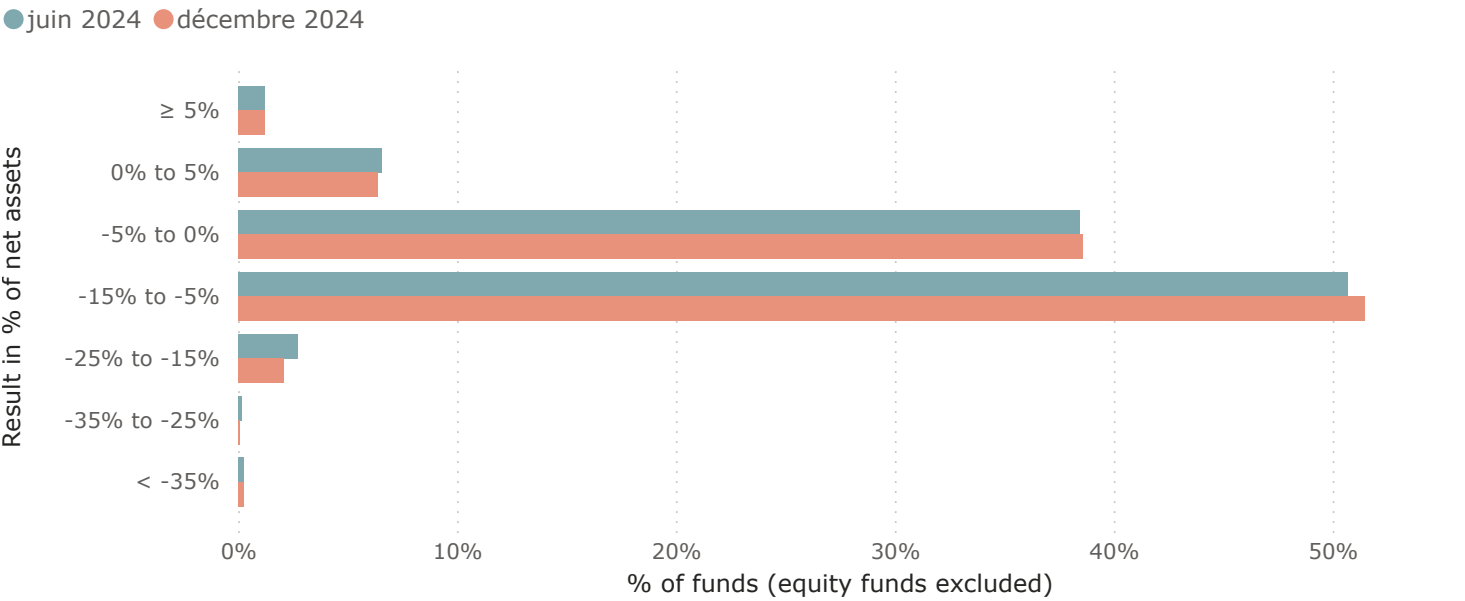
Equities -30%



Interest rates +200bps

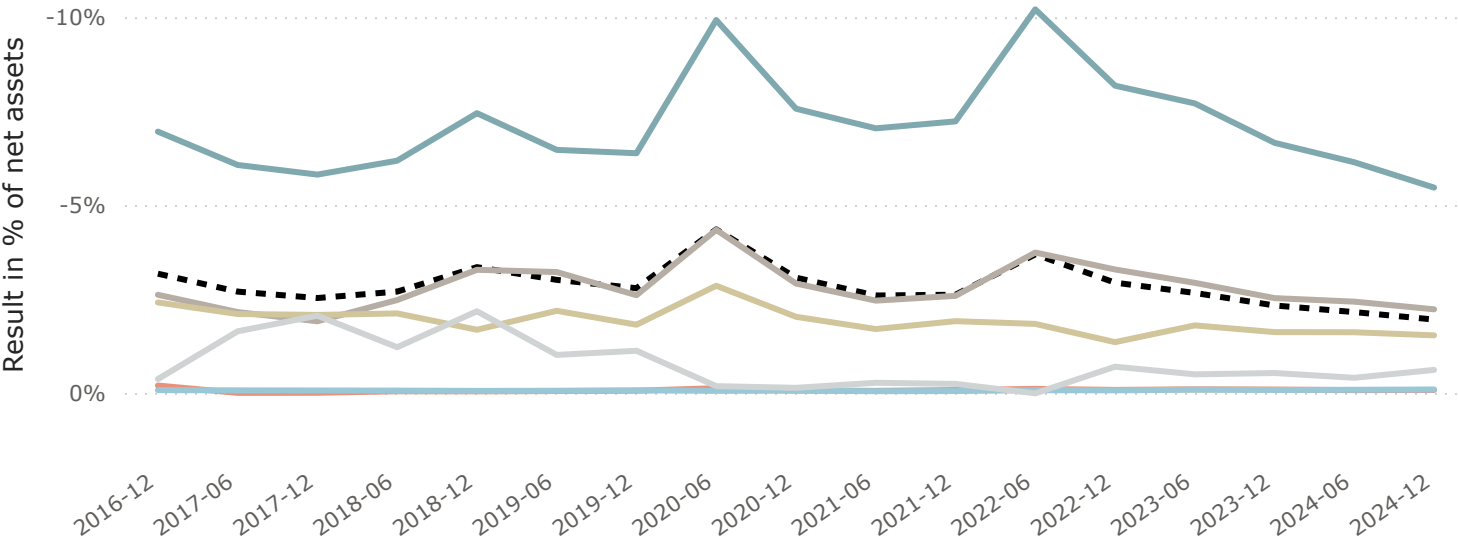


Interest rates +200bps



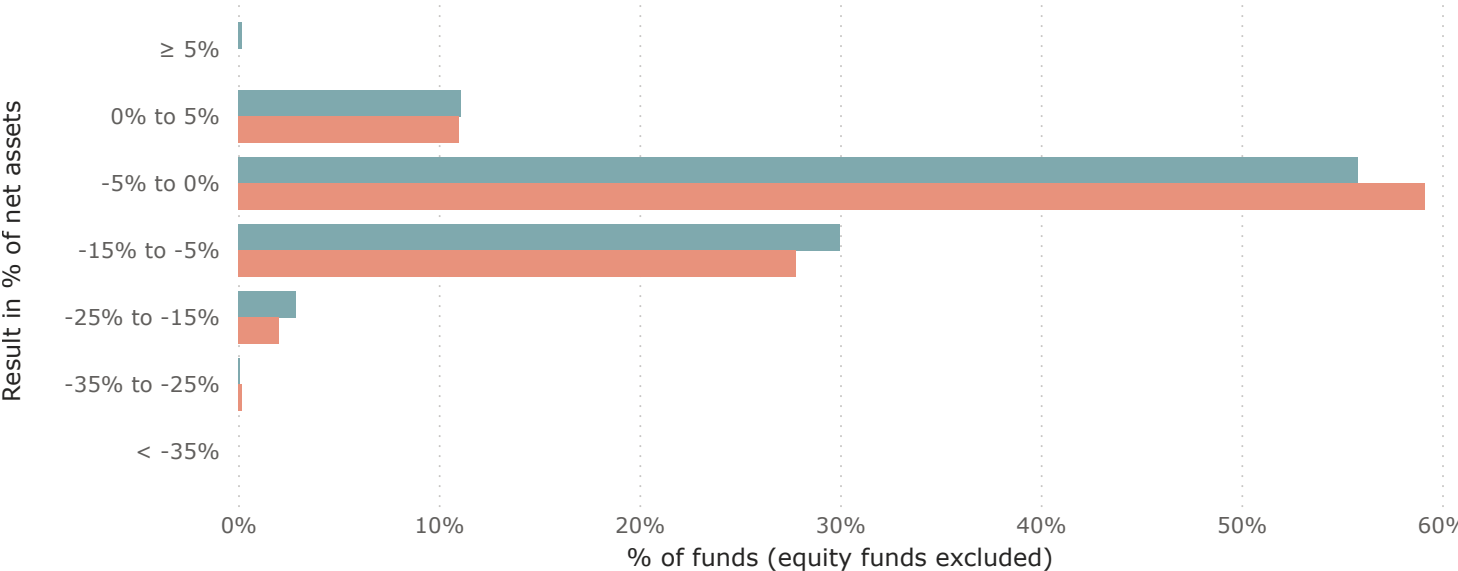
Credit spreads +100%

● All funds ● Bond funds ● Equity funds ● Mixed funds ● Hedge funds ● MMF ● Other funds



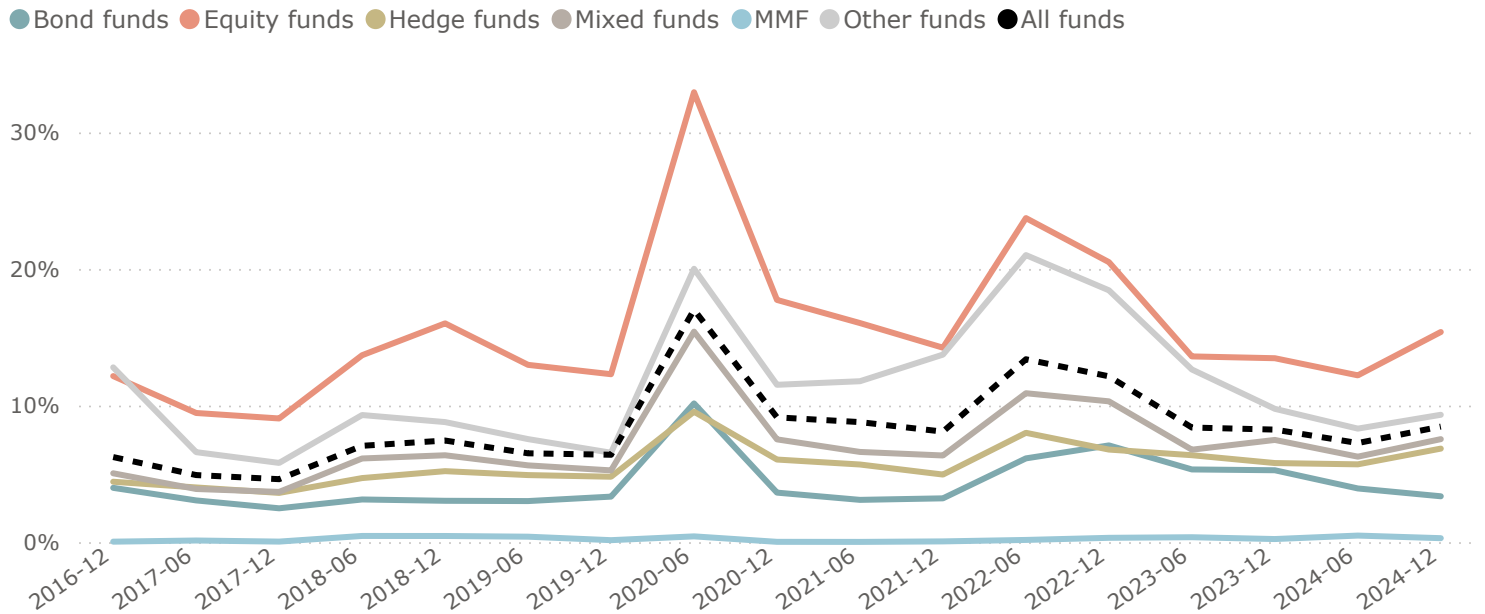
Credit spreads +100%

● juin 2024 ● décembre 2024



4.3.2. Annualised realised volatility

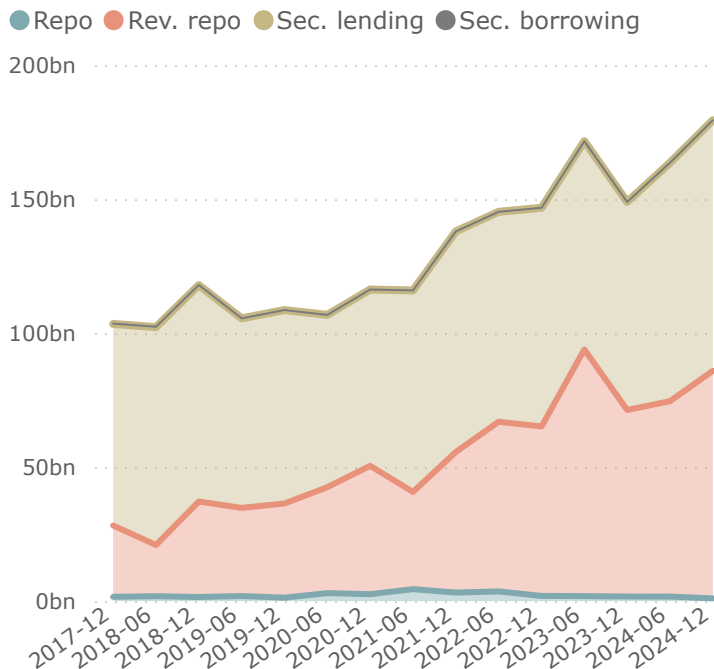
Annualised realised volatility (weighted % of NAV)



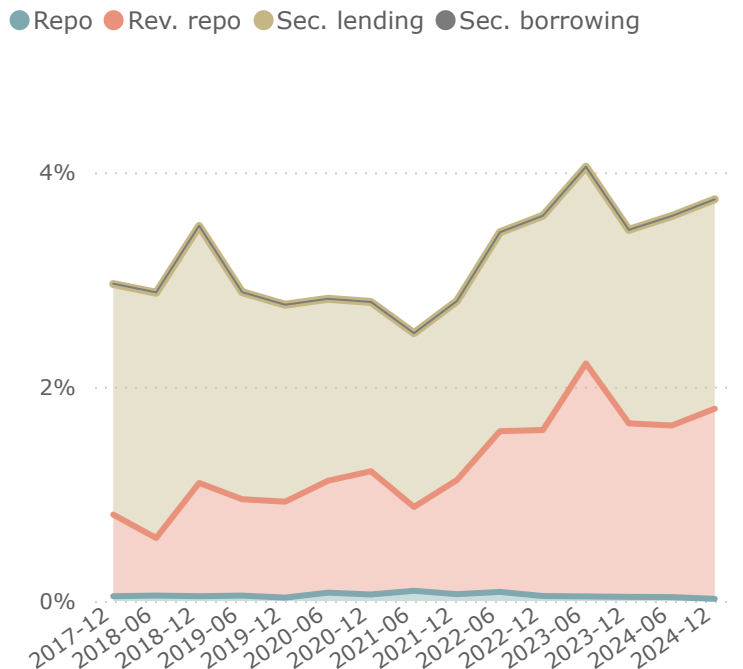
4.4. Efficient portfolio management (EPM) techniques

4.4.1. Evolution of volumes and number of active funds by EPM type

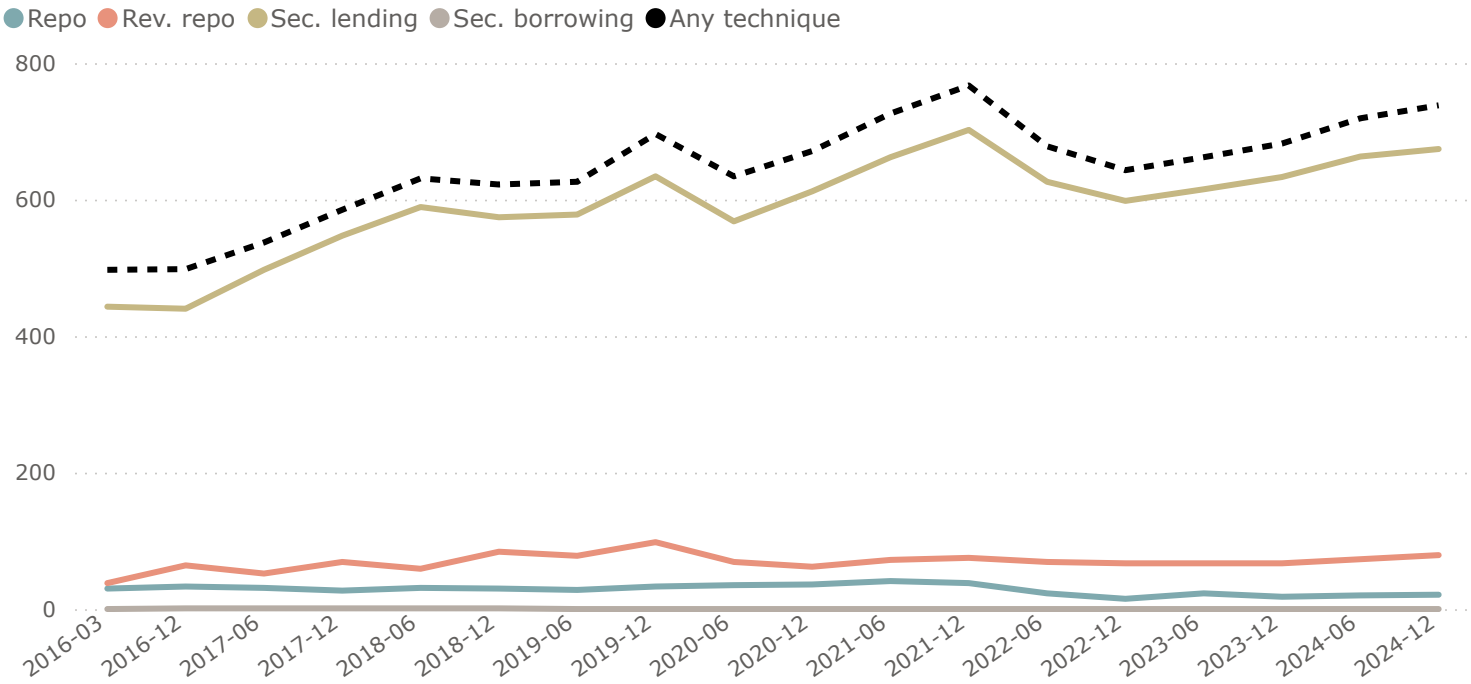
EPM volumes at semester-end (EUR)



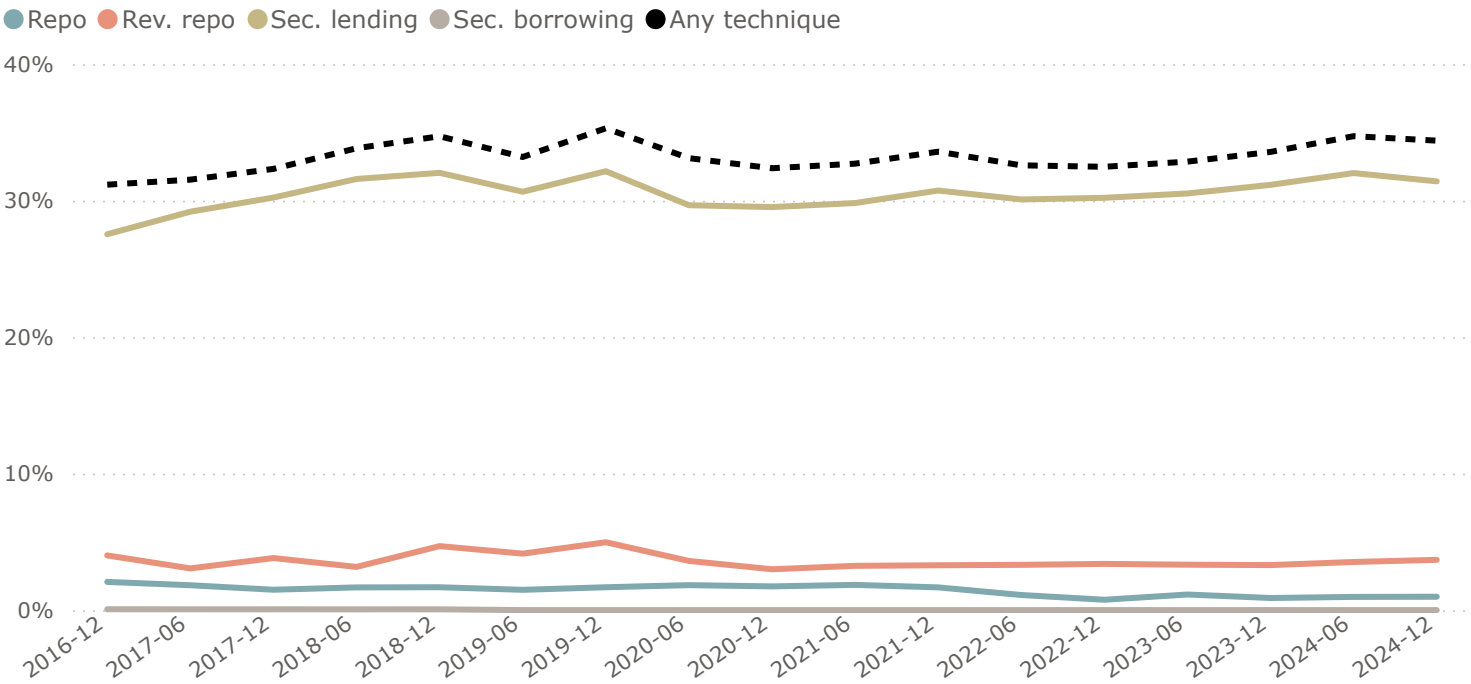
EPM volumes at semester-end (% of NAV)



Nb. funds engaged in EPM transactions

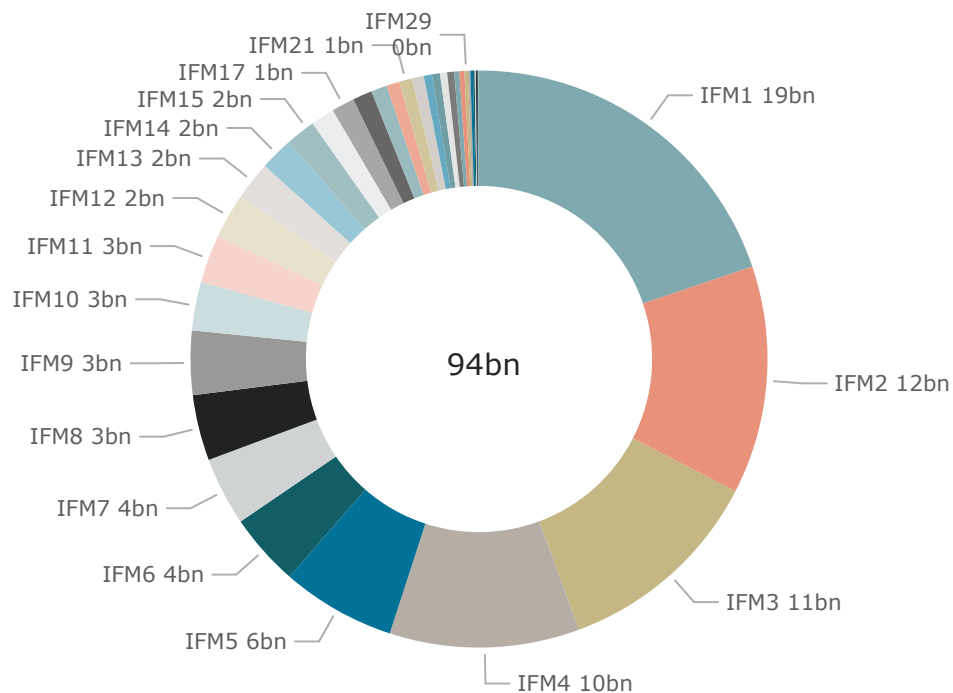


Share of funds in full reporting scope engaged in EPM transactions

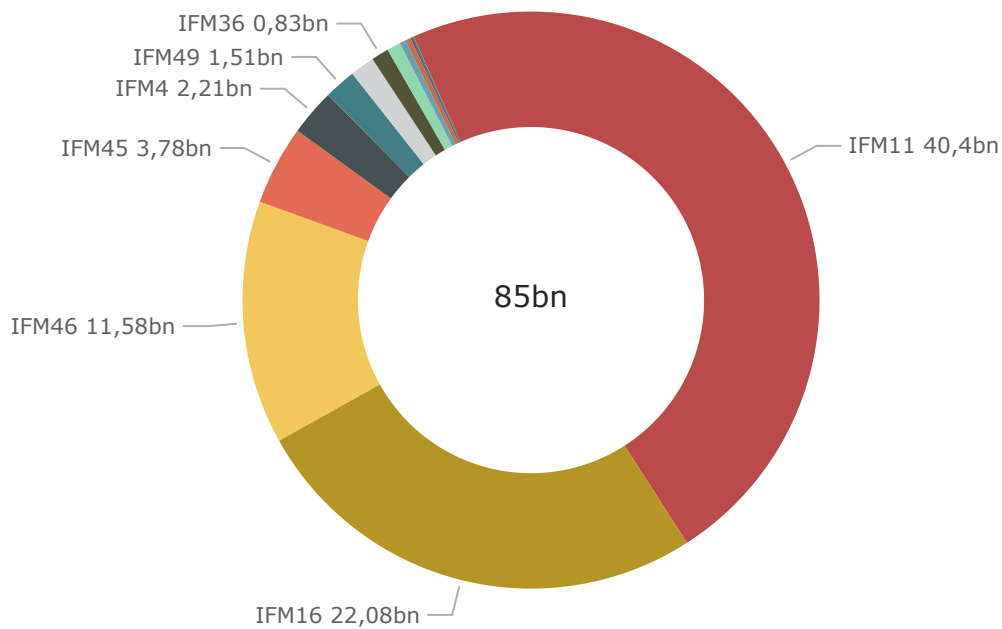


4.4.2. Main active Investment Fund Managers (IFMs) by EPM type

Securities lending, by IFM



Reverse repos, by IFM

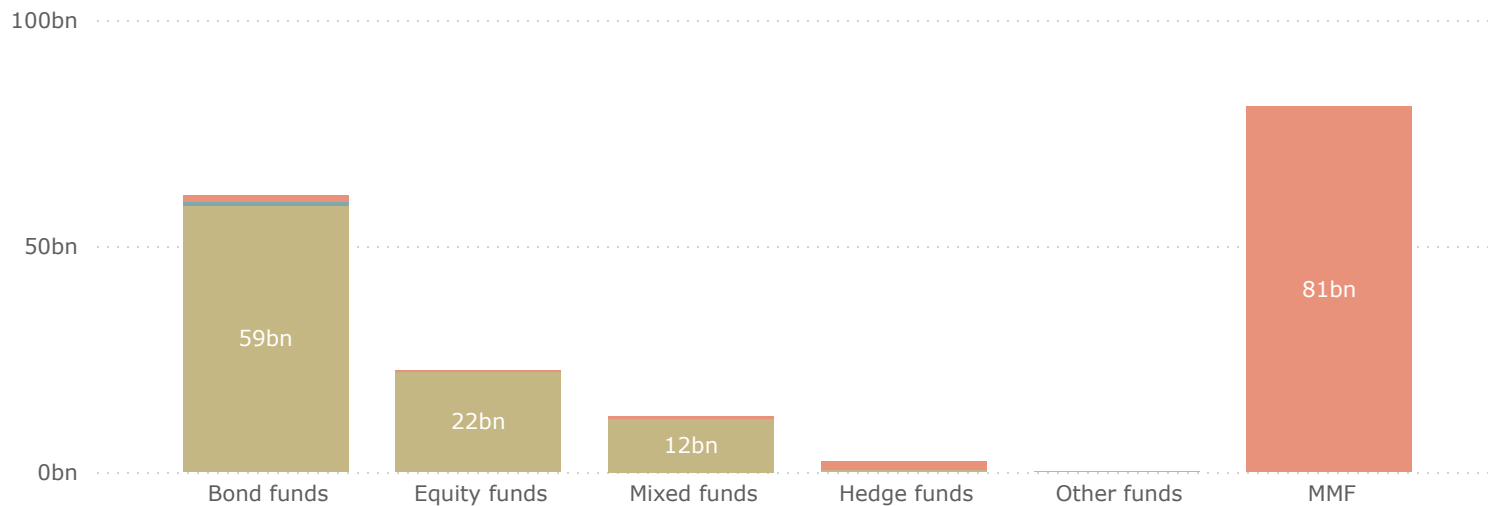


Note: Repos are not pictured above, as their volumes are much lower (total EUR 1bn). Similarly to Reverse repos, repos are dominated by a few actors (94% of volumes from funds managed by 3 IFMs).

4.4.3. EPM volumes by investment strategy

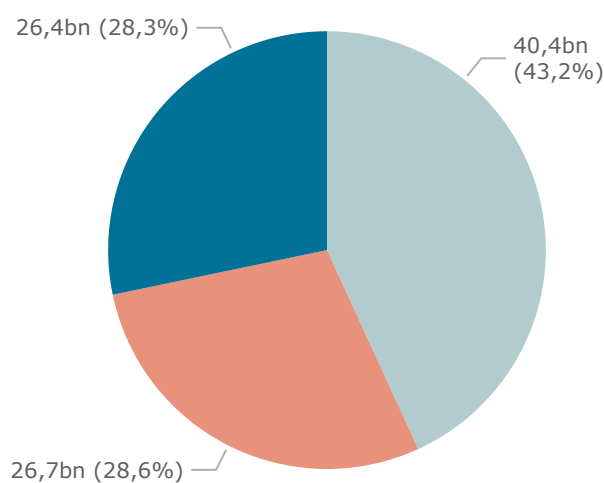
EPM volumes by investment strategy

● Sec. lending ● Sec. borrowing ● Repo ● Rev. repo

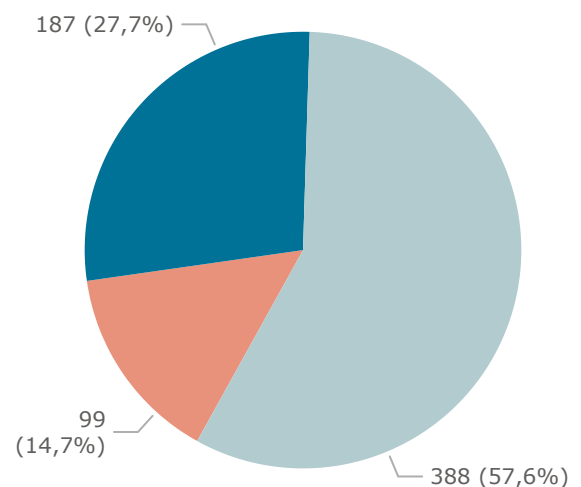


4.4.4. Securities lending: Use of Agent lenders and indemnification against borrower default

Sec. lending (EUR)



Sec. lending (nb. funds)

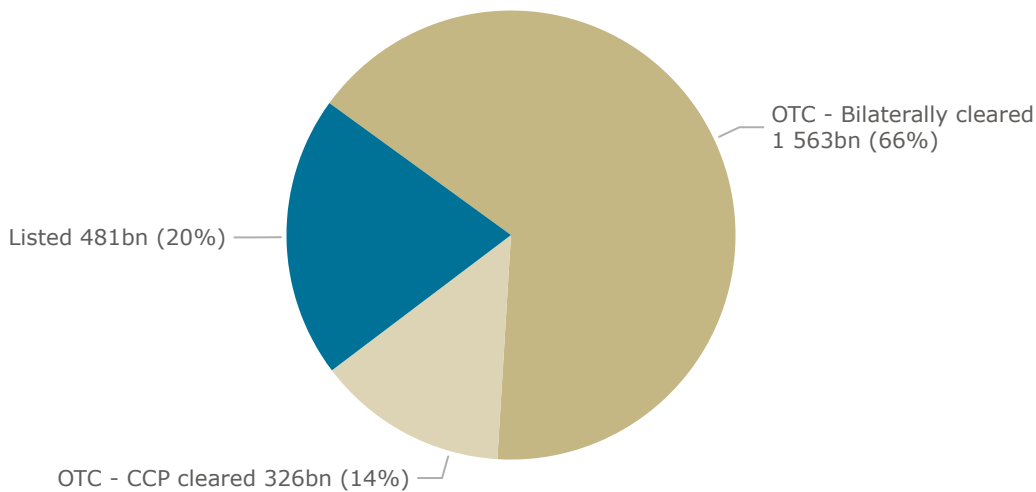


● Agent lender with borrower indemnification ● Agent lender without borrower indemnification
● No agent lender/intermediary

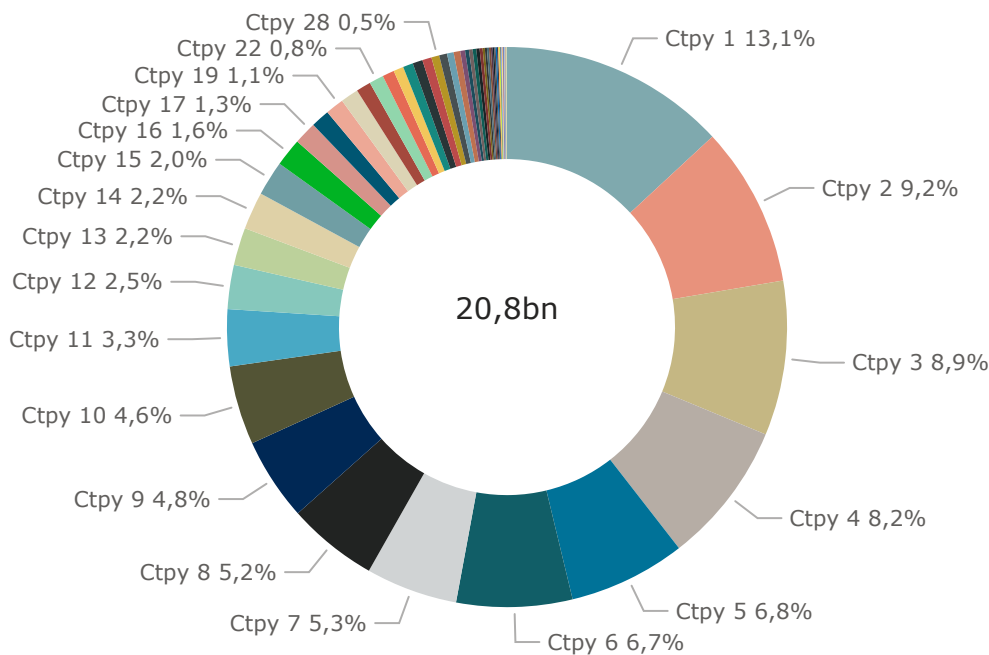


4.5. Counterparty risk and collateral in relation to EPM techniques / OTC and traded derivatives

Nominal amount of derivatives, by trading and clearing venue



Main counterparties on EPM and OTC derivatives transactions



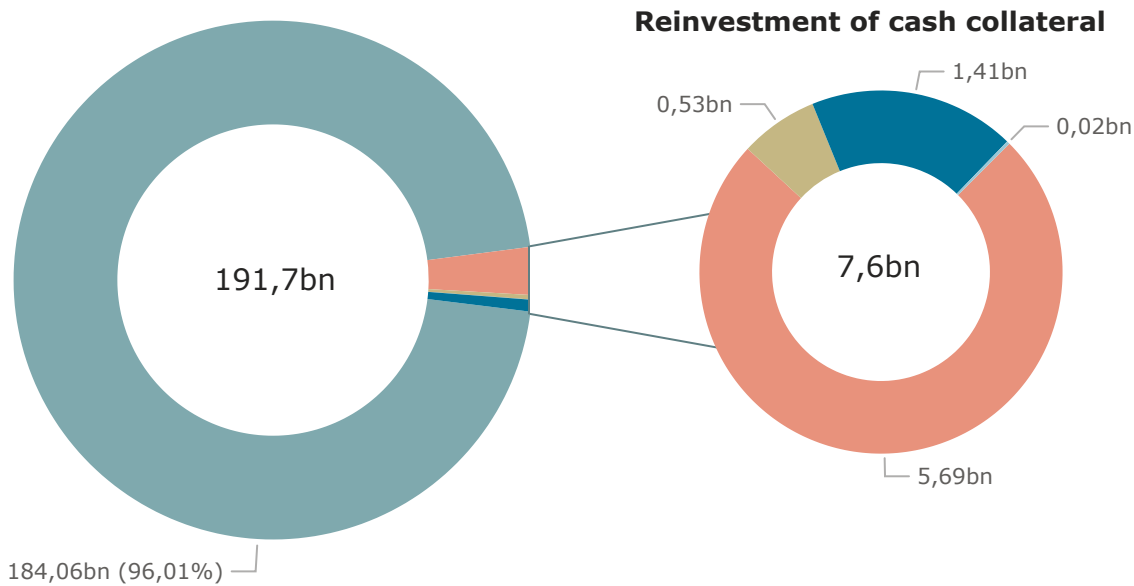
Methodology note: The graph represents the largest counterparties of UCITS in terms of (positive and negative) net counterparty exposure of UCITS in the full reporting scope. More specifically, the main counterparties are determined based on the sum of the absolute values of the net exposures of all UCITS in the full reporting scope to their three counterparties with the largest positive net exposure and to their three counterparties with the largest negative net exposure at semester-end. Counterparties are aggregated at group level rather than at legal entity level. The amount in the center of the doughnut is the sum of the absolute values of the net exposures to these counterparties.

Number of funds by net positive counterparty exposure (as % of TNA) on OTC derivatives and EPM transactions

% of TNA	EPM	%	OTC	%
0% - 1%	723	97,97%	1 138	85,95%
1% - 2%	7	0,95%	103	7,78%
2% - 3%	2	0,27%	30	2,27%
3% - 4%	1	0,14%	13	0,98%
4% - 5%	1	0,14%	14	1,06%
>= 5%	4	0,54%	26	1,96%
Total	738	100,00%	1 324	100,00%

Collateral received from EPM / OTC derivative transactions and reinvestment of cash collateral

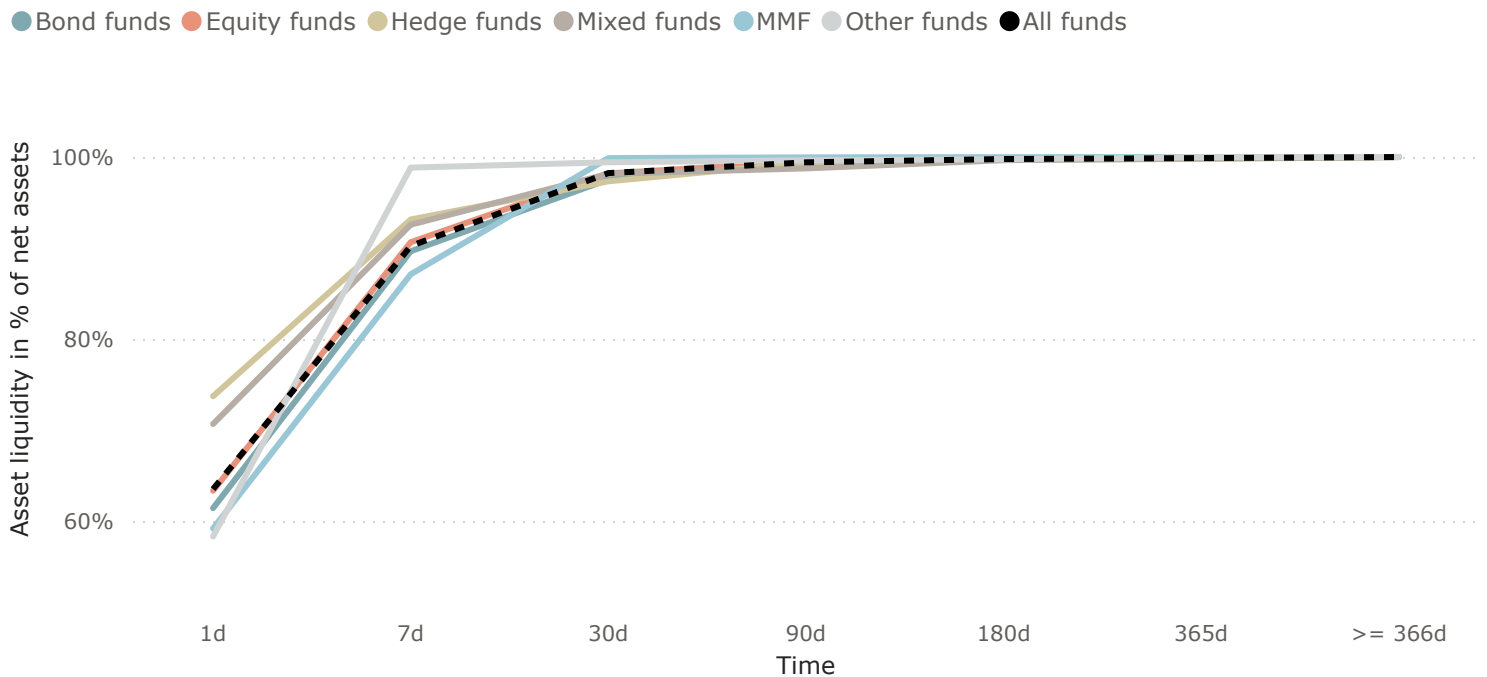
Non cash collateral Deposits Gov. bonds Short-term MMF Rev. repos



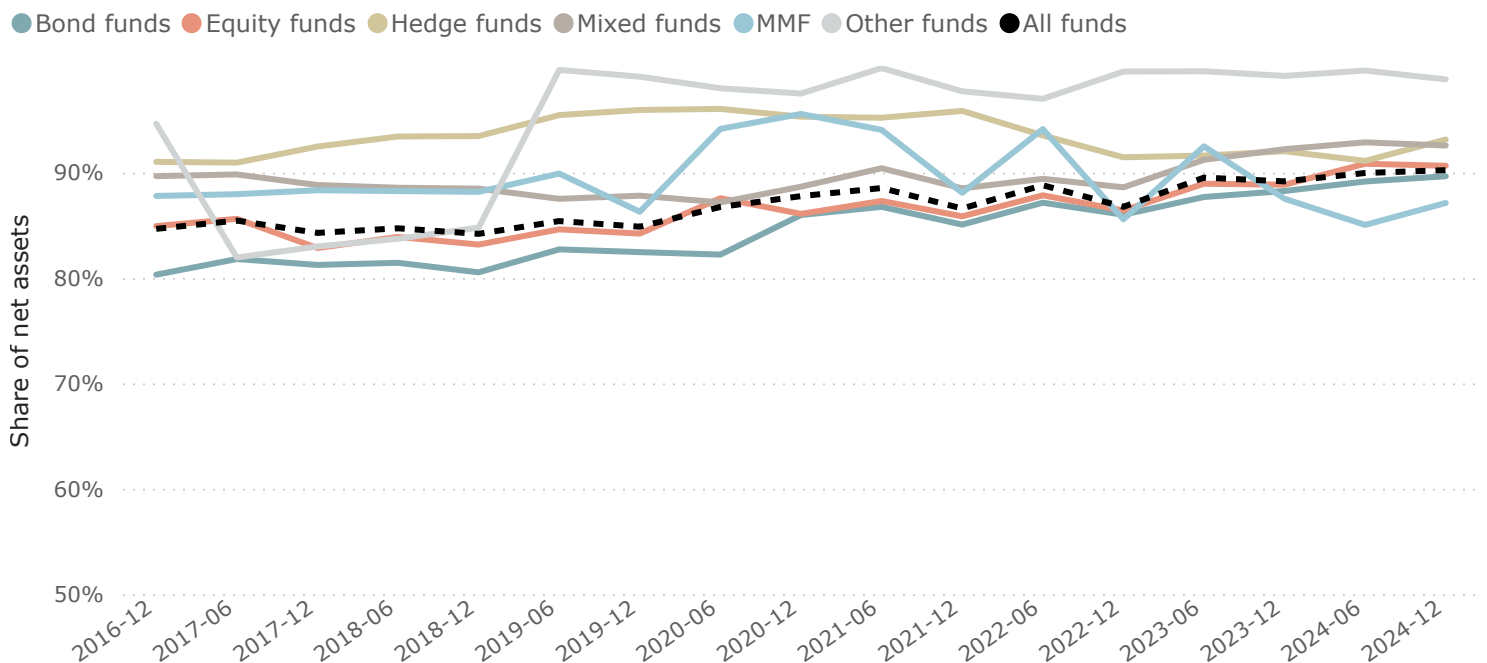
4.6. Liquidity

4.6.1. Portfolio liquidity at semester-end in normal market conditions

Time to liquidate (normal market conditions)



Evolution of 7-days liquidity (normal market conditions)

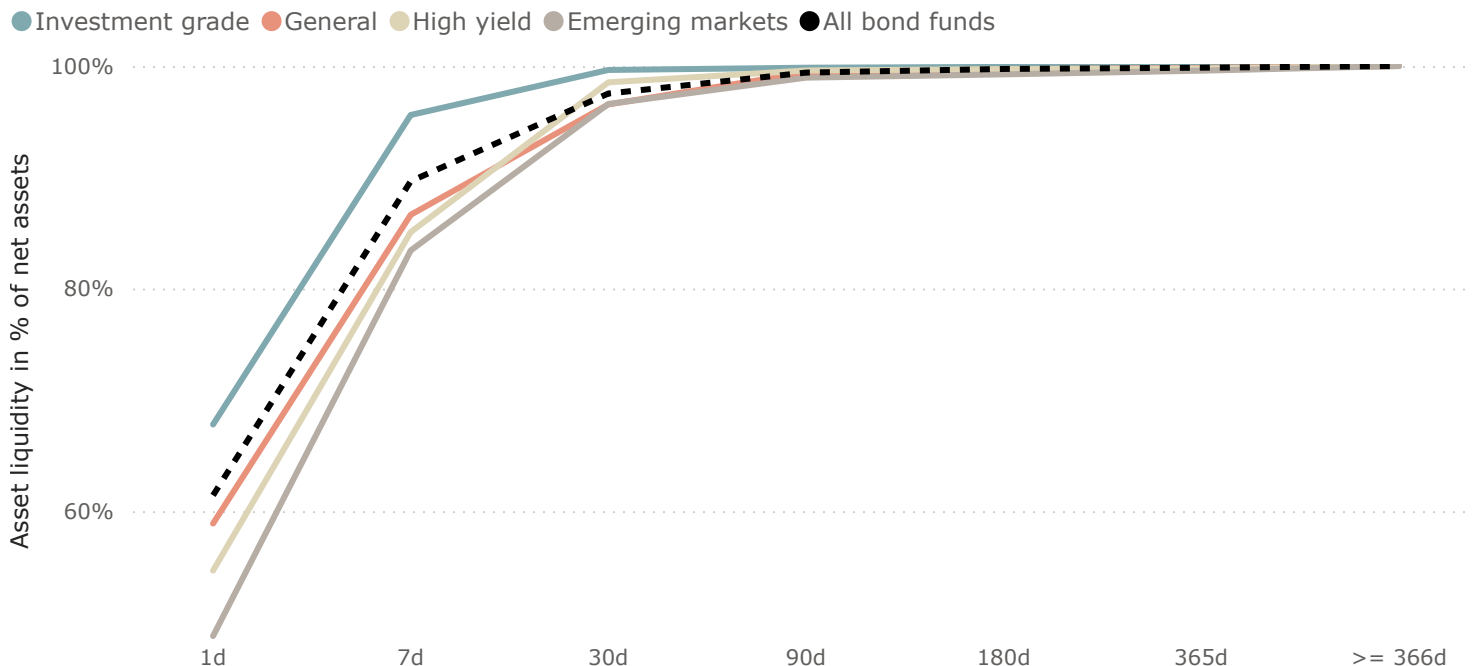


Note: The figures are based on the self-assessment of the Investment Fund Managers on the time to liquidate of their funds under normal market conditions.

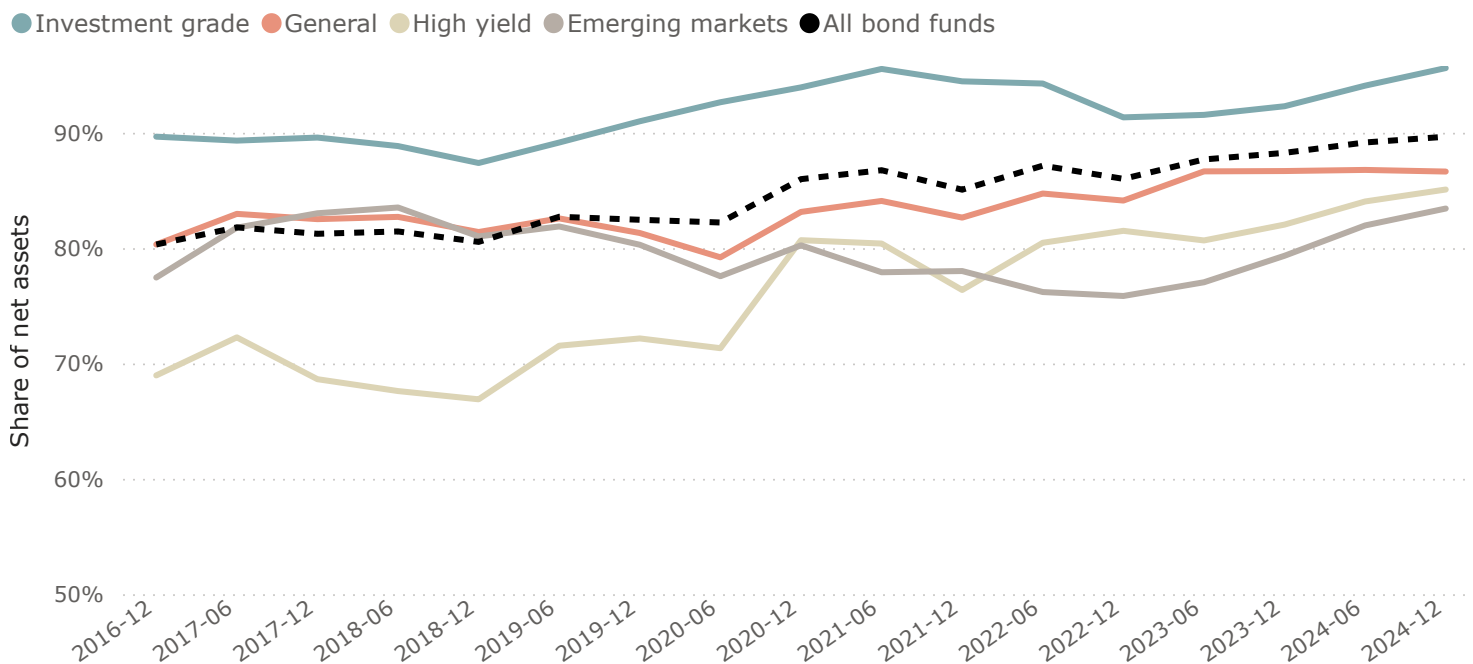


4.6.2. Portfolio liquidity of bond funds at semester-end in normal market conditions

Time to liquidate of bond funds (normal market conditions)

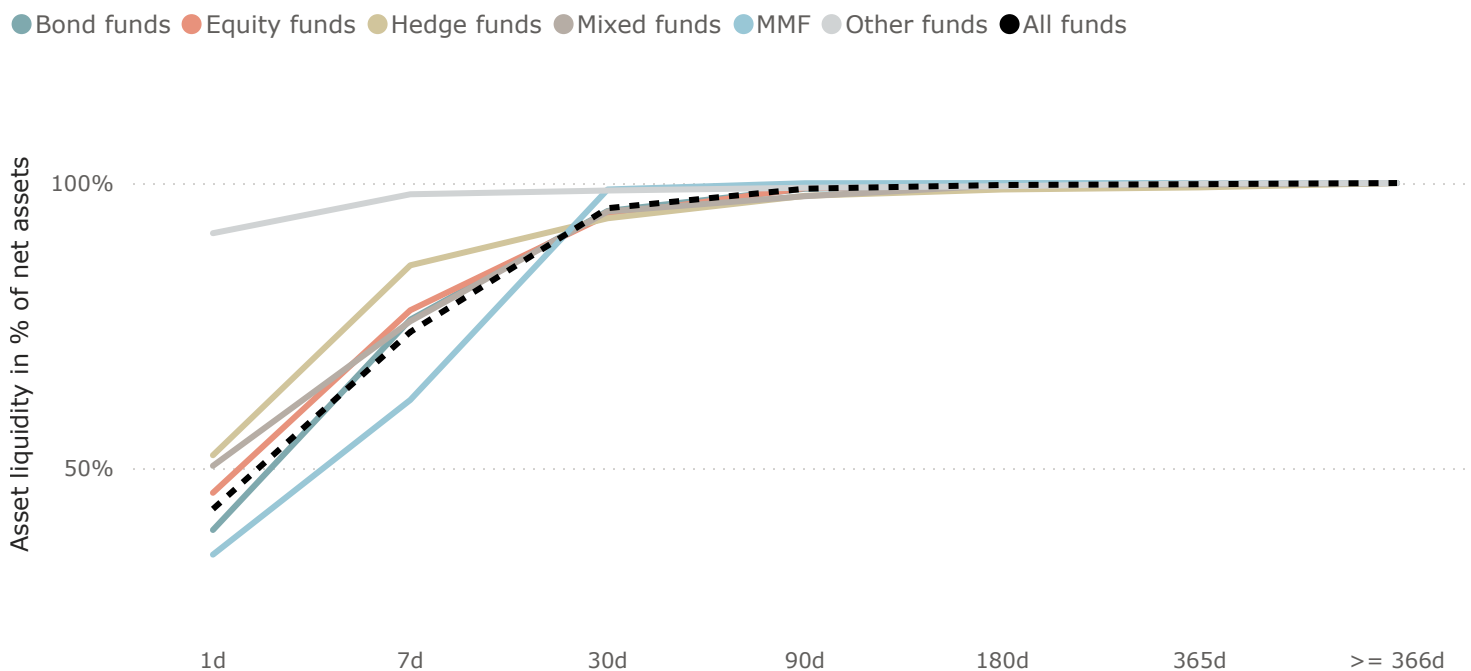


Evolution of 7-days liquidity of bond funds (normal market conditions)

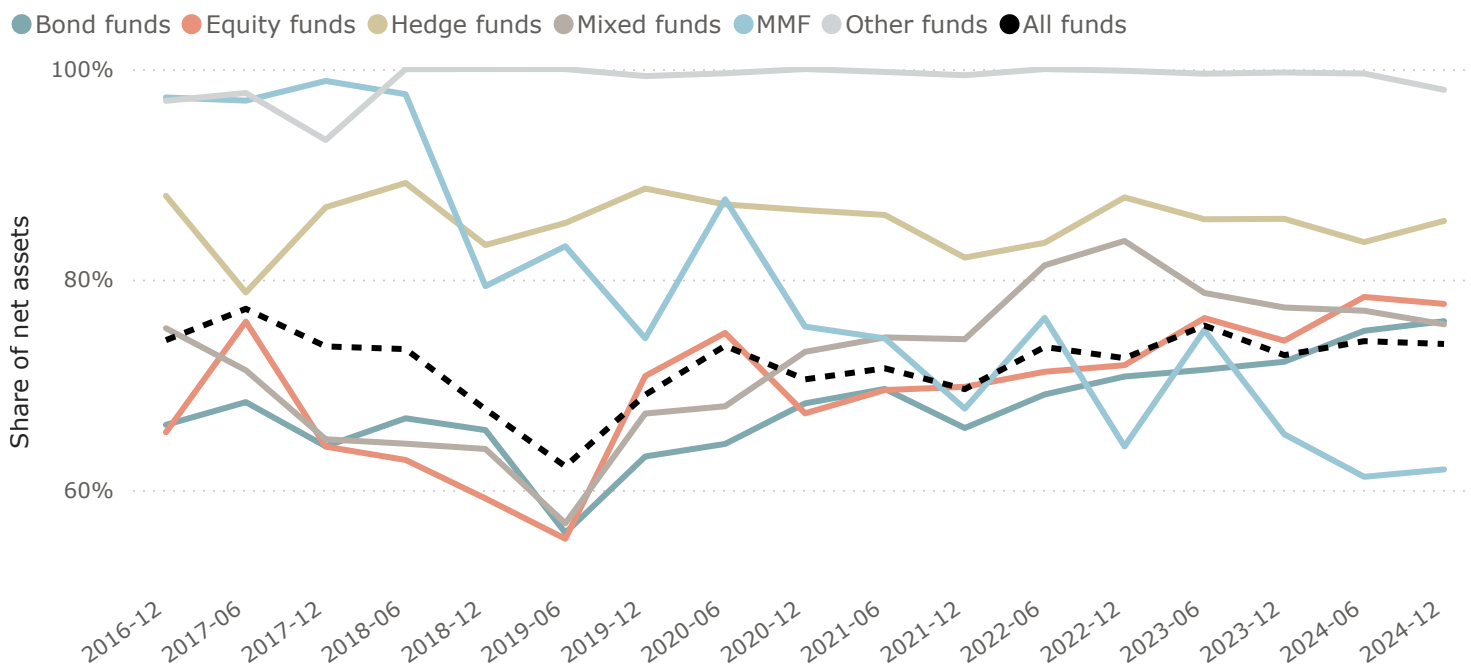


4.6.3. Portfolio liquidity at semester-end in stressed market conditions

Time to liquidate (stressed market conditions)



Evolution of 7-days liquidity (stressed market conditions)



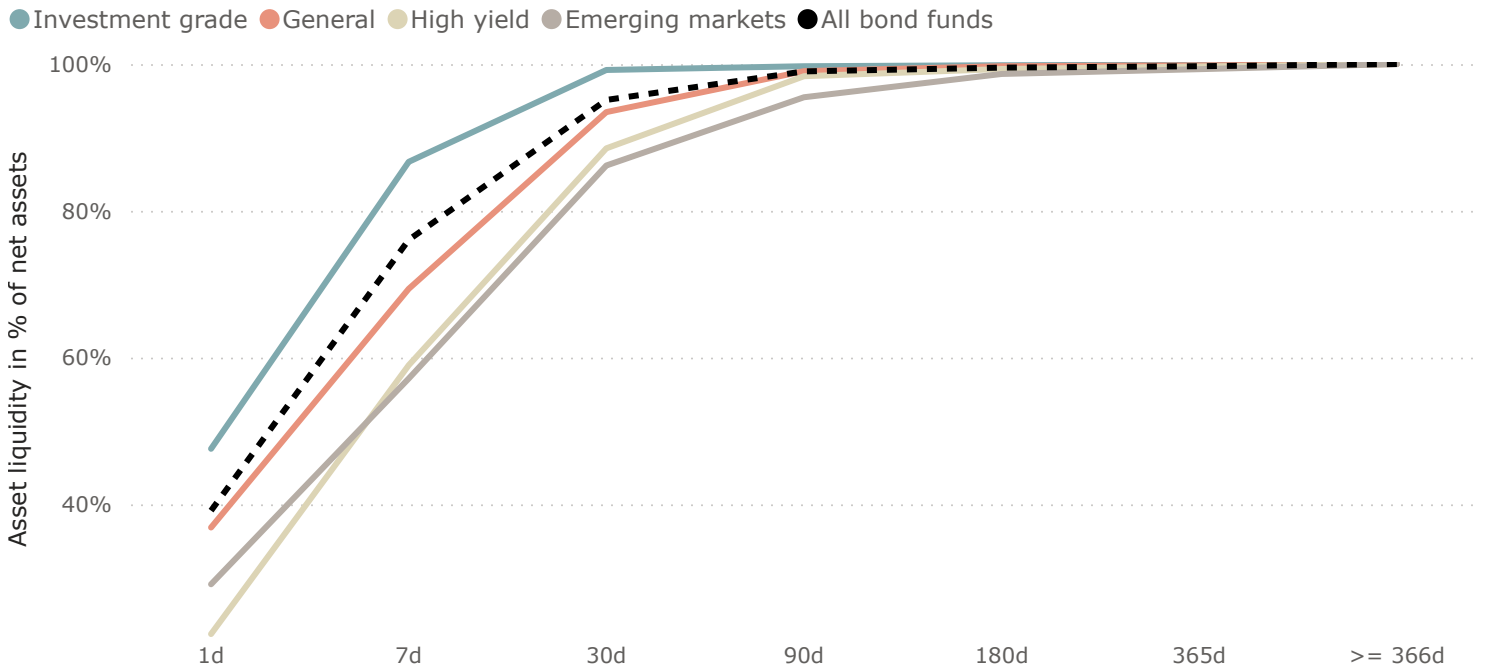
Note:

The liquidity profile under stressed market conditions, which is optional according to the CSSF's guidelines, was reported by 35% of funds in the full reporting scope. More specifically, it was reported by 249 bond funds, 299 equity funds, 34 hedge funds, 125 mixed funds, 32 money market funds and 5 other funds. It is critical to stress that the results are based on different methodologies and/or assumptions.

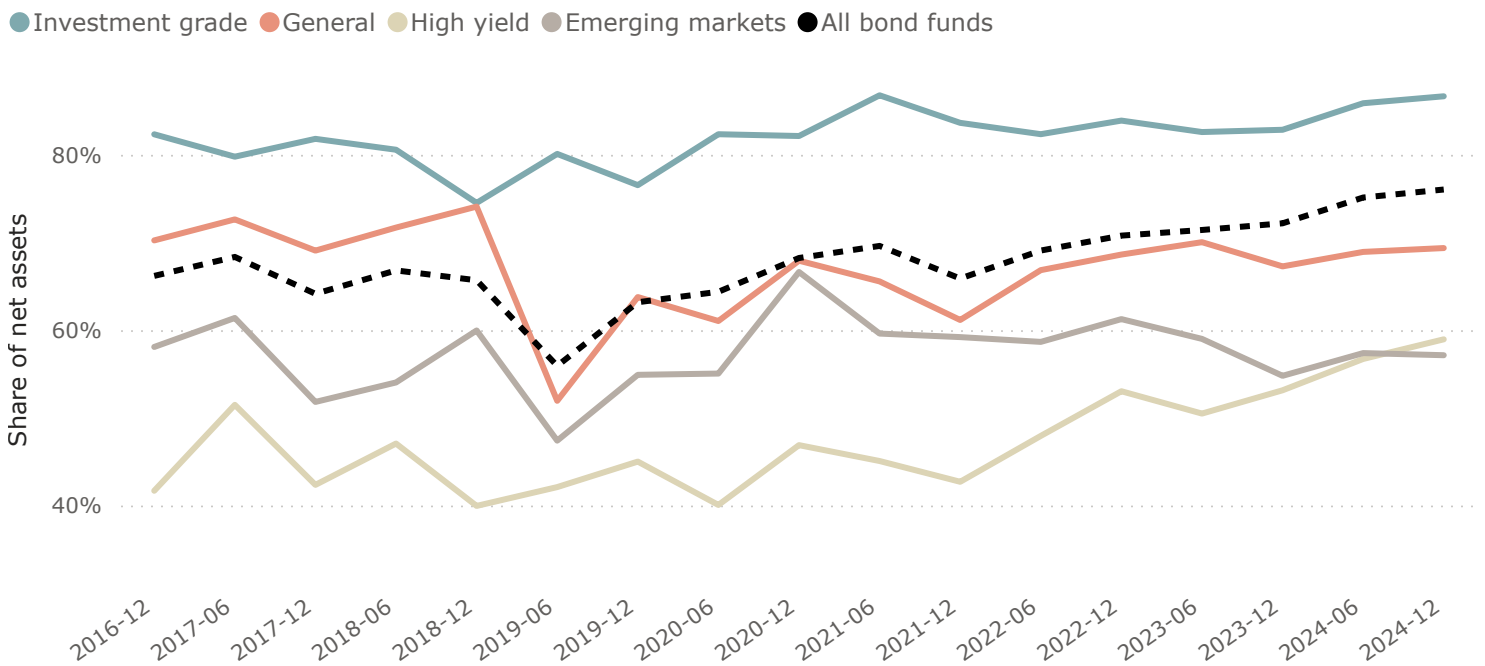


4.6.4. Portfolio liquidity of bond funds at semester-end in stressed market conditions

Time to liquidate of bond funds (stressed market conditions)

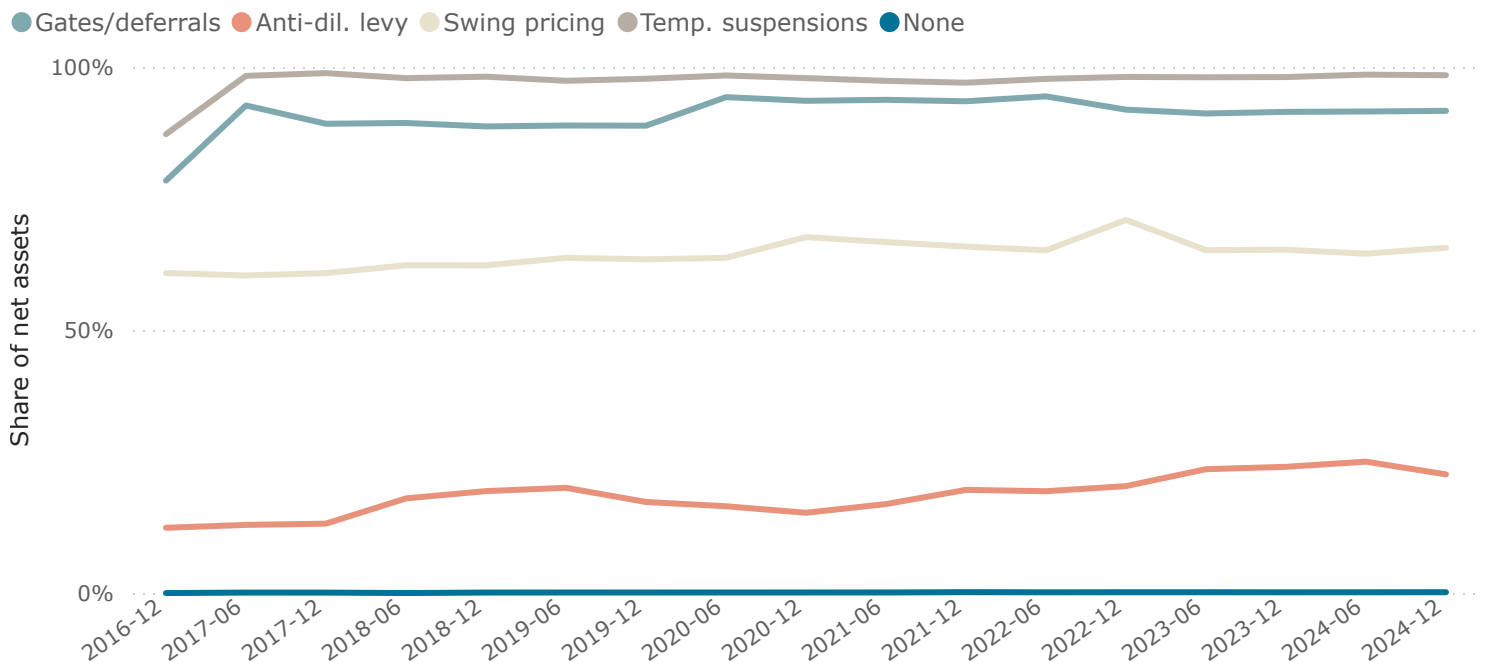


Evolution of 7-days liquidity of bond funds (stressed market conditions)

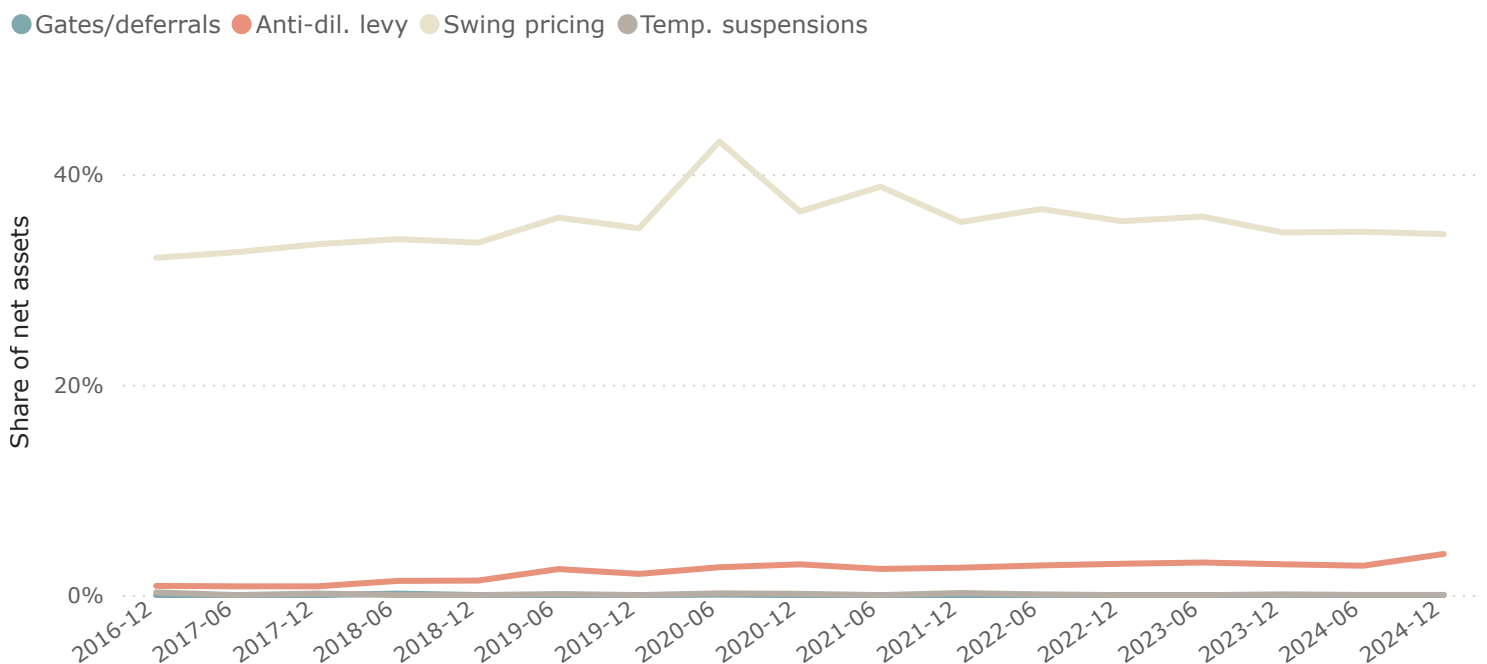


4.6.5. Liquidity Management Tools

Available liquidity management tools



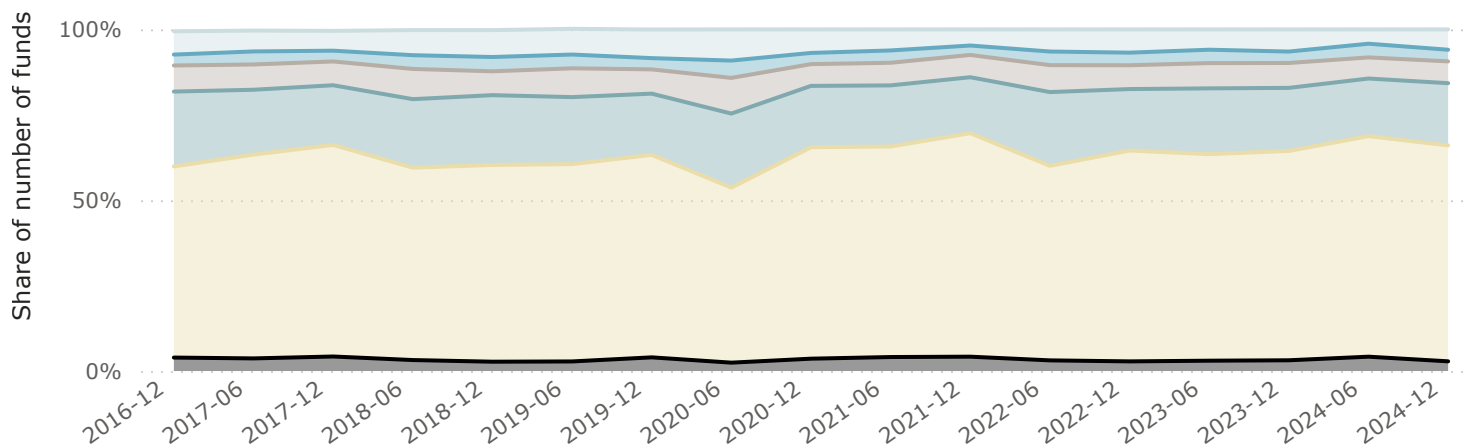
Usage liquidity management tools (at least once)



4.6.6. Highest net redemption

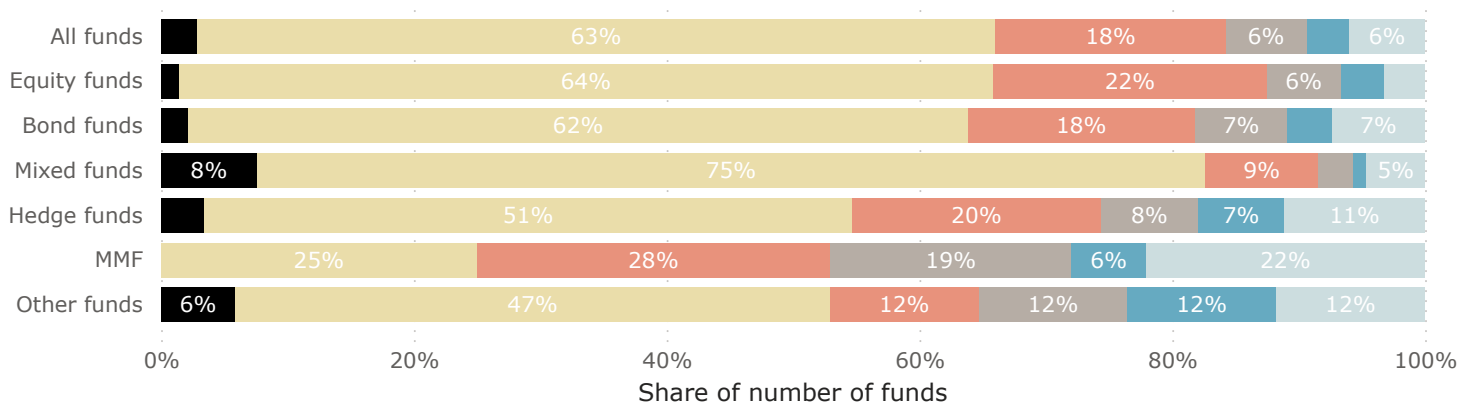
Distribution of the highest net redemption

Redeemed net assets: ● 0% ● 0% - 2.5% ● 2.5% - 5% ● 5% - 7.5% ● 7.5% - 10% ● >10%



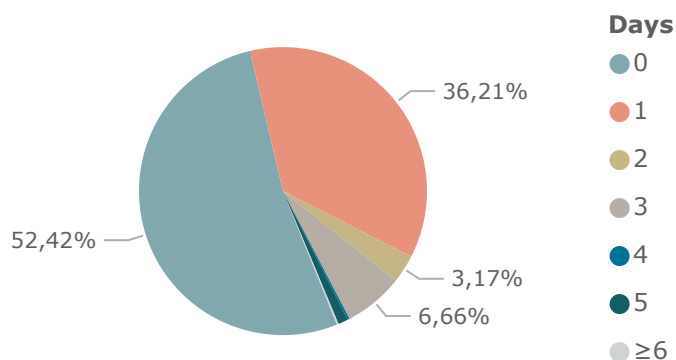
Distribution of highest net redemption, by investment policy

Redeemed net assets: ● 0% ● 0%-2.5% ● 2.5%-5% ● 5%-7.5% ● 7.5%-10% ● >10%

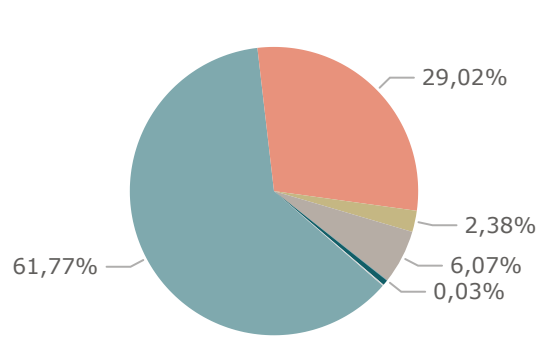


4.6.7. Notice periods for redemptions

Nb. of funds, by notice periods



Net assets, by notice periods



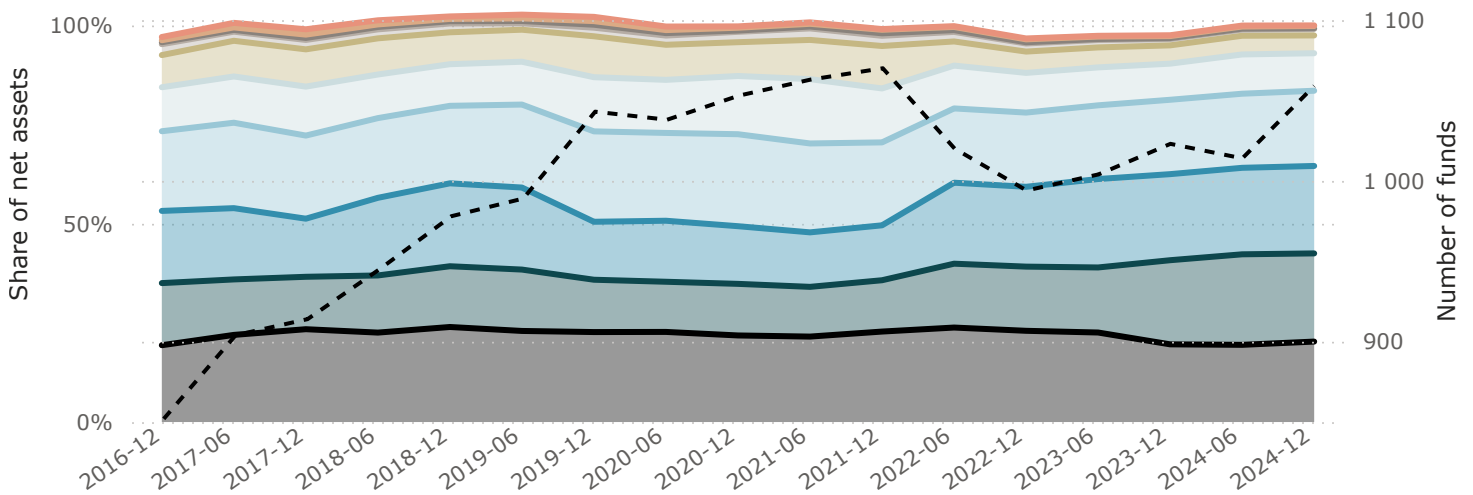
4.7. Credit

4.7.1. Aggregate credit exposure by internal ratings and by credit spreads

Aggregate credit exposure by internal ratings

Rating class: ● 1 ● 2 ● 3 ● 4 ● 5 ● 6 ● 7 ● 8 ● 9 ● 10

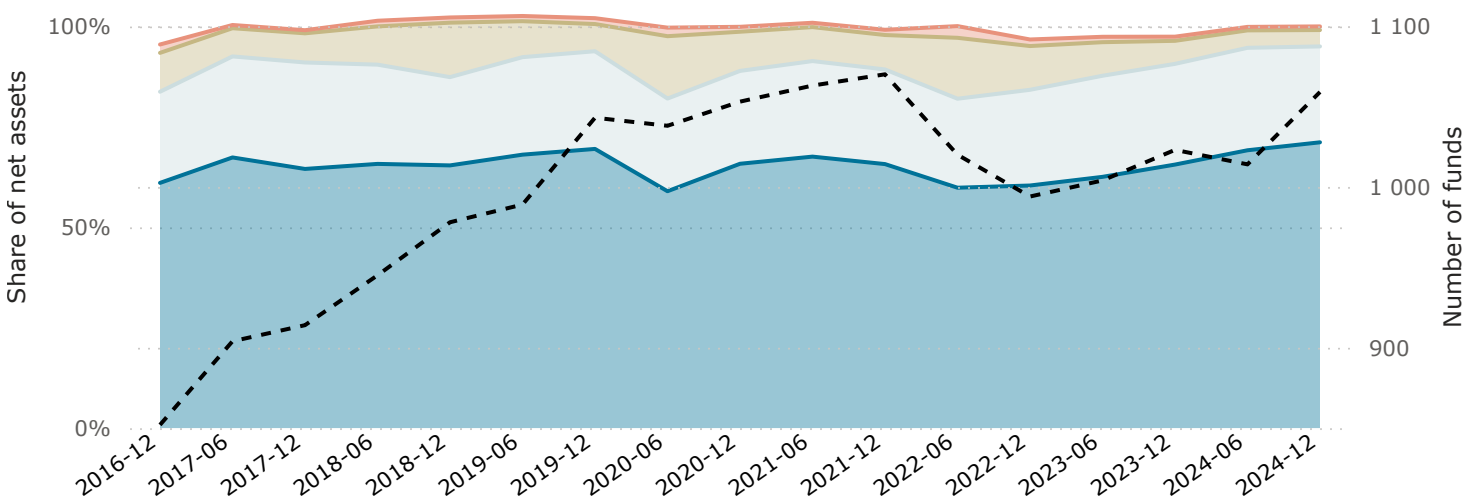
number of funds (rhs): ----



Aggregate credit exposure by credit spreads

Credit spread (bps): ● < 100 ● [100, 350[● [350, 1000[● ≥ 1000

number of funds (rhs): ----



Note: As set out in the guidelines, this sub-section is only applicable, with a few exceptions (e.g. funds of funds), to UCITS within the full reporting scope which have a total debt portfolio exposure (direct or indirect) at semester-end greater than or equal to 50% of the UCITS total net assets. Exposures to debt securities should be broken down by credit rating from 1 to 10 with reference to an internal assessment of the credit quality of the said instruments, whereby rating 1 is deemed to be the upper credit rating (i.e. the highest quality) and 10 relates to defaulted securities.



5. List of abbreviations

Abbreviation	Meaning
2010 Law	Law of 17 December 2010 relating to undertakings for collective investment, as amended
BCL	Banque Centrale du Luxembourg
CCP	Central Counterparty
CESR 10/788	CESR's Guidelines on Risk Measurement and the Calculation of Global Exposure and Counterparty Risk for UCITS
EM Bonds	Emerging Market Bonds
EPM	Efficient Portfolio Management
FX	Foreign currency exchange
HY Bonds	High Yield Bonds
IFM	Investment Fund Manager
IG Bonds	Investment Grade Bonds
IR	Interest rates
MMF	Money Market Fund
NAV	Net Asset Value
OTC	Over-the-counter
UCITS	Undertakings for Collective Investment in Transferable Securities, subject to part I of the 2010 Law
VaR	Value at Risk

