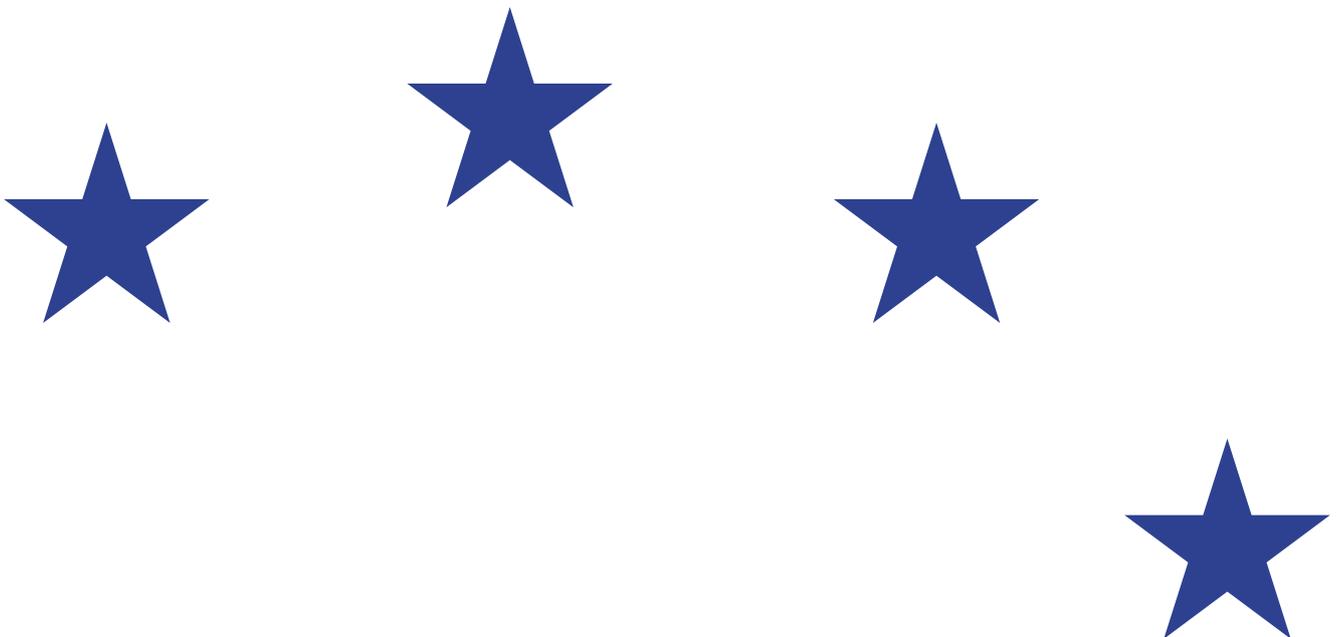


EU Alternative Investment Funds

ESMA Annual Statistical Report

2022



ESMA Annual Statistical Report on EU Alternative Investment Funds

2022

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Executive summary

Market structure and developments

The EU Alternative Investment Funds (AIF) market: The size of the EU AIF universe (using data from the 30 members of the European Economic Area, EEA30) continued to expand to reach EUR 5.9tn in net asset value (NAV) at the end of 2020, an 8% increase from 2019. The growth of the AIF market results from the launch of new AIFs in 2019 and positive valuation effects. Overall, AIFs accounted for one-third of the EEA30 fund industry at the end of 2020. Among AIF types, Funds of Funds (FoFs) account for 15% of the NAV, followed by Real Estate (RE) funds (13%), Private Equity (PE) funds (5%) and Hedge Funds (HFs) (2%). The small share of HFs compared with 2019 is explained by the fact that UK data have not been included (see editorial note for an explanation of Brexit implications for this report), while in 2019 UK AIFs accounted for 75% of HFs NAV. The category of 'other AIFs' accounts for 62% of the NAV, pointing to continued classification issues for Alternative Investment Fund Managers (AIFMs). Professional investors own most of the shares of AIFs, yet retail investor share is significant at 14% of the NAV, with more retail participation in RE funds (24%) and FoFs (19%). AIFs invest predominantly in the EEA and across a broad range of asset classes (securities, derivatives and funds). At the aggregate level, adjusted leverage declined to 128% of NAV (compared with 145% in 2019). Overall, there are signs of potential liquidity mismatch, as the liquidity offered to investors is generally greater than the liquidity of the assets, especially for RE funds. While at aggregate level this mismatch is unlikely to materialise, it indicates that AIFs with a liquidity deficit would face challenges if large redemptions were to occur.

Funds of Funds: FoFs account for 15% of the NAV of EEA30 AIFs, at around EUR 0.9tn (+4% compared with 2019). Among AIF types, FoFs have the second largest retail investor participation at 20% of NAV. Open-ended FoFs remain exposed to significant liquidity mismatch across all time horizons, including FoFs investing mainly in UCITS. The potential liquidity shortage for FoFs with a liquidity deficit is 16% of their NAV in the short term (i.e. within one week).

Real Estate Funds: RE funds account for 13% of the NAV of EEA30 AIFs, at EUR 766bn. RE funds continued to grow in 2020, albeit at a more moderate pace (+9% compared with 2019). The proportion of retail investors has continued to grow to reach 24%, the highest among AIF types. While leverage remains limited, liquidity risk in RE funds is a concern: around 54% are open-ended, and 40% of Commercial Real Estate (CRE) funds by NAV offer daily liquidity to investors. At the aggregate level, RE funds face liquidity mismatch across all time periods, an indication of a structural vulnerability as the maturities of assets and liabilities are not aligned.

Hedge Funds: With the departure of the UK from the EU, the size of the EEA30 HF sector has plummeted to only EUR 89bn (2% of the NAV of all AIFs), from EUR 354bn in 2019 (including the UK). EEA30 HFs have widespread access to the EU passport and are mainly domiciled in Ireland and Luxembourg. Leverage is very high, particularly for some strategies highly reliant on derivatives. HFs using derivatives tend to maintain large, unencumbered cash positions, possibly to meet future margin calls relating to derivatives positions. HFs are exposed to limited liquidity mismatch, as their assets can be liquidated quickly to meet investor redemptions. However, HFs are exposed to financing risk, as for some strategies more than half of their funding is overnight, implying potential rollover risk.

Private Equity Funds: PE funds account for 6% of the NAV of all EEA30 AIFs, or EUR 363bn. Among AIF types, PE funds contributed remarkably to the growth of the AIF sector in 2020 (+29% compared with 2019), together with 'other AIFs'. They follow a range of strategies and are almost exclusively sold to professional investors. PE funds invest mainly in illiquid securities (unlisted securities), but liquidity risk is limited given that PE funds are overwhelmingly closed-ended.

Other AIFs: 'Other AIFs' account for 62% of the NAV of EEA30 AIFs, at around EUR 3,650bn (+4% compared with 2019). This category of the AIFMD reporting regime covers a range of strategies, with fixed income and equity strategies accounting for 68% of the NAV and an additional residual category amounting to 28%. 'Other AIFs' are mainly sold to professional investors, although there is a significant retail investor presence in the residual category. They make little use of financial or synthetic leverage.

Although most types of 'other AIFs' have a limited liquidity risk at aggregate level, some funds in this residual category may be subject to liquidity deficits.

AIFs managed by Non-EU AIFMs: EU Member States can allow non-EU asset managers to market alternative funds at national level under the National Private Placement Regime (NPPR), even though such funds cannot be passported to other EU Members States. The market for such non-EU funds is comparatively large: The NAV of non-EU AIFs marketed under NPPR rules amounts to EUR 1.3tn, i.e. more than one-fifth of the AIF market. NPPR fund marketing is concentrated in a small number of Member States, and more than 99% of investors are professional investors. Hedge funds marketed under the NPPR are predominantly domiciled in the Cayman Islands, while 'other AIFs' marketed under the NPPR are predominantly US-based exchange-traded funds (ETFs). Overall, risk profiles for NPPR funds are comparable to EEA30 AIFs. However, the geographical investment focus is different as NPPR funds invest predominantly in non-EU areas.

Editorial note

Brexit implications for EU AIF statistics: The UK asset management industry was an important part of the EU single financial market, and with that also of the EU AIF market. Statistics presented in this report fall after the withdrawal of the United Kingdom from the EU on 31 January 2020. Although the EU laws continued to apply to the UK until the end of the transition period on 31 December 2020, it was not possible to collect data covering this period. Since this report uses end-year data, all the data used were transmitted to ESMA during the course of 2021, i.e. after the departure of the UK from the EU, making the transmission of UK data not feasible. Therefore, our statistics are constructed from data reports provided by entities authorised or registered in the Member States of the EEA post-Brexit (calculated on a constant perimeter of EEA30). Starting with this edition of this ASR series, we show statistics of the EU AIF market after Brexit. All the data in this report refer to EEA30 (EU27 and Iceland, Liechtenstein and Norway) and therefore exclude the UK, including for years before 2020. All time series have been adjusted retroactively and the UK is counted out consistently over time. Comparisons with statistics we had published in earlier editions are, therefore, limited. A dedicated section discusses the implications of Brexit for AIF statistics.

EEA30 AIFs: Essential statistics

	Funds of Funds	Real Estate	Hedge Funds	Private Equity	Other AIFs	Total
Size						
Number of funds (Absolute number)	5,362	3,978	930	4,992	14,324	30,035
Number of leveraged funds (Absolute number)	250	1,439	345	136	2,124	4,345
Net Asset Value (EUR bn)	873	766	89	363	3,652	5,899
Average fund size (EUR mn per fund)	163	190	96	73	255	195
Proportion of total market (NAV % of all AIFs)	15%	13%	2%	6%	62%	
Distribution						
EU passport (% of total)	90%	84%	76%	51%	86%	80%
Retail participation (% of total)	19%	23%	10%	6%	10%	13%
Exposures						
Main exposures (Asset type)	CIU	PA	IRD	S	S	DER
Main exposures (% of exposures)	72%	69%	40%	84%	64%	24%
Leverage						
Gross leverage (% of NAV)	120%	141%	548%	117%	154%	151%
Adjusted leverage (% of NAV)	119%	138%	327%	116%	141%	139%
Borrowing (% of NAV)	9%	12%	250%	5%	22%	21%
Liquidity						
Open ended AIFs (% of total NAV)	69%	56%	76%	4%	78%	70%
Monthly portfolio liquidity (% of NAV)	56%	3%	34%	2%	68%	55%
Monthly investor liquidity (% of NAV)	70%	17%	37%	14%	72%	61%

Note: All values refer to AIFs managed and/or marketed by EEA30 AIFMs at the end of 2020, AIFs reported to ESMA by National Competent Authorities (NCAs). AIFs sold under a National Private Placement Regime (NPPR) are excluded. Statistics for all EEA30 AIFs include 449 funds with no predominant type, for which NAV amounts to EUR 155bn. Leveraged funds are identified using the AIF reporting code as specified in the Annex 2 of ESMA guidelines on AIFMD reporting obligations. Open ended AIFs are funds that issue shares which are redeemable on demand by investors. CIU=collective investment units; PA=Physical assets; IRD=Interest rate derivatives; S=Securities. DER=Derivatives. Data for the EEA30. Sources: AIFMD database, National Competent Authorities, ESMA.

EEA30 AIFs: Gross notional exposures

Asset class	Asset type	2019 EUR bn	2020 EUR bn	Share % of 2020 exposures
Securities		3,553	3,754	48%
Among which				
	Non-financial listed equities	777	847	11%
	EU sovereign bonds	672	697	9%
	IG financial bonds	336	341	4%
	IG corporate bonds	311	301	4%
	Loans	289	297	4%
	Other cash and cash equivalent	274	295	4%
	Unlisted equities	172	236	3%
	Non-investment-grade financial bonds	86	130	2%
	Financial listed equities	123	103	1%
	Non-G10 sovereign bonds	101	101	1%
	Deposits	73	83	1%
	Leveraged loans	78	76	1%
	G10 sovereign bonds	61	53	0.7%
	Other structured products	41	47	0.6%
	MBS	48	35	0.5%
	Non-investment-grade corporate bonds	29	29	0.4%
	Non-financial convertible bonds	17	20	0.3%
	CDO/CLO	18	22	0.3%
	Municipal bonds	20	21	0.3%
	ABS	18	15	0.2%
	Financial convertible bonds	8	4	0.1%
Derivatives		2,769	1,950	25%
Among which				
	Foreign exchange derivatives	618	686	9%
	Interest rate derivatives	735	671	9%
	Fixed income derivatives	241	223	3%
	Equity derivatives	233	152	2%
	Credit derivatives	117	124	2%
	Other derivatives	785	58	0.8%
	Commodity derivatives	40	36	0.5%
Collective Investment Undertakings		1,241	1,311	17%
Among which				
	Investment funds (excl. ETFs and MMFs)	1102	1143	15%
	ETFs	69	92	1%
	MMFs	70	76	1%
Physical assets		547	641	8%
Among which				
	Physical real estate	539	629	8%
	Other physical assets	9	12	0.2%
Other assets		96	134	2%
Total exposures		8,206	7,791	100%

Note: Gross notional exposures represent the gross market exposure of a fund which is calculated by summing the absolute values of the notional amounts of a fund's derivatives and the value of the fund's other investments. Exposures can be long (when an increase in price leads to an increase in the NAV of the fund) or short (when an increase in price leads to a decrease in the NAV of the fund). Gross exposures measure the investment funds' absolute exposures (long and short). All values refer to AIFs managed and/or marketed by EEA30 AIFMs at the end of 2020, AIFs reported to ESMA by National Competent Authorities (NCAs). AIFs sold under a National Private Placement Regime (NPPR) are excluded. Statistics for all EEA30 AIFs include 449 funds for which no fund type has been specified by the AIFM, for a NAV of EUR 155bn. Data for the EEA30.

Sources: AIFMD database, National Competent Authorities, ESMA.

Market monitoring

EU AIF market

Summary

The size of the EU AIF universe (using data from the 30 members of the European Economic Area, EEA30) continued to expand to reach EUR 5.9tn in net asset value (NAV) at the end of 2020, an 8% increase from 2019. The growth of the AIF market results from the launch of new AIFs in 2019 and positive valuation effects. Overall, AIFs accounted for one-third of the EEA30 fund industry at the end of 2020. Among AIF types, Funds of Funds (FoFs) account for 15% of the NAV, followed by Real Estate (RE) funds (13%), Private Equity (PE) funds (5%) and Hedge Funds (HFs) (2%). The small share of HFs compared with 2019 is explained by the fact that UK data have not been included, while in 2019 UK AIFs accounted for 75% of HFs NAV. The category of 'other AIFs' accounts for 62% of the NAV, pointing to continued classification issues for Alternative Investment Fund Managers (AIFMs). Professional investors own most of the shares of AIFs, yet retail investor share is significant at 14% of the NAV, with more retail participation in RE funds (24%) and FoFs (19%). AIFs invest predominantly in the EEA and across a broad range of asset classes (securities, derivatives and funds). At the aggregate level, adjusted leverage declined to 128% of NAV (compared with 145% in 2019). Overall, there are signs of potential liquidity mismatch, as the liquidity offered to investors is generally greater than the liquidity of the assets, especially for RE funds. While at aggregate level this mismatch is unlikely to materialise, it indicates that AIFs with a liquidity deficit would face challenges if large redemptions were to occur..

Market size and structure

All the data in this report refer to the EEA30 (EU27 and Iceland, Liechtenstein and Norway), hence UK data are excluded, also for years before Brexit. The AIF industry continued to expand in 2020 in the EEA30, with an 8% increase from 2019, to reach a NAV of around EUR 5.9tn at the end of 2020 (ASR-AIF.1). By comparison, the NAV of Undertakings for the Collective Investment in Transferable Securities (UCITS) amounted to EUR 11.6tn at the end of 2020, according to the European Fund and Asset Management Association (EFAMA). Overall, AIFs therefore account for one-third of the EEA30 fund industry.

ASR-AIF.1
EEA30 fund industry
Significant growth in 2019



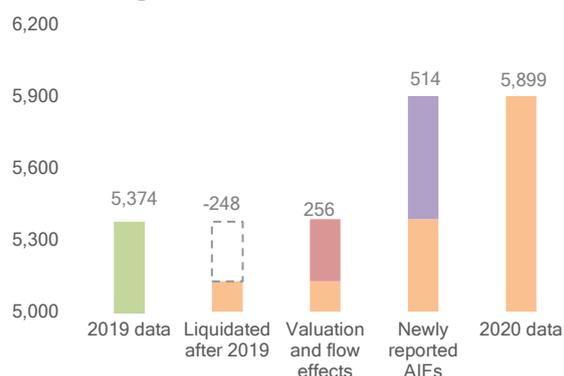
Note: NAV by type of AIF managed and/or marketed by authorized AIFMs and sub-threshold managers registered only in national jurisdictions, in EUR bn. Data for the EEA30. Sources: AIFMD database, National Competent Authorities, EFAMA, ESMA.

The growth in the EEA30 AIF market is attributable to the launch of new AIFs in 2020 (EUR 514bn), and positive valuation and flow effects (EUR 256bn), which compensated for the decline of EUR 248bn related to the liquidation of funds in 2020 (ASR-AIF.2).

ASR-AIF.2

EEA30 AIFs growth decomposition

Growth owing to new AIFs, flows, valuation effects



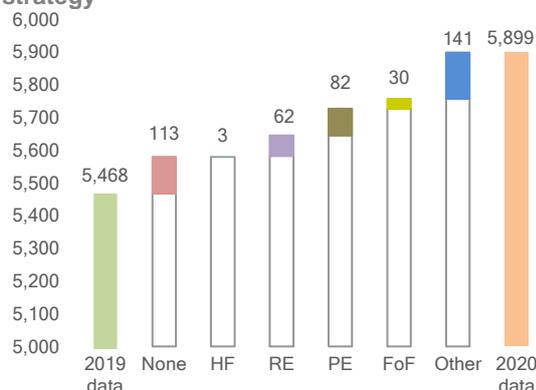
Note: Decomposition of NAV by reporting and surviving AIFs, EUR bn. Newly reported funds including AIFs accepted in 2020. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

By AIF types, 'other AIFs', PE and funds with no predominant strategy ('none') contributed most to the growth of the AIF sector (ASR-AIF.3). For the AIFs with no predominant strategy, the rise in NAV is explained by a change in classification for one country: AIFs that were previously classified as 'Other AIFs' changed to the 'none' category.

ASR-AIF.3

EEA30 AIF growth decomposition by types

Growth in 'other AIFs', PE, no predominant strategy



Note: NAV by type of AIF managed and/or marketed by authorized AIFMs and sub-threshold managers registered only in national jurisdictions, in EUR bn. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

AIF types: The composition of the AIF market by type was broadly stable in 2020. FoFs account for 15% of the NAV (stable compared with 2019), followed by RE funds (13%), PE funds (5%, +1pp), funds with no predominant strategy (3%, +2pp) and HFs (2%). The very small share of HFs is related to Brexit, since UK AIFMs had accounted for around 75% of the EU HF market before the country left the EU. Finally, 'other AIFs' remain by far the largest type, accounting for 62% of NAV (ASR-AIF.16). Within this category, around 30% of NAV is attributed to a residual category (which amounts to 17% of the NAV of all

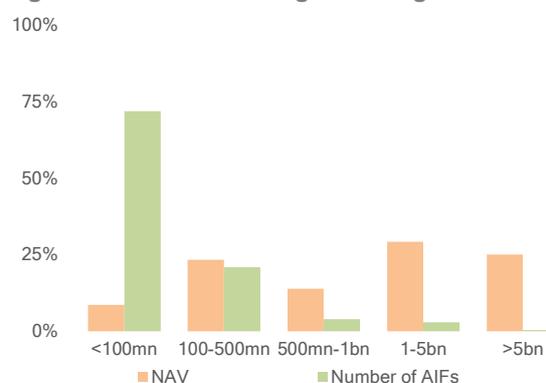
AIFs), pointing to continued classification issues for AIFMs, as detailed in the 'Other AIF section'.

AIF size: The AIF market remains highly concentrated, with a few large AIFs accounting for most of the market. In 2020, AIFs with a NAV larger than EUR 1bn accounted for less than 3% of all AIFs but for 54% of the NAV (ASR-AIF.4). Smaller AIFs (NAV lower than EUR 500mn) account for 93% of all AIFs but only 32% of NAV. The large concentration implies that by focusing on the largest AIFs, one should be able to monitor a dominant part of the market at a relatively high frequency (as reporting requirements are quarterly for funds from AIFMs with Assets under management (AuM) above EUR 1bn).

ASR-AIF.4

Size and number of AIFs

High concentration among a few large AIFs



Note: Share of AIFs by size, end of 2020, in %. AIFs managed and/or marketed by authorised AIFMs and sub-threshold managers registered only in national jurisdictions. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

AIF domicile and distribution: In terms of domicile of the AIFM, the AIF industry is concentrated in a few countries, with the top five accounting for 90% of the NAV (ASR-AIF.18). In 2020, Germany remained the country with the largest AIF industry in the EEA30 (37%, +1pp), followed by Luxembourg (16%, stable), the Netherlands (15%, stable), France (13%, -1pp) and Ireland (9%). Compared to 2019, the size of the AIF industry expanded by 14% in Luxembourg and 13% in Ireland, 8% in Germany, 5% in the Netherlands and 3% in France (ASR-AIF.5).

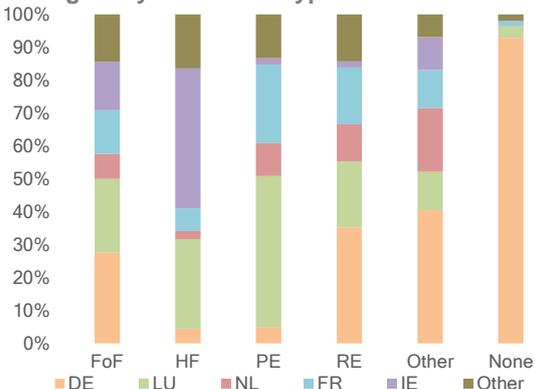
ASR-AIF.5
AIF size by country
More growth in LU and IE



Note: NAV by type of AIF managed and/or marketed by authorized AIFMs and sub-threshold managers registered only in national jurisdictions, in EUR bn. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

FoFs are mainly domiciled in countries with a large asset management industry such as Germany, France, Ireland and Luxembourg, with those four countries accounting for 78% of the NAV (ASR-AIF.6). The HF industry is heavily concentrated in Luxembourg and Ireland (70% of NAV). Managers of PE funds are mainly domiciled in Luxembourg and France (70% of NAV). In contrast, RE funds and ‘other AIFs’ are spread out across several countries. In most EU Member States, ‘other AIFs’ account for the majority of the NAV.

ASR-AIF.6
Country share by AIF type
Heterogeneity across AIF types



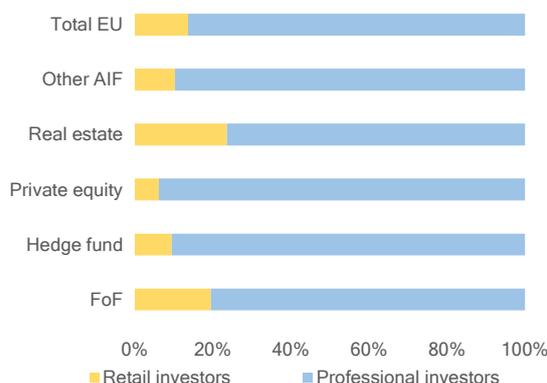
Note: Share of NAV by type of AIF managed and/or marketed by authorized AIFMs and sub-threshold managers registered only in national jurisdictions, in EUR bn. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

Most AIFs have access to the **EU passport** (78%), allowing AIFs to be sold throughout the EU (ASR-AIF.19).

AIF investors: The AIFMD provides the regulatory framework for marketing AIFs primarily to professional investors, rather than retail investors. The marketing of AIFs to retail investors remains at the discretion of each Member State. Professional investors account for

around 86% of the NAV, and direct retail investors’ participation is slightly declining but remains significant at 14% of the NAV overall (ASR-AIF.7), and amounts to 24% of NAV for RE. Retail investor participation might be underestimated since they could purchase banking or insurance products that are invested in AIFs.

ASR-AIF.7
AIF investors
Mainly professional investors



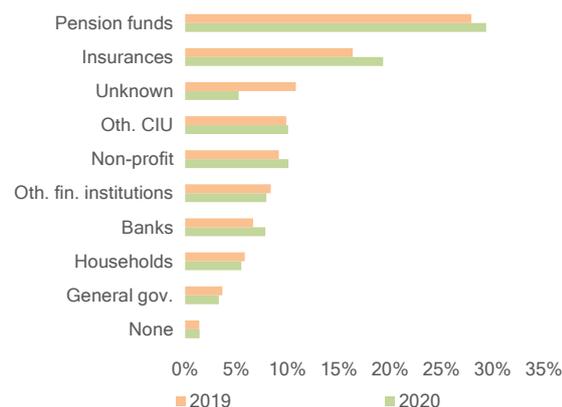
Note: Clients of AIFs managed and/or marketed by authorised AIFMs and sub-threshold managers registered only in national jurisdictions, end of 2020, in % of NAV. FoF=Fund of funds. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

Among professional investors, unitholders are diversified across AIF types (ASR-AIF.8). Pension funds and insurance companies are the main investors as they own close to 50% of the NAV of AIFs (with 29% and 19% of the NAV respectively). Banks account for 7%, other financial institutions for 8%, and funds for 10%. Non-profit organisations own 10% of the NAV, and households 6%. The share of unknown investors has declined from 11% to 5% of NAV, indicating improvements in data reported. Still, the relatively large proportion of banks might indicate a lack of look-through approach by some AIFMs, since they should report the ultimate owners of the AIF shares.

ASR-AIF.8

AIF investor types

Diversified investor base



Note: Ownership of units in AIFs managed and/or marketed by authorised AIFMs, in % of NAV. Data for the EEA30.

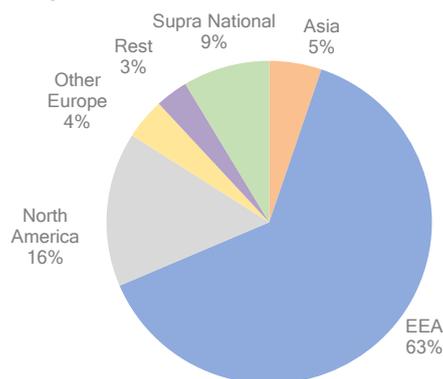
AIF shares: The ownership of AIFs continues to be highly concentrated: the top five investors account for more than 75% of the NAV across AIF types. More than 50% of all AIFs are entirely held by their top five investors, as indicated by the median of 100% for all AIF types (except PE funds, where ownership is more diversified). The high ownership concentration is explained by the dominant role played by institutional investors. In some cases, AIFs can be set up for a single institutional investor that prefers to hold all of the AIF shares, as the fund can be set up to fulfil its specific investment objective.

AIF geographical investment focus: AIFs invest mainly in the EEA (63%, +3pp), followed by North America (15%) and supranational issuers (9%), with the last category also including investments without predominant geographical focus. Other regions account for around 13% of the NAV (ASR-AIF.9).

ASR-AIF.9

Regional investment focus

Most exposures towards the EEA



Note: Regional investment focus of AIFs managed and/or marketed by authorised AIFMs and sub-threshold managers registered only in national jurisdictions, end of 2020, in % of NAV. Geo-focus determined according to the domicile of investments, supra national category including investments without predominant geo-focus. Data for the EEA30. Sources: AIFMD database, National Competent Authorities, ESMA.

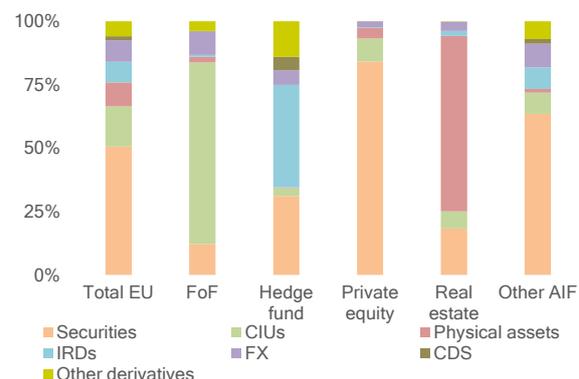
Leverage and liquidity risks

Gross exposures: AIFs are exposed to a wide range of asset classes, with variation across AIF types corresponding to their investment policies (ASR-AIF.10). RE funds, PE funds and FoFs are by construction heavily exposed to the underlying assets (physical assets for RE funds, (unlisted) securities for PE funds and collective investment units for FoFs). HF exposures are overwhelmingly biased towards interest rate derivatives (IRDs), because exposures are reported using gross notional values. The exposures of 'other AIFs' are more diversified, reflecting the range of strategies used in this residual category.

ASR-AIF.10

Gross exposures

Diverse exposures by AIF type

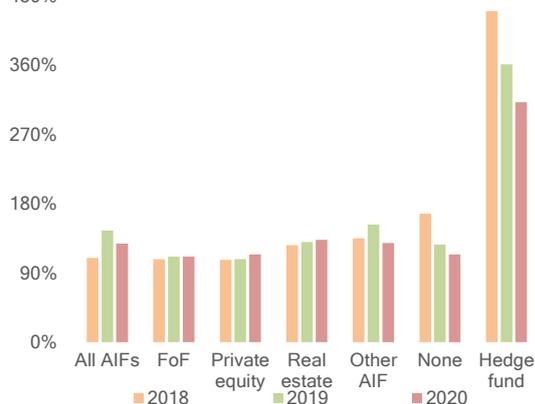


Note: NAV of AIFs managed and/or marketed by authorized AIFMs and sub-threshold managers registered only in national jurisdictions, in EUR bn. Data for the EEA30. Sources: AIFMD database, National Competent Authorities, ESMA.

Leverage: Leverage declined at the aggregate level (ASR-AIF.20). Using the adjusted measure (calculated as gross exposures to NAV excluding IRDs and FX derivatives used for hedging

purposes), leverage declined to 128% of NAV compared with 145% in 2019. Similarly, leverage measured by the ratio of AuM to NAV points to a decline from 169% to 151%. Compared to previous reports, both measures are relatively close because HFs exposures, the main driver of leverage at the aggregate level, plummeted. The large decline in HFs exposures is explained by the fact that UK data were not included in this report, and that UK HFs accounted for 70% of all AIFs exposures in 2019. Still, the aggregate measure does not reflect important differences across AIFs, with HF adjusted leverage at 312% while for all other AIF types leverage is below 150% (ASR-AIF.11). The high leverage of HFs stems mainly from the use of derivatives (synthetic leverage) rather than outright borrowing (financial leverage). In addition, aggregate measures of leverage are upward biased due to extreme outliers: the median adjusted leverage for HFs remains around 120%, while the 10% highest levered HFs have a measure above 600%.

ASR-AIF.11
Adjusted leverage by AIF type
High leverage for HFs
450%

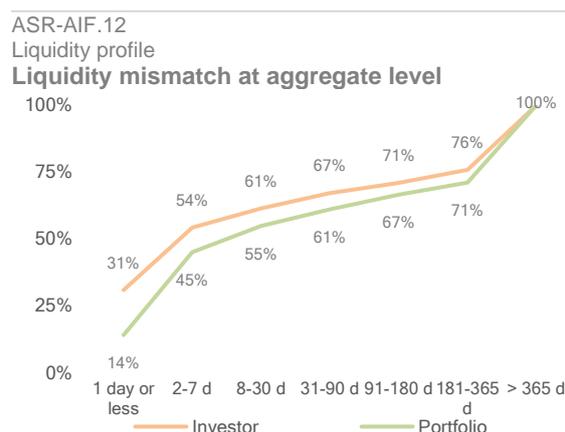


Note: Adjusted leverage by AIF type in % of NAV. AIFs managed and/or marketed by full scope AIFMs and sub-threshold managers registered only in national jurisdictions. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

Liquidity risk: Most AIFs are open-ended funds (70% of NAV, +4pp compared with 2019), with variation across types (ASR-AIF.21)¹. Within open-ended funds, around 68% offer daily liquidity to investors, and 25% offer weekly to monthly redemptions.

At the aggregate level, the **liquidity profile** of AIFs points to potential liquidity risk at all horizons: within a week, investors can redeem up

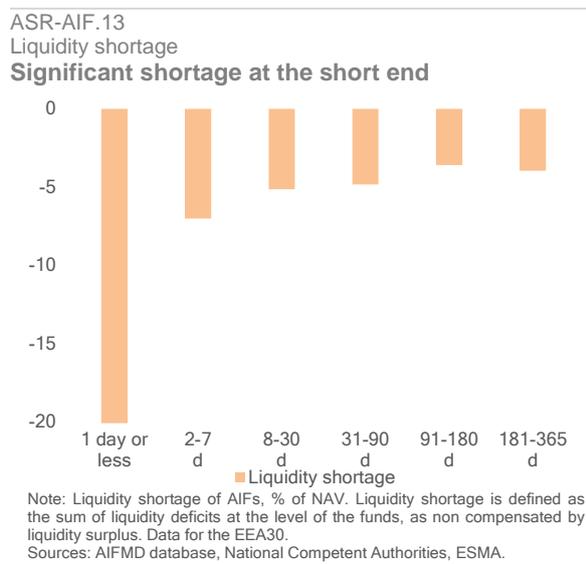
to 54% of the NAV, whereas only 45% of the assets can be liquidated within this time frame (ASR-AIF.12). Compared with previous reports, the liquidity mismatch is more pronounced due to changes in methodologies (ASR-AIF.14)². At the aggregate level, this mismatch would materialise only if very large redemptions were to take place (higher than 45% of NAV). For funds with a liquidity mismatch³, the liquidity shortage amounts to around 20% of the NAV of all AIFs over a one-day horizon (more than EUR 800bn, ASR-AIF.13). Over longer time horizons, the liquidity shortage declines significantly, edging below 7% over one week.



Note: Portfolio and investor liquidity profiles of AIFs managed and/or marketed by authorised AIFMs, end of 2020. Portfolio liquidity defined as the percentage of the funds' assets capable of being liquidated within each specified period, investor liquidity defined as the shortest period for which investors can redeem. EEA30 and non EEA30 AIFs by authorised AIFMs marketed, respectively, w/ and w/o passport. d= Days. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

¹ The flag for open or closed-ended structure of AIFs is not a mandatory field for AIFMs. Around 72% of AIFs report this information, accounting for 86% of NAV.
² Since the new methodology is more conservative than the previous one, liquidity indicators in this report cannot be compared with previous reports.

³ While reflecting a structural misalignment in portfolio and investor liquidity, the observed mismatch may be further reduced through the imposition of notice periods to investors for redeeming their shares.



ASR-AIF.14
Liquidity profile
Comparing investor and portfolio liquidity

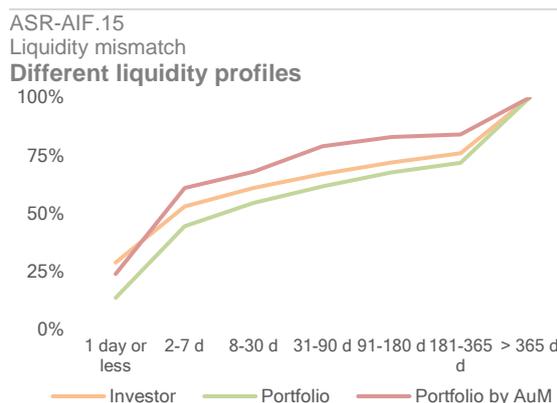
Aggregating liquidity profiles across funds is challenging. As explained in the 2020 Annual Statistical Report (ESMA, 2020), the method was revised to avoid having funds with excess liquidity compensating for liquidity mismatch in other funds, i.e. where the investor liquidity is higher than the portfolio liquidity.

Another challenge relates to the way portfolio and investor liquidity are reported. Investor liquidity is reported in % of NAV while portfolio liquidity is assessed for all assets, including those acquired through the use of leverage which can bias liquidity measures for AIFs. When leverage is used, the size of the portfolio will be larger than the NAV, making the comparison of investor and portfolio liquidity challenging.

In addition, the use of leverage entails that, in case of stress, the fund might be in the position of using part of the portfolio liquidity to satisfy borrowings and/or margin calls on derivatives or securities financing transactions if no unencumbered cash is at disposal. In that case, not all the portfolio liquidity would be available to investors,

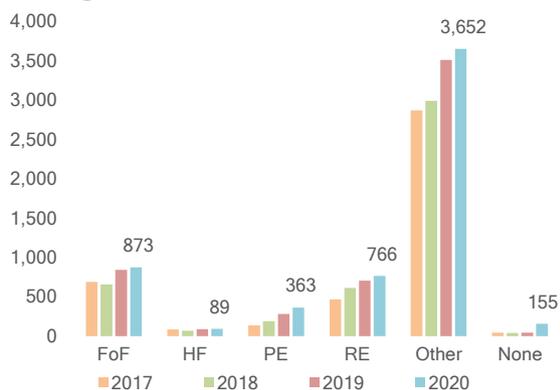
Therefore, a conservative approach is used whereby we consider that the portfolio liquidity reported by AIFMs is expressed in % of NAV and not AuM. This more conservative approach is adopted here to assess potential liquidity mismatch.

The chart below, using end-2019 data, shows the difference between the two measures of portfolio liquidity: when using AuM, AIFs would only show a liquidity mismatch at the very short end (1 day or less), while when using NAV the liquidity mismatch is visible over all time horizons.



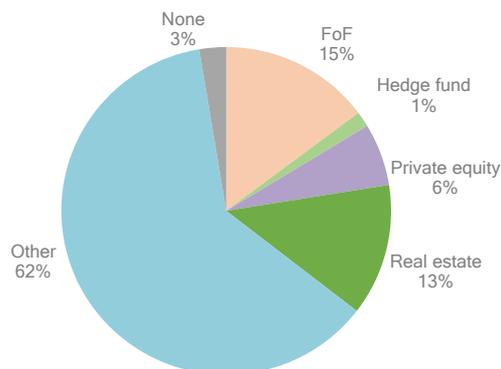
Note: Portfolio and investor liquidity profiles of AIFs managed and/or marketed by authorised AIFMs, end of 2019. Portfolio liquidity defined as the percentage of the funds' assets capable of being liquidated within each specified period, investor liquidity defined as the shortest period for which investors can redeem. EEA30 and non-EEA30 AIFs by authorised AIFMs marketed, respectively, w/ and w/o passport. d= Days. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF.16
Size of the AIF industry
Growing market



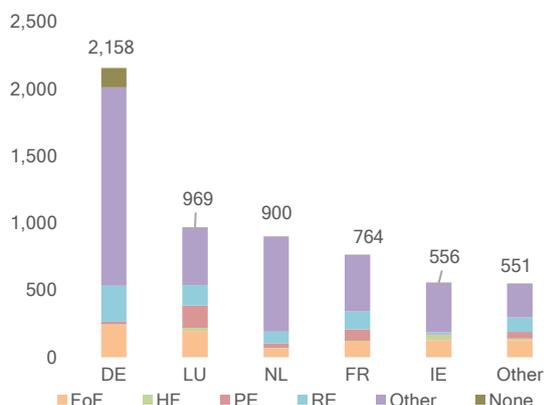
Note: NAV by type of AIF managed and/or marketed by authorized AIFMs and sub-threshold managers registered only in national jurisdictions, in EUR bn and percent. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF.17
AIF industry by type
'Other AIFs' largest type



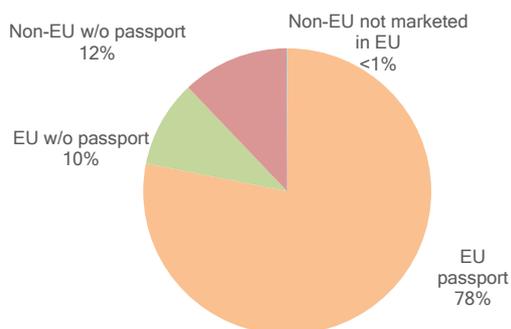
Note: NAV by type of AIFs managed and/or marketed by authorised AIFMs and sub-threshold managers registered only in national jurisdictions, end of 2020, in %. FoF=Fund of funds, None=No predominant type. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF.18
Size of AIF by type and country
Concentration in a few countries



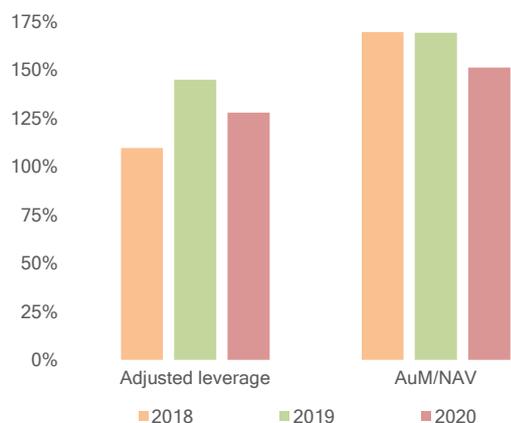
Note: NAV by type of AIF managed and/or marketed by authorized AIFMs and sub-threshold managers registered only in national jurisdictions, in EUR bn. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF.19
EU passport
Most AIFs can be passported



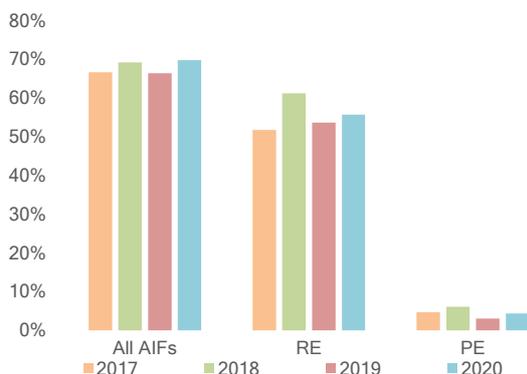
Note: NAV of AIFs by manager's access to AIFMD passport, end of 2020, in %. Authorised EEA30 AIFMs with access to AIFMD passport or marketing non-EEA30 AIFs w/o passport, sub-threshold managers registered only in national jurisdictions w/o passporting rights. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF.20
Leverage
Decline in leverage



Note: Leverage in % of NAV. AIFs managed and/or marketed by full scope AIFMs and sub-threshold managers registered only in national jurisdictions. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF.21
Liquidity
Most AIFs open-ended



Note: Share of open-ended AIFs by type in % of NAV. AIFs managed and/or marketed by full scope AIFMs and sub-threshold managers registered only in national jurisdictions. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

Brexit implications for AIF statistics

Summary

The UK asset management industry was an important part of the EU single financial market, and with that also of the EU AIF market. Statistics presented in this report fall after the withdrawal of the United Kingdom from the EU on 31 January 2020. This section compares the size and structure of UK and EEA30 AIF sector to discuss the implications of Brexit for AIF statistics.

Comparative size of UK and EEA30 AIFs

As a consequence of the withdrawal of the UK, the composition and size of the EU AIF industry has changed. While the UK withdrew from the EU on 31 January 2020, EU law continued to apply in the UK until the end of the transition period on 31 December 2020. However, this Annual Statistical Report uses end-2020 data, which were transmitted to ESMA in the course of 2021, i.e. after the transition period, making ESMA unable to collect data for the UK covering the year 2020.

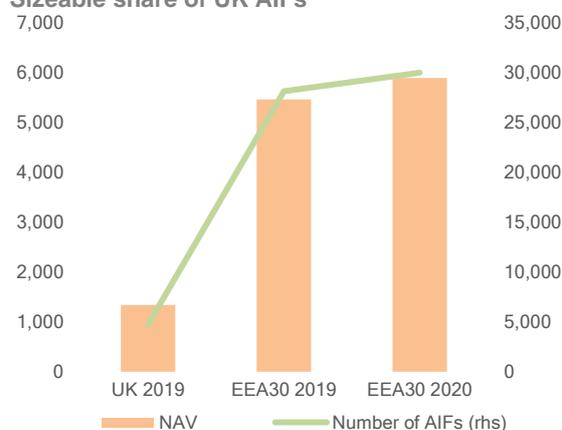
Given these data constraints, this section uses 2019 data to illustrate the impact of Brexit on the EEA30 AIF sector.

Size: In 2019, UK AIFs had a NAV of EUR 1,338bn compared with EUR 5,468bn for the EEA30 (ASR-AIF.22). Therefore, the UK accounted for 20% of the NAV of the EU sector end-2019 (composed of EEA30 and the UK). There were around 4,700 UK AIFs compared with more than 28,000 for the EEA30.

ASR-AIF.22

AIFs managed by UK and EEA30 AIFMs

Sizeable share of UK AIFs

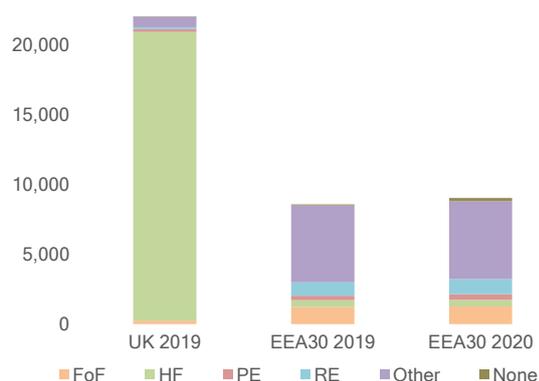


Note: NAV and number of AIFs managed by AIFMs domiciled in the UK and in the EEA30, in EUR bn.

Sources: AIFMD database, National Competent Authorities, ESMA.

In terms of **regulatory Asset under Management (AuM)**, UK AIFs accounted for 70% of the combined AuM of the UK and the EEA30 in 2019 (ASR-AIF.23). UK AIFs reported around EUR 22trn in 2019 compared with EUR 8.5trn for the EEA30 in 2019 (and EUR 9trn in 2020). Hedge funds managed by UK AIFMs account for the large share of AuM (mainly due to the use of interest rate derivatives which are reported in notional terms). Excluding HFs, UK AIFs AuM amounted to EUR 1.3trn.

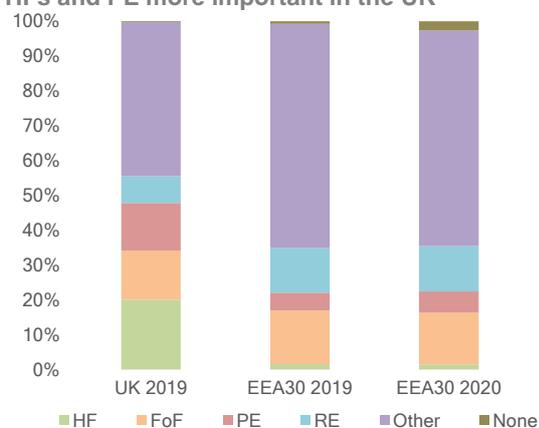
ASR-AIF.23
Regulatory AuM
Larger size for the UK due to HFs
25,000



Note: AuM of AIFs managed by AIFMs domiciled in the UK and in the EEA30, in EUR bn.
Sources: AIFMD database, National Competent Authorities, ESMA.

AIF type: The UK AIF sector has a different composition compared with the EEA30, with a larger role played by HFs and PE funds (ASR-AIF.24). Other AIFs account for 44% of the NAV in the UK (against 62% for the EEA30), followed by HFs with 20% (2% for EEA30), FoFs with 14% (15% in the EEA30), PE with 14% (5% for EEA30), and RE with 8% (13% for the EEA30).

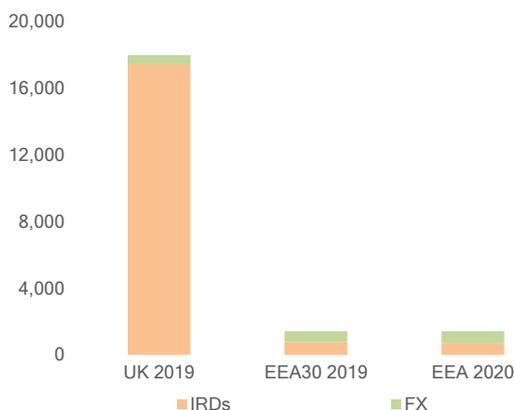
ASR-AIF.24
Structure of AIF sector
HFs and PE more important in the UK



Note: NAV by AIF type for AIFs managed by AIFMs domiciled in the UK and in the EEA30, in %.
Sources: AIFMD database, National Competent Authorities, ESMA.

Exposures: UK AIFs reported gross exposures of EUR 21.4trn in 2019, mainly due to IRDs and FX derivatives which account for 84% of exposures (ASR-AIF.25). EEA30 reported gross exposures of EUR 8.9trn, with IRDs and FX derivatives accounting for only 15% of exposures.

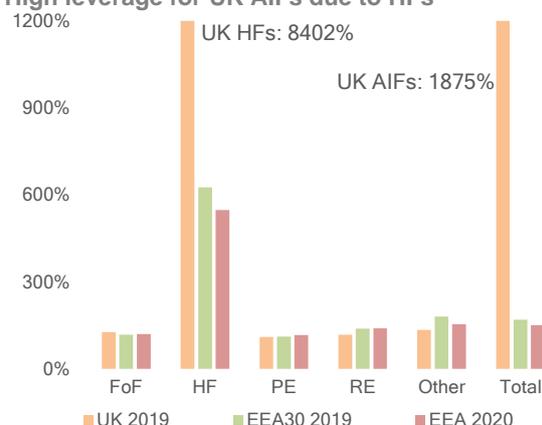
ASR-AIF.25
Gross exposures
Large exposures related to IRDs for UK AIFs



Note: Gross exposure to IRDs and FX derivatives, in EUR bn.
Sources: AIFMD database, National Competent Authorities, ESMA.

Leverage: UK AIFs report higher leverage than EEA30 AIFs irrespective of the measure used. The high leverage for UK AIFs is entirely driven by the HF sector, while for other AIF types, leverage measures are similar for UK and EEA30 AIFs. At the aggregate level, UK AIFs had a gross leverage of 1,875% compared with 170% for EEA30 AIFs (ASR-AIF.26).

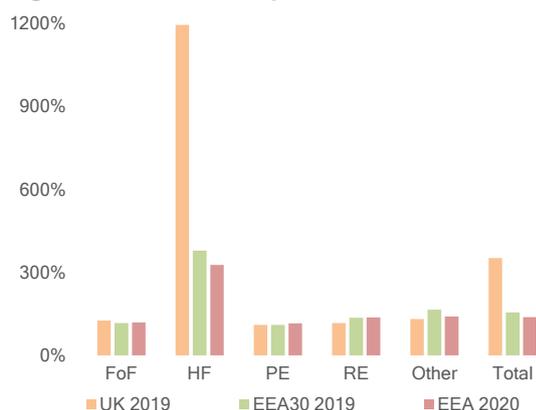
ASR-AIF.26
Gross leverage
High leverage for UK AIFs due to HFs



Note: Gross leverage, in % of NAV.
Sources: AIFMD database, National Competent Authorities, ESMA.

Adjusted leverage indicators, when IRDs and FX derivatives are excluded, show similar patterns (ASR-AIF.27), with large values for UK HFs.

ASR-AIF.27
Adjusted leverage
Higher for UK HF compared to EEA30



Note: Adjusted gross leverage, in % of NAV.
Sources: AIFMD database, National Competent Authorities, ESMA.

differences across types. UK AIFs accounted for 16% of FoFs in 2019 and around 12% for RE and 'Other AIFs'.

Implications for AIF statistics

In terms of size and composition of the AIF sector, Brexit had its largest impact on **hedge funds**. HFs managed by UK AIFMs accounted for more than 75% of the NAV of UK and EEA30 HFs and more than 97% of AuM. Since UK HFs tend to be larger and use more leverage than EEA30 AIFs, leverage measures have declined when comparing EEA30 data for 2020 with the 2019 data published in the previous report (which included the UK in the EU).

Private equity funds are also impacted, since UK PEs accounted for 40% of the NAV of the sector in 2019.

For other type of AIFs, the impact of Brexit on the size of the sector is also significant, with

Funds of Funds

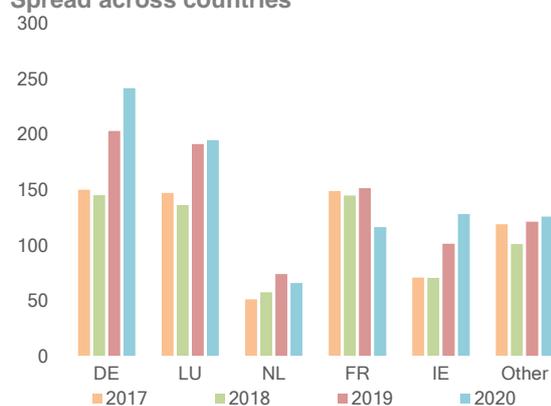
Summary

FoFs account for 15% of the NAV of EEA30 AIFs, at around EUR 0.9tn (+4% compared with 2019). Among AIF types, FoFs have the second largest retail investor participation at 20% of NAV. Open-ended FoFs remain exposed to significant liquidity mismatch across all time horizons, including FoFs investing mainly in UCITS. The potential liquidity shortage for FoFs with a liquidity deficit is 16% of their NAV short term (within 1 week).

Market size and structure

Size: As of the end of 2020, the NAV of FoFs sold in the EEA30 by AIFMs domiciled in the EEA30 amounted to EUR 873bn, a 4% increase (EUR 30bn) compared with 2019. FoFs account for 15% of the NAV of all AIFs. The evolution of FoFs has been very different among countries. A few countries recorded high increase in NAV: 19% in Germany and 27% in Ireland (ASR-AIF.28). In contrast, France and the Netherlands experienced a sharp decline in NAV, with a 23% and a 10% drop respectively. Luxembourg FoFs remained stable (+1%). The top 5 EU jurisdictions account for almost 90% of total EEA30 FoFs' NAV.

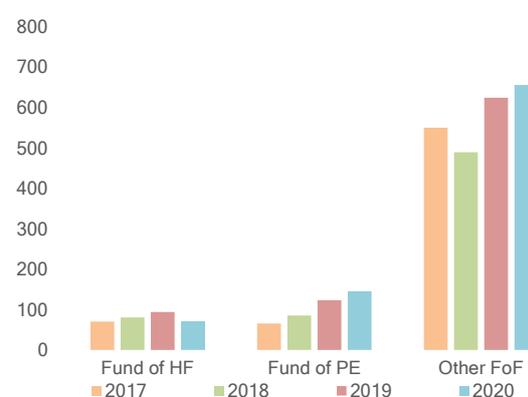
ASR-AIF.28
Funds in FoFs' portfolios
Spread across countries



Note: NAV of FoFs managed and/or marketed by authorized AIFMs and sub-threshold managers registered only in national jurisdictions, in EUR bn. data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

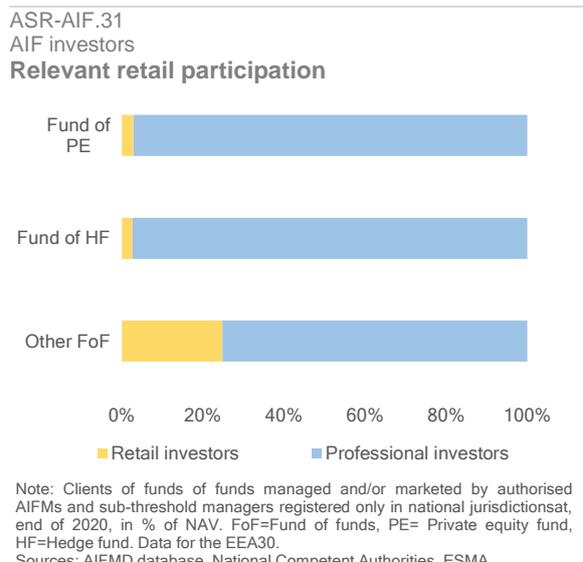
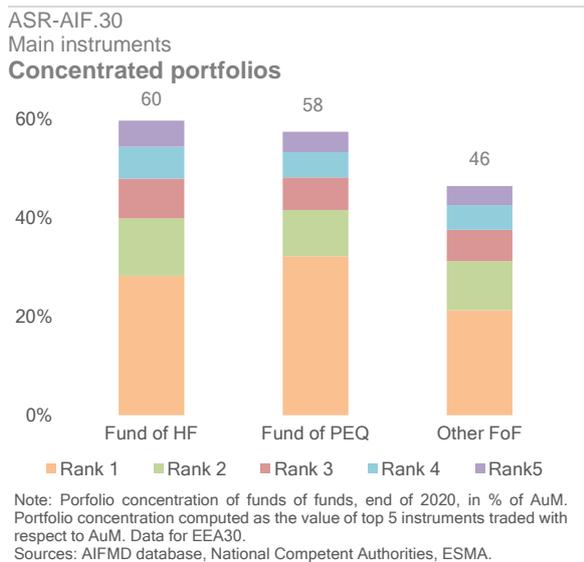
Funds of funds strategies: Funds of funds invest in underlying collective investment undertakings and serve the purpose of diversifying fund-specific risk, relieving burdens for investors to perform due diligence on individual fund managers. FoFs pursuing strategies beyond PE funds or HFs have registered a sustained growth since 2018 (+34pp) and account for 75% of NAV (ASR-AIF.29).

ASR-AIF.29
FoF strategies
Mainly outside of PE funds and HFs



Note: NAV of FoFs by strategy, in EUR bn. AIFs managed and/or marketed by full scope AIFMs and sub-threshold managers registered only in national jurisdictions. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

Information on the most traded instruments provided by AIFMs on behalf of the managed funds allows to classify the CIUs in which FoFs invest and gain insights into their activity. For FoFs investing in PE funds and HFs the top five traded instruments account for around 60% for of the portfolio, while the remaining FoFs have a slightly more diversified portfolio (ASR-AIF.30ASR-AIF.30).



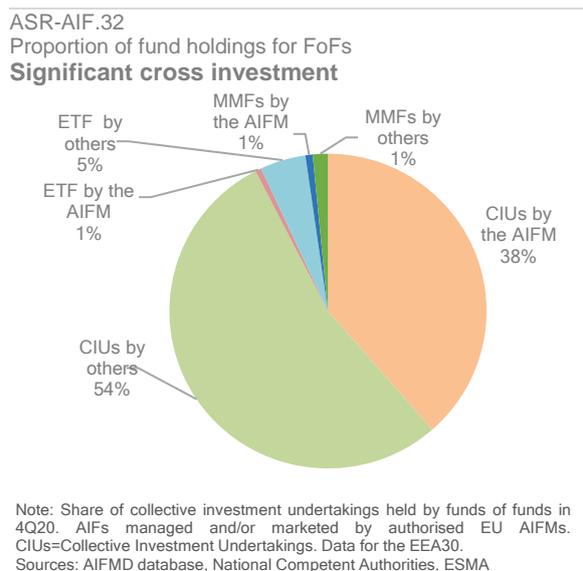
Distribution: Most FoFs have access to the EU passport to a large extent, with 96% licensed to be sold throughout the EU (ASR-AIF.39ASR-AIF.39).

Funds of Fund investors: Among AIF types, FoFs have the second largest proportion of retail investors (20%), although they are sold mainly to professional investors (80%) (ASR-AIF.31ASR-AIF.31). FoFs are diversified and usually require less initial investment than other types of sophisticated vehicles, so are easier to access, especially for retail investors. Nevertheless, retail participation varies significantly between FoF strategies — 3% for funds of PE funds and funds of HFs, and around 20 % for ‘other FoFs’. Among professional investors, pension funds and insurance companies are the main investors, accounting for 25% (+6pp compared to 2019) and 9% of the NAV respectively. Around 10% of FoFs’ NAV is instead held by other CIUs, (ASR-AIF.40). In particular pension funds and other CIUs have a large participation in FoFs investing in PE and HFs (~60%).

Geographical investment focus: FoFs invest primarily in the EEA (54%), followed by supranational issuers (25%) and North America (11%) (ASR-AIF.41ASR-AIF.41). Since the supranational issuers category also covers ‘multiple regions’, FoFs may invest in geographically diversified funds, rather than in supranational issuers specifically.

Leverage and liquidity risks

Gross exposures: FoFs have a large proportion of their fund holdings invested in funds from the same manager (around 40% of the NAV including Money Market Funds and ETFs by the same AIFMs, ASR-AIF.32ASR-AIF.32).



This results also from the analysis of the main traded instruments of FoFs investing in funds different from PE funds and HFs. For this large residual category of FoFs, 20% of total portfolio exposure resulting from the top five instruments

relates to cross investment. For funds of PE funds and HFs the shares of CIUs managed by other management companies is, respectively, above 40% and around 28%. Looking at the use of derivatives, funds of HFs rely largely on FX derivatives (ASR-AIF.33). The use of these derivatives may serve to hedge the exposures arising from foreign currency share classes held in portfolio.

ASR-AIF.33
Main traded instruments

Instruments (%)	Funds of HFs	Funds of PE	Other FoFs
Cash	3.0	1.8	2.0
Equities	0.9	3.4	1.5
Corporate bonds	0.0	0.0	0.1
Sovereign bonds	0.1	0.1	0.2
Convertible bonds	0.0	0.0	0.0
Loans	1.3	0.0	0.1
Structured products	0.0	0.0	0.1
CDS & equity derivatives	0.0		1.9
IRDs and FX	15.2	1.1	4.4
Other derivatives	0.0	0.0	0.5
Real assets		0.0	0.1
MMFs by other AIFMs	0.1	0.2	0.7
MMFs by the same AIFM	0.1	0.0	0.4
ETFs by other AIFMs	2.2	1.0	1.6
ETFs by the same AIFM	0.0	0.0	0.2
CIUs by other AIFMs	27.8	42.5	12.1
CIUs by the same AIFM	8.3	3.8	19.7
Other assets	0.4	3.6	0.8
Total	3.0	1.8	2.0

Note: Main traded instruments, end of 2020, % of total exposures. Data for the EEA30. Sources: AIFMD database, National Competent Authorities, ESMA.

Leverage: FoFs display limited use of leverage: regulatory AuM to NAV is 145% on aggregate, with some variation by type (ASR-AIF.34, ASR-AIF.43). Relatively low leverage levels come from limited exposures to derivatives and little use of financial leverage (less than 1% of NAV). Adjusted leverage appears stable over time and even more limited in funds investing in PE funds and in the large FoF residual category.

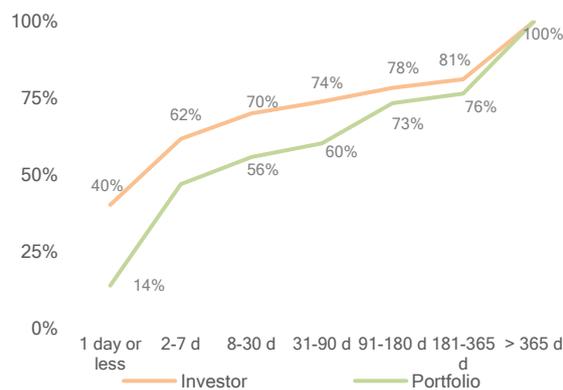
ASR-AIF.34
Adjusted leverage over time
Stable over time



Note: Adjusted leverage of FoFs in % of NAV. AIFs managed and/or marketed by full scope AIFMs and sub-threshold managers registered only in national jurisdictions. Data for the EEA30. Sources: AIFMD database, National Competent Authorities, ESMA.

Liquidity risk: Most FoFs are open-ended funds (70% by NAV), with the exception of funds of PE funds (ASR-AIF.42). Among open-ended FoFs, most of funds investing in strategies beyond HFs and PE funds offer daily liquidity to investors (ASR-AIF.44). At the aggregate level, the liquidity profile of FoFs points to a significant and persisting liquidity mismatch over the different time horizons. Within one day investors can redeem up to 40% of the NAV, whereas 14% of the assets can be liquidated within this time frame. The liquidity gap reduced between three and six months (ASR-AIF.35).

ASR-AIF.35
Liquidity profile
Significant liquidity mismatch



Note: Portfolio and investor liquidity profiles of funds of funds managed and/or marketed by authorised AIFMs, end of 2020. Portfolio liquidity defined as the percentage of the funds' assets capable of being liquidated within each specified period, investor liquidity defined as the shortest period for which investors can redeem. EEA30 and non-EEA30 AIFs by authorised AIFMs marketed, respectively, w/ and w/o passport. d=Days. Data for the EEA30. Sources: AIFMD database, National Competent Authorities, ESMA.

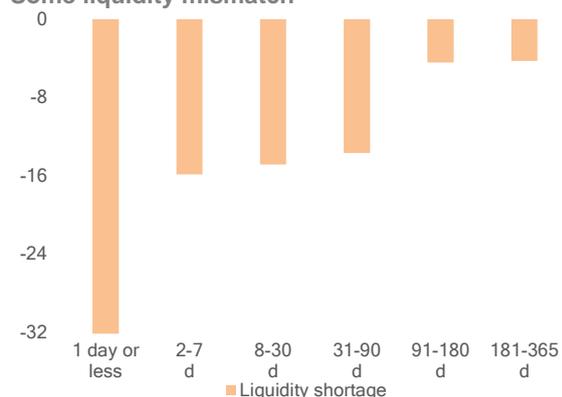
Most FoFs investing beyond HF and PE strategies usually hold shares of UCITS, which offer daily liquidity to investors. The observed one-day liquidity gap implies that AIFMs might consider their UCITS' exposures subject to liquidity risk over one day. One factor could be that the AIFM might take into account the

settlement period required by the underlying funds (usually T+2). Alternatively, the manager might report a liquidity mismatch based on its internal liquidity risk assessment. FoFs might hold a large portion of the shares of some UCITS. Therefore, the manager would need more time to sell its shares, to reduce the price impact of his sales. When considering only FoFs with a liquidity deficit, the potential liquidity shortage in the very short term (within 1 day) is above 30% of their NAV and it reduces significantly within the six-months horizon (ASR-AIF.36).

ASR-AIF.36

Liquidity profile

Some liquidity mismatch



Note: Liquidity shortage of funds of funds, % of NAV. Liquidity shortage is defined as the sum of liquidity deficits at the level of the funds, as non compensated by liquidity surplus. Data for the EEA30. Sources: AIFMD database, National Competent Authorities, ESMA.

FoFs offering daily redemptions and not requiring any notice period to investors for redeeming their share represent one-third of the NAV. A notice period ranging from 1 to 7 days for FoFs allowing to redeem on a daily basis is instead more commonly requested (40% of NAV). Overall, more than 40% of FoFs by NAV do not require any redemption notice to investors (**Error! Reference source not found.**).

ASR-AIF.37

Redemption frequency and notice period

Majority of daily funds without any notice period

Redemption Frequency	Notice Period					Total
	None	1D	1W	1M	>1M	
Daily	33.5	19.1	11.3	0.6		64.0
Weekly to Monthly	8.6	7.3	4.4	13.9	3.1	29.1
Quarterly	0.6	0.1	0.1	0.3	0.1	4.3
Longer than quarterly	0.3			0.1	0.8	1.4
Other	0.2		0.8	0.2	0.1	1.2
Total	43.3	26.5	16.7	15	4.0	100

Note: Funds of funds by redemption frequency and notice period given to investors, in % of NAV, end of 2020. 1D= 1 day, 1W = 2 to 7 days, 1M = 8 to 30 days, >1M = more than 30 days' notice period. Data for the EEA30.

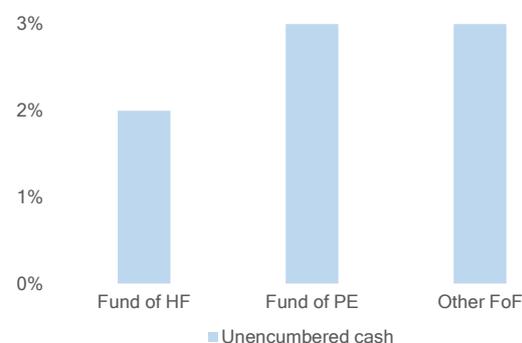
Source: AIFMD database, National Competent Authorities, ESMA.

Unencumbered cash, i.e. a fund's position in cash or cash-like securities not subject to legal claims by another party (e.g. from collateral pledges or securities lending activities), is an important indicator of a fund's ability to mobilise funds fast to meet redemption claims⁴. FoFs have relatively low levels of unencumbered cash, between 2% and 3% of the NAV across types (ASR-AIF.38).

ASR-AIF.38

Unencumbered cash

Low cash buffers



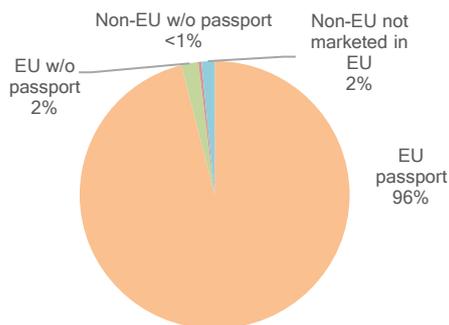
Note: Unencumbered cash held by funds of funds, end of 2020, in % of NAV. EEA30 and non-EEA30 AIFs by authorised AIFMs marketed, respectively, w/ and w/o passport. FoF=Funds of funds, HF=Hedge fund, PE=Private equity fund. Data for the EEA30.

Sources: AIFMD database, National Competent Authorities, ESMA.

⁴ Unencumbered cash is an optional field for AIFMs to report.

ASR-AIF.39
EU passport

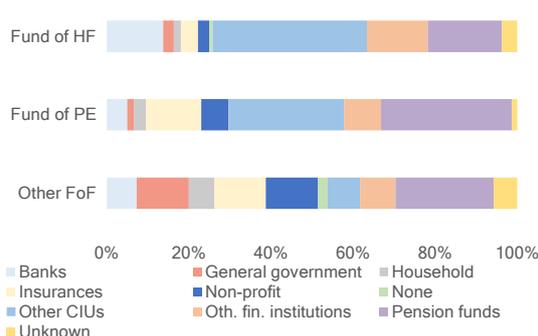
Most FoFs can be passported



Note: NAV of funds of funds by manager's access to AIFMD passport, end of 2020, in %. Authorised EEA30 AIFMs with access to AIFMD passport or marketing non-EEA30 AIFs w/o passport, sub-threshold managers are registered only in national jurisdictions w/o passporting rights. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF.40
FoF investors

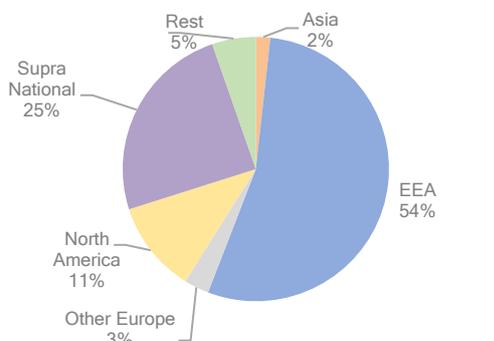
Mainly institutional investors



Note: Ownership of units in funds of funds managed and/or marketed by authorised AIFMs, end of 2020, in % of NAV. FoF=Fund of funds; PE=Private equity fund, HF=Hedge fund. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF.41

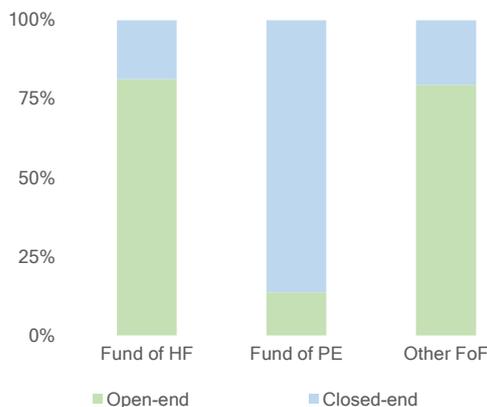
Regional investment focus
Mainly EEA



Note: Regional investment focus of funds of funds managed and/or marketed by authorised AIFMs and sub-threshold managers registered only in national jurisdictions, end of 2020, in % of NAV. Geo-focus determined according to the domicile of investments and the supranational category including investments without a predominant geo-focus. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF.42
Investor rights

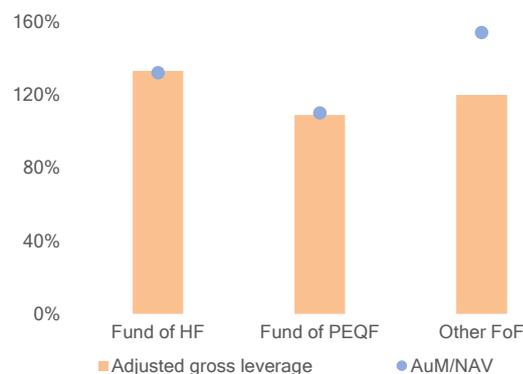
Funds of PE mostly closed



Note: Redemption rights provided in the ordinary course to investors in funds of funds managed and/or marketed by authorised AIFMs, end of 2020, in % of NAV. HF=Hedge fund; PE=Private equity; FoF=Fund of funds, PE=Private equity fund. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF.43

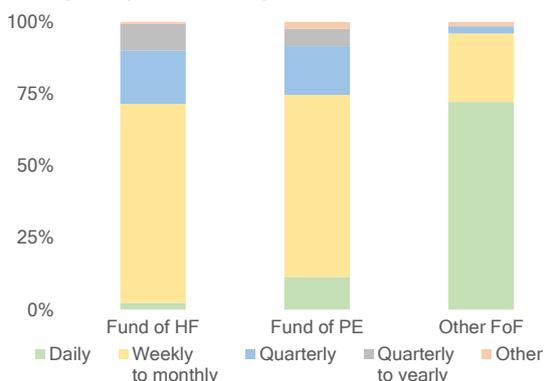
Leverage
Limited leverage



Note: Adjusted gross leverage of funds of funds managed and/or marketed by authorised AIFMs, end of 2020, in % of NAV. Adjusted gross leverage computed as total exposure less IRDs with respect to NAV. FoF= Funds of funds, PE=Private equity fund, HF=Hedge fund. Data for the EEA30.
Sources: AIFMD database, National competent authorities, ESMA.

ASR-AIF.44

Redemption frequencies
Mostly daily and weekly



Note: Investor redemption frequencies allowed by open-end funds of funds managed and/or marketed by authorised AIFMs, end of 2020, in % of NAV. EEA30 and non-EEA30 AIFs by authorised AIFMs marketed, respectively, w/ and w/o passport. FoF=Fund of funds, PE=Private equity fund, HF=Hedge Fund. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

Real Estate Funds

Summary

RE funds account for 13% of the NAV of EEA30 AIFs, at EUR 766bn. RE funds continued to grow in 2020, albeit at a more moderate pace (+9% compared with 2019). The proportion of retail investors has continued to grow to reach 24%, the highest among AIF types. While leverage remains limited, liquidity risk in RE funds is a concern: around 54% are open-ended, and 40% of Commercial Real Estate (CRE) funds by NAV offer daily liquidity to investors. At the aggregate level, RE funds face liquidity mismatch across all time periods, an indication of a structural vulnerability as the maturities of assets and liabilities are not aligned.

Market size and structure

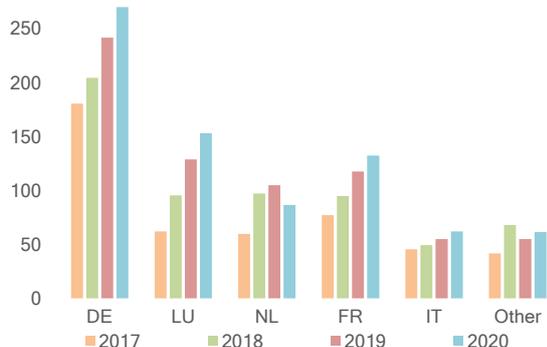
Size: RE funds are the third-largest AIF type by size, with a NAV of EUR 766bn, or 13% of all EEA30 AIFs. The size of the RE fund industry increased by 9% in 2020, a more moderate pace compared to 2019 (15% increase), as the result of positive developments in housing markets. The RE fund industry remains concentrated in a few countries (ASR-AIF.45), with the top five accounting for 92% of the NAV. The NAV increased in most countries with the largest RE fund industry.

ASR-AIF.45

Size of RE funds

Concentration in a few countries

300



Note: NAV of REs managed and/or marketed by authorized AIFMs and sub-threshold managers registered only in national jurisdictions, in EUR bn. data for the EEA30.

Sources: AIFMD database, National Competent Authorities, ESMA.

Real Estate fund types: RE investment strategies continue to be dominated by CRE with 64% of the NAV (-2pp compared with 2018); while exposure to residential markets remained stable at 16% of NAV (+1pp, ASR-AIF.52ASR-AIF.52).

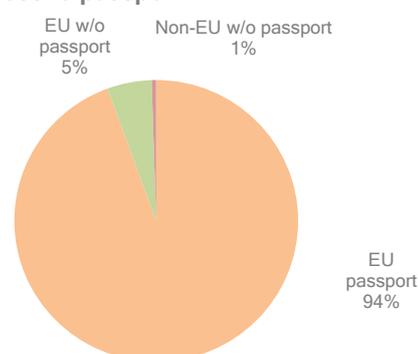
Distribution: Among AIFs, RE funds have an extensive access to the EU passport, with 94%

able to be sold throughout the EU, a 3pp increase from 2019 (ASR-AIF.46).

ASR-AIF.46

EU passport

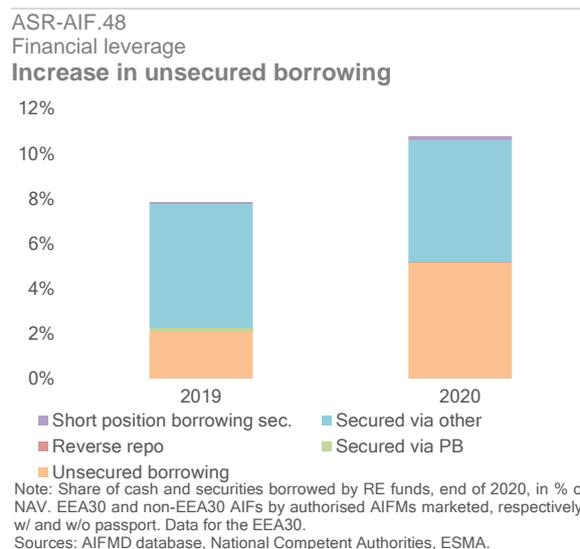
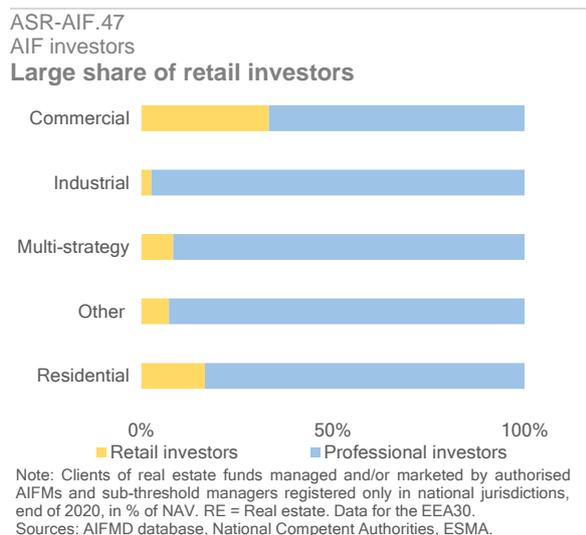
High access to passport



Note: NAV of real estate AIFs by manager's access to AIFMD passport, end of 2020, in %. Authorised EEA30 AIFMs with access to AIFMD passport or marketing non-EEA30 AIFs w/o passport, sub-threshold managers are registered only in national jurisdictions w/o passporting rights. Data for the EEA30.

Sources: AIFMD database, National Competent Authorities, ESMA.

Real Estate fund investors: RE funds are sold mainly to professional investors (76%), with the proportion of retail investors increasing by 3pp to 24% in 2020. The retail investor share is even higher for CRE funds, at 33% of the NAV (+1pp) while the share fell by 2pp to 17% for the residential category (ASR-AIF.47ASR-AIF.47). Among professional investors, pension funds and insurance companies are the main investors, accounting for 23% and 17% of the NAV respectively (ASR-AIF.53). Households own 15% of the NAV of RE, followed by other funds with 13% of the NAV. Banks have limited exposures to RE funds, except for residential RE funds for which banks hold 13% of NAV.

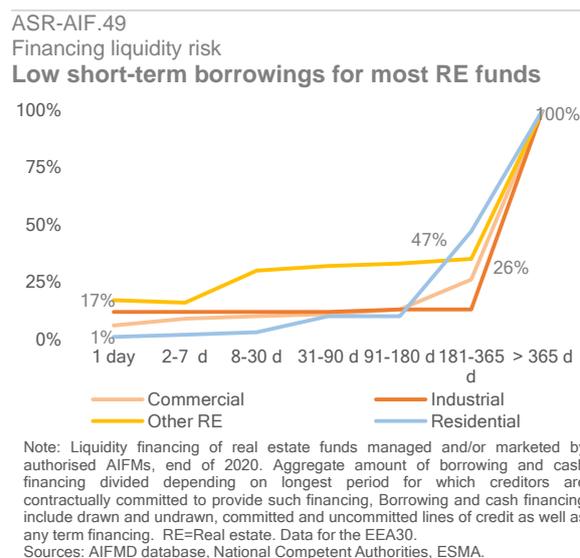


Geographical investment focus: RE funds invest overwhelmingly in the EEA (88%, +5pp compared with 2019, ASR-AIF.54ASR-AIF.54). RE funds have by far the largest exposures to EEA countries compared with other AIF types.

Financing liquidity risk for most RE funds appears limited as most of the borrowing lines remain available for relatively long periods. For ‘other’ RE funds, the reliance on overnight borrowing increased by 6 pp since 2019 to amount to 17% of financing liquidity (ASR-AIF.49).

Leverage and liquidity risks

Gross exposures: RE gross exposures are concentrated in physical assets (around 70% of exposures, across most RE types), in line with the strategy used (ASR-AIF.55).



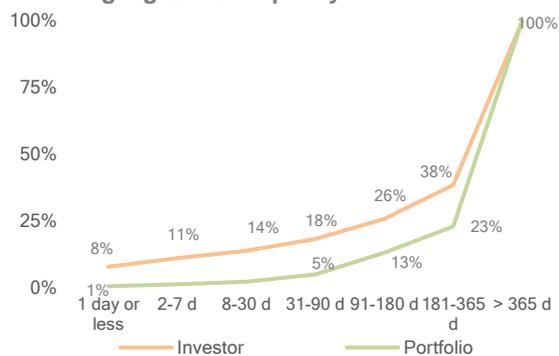
Leverage: Specific limits to balance sheet leverage in RE funds are established in most EU jurisdictions to mitigate the risks related to leverage and liquidity⁵. However, those measures are not harmonized and can vary from one country to another (ESRB, 2021). Regulatory AuM to NAV is 138% on aggregate, as they have limited exposures to derivatives, with low dispersion across RE fund types (ASR-AIF.56). However, RE funds do use **financial leverage**, with outright borrowing amounting to 11% of the NAV (+3pp compared with 2019, the second largest by AIF type, after HFs (ASR-AIF.48ASR-AIF.48). In 2020, the share of unsecured borrowing jumped from 2% to 5% of NAV.

Liquidity risk: In terms of NAV, 56% of RE funds are open-ended funds (+2pp compared with 2019) and there is considerable heterogeneity regarding redemption frequencies for open-ended RE funds (ASR-AIF.57). The share of RE funds offering daily to monthly liquidity remained stable in 2020, accounting for 55% of the NAV. However, 40%% of CRE funds still offer daily liquidity to investors (-2pp). At the aggregate level, the **liquidity profile** of RE fund points to significant liquidity mismatch: within a month, investors can redeem up to 14% of the NAV, whereas only 2% of the assets can be liquidated

⁵ In 2021, the Central Bank of Ireland published a [Consultation Paper](#) to introduce macroprudential limits on leverage and liquidity mismatch (CBol, 2021).

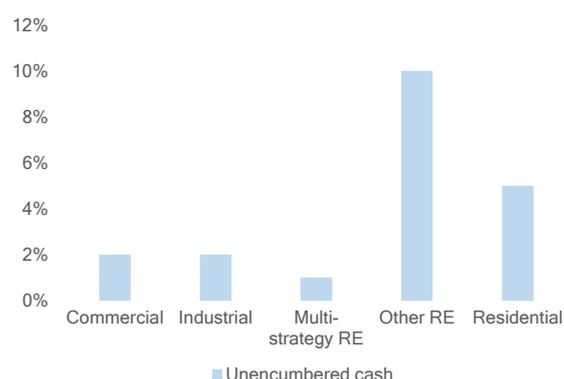
within this time frame. The liquidity mismatch occurs across all time buckets within one year and is most prevalent for the two main strategies (CRE and residential) which account for 80% of NAV (ASR-AIF.50). The aggregate level of liquidity masks important differences across Member States, as in some countries RE funds can only be closed-ended.

ASR-AIF.50
Liquidity profile
Persisting significant liquidity mismatch



Note: Portfolio and investor liquidity profiles of real estate funds managed and/or marketed by authorised AIFMs, end of 2020. Portfolio liquidity defined as the percentage of the funds' assets capable of being liquidated within each specified period, investor liquidity defined as the shortest period for which investors can redeem. EEA30 and non-EEA30 AIFs by authorised AIFMs marketed, respectively, w/ and w/o passport. RE=Real estate. Data for the EEA30. Sources: AIFMD database, National Competent Authorities, ESMA.

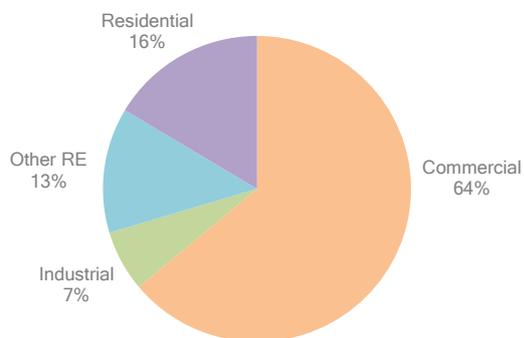
ASR-AIF.51
Unencumbered cash
Cash buffers lower than liquidity gap



Note: Unencumbered cash held by real estate funds, end of 2020, in % of NAV. EEA30 and non-EEA30 AIFs by authorised AIFMs marketed, respectively, w/ and w/o passport. RE=Real estate. Data for the EEA30. Sources: AIFMD database, National Competent Authorities, ESMA.

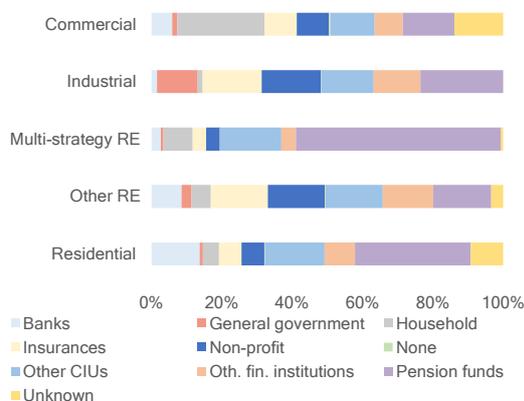
The liquidity mismatch at the short-end can be mitigated by cash, albeit to a lesser extent: **unencumbered cash** for RE funds remains below 6% for commercial and residential RE funds, the two largest strategies (ASR-AIF.51). Furthermore, cash buffers are significantly lower than the potential liquidity mismatch that could arise if investors were to redeem over longer time horizons. In that context, funds might have to rely on liquidity management tools, provided that they were available at the fund level. Around 70% of open-ended RE funds require a notice period, which in most cases is at least three months, and 21% have lock-up periods.

ASR-AIF.52
RE fund strategies
Mainly CRE



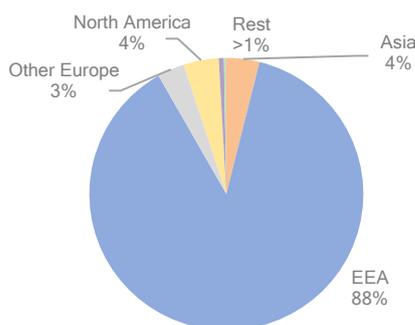
Note: Investment strategies of real estate funds, end of 2020, in % of NAV. Real estate funds managed and/or marketed by full scope AIFMs and sub-threshold managers registered only in national jurisdictions. RE= Real estate. Data for the EEA30. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF.53
RE funds investors
Pension funds as largest investors



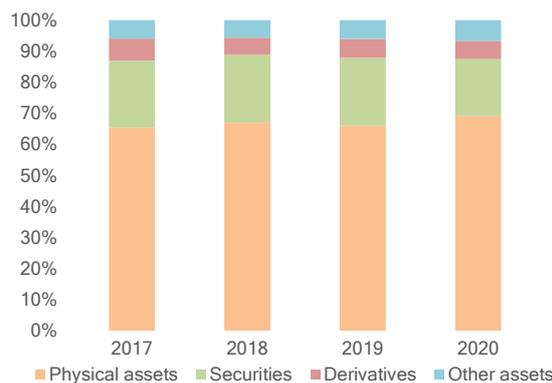
Note: Ownership of units in real estate funds AIFs managed and/or marketed by authorised AIFMs, end of 2020, in % of NAV. RE=Real estate. Data for the EEA30. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF.54
Regional investment focus
Investments mainly in EEA



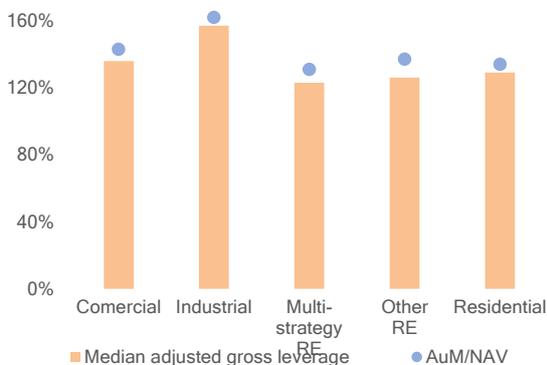
Note: Regional investment focus of real estate funds managed and/or marketed by authorised AIFMs and sub-threshold managers registered only in national jurisdictions, end of 2020, in % of NAV. Geo-focus determined according to the domicile of investments and the supranational category including investments without a predominant geo-focus. Data for the EEA30. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF.55
Gross exposures
Mainly physical assets



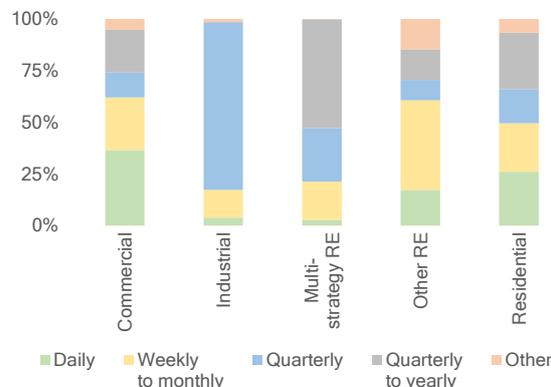
Note: Share of exposures by RE funds, end of 2020, in % of total. AIFs managed and/or marketed by authorised AIFMs. RE=Real estate. Data for the EEA30. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF.56
Leverage
Limited use of leverage



Note: Adjusted gross leverage of real estate funds managed and/or marketed by authorised AIFMs, end of 2020, in % of NAV. Adjusted gross leverage computed as total exposure less IRDs with respect to NAV. RE=Real estate. Data for the EEA30. Sources: AIFMD database, National competent authorities, ESMA.

ASR-AIF.57
Redemption frequencies
Large dispersion



Note: Investor redemption frequencies allowed by open-end real estate funds managed and/or marketed by authorised AIFMs, end of 2020, in % of NAV. EEA30 and non-EEA30 AIFs by authorised AIFMs marketed, respectively, w/ and w/o passport. RE=Real estate. Data for the EEA30. Sources: AIFMD database, National Competent Authorities, ESMA.

Hedge Funds

Summary

With the departure of the UK from the EU, the size of the EEA30 HF sector has plummeted to only EUR 89bn (2% of the NAV of all AIFs), from EUR 354bn in 2019 (including the UK). EEA30 HFs have widespread access to the EU passport and are mainly domiciled in Ireland and Luxembourg. Leverage is very high, particularly for some strategies highly reliant on derivatives. HFs using derivatives tend to maintain large, unencumbered cash positions, possibly to meet future margin calls relating to derivatives positions. HFs are exposed to limited liquidity mismatch, as their assets can be liquidated quickly to meet investor redemptions. However, HFs are exposed to financing risk, as for some strategies more than half of their funding is overnight, implying potential rollover risk.

Hedge Funds: market size and structure

HFs are funds that employ complex strategies, usually through the use of derivatives, and rely on leverage to generate returns.

Size: As of the end of 2020, the NAV of HFs sold in the EEA30 by AIFMs domiciled in the EEA30 amounted to EUR 89bn, a 3% increase compared with 2018. With the departure of the UK from the EU, the size of the EEA30 HF industry has shrunk considerably since HFs managed by UK AIFMs accounted for 75% of the NAV in 2019 (ESMA, 2021). Most of the EEA30 HF industry remains concentrated in two Member States: Ireland and Luxembourg account for 58% of the NAV (ASR-AIF.65).

Outside the AIFMD framework, definitions of hedge funds have been put forward (ASR-AIF.58). As a result, funds have been identified that apply investment strategies comparable to hedge funds, whose size has been found to be significant.

ASR-AIF.58

Hedge funds

Definitions outside of the AIFMD framework

The ECB defines hedge funds as funds “*which apply relatively unconstrained investment strategies to achieve positive absolute returns, and whose managers, in addition to management fees, are remunerated in relation to the fund’s performance*” (ECB, 2017).

In the US, the SEC defines a hedge fund as any private fund whose managers are paid a performance fee, and that may borrow in excess of 150% of its NAV or have a gross notional exposure higher than 200% of its NAV or may sell securities or other assets short (SEC, 2021).

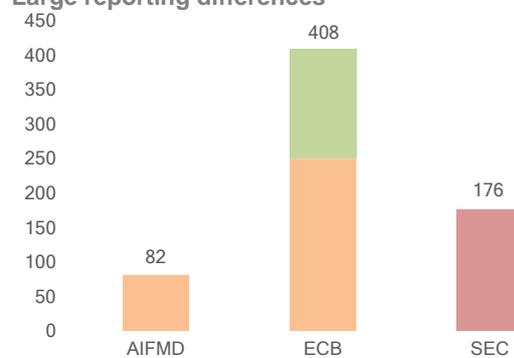
For example, the ECB estimates the total size of the euro area market for funds pursuing hedge-fund style strategies to amount to EUR 408bn, including EUR 250bn registered as AIFs, and

EUR 158bn of funds registered under the UCITS framework (ASR-AIF.59). Most strikingly, the size of AIF HFs cited by the ECB amounts to more than three times the volume found under formal AIF reporting. This represents a significant case of reporting inconsistencies resulting from the AIF categorisation. In the US, data from the Securities and Exchange Commission indicate that the NAV of HFs domiciled in two euro area jurisdictions amount to EUR 176bn, two times what is reported for euro area HFs in AIFMD.

ASR-AIF.59

Classification of euro area-domiciled hedge funds

Large reporting differences



Note: NAV of euro area domiciled hedge fund by regulatory type and definition, in EUR bn. SEC data only include HFs domiciled in Ireland and Luxembourg.

Sources: AIFMD database, National Competent Authorities, ECB, SEC, ESMA.

There are also AIF HFs which are neither domiciled nor managed in the EEA30 but are sold in individual Member States under NPPR. Those HFs had a NAV of EUR 1938bn at the end of 2020. Most of HFs sold under NPPR are domiciled in offshore centres such as the Cayman Islands (53% of NAV) and the British Virgin Islands (17%). Around 22% are domiciled in the United States.

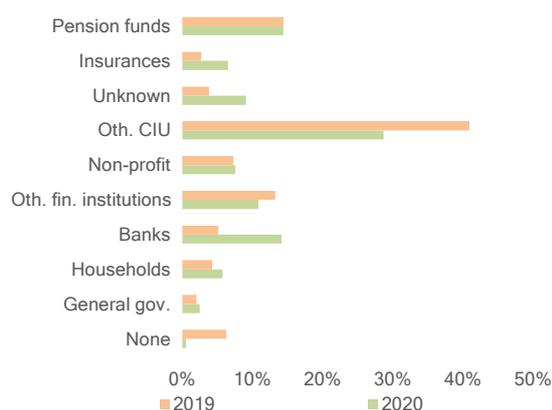
Hedge Fund types: HFs pursue a wide range of strategies (ASR-AIF.66). Strategies relating to

equities (such as long/short) remain dominant (37%, +4pp), followed by other HF strategies (25%) and credit (12%).

Distribution: EU HFs have an extensive access to the EU passport, with 95% able to be sold throughout the EU (+12pp compared with 2019). This stands in sharp contrast with previous reports when UK data were included, as UK HFs were mainly domiciled outside the EU and hence not eligible for passporting.

Hedge Fund investors: HFs are mainly owned by professional investors, with retail investors accounting for 10% of NAV. Among professional investors, investment funds are the main holders of HF shares at 29% (ASR-AIF.60), followed by pension funds (14%) and banks (14%) and other financial institutions (11%, +3pp). Similarly, for other types of AIFs, the ownership of HF shares is highly concentrated, with the top five holders accounting for around 80% of the NAV for HFs.

ASR-AIF.60
HF investors
Mainly funds and pension funds



Note: Ownership of units in HFs managed and/or marketed by authorised AIFMs, in % of NAV. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

Investment focus: HFs invest primarily in the EEA (46%), and North America (36%, -4pp), while exposures to Asia amount to 7% of NAV.

Leverage and liquidity risks

Gross exposures: Gross exposures of HFs are diverse and heterogeneous across strategies (ASR-AIF.67). Macro, CTA and relative value HFs have high exposures relating to interest-rate derivatives, while credit HFs are exposed mainly to credit derivatives (47% of exposures). Securities account for the main part of gross exposures for event-driven and equity HFs (71% and 60% respectively).

HFs have high levels of **unencumbered cash** compared to other types of AIFs (11% for HFs

versus 5% for all AIFs). The highest levels of cash are observed for CTA strategies which rely heavily on derivatives (ASR-AIF.61). This suggests that part of the unencumbered cash is used to cover future margin calls.

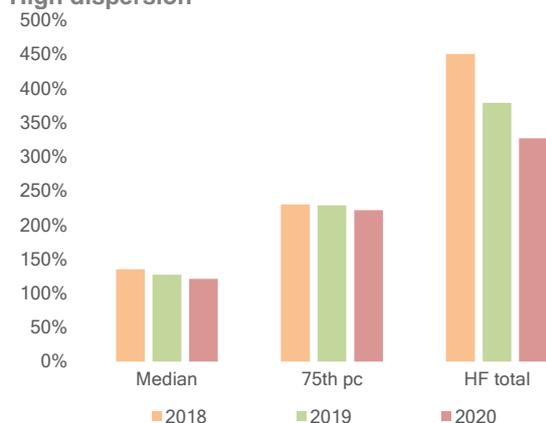
ASR-AIF.61
Unencumbered cash
Cash correlated with derivatives exposures



Note: Unencumbered cash in % of NAV and derivatives exposures in % of gross exposures for hedge funds, end of 2020. EEA30 and non-EEA30 AIFs by authorised AIFMs marketed, respectively, w/ and w/o passport. HF=Hedge fund. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

Leverage: HFs are in general highly leveraged, with adjusted leverage at around 330% of NAV (ASR-AIF.62), although leverage has been declining since 2018. The high levels of aggregate leverage are driven by a few very large outliers: half of HFs have a leverage below 130%, as indicated by the median leverage which remained stable at 121%. In addition, 3/4th of HFs has a leverage below 220% (75th percentile). Among HF strategies (ASR-AIF.68), CTAs have the highest median leverage (at 640%), followed by macro (435%) and relative value (230%).

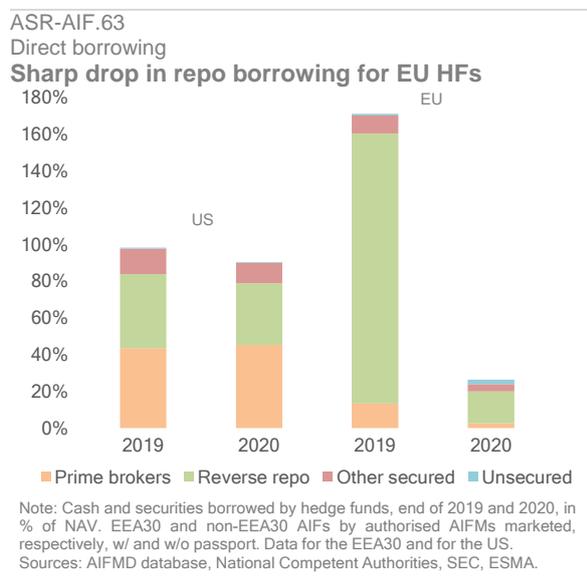
ASR-AIF.62
Hedge fund leverage
High dispersion



Note: Adjusted leverage of HFs in % of NAV. AIFs managed and/or marketed by full scope AIFMs and sub-threshold managers registered only in national jurisdictions. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

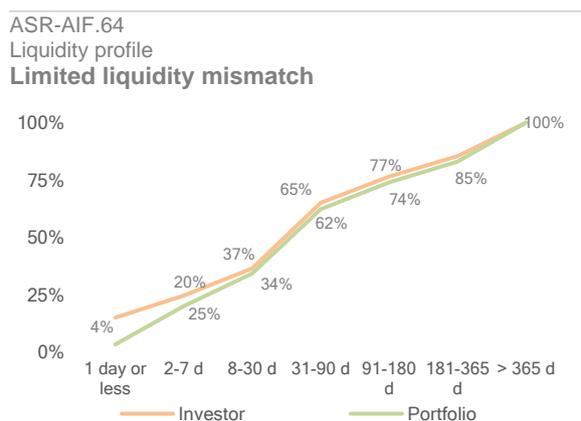
Although most of the leverage is synthetic leverage, i.e. due to the use of derivatives, **financial leverage** is also significant for HFs

compared with other AIF types. However, in 2020, direct borrowings plummeted to 37% of NAV compared with 225% in 2019 (ASR-AIF.63). The drop is mainly driven by a sharp reduction in repo: from 150% to 18% of NAV as well as lower short positions (from 55% to 10% of NAV). In the US, SEC reports also point to a decline in the use of reverse repo by HFs, although by a much smaller extent (from 40% to 34% of NAV).



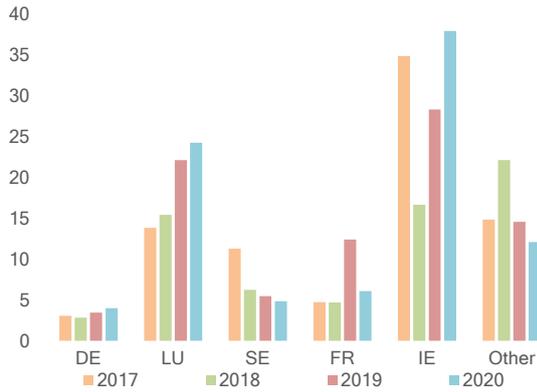
Liquidity risk: HFs reliant on short-term borrowings are exposed to **financing liquidity risk** (ASR-AIF.70). The risk would crystallise if HFs were to use most of their available financing, and then their counterparts were to cut or reduce their funding. For some strategies, such as CTA and equity, borrowings are almost entirely overnight (more than 90% for equity HFs), exposing them to potential rollover risk.

Most HFs are open-ended funds (78% of NAV) which offer weekly to monthly liquidity to investors across strategies (ASR-AIF.69). HFs offering daily liquidity account for only 8% of the NAV. At the aggregate level, the **liquidity profile** of HFs points to limited liquidity mismatch: within one week, investors can redeem up to 25% of the NAV, whereas 20% of the assets can be liquidated within this time frame (ASR-AIF.64). This pattern is evident across all HF strategies, despite different levels of portfolio and investor liquidity. In addition, among AIFs, HFs make the most use of notice periods, which are on average around one month.



ASR-AIF.65
Size of HFs by country

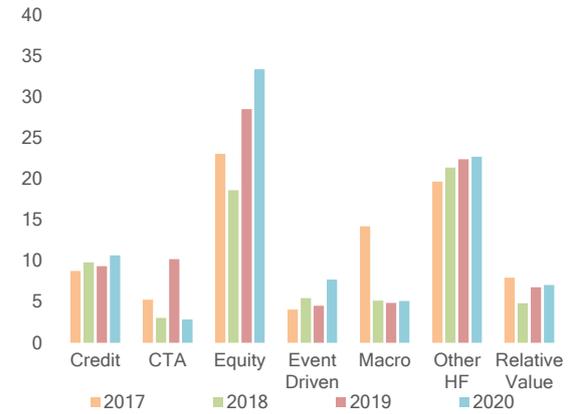
Concentrated in two countries



Note: NAV of HFs of AIF managed and/or marketed by authorized AIFMs and sub-threshold managers registered only in national jurisdictions, in EUR bn. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF.66

HF strategies
Mainly equity strategies

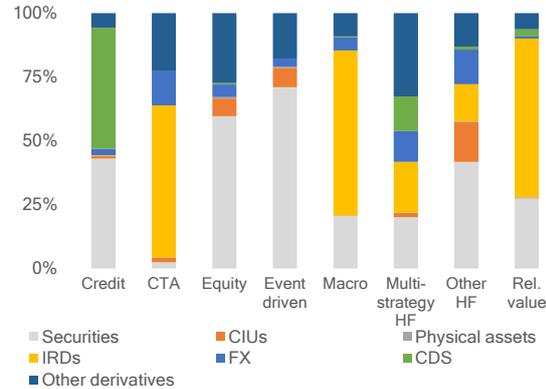


Note: NAV of HFs by strategy, in EUR bn. AIFs managed and/or marketed by full scope AIFMs and sub-threshold managers registered only in national jurisdictions. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF.67

Gross exposures

Heterogeneity across HF strategies

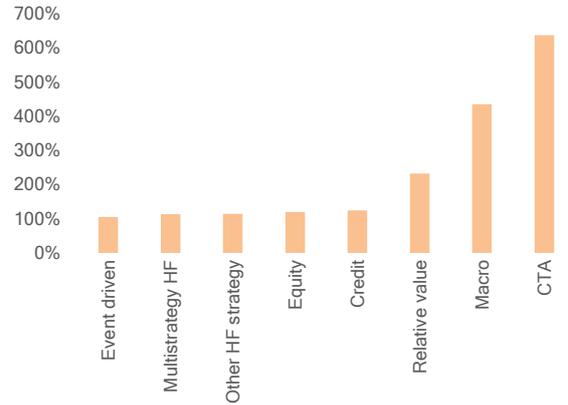


Note: Share of exposures by hedge funds' investment strategies, end of 2020, in % of total. AIFs managed and/or marketed by authorised AIFMs. HF=Hedge fund. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF.68

Leverage

Dispersion across HF strategies

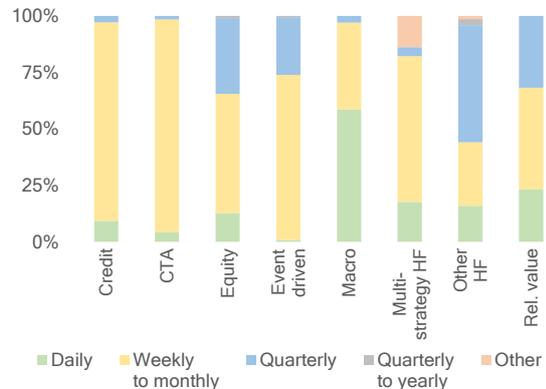


Note: Median adjusted leverage of HFs in % of NAV, end of 2020. AIFs managed and/or marketed by full scope AIFMs and sub-threshold managers registered only in national jurisdictions. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF.69

Redemption profile

Mostly weekly to monthly frequency

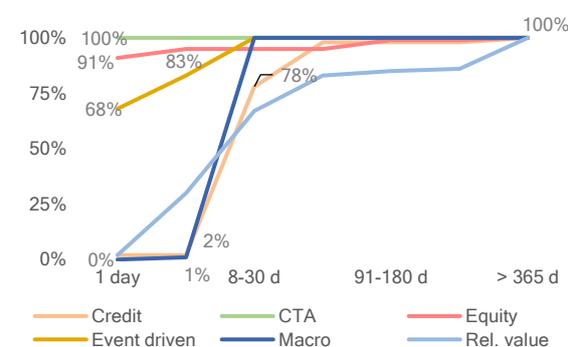


Note: Investor redemption frequencies allowed by open-end hedge funds managed and/or marketed by authorised AIFMs, end of 2020, in % of NAV. EEA30 and non-EEA30 AIFs by authorised AIFMs marketed, respectively, w/ and w/o passport. HF=Hedge fund. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF.70

Liquidity financing

Reliance on short-term funding



Note: Liquidity financing of hedge funds managed and/or marketed by authorised AIFMs, end of 2020. Aggregate amount of borrowing and cash financing divided depending on longest period for which creditors are contractually committed to provide such financing. Borrowing and cash financing include drawn and undrawn, committed and uncommitted lines of credit as well as any term financing. HF=Hedge fund. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

Private Equity Funds

Summary

PE funds account for 6% of the NAV of all EEA30 AIFs, or EUR 363bn. Among AIF types, PE funds contributed remarkably to the growth of the AIF sector in 2020 (+29% compared with 2019), together with 'other AIFs'. They follow a range of strategies and are almost exclusively sold to professional investors. PE funds invest mainly in illiquid securities (unlisted securities), but liquidity risk is limited given that PE funds are overwhelmingly closed-ended.

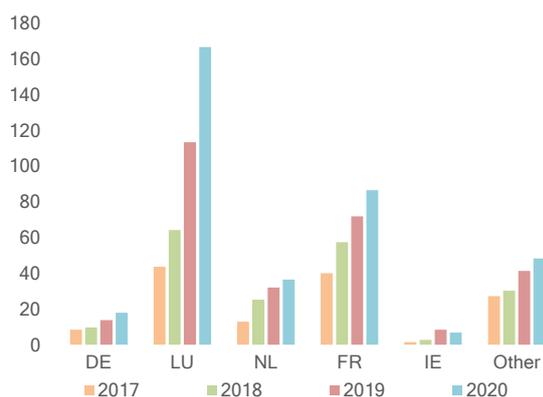
Market size and structure

Size: PE funds have grown substantially (+29pp) in 2020 reaching a total NAV of EUR 456bn, or 6% of all AIFs. The PE fund industry is concentrated in a few countries (ASR-AIF.71), with the top five accounting for 83% of the NAV.

ASR-AIF.71

Size of PE funds

Concentration in a few countries



Note: NAV of PEs managed and/or marketed by authorized AIFMs and sub-threshold managers registered only in national jurisdictions, in EUR bn. Data for the EEA30.

Sources: AIFMD database, National Competent Authorities, ESMA.

Private Equity Fund types: PE investment strategies are diversified, with 33% of the NAV invested in growth capital, followed by venture capital (16%) and mezzanine capital (6%). A large part of the NAV (45%) is related to other unspecified strategies (ASR-AIF.75). The large residual category can be explained by classification issues, as PE fund types do not include leveraged buyouts, which account for a significant proportion of the PE industry (around 60% of fundraising in 2019 according to Invest Europe)⁶.

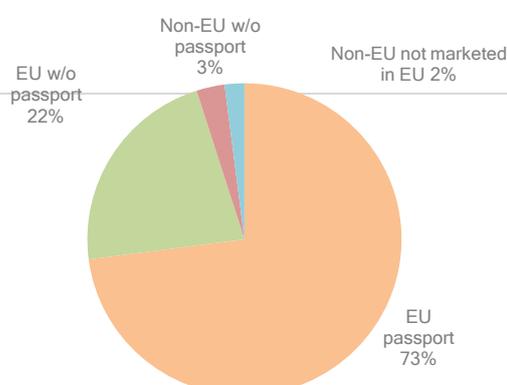
Distribution: As for other types of AIFs, the majority of PE funds have access to the EU

passport, with 73% able to be sold throughout the EU (ASR-AIF.72ASR-AIF.72).

ASR-AIF.72

EU passport

High access to passport

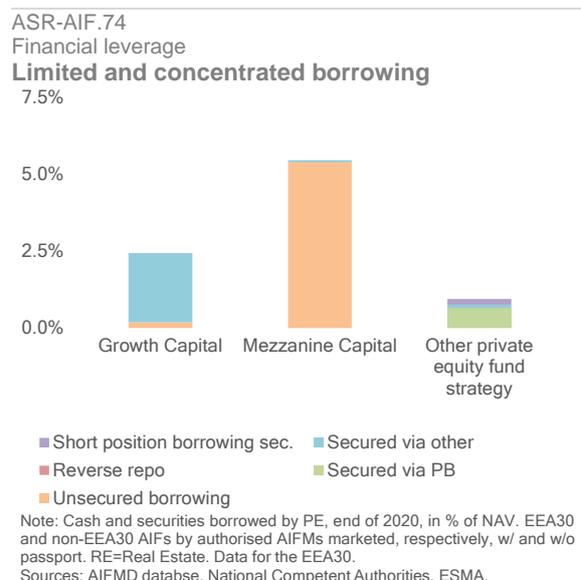


Note: NAV of private equity funds by manager's access to AIFMD passport, end of 2020, in %. Authorised AIFMs with access to AIFMD passport, subthreshold managers registered only in national jurisdictions w/o passport. Data for the EEA30.

Sources: AIFMD database, National Competent Authorities, ESMA.

Private Equity Fund investors: Among AIFs, PE funds have the lowest proportion of retail investors (6%). Among PE fund types, venture capital has a larger proportion of retail investors, at 12% of the NAV (ASR-AIF.73ASR-AIF.73). Among professional investors, no important shifts in composition occurred in 2020. The main investor type is other CIUs with 33% of the NAV in 2020 (ASR-AIF.76), followed by other financial institutions (17%) and non-profit funds (11%). The distribution of the investors remains more or less similar to the one of 2019.

⁶ See Invest Europe (2021).



Geographical investment focus: PE funds continue to invest mainly in the EEA (72% of NAV (ASR-AIF.77ASR-AIF.77) and the relative share remain more or less stable. The second region of investments for PE funds is still North America (17% of the NAV).

Leverage and liquidity risks

Leverage: PE funds make limited use of leverage. The AuM-to-NAV ratio is at 115% on aggregate, the lowest among AIF types, with low dispersion across PE fund types (ASR-AIF.79ASR-AIF.79). PE funds make limited use of **financial leverage**, with outright borrowing amounting to less than 2% of the NAV. The borrowings are concentrated in Mezzanine capital and other PE funds (ASR-AIF.74).

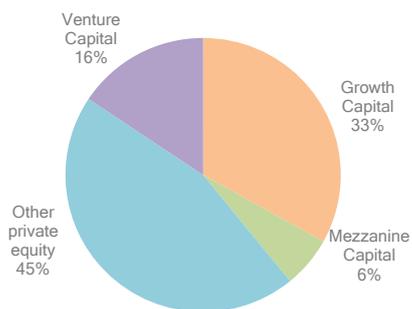
The low level of leverage is explained by the structures used by PE funds. PE funds are not usually leveraged but they invest in a portfolio company that could be leveraged. According to the AIFMD, leverage should not be reported by the AIF at the portfolio company level.⁷

Liquidity risk: Most PE funds are closed-ended funds (96% of the NAV, ASR-AIF.80) and the redemption frequency for open-ended PE funds is usually weekly to monthly. **Financing liquidity risk** for PE funds is limited in the very short-term (only 1% of available financing is under a week), but it increases substantially over one month, as more than 70% of available financing expires between 8 and 30 days (ASR-AIF.78). PE funds have high levels of **unencumbered cash** compared with 2019 at 6% of the NAV (+4pp) and is almost entirely held by Other PE funds.

⁷ According to recital 78 of the AIFMD: “for private equity and venture capital funds this means that leverage that

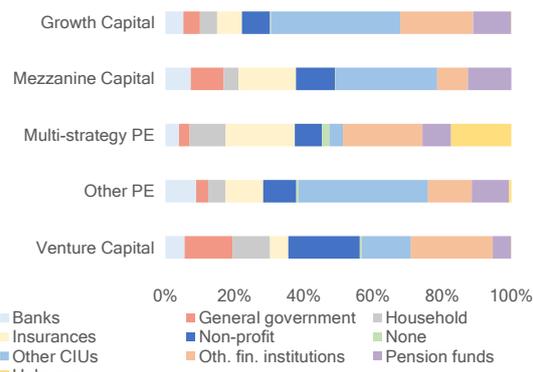
exists at the level of a portfolio company is not intended to be included”.

ASR-AIF.75
PE fund strategies
Diversified strategies



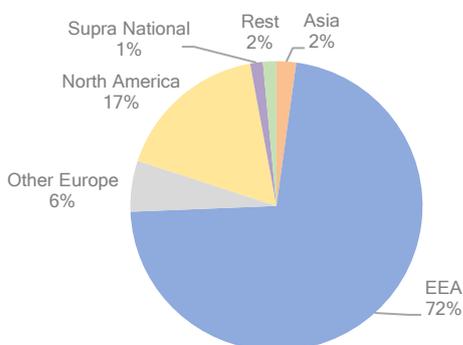
Note: Investment strategies of private equity funds, end of 2020, in % of NAV. Private equity funds managed and/or marketed by authorised AIFMs and sub-threshold managers registered only in national jurisdictions. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF.76
PE fund investors
Stable distribution of investors



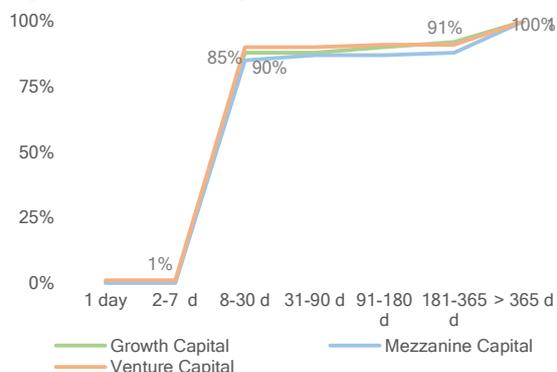
Note: Ownership of units in private equity funds managed and/or marketed by authorised AIFMs, end of 2020, in % of NAV. PE=Private equity fund. Data for the EEA30...
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF.77
Regional investment focus
Mostly EEA



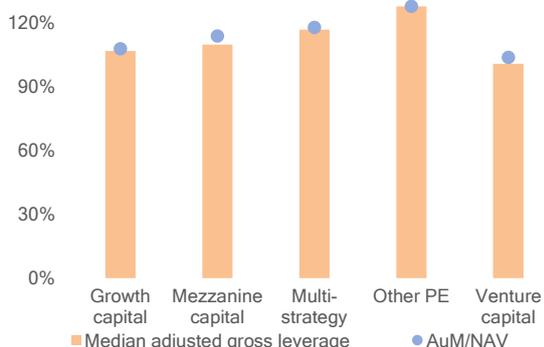
Note: Regional investment focus of private equity funds managed and/or marketed by authorised AIFMs and sub-threshold managers registered only in national jurisdictions, end of 2020, in % of NAV. Geo-focus determined according to the domicile of investments, and the supranational category including investments without a predominant geo-focus. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF.78
Liquidity financing
High share of funding below one month



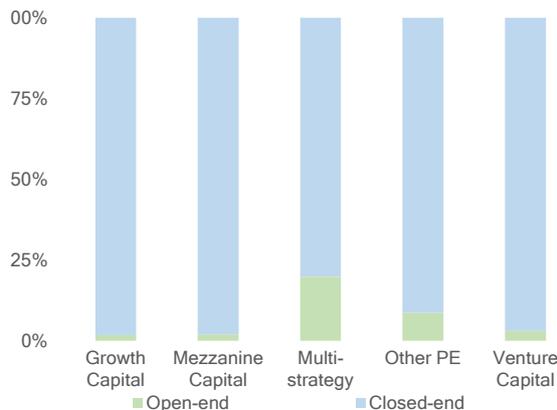
Note: Liquidity financing of private equity funds managed and/or marketed by authorised AIFMs, end of 2020. Aggregate amount of borrowing and cash financing divided depending on longest period for which creditors are contractually committed to provide such financing. Borrowing and cash financing include drawn and undrawn, committed and uncommitted lines of credit as well as any term financing. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF.79
Leverage
Limited use of leverage



Note: Adjusted gross leverage of private equity funds managed and/or marketed by authorised AIFMs, end of 2020, in % of NAV. Adjusted gross leverage computed as total exposure less IRDs with respect to NAV. PE=Private equity fund. Data for the EEA30.
Sources: AIFMD database, National competent authorities, ESMA.

ASR-AIF.80
Redemption rights
Mainly closed-ended funds



Note: Redemption rights provided in the ordinary course to investors in private equity funds managed and/or marketed by authorised AIFMs, end of 2020, in % of NAV. PE=Private equity fund. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

Other AIFs

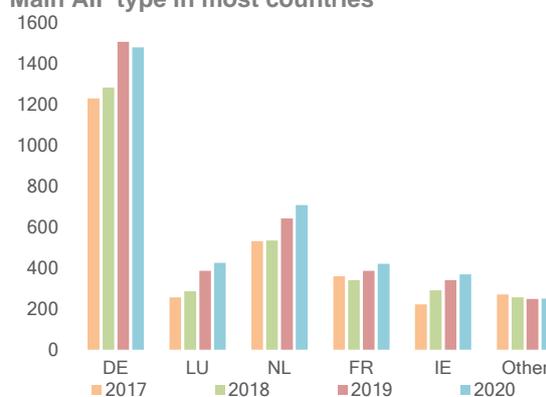
Summary

'Other AIFs' account for 62% of the NAV of EEA30 AIFs, at around EUR 3,650bn (+4% compared with 2019). This category of the AIFMD reporting regime covers a range of strategies, with fixed income and equity strategies accounting for 68% of the NAV and an additional residual category amounting to 28%. 'Other AIFs' are mainly sold to professional investors, although there is a significant retail investor presence in the residual category. They make little use of financial or synthetic leverage. Although most types of 'other AIFs' have a limited liquidity risk at aggregate level, some funds in this residual category may be subject to liquidity deficit.

Market size and structure

Size: At the end of 2020, the size of the 'other AIFs' amounted to EUR 3,650bn (+4% compared with 2019), concentrated in a few countries (ASR-AIF.81ASR-AIF.81). According to the AIFMD fund classification the category of 'other AIFs' is a residual category. However, almost half of the reported AIFs, accounting for 62% of total NAV, fall in this category that comprehend a heterogeneous group of strategies.⁸ In relative terms, 'other AIFs' constitutes the main AIF type in most EEA30 countries, accounting for around 80% of the NAV in the Netherlands and Poland, around 70% in Germany, Spain, Ireland and between 40% and 60% in France, Luxembourg, Austria and Sweden.

ASR-AIF.81
Size of 'other AIFs'
Main AIF type in most countries



Note: NAV of 'Other AIFs' managed and/or marketed by authorized AIFMs and sub-threshold managers registered only in national jurisdictions, in EUR bn. data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

'Other AIF' types: 'other AIFs' can use very different strategies (ASR-AIF.82ASR-AIF.82). The main strategies are related to fixed income (44% of the NAV) — which includes a few money-market funds operating under the AIFMD framework — and equity (24%).

⁸ The transparency obligations established by the AIFMD require AIFMs to make available to investors and NCAs a description of the fund strategy and the type of assets in which it may invest. For a detailed description of this category and a discussion of the related potential

classification issues, see the section "AIFMD fund classification – shedding light on 'other AIFs' in ESMA (2020b).

ASR-AIF.82

'Other' AIFs strategies admitted under AIFMD

Diversified set of strategies

Real estate strategies	Number of AIFs (%)	NAV (EUR bn)
Equity	21	893
Fixed income	28	1594
Infrastructure	2	91
Commodity	2	35
Other-other	46	1,037

Total 'other AIFs' 15,419 AIFs 3,650

Note: AIFs classified as "other AIFs" under the AIFMD, end of 2020. Strategies identified according to the fund primary strategy. Data for the EEA30.

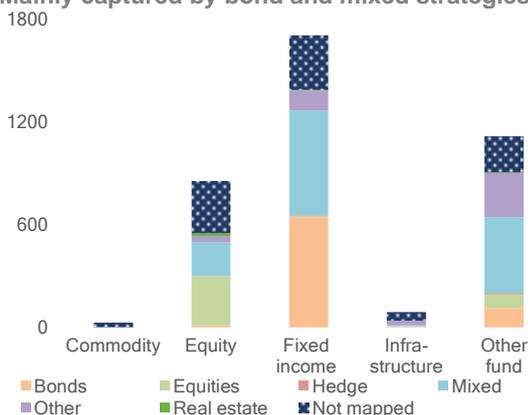
Sources: AIFMD database, National Competent Authorities, ESMA.

Within 'other AIFs' there is an additional residual fund category, the so-called 'other-other' AIFs, accounting for a significant portion of the NAV (28%) which cannot be fully identified as managers did not refer to a specified strategy. Benchmarking the strategies self-reported under the AIFMD with the information collected by the ECB allows to clarify the characteristics of the investment policies of those AIFs classified in residual categories.⁹ A relevant portion of 'other AIFs' with an undefined strategy could be largely described as mixed funds, that is investing in both equity and bonds with no prevalence of one instrument, while one third remain still unidentified (ASR-AIF.83).

ASR-AIF.83

'Other AIFs' mapped into ECB investment policy

Mainly captured by bond and mixed strategies



Note: NAV of AIFs classified as Other under AIFMD mapped into the ECB investment policy classification, end of 2020, EUR bn. Data for the EEA30. Sources: AIFMD database, National Competent Authorities, ESMA, ECB.

Traded instruments and portfolio characteristics: Commodity and infrastructure AIFs appear highly concentrated with the top-five

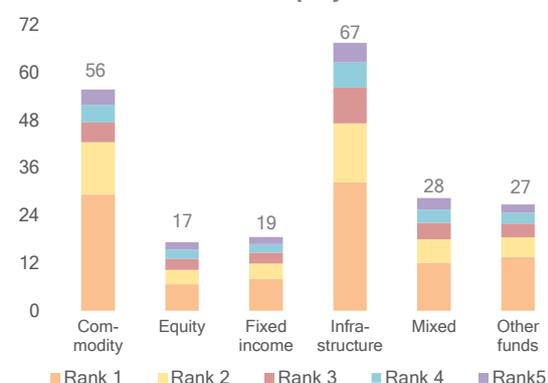
⁹ The ECB publishes the list of European investment funds based on information provided regularly by all members of the ESCB. Funds domiciled in Denmark and Norway are not covered. MMFs and Pension funds are excluded from the definition of investment fund adopted for ESCB

assets representing on average respectively more than 50% and 60% of their total investments. (ASR-AIF.84ASR-AIF.84). Equity AIFs have around 17% of their long-position assets invested in their five largest positions. Similarly, the typical fixed income AIFs appear moderately diversified, with the top five positions representing almost 20% of total assets. Mixed funds and unidentified 'other-other' AIFs show instead a higher degree of asset concentration, implying that the returns of these AIFs depend on the performance of a smaller number of key assets. For all strategies, the largest asset to which AIFs are exposed (highest ranked asset) accounts for half of the main instruments in which AIFs are trading.

ASR-AIF.84

Size of 'other AIFs'

Low concentration for Equity and Fixed income



Note: Portfolio concentration of AIF, end of 2020, in % of AuM. Portfolio concentration computed as the value of top 5 instruments traded with respect to AuM. Data for the EEA30. Sources: AIFMD database, National Competent Authorities, ESMA.

For AIFs reclassified as mixed funds, the top five instruments show sizable shares of CIUs (6.5% of total investments), while 'other-other' AIFs have on average the largest footprint in sovereign bonds (6.8%). Looking at the use of derivatives, these AIFs rely to some extent on IRDs, FX derivatives and CDS (ASR-AIF.85ASR-AIF.85). Derivatives may be used by funds engaging into bond trading as risk management tool¹⁰ or as a flexible and less capital-intensive alternative to other assets to enhance the risk-return profile of the fund through leverage.

data collection. MMFs would then be still classified as fixed income AIFs.

¹⁰ For example, managers investing in debt securities could use derivatives to adjust exposures to interest rate, credit, and currency risk

ASR-AIF.85

Main traded instruments

Instruments (%)	Commodity	Infra-structure	Equity
Cash	38.5	2.0	0.4
Equities	0.1	27.3	10.1
Corporate bonds	0.0	3.6	0.1
Sovereign bonds	1.1	0.0	0.1
Convertible bonds		2.2	0.0
Loans	0.1	12.3	0.0
Structured products	0.2	0.1	0.0
CDS & equity derivatives	0.0		1.1
IRDs and FX	0.2	1.0	3.0
Commodity and other derivatives	13.4	0.0	0.3
Real assets	1.6	3.7	0.0
MMFs	0.4	0.6	0.1
ETFs	0.0	0.0	0.5
Other CIUs	0.1	13.4	1.2
Other assets	0.0	1.4	0.3
Total	55.7	67.5	17.3

Instruments (%)	Fixed income	Mixed	other-Other
Cash	1.8	2.3	1.1
Equities	0.4	2.0	3.0
Corporate bonds	1.0	1.5	0.5
Sovereign bonds	3.5	2.5	6.8
Convertible bonds	0.0	0.0	0.0
Loans	0.5	1.4	2.2
Structured products	0.1	0.4	0.4
CDS & equity derivatives	2.4	3.1	1.5
IRDs and FX	5.4	5.8	4.5
Commodity and other derivatives	0.2	0.6	0.7
Real assets	0.0	0.3	0.2
MMFs	0.5	0.2	1.0
ETFs	0.1	0.8	0.4
Other CIUs	2.3	6.5	2.3
Other assets	0.1	1.1	2.4
Total	18.6	28.3	26.8

Note: Main traded instruments, end of 2020, % of total exposures. Data for the EEA30.

Sources: AIFMD database, National Competent Authorities, ESMA.

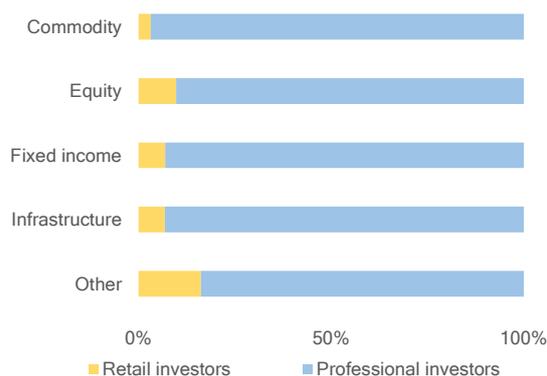
Distribution: Like most types of AIF, “other AIFs” have access to the EU passport to a large extent, with 93% (+8pp) able to be sold throughout the EU (ASR-AIF.91).

‘Other AIF’ investors: ‘other AIFs’ are sold mainly to professional investors (88%, +2pp), although retail investor presence is higher for the residual category (‘other-other’), accounting for

19% of the NAV (ASR-AIF.86ASR-AIF.86). Overall, retail clients participate in ‘other AIFs’ for EUR 480bn. Among professional investors, pension funds and insurance companies are the main investors, accounting for 31% and 21% of the NAV respectively. However, there are large differences by strategy with insurances holding one-third of fixed income AIFs’ NAV and pension funds highly exposed also to equity and infrastructure funds (ASR-AIF.92). The high proportion of pension funds might be partly explained by country-specific factors.¹¹

ASR-AIF.86

AIF investors

Predominantly professional investors

Note: Clients of AIFs classified as Other AIFs managed and/or marketed by authorised AIFMs and sub-threshold managers registered only in national jurisdictions, end of 2020, in % of NAV. Data for the EEA30.

Sources: AIFMD database, National Competent Authorities, ESMA.

Geographical investment focus: ‘other AIFs’ are primarily exposed to securities issued in the EEA (61%), with a significant geo-focus also on North America (18%) and Asia (6%) (ASR-AIF.93).

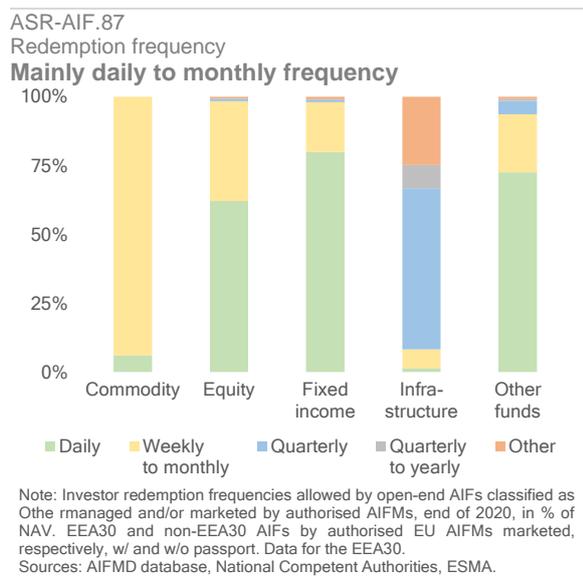
Leverage and liquidity risks

Leverage: ‘Other AIFs’ display limited use of leverage: regulatory AuM to NAV is 153% on aggregate as their exposures to derivatives is limited to 18% of the total exposure (ASR-AIF.94) and is accompanied by a limited use of financial leverage (around 5% of the NAV).

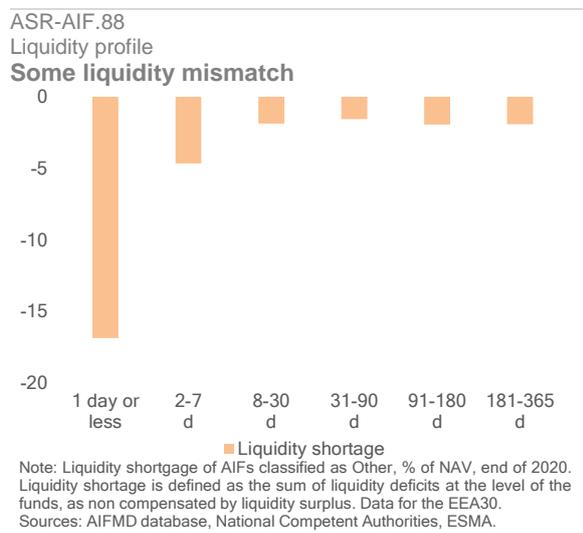
Liquidity risk: The vast majority of ‘other AIFs’ are open-ended, representing around 80% of the NAV of this segment. Infrastructure funds have instead mostly a closed structure with only 8% of their NAV redeemable by investors, mostly on over a monthly horizon. Overall, open-ended other AIFs offer mainly daily liquidity (75%) or weekly and monthly liquidity (24%; ASR-AIF.87).

¹¹ Pension funds in Netherlands hold the majority of the NAV of AIFs, typically investing in equity and fixed income AIFs, partially explaining the higher proportion of pension funds in ‘other AIFs’ at European level. A large share of

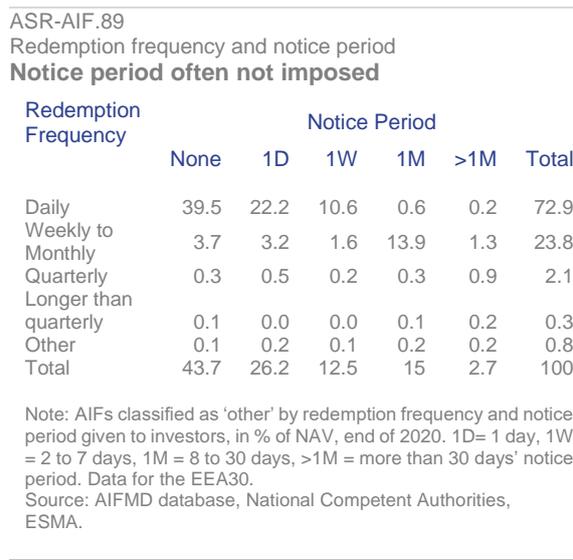
German ‘Spezialfonds’ are also classified in this category. For a detail discussion see ESMA (2020b).



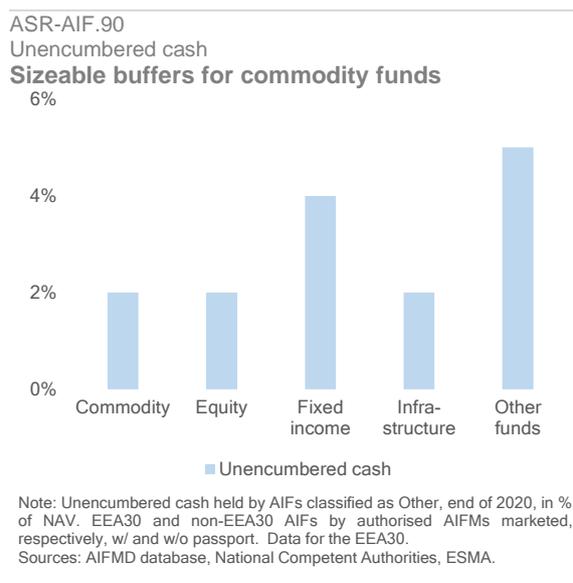
At the aggregate level, the **liquidity profile** of ‘other AIFs’ indicates that within one week, investors can redeem up to 63% of the NAV, whereas 55% of the assets can be liquidated within this time frame. The liquidity shortage of those funds with a liquidity deficit is 17% of the NAV in the very short term (within 1 day) and it reduces to 5% within one week (ASR-AIF.88ASR-AIF.88).



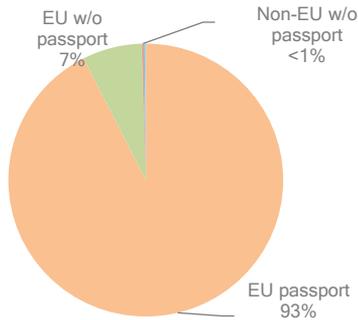
The majority of AIFs in the broad ‘other’ category that offer to investors the possibility to redeem on a daily basis do not require any notice period (40% of the NAV). A minimum notice period ranging from 1 to 7 days is requested only by Other AIFs representing one-third of the total NAV. Overall, around 43% by NAV of ‘other-AIFs’ do not require any redemption notice to investors. (ASR-AIF.89ASR-AIF.89).



Levels of **unencumbered cash** (ASR-AIF.90) are higher for ‘other-Other’ and fixed income AIFs, accounting respectively for 5% and 4% of the NAV. This level of cash is in line with their reliance on IRDs and FX derivatives.

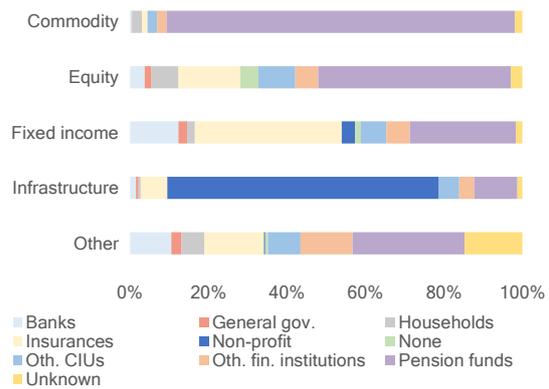


ASR-AIF.91
EU passport
Most 'other AIFs' can be passported



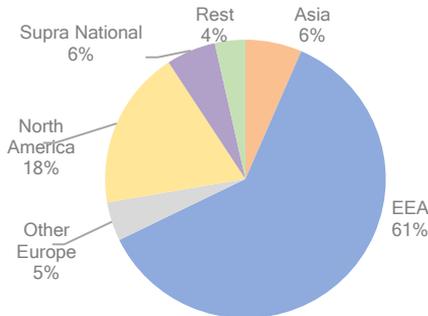
Note: NAV of AIFs classified as Other by manager's access to AIFMD passport, end of 2020, in %. Authorised EEA30 AIFMs with access to AIFMD passport or marketing non-EEA30 AIFs w/o passport, sub-threshold managers registered only in national jurisdictions w/o passporting rights. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF.92
'Other AIFs' investor types
Mainly pension funds



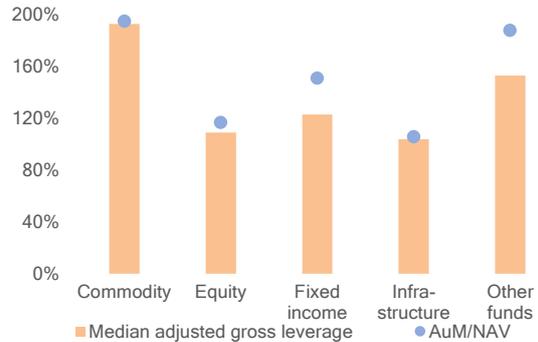
Note: Ownership of units in AIFs classified as Other AIFs managed and/or marketed by authorised AIFMs, end of 2020, in % of NAV. CIUs=Collective investment undertakings. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF.93
Regional investment focus
Mostly EEA



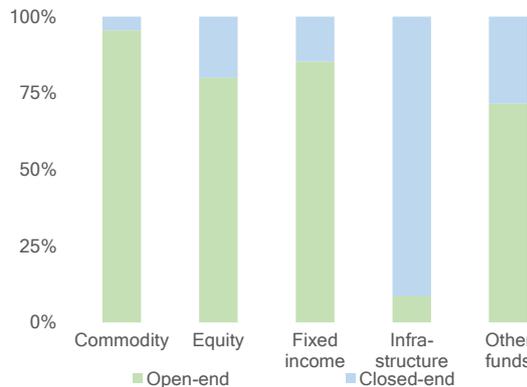
Note: Regional investment focus of EU AIFs classified as Other, managed and/or marketed by authorised AIFMs and sub-threshold managers registered only in national jurisdictions, end of 2020, in % of NAV. Geo-focus determined according to the domicile of investments and the supranational category including investments without a predominant geo-focus. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF.94
Leverage
Limited use of leverage



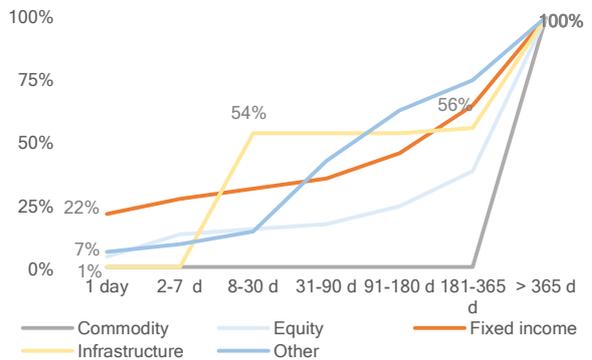
Note: Adjusted gross leverage of funds of funds managed and/or marketed by authorised AIFMs, end of 2020, in % of NAV. Adjusted gross leverage computed as total exposure less IRDs with respect to NAV. FoF= Funds of funds, PE=Private equity fund, HF=Hedge fund. Data for the EEA30.
Sources: AIFMD database, National competent authorities, ESMA.

ASR-AIF.95
Redemption rights
Mostly open-ended



Note: Redemption rights provided in the ordinary course to investors in AIFs classified as Other managed and/or marketed by authorised AIFMs, end of 2020, in % of NAV. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF.96
Financial leverage
High short-term funding for bond funds



Note: Liquidity financing of AIFs classified as Other managed and/or marketed by authorised AIFMs, end of 2020. Aggregate amount of borrowing and cash financing divided depending on longest period for which creditors are contractually committed to provide such financing. Borrowing and cash financing include drawn and undrawn committed and uncommitted lines of credit as well as any term financing. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

Non-EU AIFs (NPPR)

Summary

EU Member States can allow non-EU asset managers to market alternative funds at national level under the National Private Placement Regime (NPPR), even though such funds cannot be passported to other EU Member States. The market for such non-EU funds is comparatively large: The NAV of non-EU AIFs marketed under NPPR rules amounts to EUR 1.3tn, i.e. more than one-fifth of the AIF market. NPPR fund marketing is concentrated in a small number of Member States, and more than 99% of investors are professional investors. Hedge funds marketed under the NPPR are predominantly domiciled in the Cayman Islands, while 'other AIFs' marketed under the NPPR are predominantly US-based exchange-traded funds (ETFs). Overall, risk profiles for NPPR funds are comparable to EEA30 AIFs. However, the geographical investment focus is different as NPPR funds invest predominantly in non-EU areas.

Market size and structure

AIF size: At a minimum estimated EUR 1.3tn NAV, the NPPR market is equivalent to more than one-fifth of the EEA30 AIF market.

ASR-AIF.97

ART. 42 AIFMD

Non-EU AIFMs under National Private Placement

The NPPR is a mechanism to allow non-EU managers to market investment funds that are not allowed to be marketed under the AIFMD domestic marketing or passporting regimes. This principally relates to the marketing of non-EU AIFs by non-EU AIFMs. NPPRs are not a form of cross-border distributions and NPPRs' rules vary significantly across jurisdictions. Non-EU AIFMs are subject to reporting under the AIFMD in each jurisdiction in which they are authorised to market their products. Because under the NPPR rules the same AIFs can be marketed under different jurisdictions, the full assessment of the non-EU AIF market in terms of size, composition and risks for financial stability depends on the possibility of uniquely identifying AIFs. International identifiers (i.e. Legal Entity Identifiers (LEIs) or International Securities Identification Numbers (ISINs)) are used to analyse this segment of the AIF industry to avoid overestimating market shares for funds reporting in different countries.

AIF domicile and EEA30 jurisdictions:

According to data reported by National Competent Authorities, non-EU AIFs are marketed in 9 EU Member States. A total of 508 non-EU AIFs marketed under the NPPR can be uniquely identified.¹² The total regulatory AuM of these uniquely identified AIFs reach EUR 3tn for the NPPR market. The difference between the regulatory AuM and the NAV is due to the large exposure of offshore HFs to IRDs. In terms of cross-country distribution, the AIF industry is concentrated in 6 countries, with FI as the largest hub of non-EU AIFs (ASR-AIF.98ASR-AIF.98).

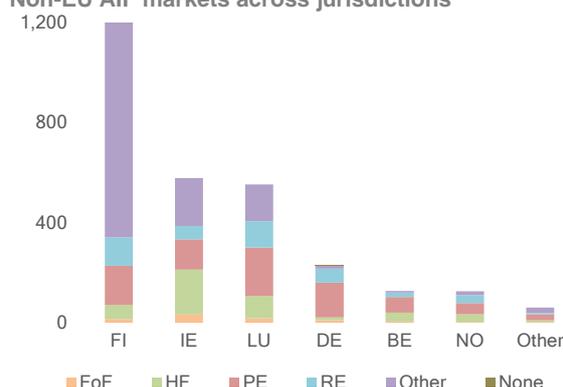
¹² Around 1,500 AIFs marketed under NPPR in different EU jurisdictions cannot be uniquely identified owing to the lack of international identifiers.

As in 2019, FI, LU and IE remain the top three countries in terms of access from non-EU AIFs¹³.

ASR-AIF.98

NPPR market by country

Non-EU AIF markets across jurisdictions

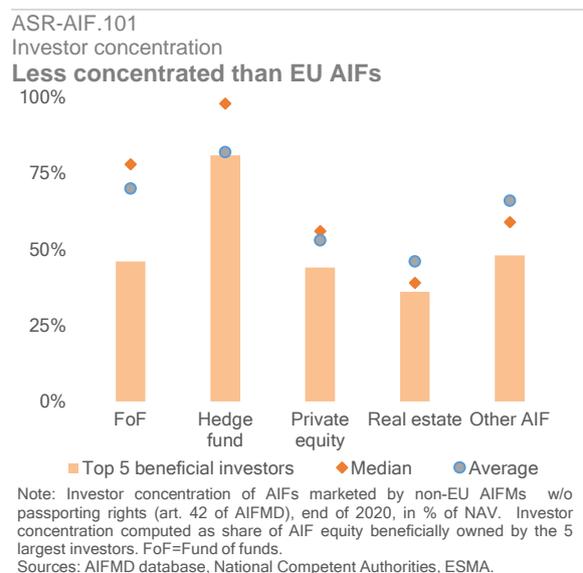
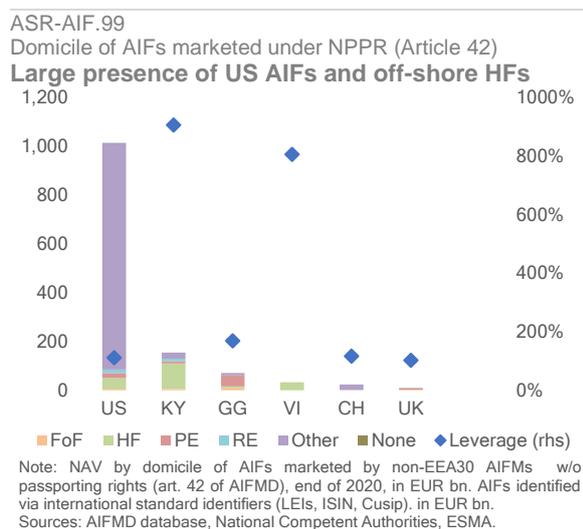


Note: NAV by authorising EEA30 country of AIFs marketed by non-EEA30 AIFMs w/o passporting rights (art. 42 of AIFMD), end of 2020, in EUR bn. AIFs identified via international standard identifiers (LEIs, ISIN, Cusip). Sources: AIFMD database, National Competent Authorities, ESMA.

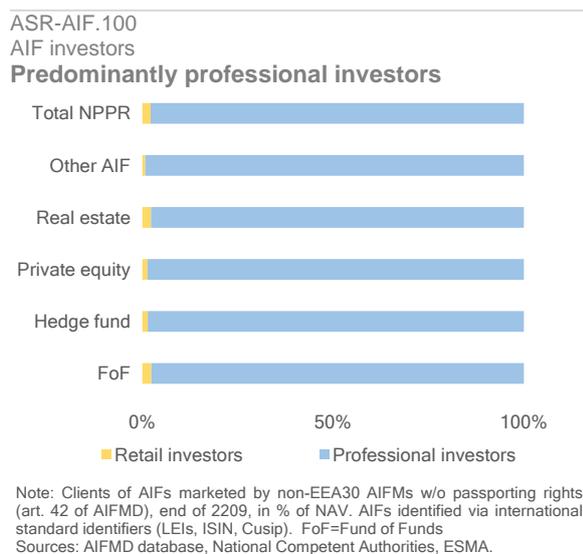
In terms of NAV, the NPPR segment is dominated by US ETFs (mostly equity) that are classified as 'other AIFs' (ASR-AIF.99ASR-AIF.99).

The AIF market regulated by Article 42 of the AIFMD appears extremely concentrated: 9% of NPPR AIFs have a NAV higher than EUR 5bn — these funds represent 72% of the NPPR NAV.

¹³ In 2019, the UK was the largest EU country in terms of NPPR market, with close to EUR 2trn (ESMA, 2021).



Non-EU AIF investors: All the AIF types marketed under the NPPR by non-EU AIFMs see a retail participation of less than 3% (ASR-AIF.100ASR-AIF.100). Overall non-EU AIFs sold by non-EU AIFMs are owned almost entirely by professional investors (99%).



On average, the top-5 holders of US ETFs account for more than 75% of the NAV (ASR-AIF.101). Other AIF types display a less concentrated ownership (above 40% NAV). A large proportion of NPPR investors cannot be identified (25% of the NAV). Banks, pension funds and insurance companies have only a limited exposure, amounting to 6% of NAV (ASR-AIF.107Error! Reference source not found.).

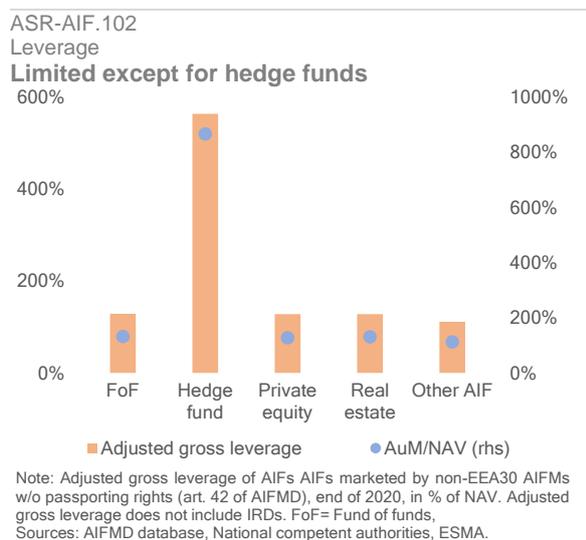
Geographical investment focus: non-EU funds appear not to be focused on EU assets. Their investments are domiciled mostly in North America (65%) and Asia (15%) (ASR-AIF.109). This result is driven by the high number of US domiciled ETFs identified through their ISINs.

Leverage and liquidity risks

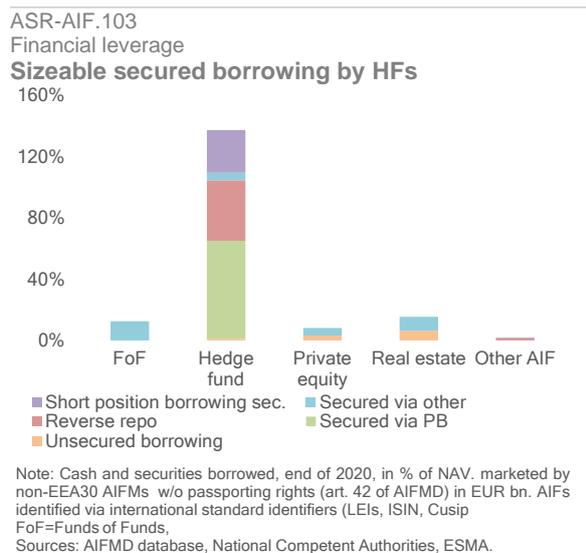
Gross exposures: The asset exposure of non-EU AIFs is similar to that of EU-domiciled funds with RE funds exposed to physical assets, FoFs investing in collective investment schemes and hedge funds heavily exposed to interest rate derivatives (ASR-AIF.110).

Leverage: With the exception of HFs, non-EU funds make limited use of leverage. Regulatory AuM to NAV is 161% on aggregate when excluding HFs, as the exposures to derivatives are limited. When the effect of IRDs is netted, HFs leverage declines from 870% to 560% (ASR-AIF.102). The ratio of regulatory AuM to NAV reaches 1,090% for HFs domiciled offshore (Cayman Islands, Virgin Islands, Bahamas, Bermuda)¹⁴.

¹⁴ This includes 104 HFs uniquely identified.



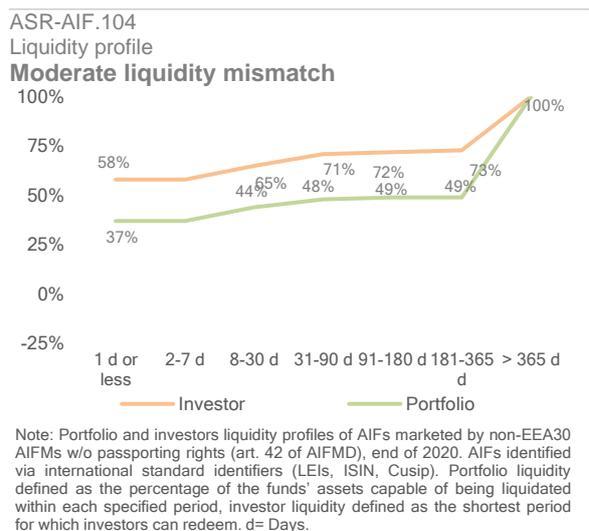
Non-EU HFs borrowings stand at 137% of their NAV (ASR-AIF.103). Whereas EU HFs increase their financial leverage by engaging in repo trades, non-EU HFs borrow comparatively more from their prime broker (64% of NAV). Other non-EU funds do not use financial leverage extensively.



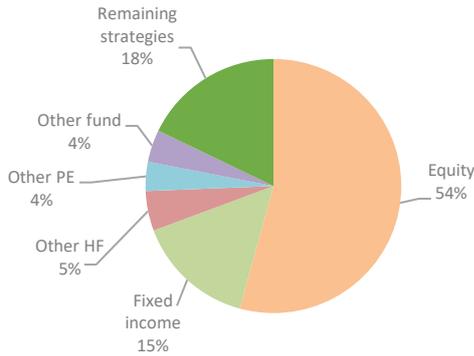
Liquidity risk: In absolute terms, 57% of non-EU AIFs uniquely identified are open-ended. Around

85% of NAV of AIFs regulated by art. 42 AIFMD is held by open-ended funds, with variation across fund types.

The vast majority offer daily or weekly liquidity to their investors. In the case of other AIFs with non-EU AIFs, 96% of their NAV is redeemable on a daily basis (ASR-AIF.108). At the aggregate level, the liquidity profile of non-EU AIFs points to a liquidity risk for all time horizons. within a day, investors can redeem up to 58% of the NAV, whereas only 37% of the assets can be liquidated within this time frame. The liquidity gap is increasing to 24% for the long end (ASR-AIF.104ASR-AIF.104).

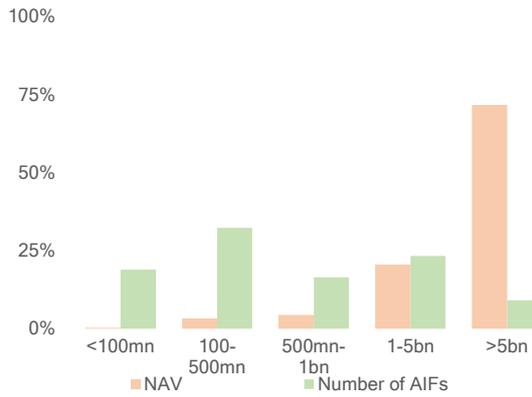


ASR-AIF.105
NPPR strategies
US ETFs dominant in terms of NAV



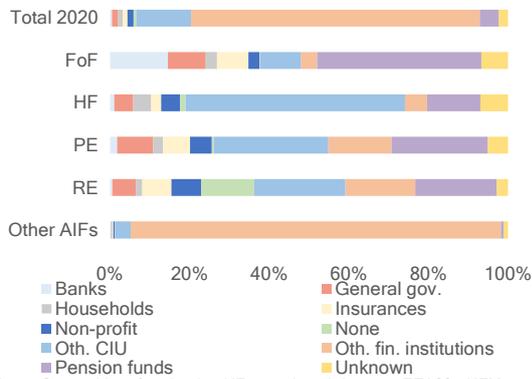
Note: Investment strategies of AIFs marketed by non-EEA30 AIFMs w/o passporting rights (art. 42 of AIFMD), end of 2020, in % of NAV. AIFs identified via international standard identifiers (LEIs, ISIN, Cusip).
 Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF.106
Size distribution
Large funds dominating the segment



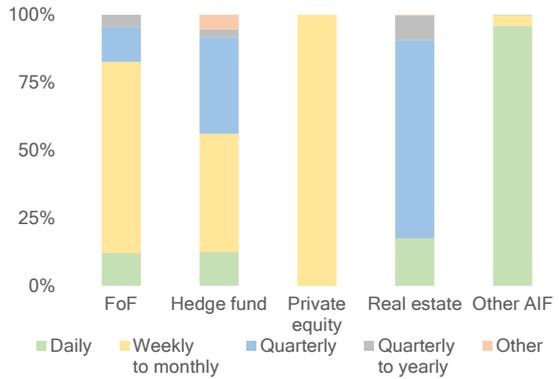
Note: Share of AIFs marketed by non-EEA30 AIFMs w/o passporting rights (art. 42 of AIFMD) by size, end of 2020. In % of NAV. AIFs identified via international standard identifiers (LEI, ISIN, Cusip).
 Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF.107
NPPR investor types
Large proportion of ownership unidentified



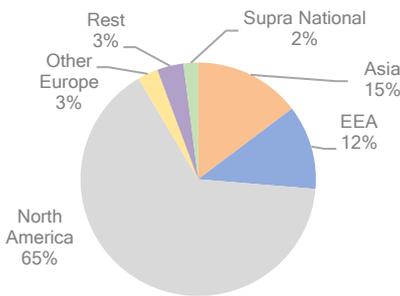
Note: Ownership of units in AIFs marketed by non-EEA30 AIFMs w/o passporting rights (art. 42 of AIFMD), end of 2020, in % of NAV. AIFs identified via international standard identifiers (LEIs, ISIN, Cusip). FoF=Fund of Funds.
 Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF.108
Redemption frequency
Mainly daily to monthly frequency



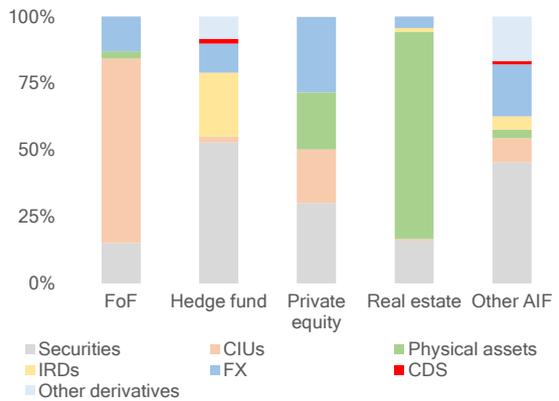
Note: Investor redemption frequencies allowed by open-end AIFs marketed by non-EEA30 AIFMs w/o passporting rights (art. 42 of AIFMD), end of 2020, in % of NAV. AIFs identified via international standard identifiers (LEIs, ISIN, Cusip).

ASR-AIF.109
Regional investment focus
Mostly North America



Note: Regional investment focus of AIFs marketed by non-EEA30 AIFMs w/o passporting rights (art. 42 of AIFMD), end of 2020, in EUR bn. AIFs identified via international standard identifiers (LEIs, ISIN, Cusip). in EUR bn. Geo-focus determined according to the domicile of investments, supra national category including investments without predominant geo-focus.
 Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF.110
Exposures
Use of derivatives limited to HF's



Note: Share of gross exposures by AIF type, end of 2020, in % of total. AIFs managed and/or marketed by authorised EEA30 AIFMs. FoF=Fund of funds, None=No predominant type.
 Sources: AIFMD database, National Competent Authorities, ESMA.

References

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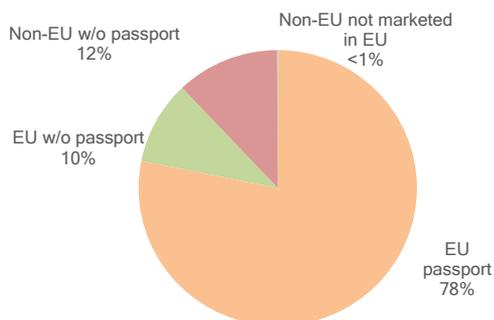
Securities and Exchange Commission, (2021), "[Reporting Form for Investment Advisers to Private Funds and Certain Commodity Pool Operators and Commodity Trading Advisors](#)".

Statistics

EU AIF market

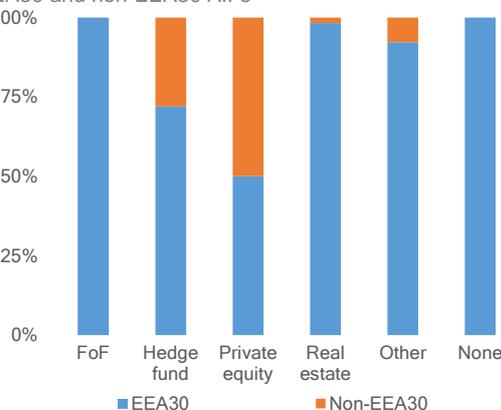
AIF characteristics

ASR-AIF-S.1
AIFMD passport



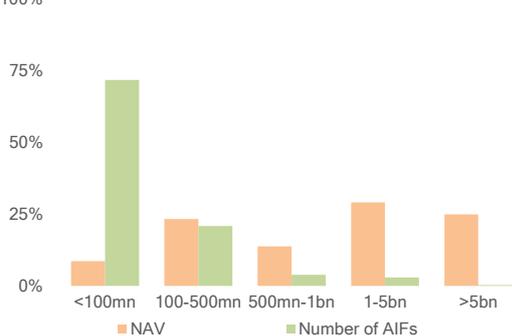
Note: NAV of AIFs by manager's access to AIFMD passport, end of 2020, in %.
 Authorised EEA30 AIFMs with access to AIFMD passport or marketing non-EEA30 AIFs w/o passport, sub-threshold managers registered only in national jurisdictions w/o passporting rights. Data for the EEA30.
 Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.2
EEA30 and non-EEA30 AIFs



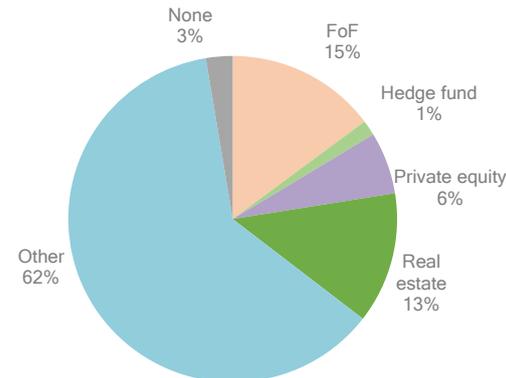
Note: Share of EEA30 and non-EEA30 AIFs managed and/or marketed by authorised AIFMs and sub-threshold managers registered only in national jurisdictions, end of 2020, in % on NAV. Non-EEA30 AIFs marketed w/o passport. Data for the EEA30.
 Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.3
AIF distribution by size



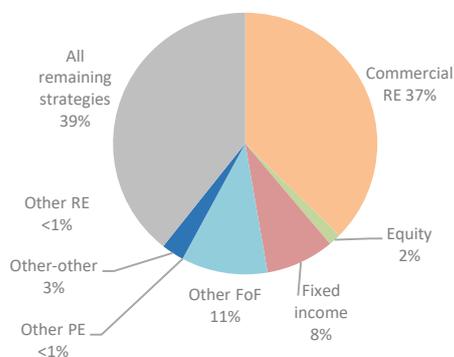
Note: Share of AIFs by size, end of 2020, in %. AIFs managed and/or marketed by authorised AIFMs and sub-threshold managers registered only in national jurisdictions. Data for the EEA30.
 Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.4
AIF types



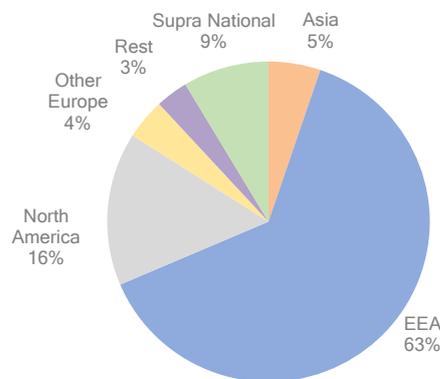
Note: NAV by type of AIFs managed and/or marketed by authorised AIFMs and sub-threshold managers registered only in national jurisdictions, end of 2020, in %. FoF=Fund of funds, None=No predominant type. Data for the EEA30.
 Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.5
AIF strategies



Note: Investment strategy of AIFs managed and/or marketed by authorised AIFMs and sub-threshold managers registered only in national jurisdictions, end of 2020, in % of NAV. FoF=Fund of funds, PE=Private equity funds, RE=Real estate. Data for the EEA30.
 Sources: AIFMD database, National Competent Authorities, ESMA.

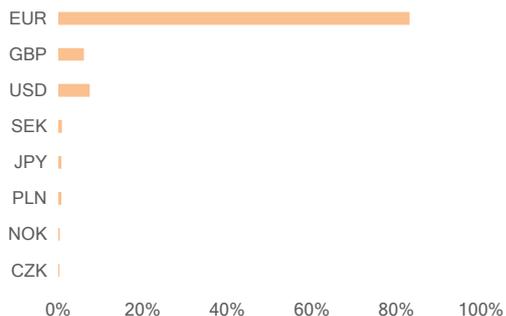
ASR-AIF-S.6
Investment regions



Note: Regional investment focus of AIFs managed and/or marketed by authorised AIFMs and sub-threshold managers registered only in national jurisdictions, end of 2020, in % of NAV. Geo-focus determined according to the domicile of investments, supra national category including investments without predominant geo-focus. Data for the EEA30.
 Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.7

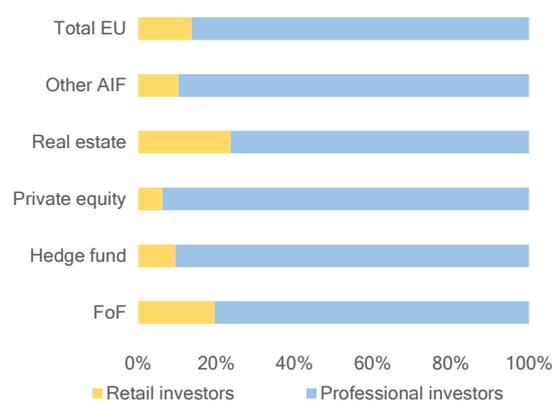
Base currencies



Note: Base currency managed and/or marketed by authorised EU AIFMs and sub-threshold managers registered only in national jurisdictions, end of 2020, in % of NAV. Sources: AIFMD database, National Competent Authorities, ESMA. Data for 28 EEA countries. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.8

Clients

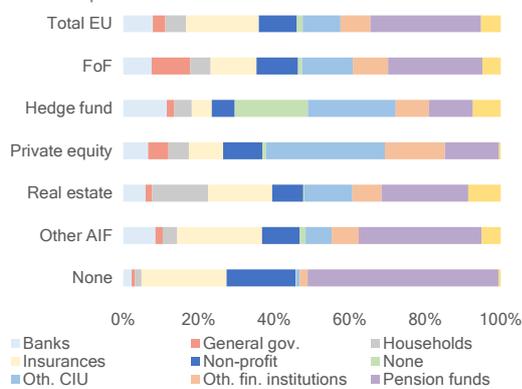


Note: Clients of AIFs managed and/or marketed by authorised EU AIFMs and sub-threshold managers registered only in national jurisdictions, end of 2020, in % of NAV. FoF=Fund of funds. Data for 28 EEA countries. Sources: AIFMD database, National Competent Authorities, ESMA.

Liquidity and counterparty risk profile

ASR-AIF-S.9

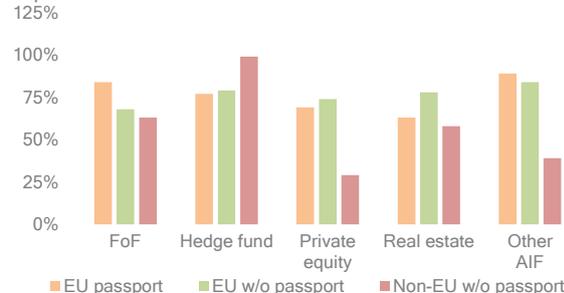
Ownership of AIF



Note: Ownership of units in AIFs managed and/or marketed by authorised EU AIFMs, end of 2020, in % of NAV. FoF=Fund of funds; None=No predominant type. Data for 28 EEA countries. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.10

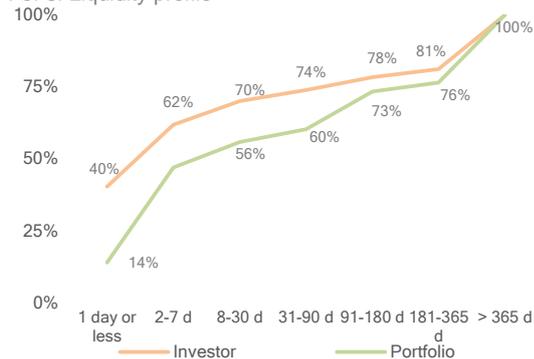
Top 5 beneficial owners



Note: Investor concentration of AIFs managed and/or marketed by authorised EU AIFMs, end of 2020, in % of NAV. Investor concentration computed as share of AIF equity beneficially owned by the 5 largest investors. Data for 28 EEA countries. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.11

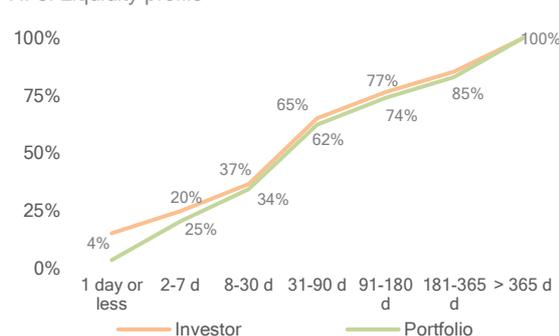
FoFs: Liquidity profile



Note: Portfolio and investor liquidity profiles of funds of funds managed and/or marketed by authorised AIFMs, end of 2020. Portfolio liquidity defined as the percentage of the funds' assets capable of being liquidated within each specified period, investor liquidity defined as the shortest period for which investors can redeem. EEA30 and non-EEA30 AIFs by authorised AIFMs marketed, respectively, w/ and w/o passport. d=Days. Data for the EEA30. Sources: AIFMD database, National Competent Authorities, ESMA.

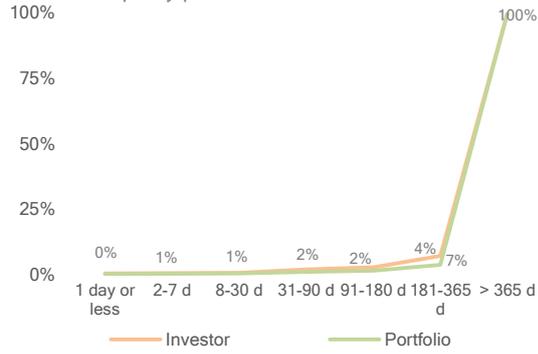
ASR-AIF-S.12

HFs: Liquidity profile



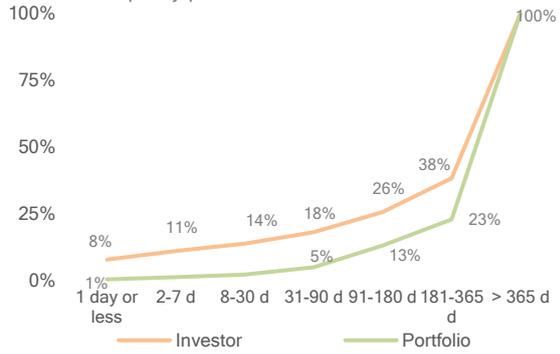
Note: Portfolio and investor liquidity profiles of hedge funds managed and/or marketed by authorised AIFMs, end of 2020. Portfolio liquidity defined as the percentage of the funds' assets capable of being liquidated within each specified period, investor liquidity defined as the shortest period for which investors can redeem. EEA30 and non-EEA30 AIFs by authorised AIFMs marketed, respectively, w/ and w/o passport. d=Days. Data for the EEA30. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.13
PE funds: Liquidity profile



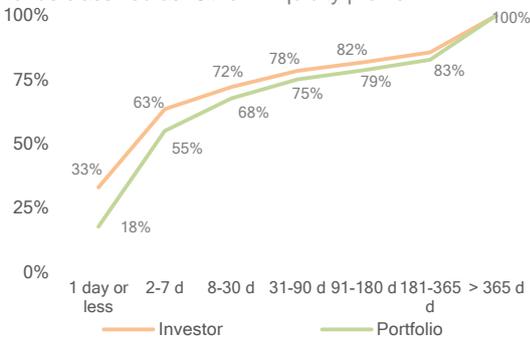
Note: Portfolio and investor liquidity profiles of private equity funds managed and/or marketed by authorised AIFMs, end of 2020. Portfolio liquidity defined as the percentage of the funds' assets capable of being liquidated within each specified period, investor liquidity defined as the shortest period for which investors can redeem. EEA30 and non-EEA30 AIFs by authorised AIFMs marketed, respectively, w/ and w/o passport. d=Days. Data for the EEA30. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.14
RE funds: Liquidity profile



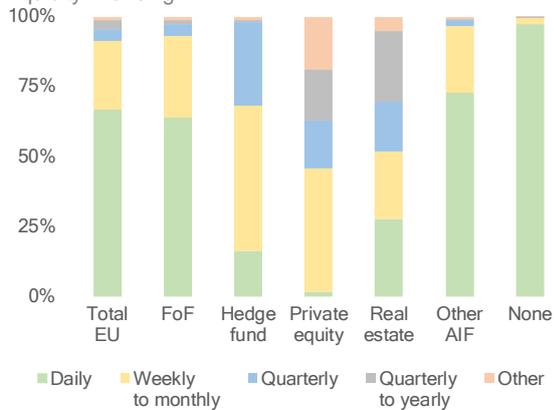
Note: Portfolio and investor liquidity profiles of real estate funds managed and/or marketed by authorised AIFMs, end of 2020. Portfolio liquidity defined as the percentage of the funds' assets capable of being liquidated within each specified period, investor liquidity defined as the shortest period for which investors can redeem. EEA30 and non-EEA30 AIFs by authorised AIFMs marketed, respectively, w/ and w/o passport. d=Days. Data for the EEA30. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.15
Funds classified as 'Other': Liquidity profile



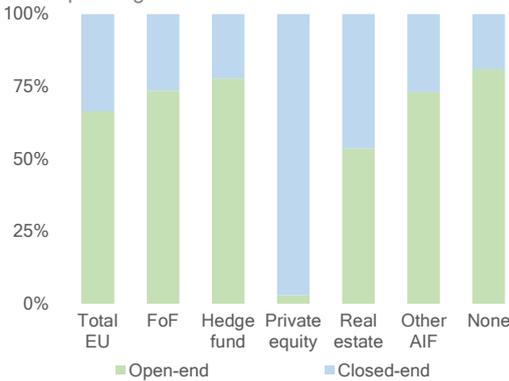
Note: Portfolio and investor liquidity profiles of AIFs classified as Other managed and/or marketed by authorised AIFMs, end of 2020. Portfolio liquidity defined as the percentage of the funds' assets capable of being liquidated within each specified period, investor liquidity defined as the shortest period for which investors can redeem. EEA30 and non-EEA30 AIFs by authorised AIFMs marketed, respectively, w/ and w/o passport. d=Days. Data for the EEA30. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.16
Liquidity financing



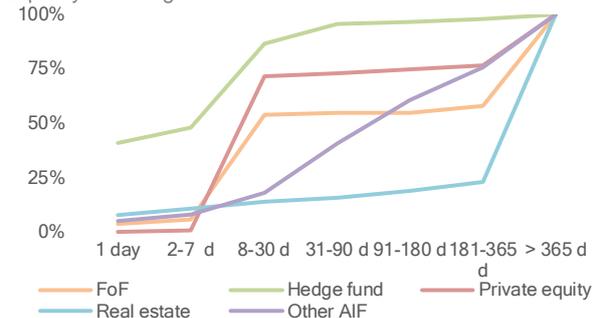
Note: Investor redemption frequencies allowed by open-end AIFs managed and/or marketed by authorised AIFMs, end of 2020, in % of NAV. EEA30 and non-EEA30 AIFs by authorised AIFMs marketed, respectively, w/ and w/o passport. FoF=Fund of Funds, None=No Predominant Type. Data for the EEA30. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.17
Redemption rights to investors



Note: Redemption rights provided in the ordinary course to investors in AIFs managed and/or marketed by authorised EU AIFMs, end of 2020, in % of NAV. FoF=Fund of funds, None=No predominant type. Data for 28 EEA countries. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.18
Liquidity financing

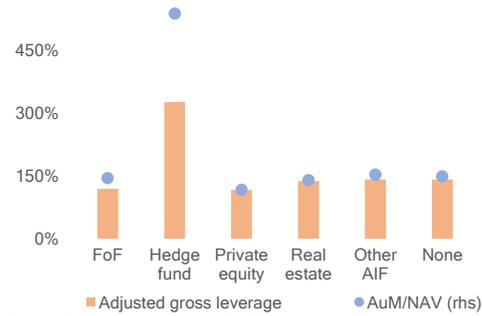


Note: Liquidity financing of AIFs managed and/or marketed by authorised AIFMs, end of 2020. Aggregate amount of borrowing and cash financing divided depending on longest period for which creditors are contractually committed to provide such financing. Borrowing and cash financing include drawn and undrawn, committed and uncommitted lines of credit as well as any term financing. FoF=Fund of funds, None=No Predominant type. Data for the EEA30. Sources: AIFMD database, National Competent Authorities, ESMA.

Leverage and exposure

ASR-AIF-S.19

Adjusted gross leverage
600%



Note: Adjusted gross leverage of AIFs managed and/or marketed by authorised AIFMs, end of 2020, in % of NAV. Adjusted gross leverage does not include IRDs. FoF=Fund of funds, None=No predominant type. Data for the EEA30. Sources: AIFMD database, National competent authorities, ESMA.

ASR-AIF-S.20

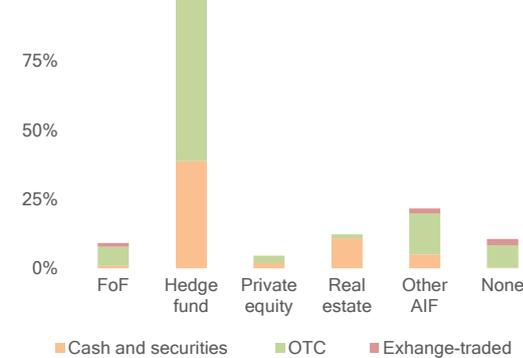
Leverage and unleveraged AIFs
3000



Note: Leveraged and unleveraged AIFs managed and/or marketed by authorised EU AIFMs and sub-threshold managers registered only in national jurisdictions, end of 2020, EUR bn. Leveraged funds identified using the AIF reporting code as specified in Annex 2 of ESMA guidelines on AIFMD reporting obligations. FoF=Fund of funds. Data for 28 EEA countries. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.21

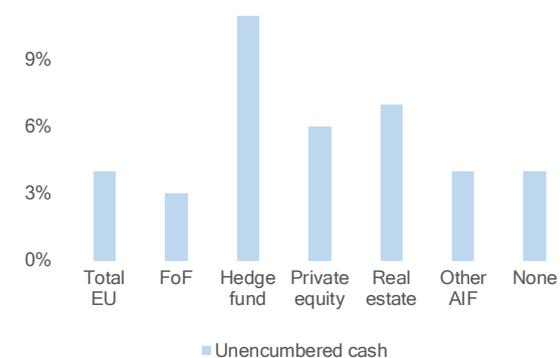
Borrowing embedded in financial instruments
100%



Note: Borrowing of cash and securities or embedded in derivatives, end of 2020, in % of total exposure. AIFs managed and/or marketed by authorised AIFMs. OTC and exchange-traded derivatives net of margins. FoF=Fund of funds, None=No predominant type. Data for the EEA30. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.22

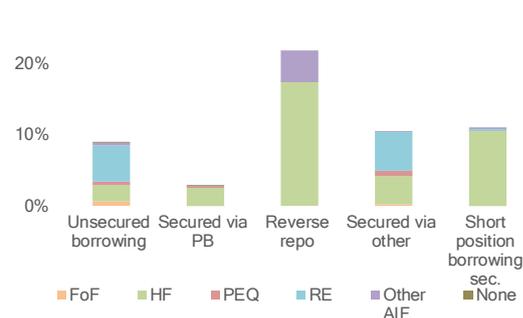
Unencumbered cash
12%



Note: Unencumbered cash, end of 2020, in % of NAV. EEA30 and non-EEA30 AIFs by authorised AIFMs marketed, respectively, w/ and w/o passport. FoF=Fund of funds, None=No predominant type. Data for the EEA30. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.23

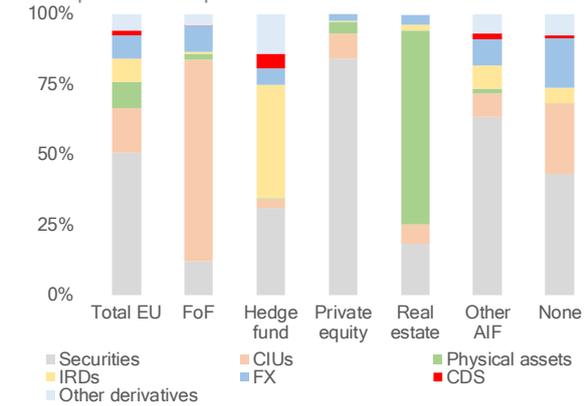
Financial leverage
30%



Note: Cash and securities borrowed, end of 2020, in % of NAV. EEA30 and non-EEA30 AIFs by authorised AIFMs marketed, respectively, w/ and w/o passport. FoF=Funds of Funds, None=No predominant type. FoF=Funds of Funds, Data for the EEA30. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.24

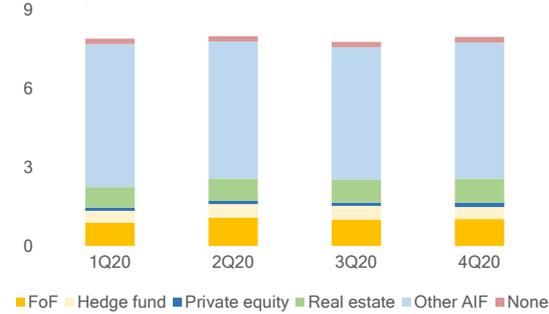
Decomposition of exposures



Note: Share of gross exposures by AIF type, end of 2020, in % of total. AIFs managed and/or marketed by authorised AIFMs. FoF=Fund of funds, None=No predominant type. Data for the EEA30. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.25

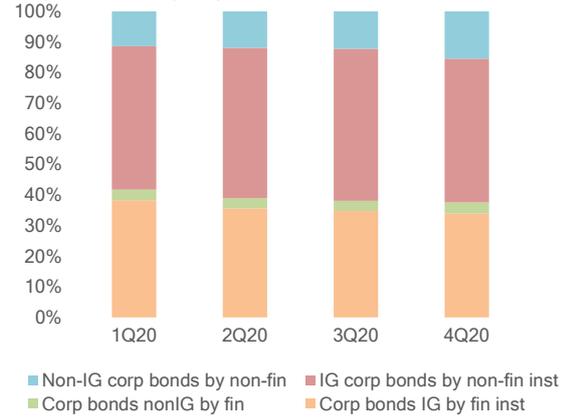
Total exposures



Note: Exposures of AIFs managed and/or marketed by authorised AIFMs, funds quarterly reported, EUR tn. EEA30 and non-EEA30 AIFs by authorised AIFMs marketed, respectively, w/ and w/o passport. FoF=Fund of funds, None=No predominant type. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.26

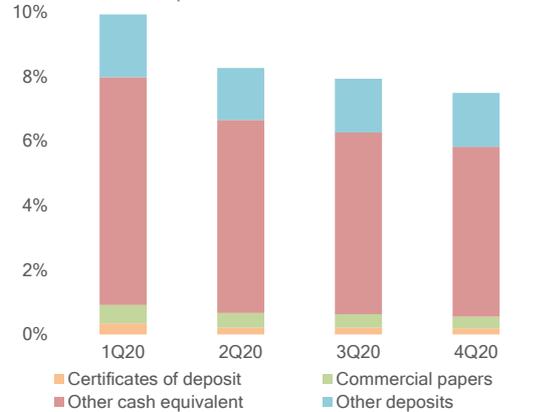
Corporate bond quality



Note: Corporate bonds exposure, funds reported quarterly, in % of NAV. AIFs managed and/or marketed by authorised EU AIFMs. Data for 28 EEA countries.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.27

Cash and cash equivalents



Note: Cash and cash equivalents exposure, funds reported quarterly, in % of NAV. Government bonds excluded from other cash equivalents. Data for 28 EEA countries.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.28

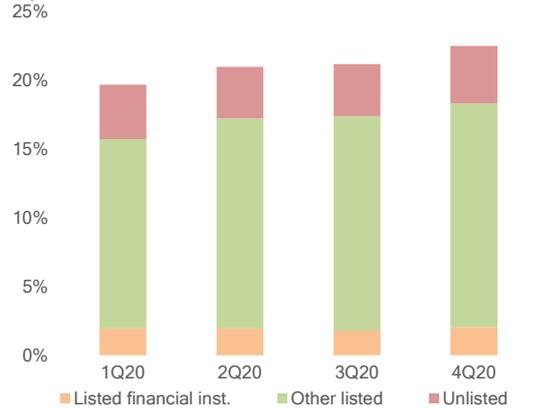
Cash and cash equivalents by AIF type



Note: Cash and cash equivalents exposure by AIF type, funds quarterly reported, in % of NAV. Data for 28 EEA countries. FoF=Funds of funds.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.29

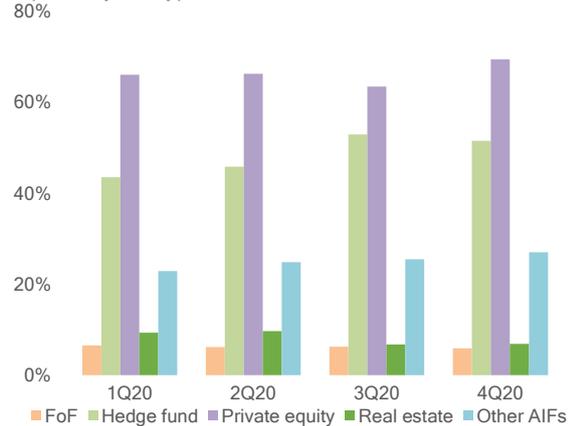
Equities



Note: Exposure to equities, funds quarterly reported, in % of NAV. AIFs managed and/or marketed by authorised EU AIFMs. Data for 28 EEA countries.
Sources: AIFMD database, National Competent Authorities, ESMA.

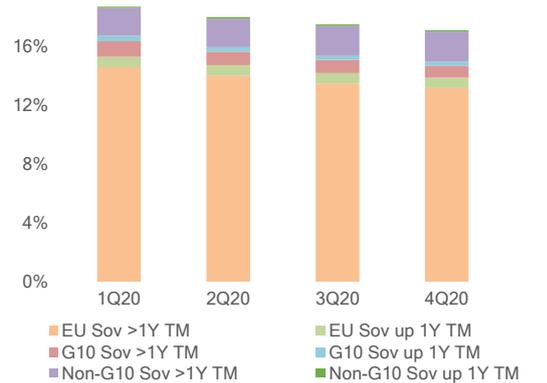
ASR-AIF-S.30

Equities by AIF type



Note: Equities exposure by AIF type, funds quarterly reported, in % of NAV. AIFs managed and/or marketed by authorised EU AIFMs. Data for 28 EEA countries. FoF=Funds of Funds.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.31
Sovereign bonds
20%



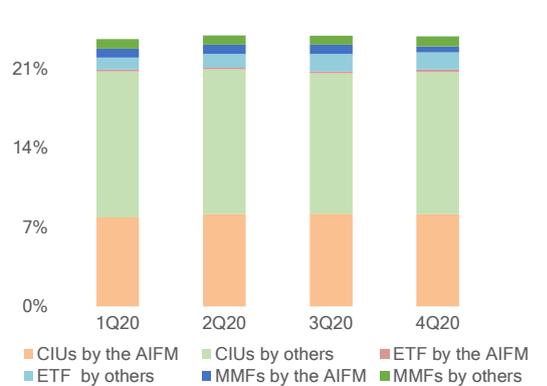
Note: Sovereign bonds exposure, funds reported quarterly, in % of NAV. AIFs managed and/or marketed by authorised EU AIFMs. Sov=Sovereign bonds, TM=Time to Maturity. Data for 27 EEA countries. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.32
Sovereign bonds by AIF type
30%



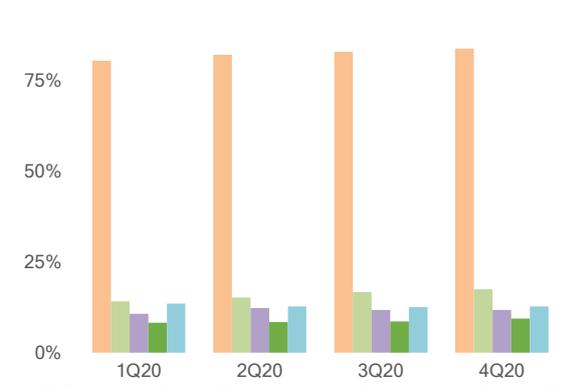
Note: Sovereign bonds exposure by AIF type, funds reported quarterly, in % of NAV. AIFs managed and/or marketed by authorised EU AIFMs. FoF=Funds of Funds. Data for 28 EEA countries. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.33
CIUs
28%



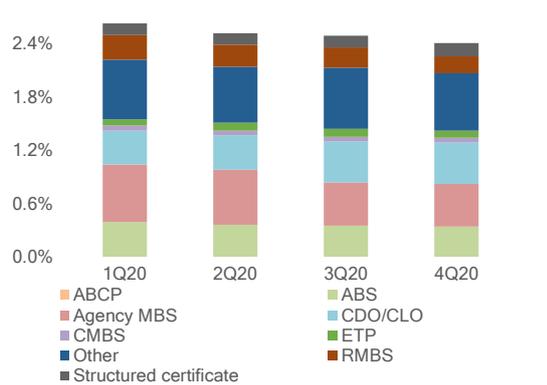
Note: Collective investment undertakings exposure, funds reported quarterly, in % of NAV. AIFs managed and/or marketed by authorised EU AIFMs. CIUs=Collective Investment Undertakings. Data for 28 EEA countries. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.34
CIUs by AIF type
100%



Note: Collective investment undertakings exposure by AIF type, funds reported quarterly, in % of NAV. AIFs managed and/or marketed by authorised EU AIFMs. FoF=Funds of Funds. Data for 28 EEA countries. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.35
Structured products
3.0%



Note: Structured products exposure, funds reported quarterly, in % of NAV. AIFs managed and/or marketed by authorised EU AIFMs. Data for 28 EEA countries. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.36
Structured products by AIF type

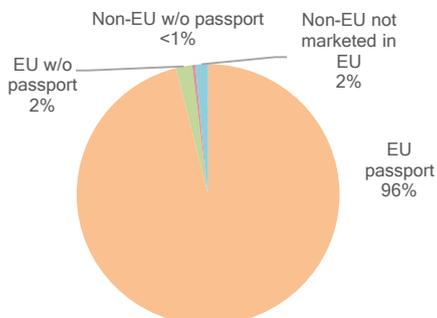


Note: Structured products exposure by AIF type, funds reported quarterly, in % of NAV. AIFs managed and/or marketed by authorised EU AIFMs. FoF=Funds of funds. Data for 28 EEA countries. Sources: AIFMD database, National Competent Authorities, ESMA.

Funds of Funds

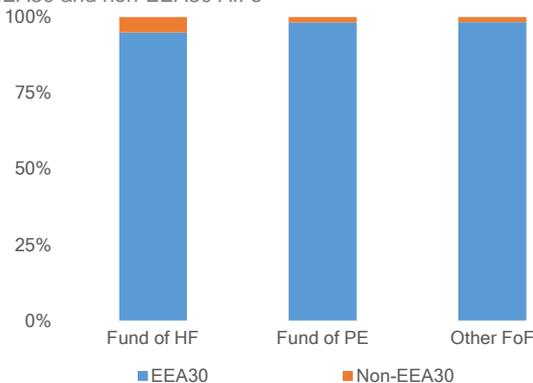
AIF characteristics

ASR-AIF-S.37
AIFMD passport



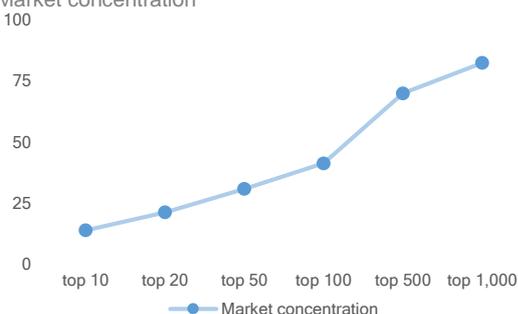
Note: NAV of funds of funds by manager's access to AIFMD passport, end of 2020, in %. Authorised EEA30 AIFMs with access to AIFMD passport or marketing non-EEA30 AIFs w/o passport, sub-threshold managers are registered only in national jurisdictions w/o passporting rights. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.38
EEA30 and non-EEA30 AIFs



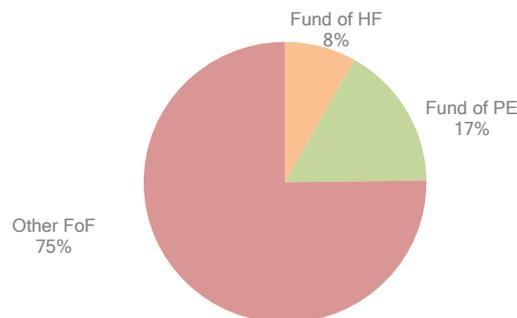
Note: Share of EEA30 and non-EEA30 AIFs managed and/or marketed by authorised AIFMs and sub-threshold managers registered only in national jurisdictions, end of 2020, in % on NAV. Non-EEA30 AIFs marketed w/o passport. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.39
Market concentration



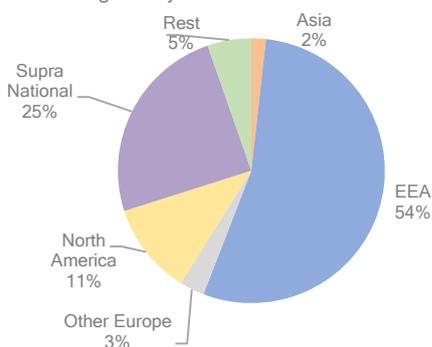
Note: Market concentration of the largest 10-to-1,000 funds of funds managed and/or marketed by authorised EU AIFMs and sub-threshold managers registered only in national jurisdictions, end of 2020, in % of NAV. Data for 28 EEA countries.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.40
Investment strategies by NAV



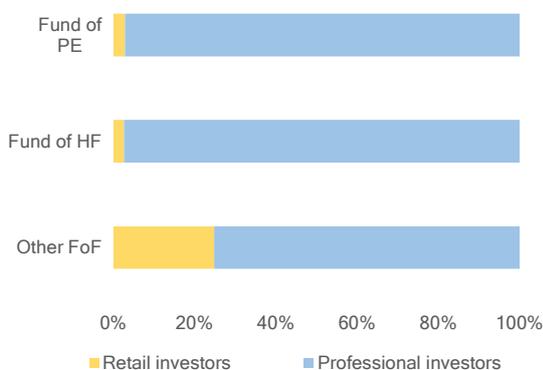
Note: Investment strategies of funds of funds, end of 2020, in % of NAV. Funds of funds managed and/or marketed by authorised EU AIFMs and sub-threshold managers registered only in national jurisdictions. FoF=Fund of funds, PE=Private equity fund, HF=Hedge fund. Data for 28 EEA countries.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.41
Investment regions by NAV



Note: Regional investment focus of funds of funds managed and/or marketed by authorised AIFMs and sub-threshold managers registered only in national jurisdictions, end of 2020, in % of NAV. Geo-focus determined according to the domicile of investments and the supranational category including investments without a predominant geo-focus. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.42
Investor type

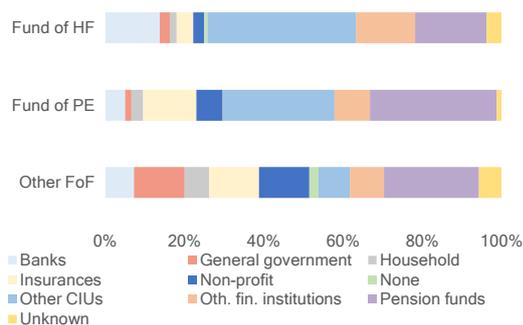


Note: Clients of funds of funds managed and/or marketed by authorised EU AIFMs and sub-threshold managers registered only in national jurisdictions, end of 2020, in % of NAV. FoF=Fund of funds, PE= Private equity fund, HF=Hedge fund. Data for 28 EEA countries.
Sources: AIFMD database, National Competent Authorities, ESMA.

Liquidity and counterparty risk profile

ASR-AIF-S.43

Ownership of AIFs



Note: Ownership of units in funds of funds managed and/or marketed by authorised EU AIFMs, end of 2020, in % of NAV. FoF=Fund of funds; PE=Private equity fund, HF=Hedge fund. Data for 28 EEA countries. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.44

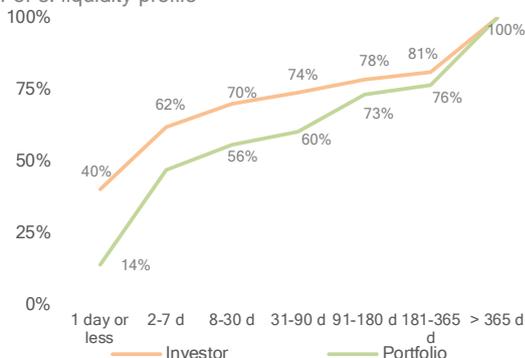
Top five beneficial owners



Note: Investor concentration of funds of funds managed and/or marketed by authorised EU AIFMs, end of 2020, in % of NAV. Investor concentration computed as share of AIF equity beneficially owned by the 5 largest investors. FoF=Fund of Funds, PEQF=Private Equity Fund, HF=Hedge Fund. Data for 28 EEA countries. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.45

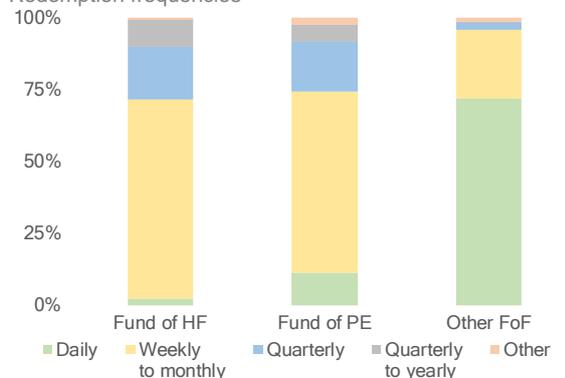
FoFs: liquidity profile



Note: Portfolio and investor liquidity profiles of funds of funds managed and/or marketed by authorised AIFMs, end of 2020. Portfolio liquidity defined as the percentage of the funds' assets capable of being liquidated within each specified period, investor liquidity defined as the shortest period for which investors can redeem. EEA30 and non-EEA30 AIFs by authorised AIFMs marketed, respectively, w/ and w/o passport. d=Days. Data for the EEA30. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.46

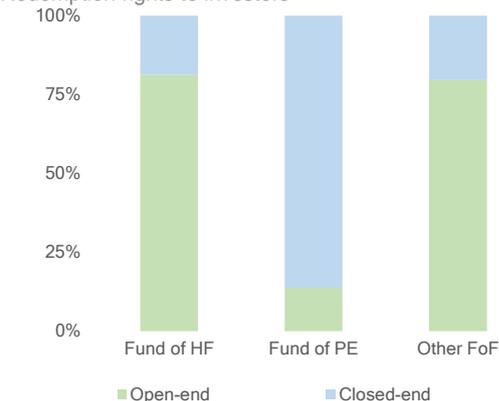
Redemption frequencies



Note: Investor redemption frequencies allowed by open-end funds of funds managed and/or marketed by authorised AIFMs, end of 2020, in % of NAV. EEA30 and non-EEA30 AIFs by authorised AIFMs marketed, respectively, w/ and w/o passport. FoF=Fund of funds, PE=Private equity fund, HF=Hedge fund. Data for the EEA30. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.47

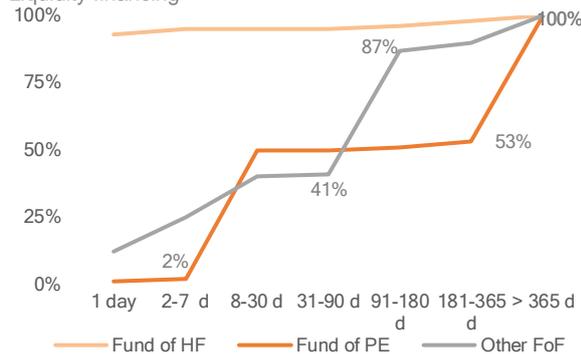
Redemption rights to investors



Note: Redemption rights provided in the ordinary course to investors in funds of funds managed and/or marketed by authorised EU AIFMs, end of 2020, in % of NAV. HF=Hedge fund; PE=Private equity; FoF=Fund of funds, PE=Private equity fund. Data for 28 EEA countries. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.48

Liquidity financing

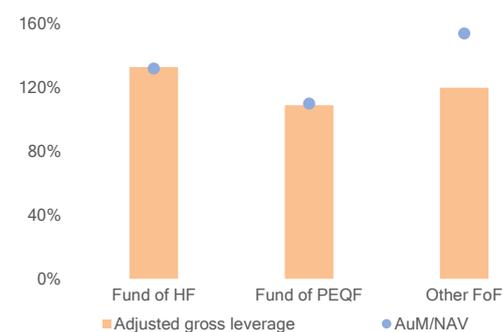


Note: Liquidity financing of funds of funds managed and/or marketed by authorised AIFMs, end of 2020. Aggregate amount of borrowing and cash financing divided depending on longest period for which creditors are contractually committed to provide such financing. Borrowing and cash financing include drawn and undrawn, committed and uncommitted lines of credit as well as any term financing. Data for the EEA30. FoF=Fund of funds, PE=Private equity fund, HF=Hedge fund. Sources: AIFMD database, National Competent Authorities, ESMA.

Leverage and exposure

ASR-AIF-S.49

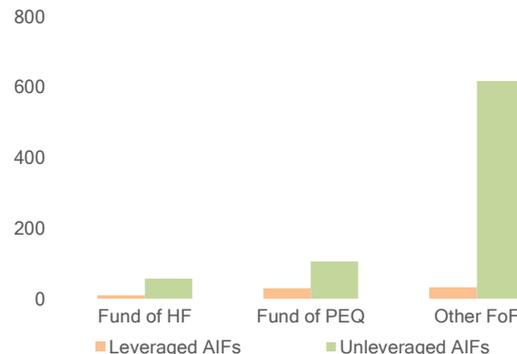
Adjusted gross leverage



Note: Adjusted gross leverage of funds of funds managed and/or marketed by authorised AIFMs, end of 2020, in % of NAV. Adjusted gross leverage computed as total exposure less IRDs with respect to NAV. FoF= Funds of funds, PE=Private equity fund, HF=Hedge fund. Data for the EEA30.

ASR-AIF-S.50

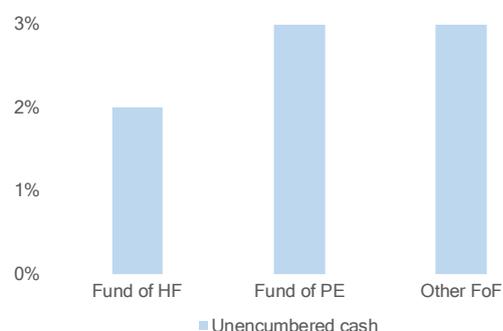
Leveraged and unleveraged AIFs



Note: Leveraged and unleveraged funds of funds managed and/or marketed by authorised EU AIFMs and sub-threshold managers registered only in national jurisdictions, end of 2019, EUR bn. Leveraged funds identified using the AIF reporting code as specified in Annex 2 of ESMA guidelines on AIFMD reporting obligations. FoF=Funds of funds, HF=Hedge funds, PEQ=Private equity funds. Data for 27 EEA countries. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.51

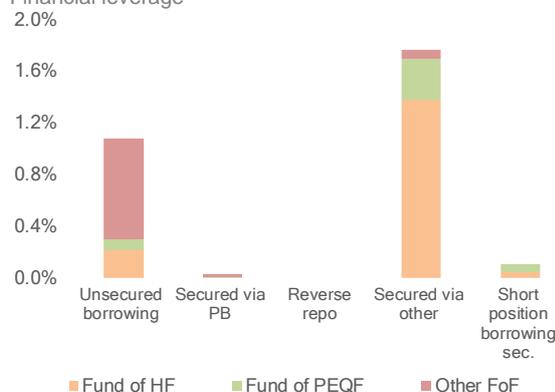
Unencumbered cash



Note: Unencumbered cash held by funds of funds, end of 2020, in % of NAV. EEA30 and non-EEA30 AIFs by authorised AIFMs marketed, respectively, w/ and w/o passport. FoF=Funds of funds, HF=Hedge fund, PE=Private equity fund. Data for the EEA30. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.52

Financial leverage

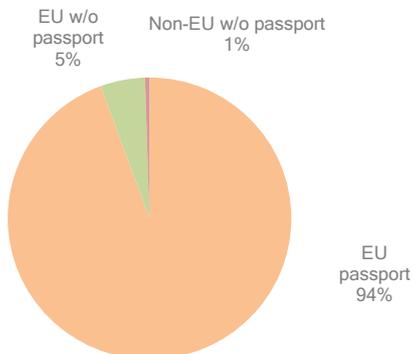


Note: Cash and securities borrowed by funds of funds, end of 2020, in % of NAV. EEA30 and non-EEA30 AIFs by authorised AIFMs marketed, respectively, w/ and w/o passport. FoF=Funds of Funds, PEQF= Private Equity Fund. Data for the EEA30. Sources: AIFMD database, National Competent Authorities, ESMA.

Real Estate Funds

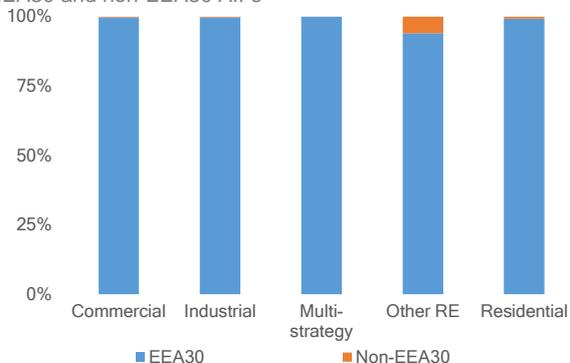
AIF characteristics

ASR-AIF-S.53
AIFMD passport



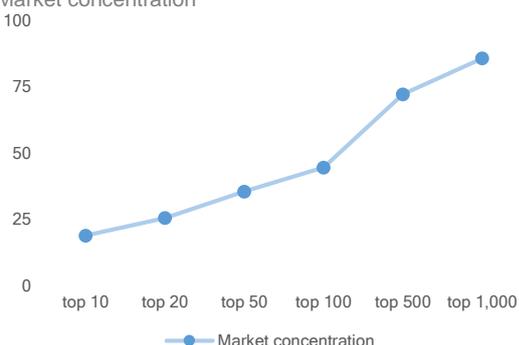
Note: NAV of real estate AIFs by manager's access to AIFMD passport, end of 2020, in %. Authorised EEA30 AIFMs with access to AIFMD passport or marketing non-EEA30 AIFs w/o passport, sub-threshold managers are registered only in national jurisdictions w/o passporting rights. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.54
EEA30 and non-EEA30 AIFs



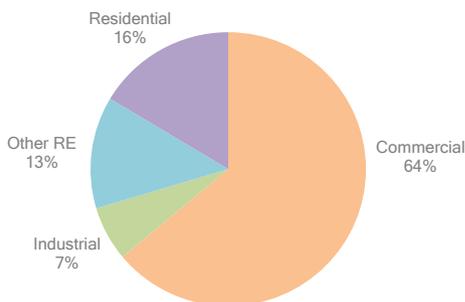
Note: Share of EEA30 and non-EEA30 AIFs managed and/or marketed by authorised AIFMs and sub-threshold managers registered only in national jurisdictions, end of 2020, in % on NAV. Non-EEA30 AIFs marketed w/o passport. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.55
Market concentration



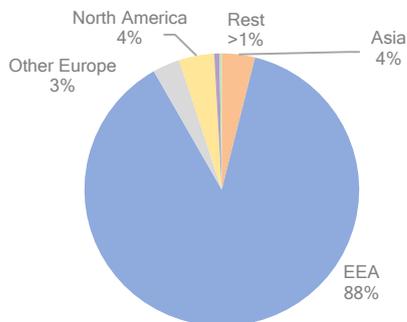
Note: Market concentration of the largest 10-to-1,000 real estate funds managed and/or marketed by authorised EU AIFMs accessing AIFMD passport and sub-threshold managers registered only in national jurisdictions, end of 2020, in % of NAV. Data for 28 EEA countries.

ASR-AIF-S.56
Investment strategies by NAV



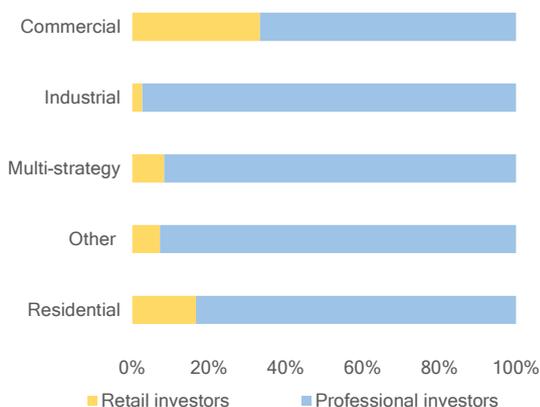
Note: Investment strategies of real estate funds, end of 2020, in % of NAV. Real estate funds managed and/or marketed by full scope EU AIFMs and sub-threshold managers registered only in national jurisdictions. RE= Real estate. Data for 28 EEA countries.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.57
Investment regions by NAV



Note: Regional investment focus of real estate funds managed and/or marketed by authorised AIFMs and sub-threshold managers registered only in national jurisdictions, end of 2020, in % of NAV. Geo-focus determined according to the domicile of investments and the supranational category including investments without a predominant geo-focus. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

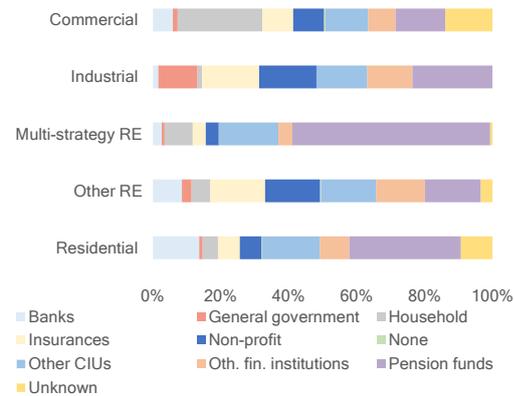
ASR-AIF-S.58
Investor type



Note: Clients of real estate funds managed and/or marketed by authorised EU AIFMs and sub-threshold managers registered only in national jurisdictions, end of 2020, in % of NAV. RE= Real estate. Data for 28 EEA countries.

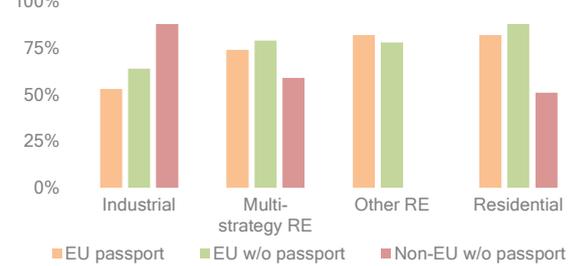
Liquidity and counterparty risk profile

ASR-AIF-S.59
Ownership of RE funds



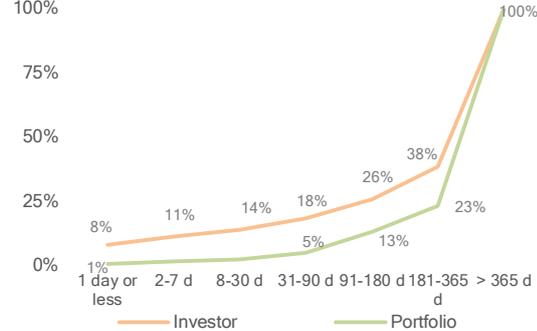
Note: Ownership of units in real estate funds AIFs managed and/or marketed by authorised EU AIFMs, end of 2020, in % of NAV. RE=Real estate. Data for 28 EEA countries. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.60
Top five beneficial owners



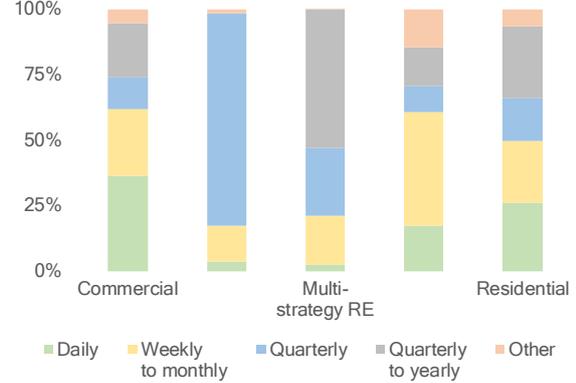
Note: Investor concentration of real estate managed and/or marketed by authorised EU AIFMs, end of 2020, in % of NAV. Investor concentration computed as share of AIF equity beneficially owned by the 5 largest investors. RE=Real estate. Data for 28 EEA countries. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.61
RE: liquidity profile



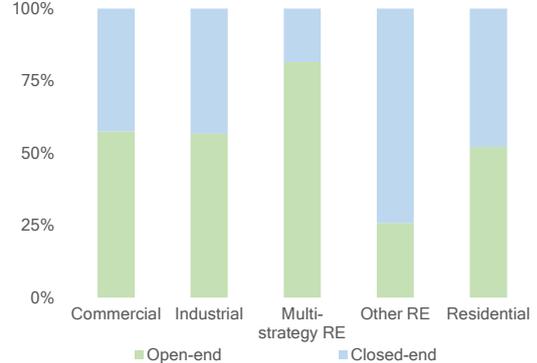
Note: Portfolio and investor liquidity profiles of real estate funds managed and/or marketed by authorised AIFMs, end of 2020. Portfolio liquidity defined as the percentage of the funds' assets capable of being liquidated within each specified period, investor liquidity defined as the shortest period for which investors can redeem. EEA30 and non-EEA30 AIFs by authorised AIFMs marketed, respectively, w/ and w/o passport. d=Days. Data for the EEA30.. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.62
Redemption frequencies



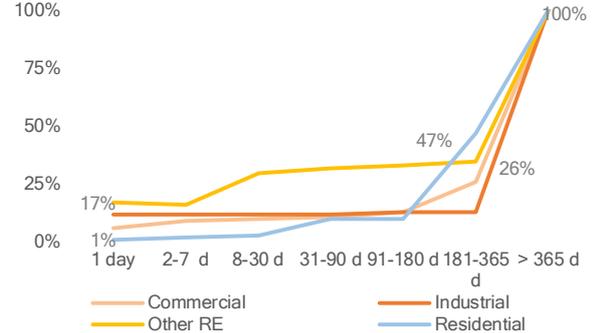
Note: Investor redemption frequencies allowed by open-end real estate funds managed and/or marketed by authorised AIFMs, end of 2020, in % of NAV. EEA30 and non-EEA30 AIFs by authorised AIFMs marketed, respectively, w/ and w/o passport. RE=Real estate. Data for the EEA30. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.63
Redemption rights to investors



Note: Redemption rights provided in the ordinary course to investors in real estate funds managed and/or marketed by authorised EU AIFMs, end of 2020, in % of NAV. RE=Real estate. Data for 28 EEA countries. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.64
Liquidity financing

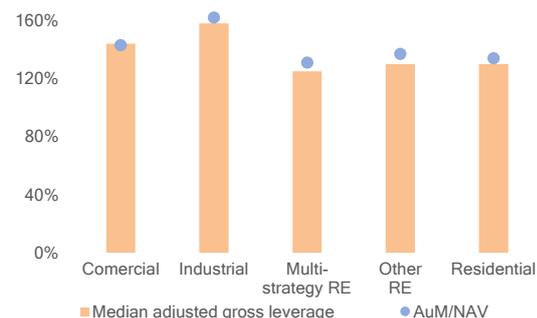


Note: Liquidity financing of real estate funds managed and/or marketed by authorised AIFMs, end of 2020. Aggregate amount of borrowing and cash financing divided depending on longest period for which creditors are contractually committed to provide such financing. Borrowing and cash financing include drawn and undrawn, committed and uncommitted lines of credit as well as any term financing. RE=Real estate. Data for the EEA30. Sources: AIFMD database, National Competent Authorities, ESMA.

Leverage and exposure

ASR-AIF-S.65

Adjusted gross leverage

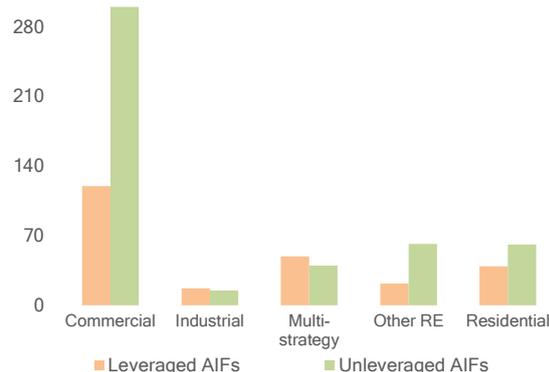


Note: Adjusted gross leverage of real estate funds managed and/or marketed by authorised AIFMs, end of 2020, in % of NAV. Adjusted gross leverage computed as total exposure less IRDs with respect to NAV. RE=Real estate. Data for the EEA30.

Sources: AIFMD database, National competent authorities, ESMA.

ASR-AIF-S.66

Leveraged and unleveraged AIFs



Note: Leveraged and unleveraged real estate AIFs managed and/or marketed by authorised EU AIFMs and sub-threshold managers registered only in national jurisdictions, end of 2018, EUR bn. Leveraged funds identified using the AIF reporting code as specified in Annex 2 of ESMA guidelines on AIFMD reporting obligations Data for 27 EEA countries.

Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.67

Borrowings embedded in derivatives

24%



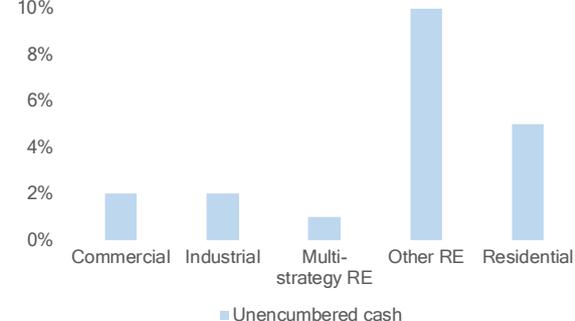
Note: Borrowing of cash and securities or embedded in derivatives by real estate funds, end of 2020, in % of total exposure. AIFs managed and/or marketed by authorised AIFMs marketed. OTC and exchange-traded derivatives net of margins. RE=Real estate. Data for the EEA30.

Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.68

Unencumbered cash

12%



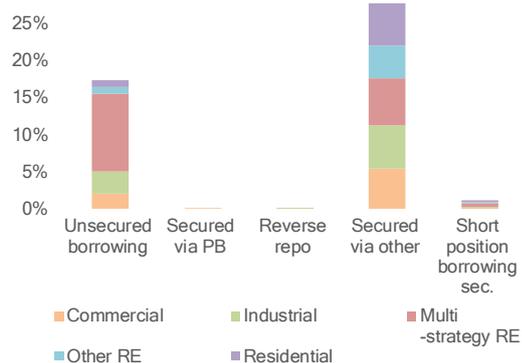
Note: Unencumbered cash held by real estate funds, end of 2020, in % of NAV. EEA30 and non-EEA30 AIFs by authorised AIFMs marketed, respectively, w/ and w/o passport. RE=Real estate. Data for the EEA30.

Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.69

Financial leverage

30%



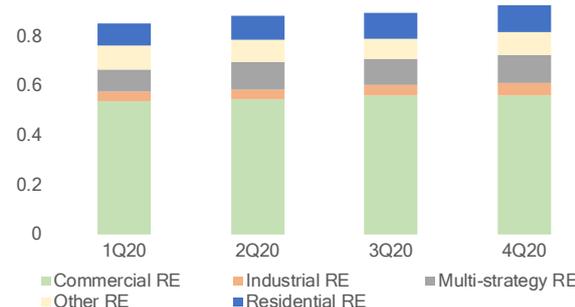
Note: Cash and securities borrowed by real estate funds, end of 2020, in % of NAV. EEA30 and non-EEA30 AIFs by authorised AIFMs marketed, respectively, w/ and w/o passport. RE=Real Estate. Data for the EEA30.

Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.70

Total exposures

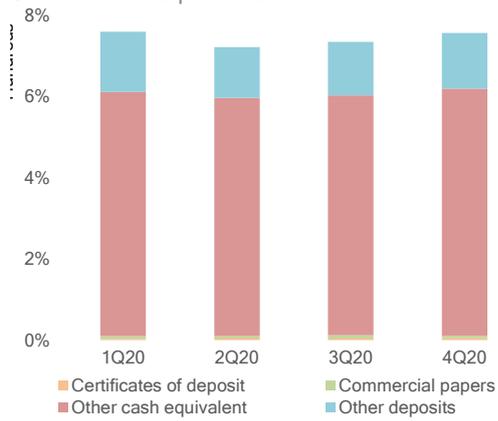
1



Note: Exposure of real estate funds managed and/or marketed by authorised AIFMs, funds quarterly reported, EUR tn. EEA30 and non-EEA30 AIFs by authorised AIFMs marketed, respectively, w/ and w/o passport. RE=Real estate. Data for the EEA30.

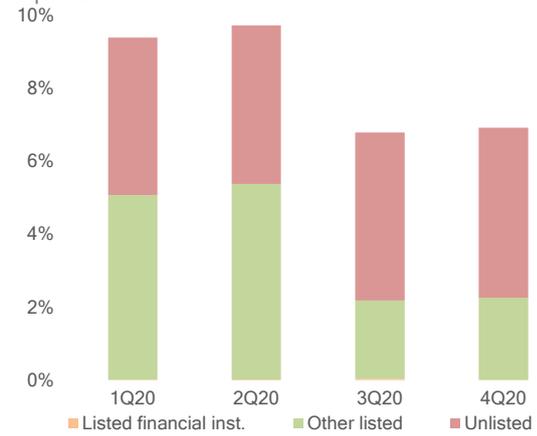
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.71
Cash and cash equivalents



Note: Cash and cash equivalents exposure of real estate funds, AIFs reported quarterly, in % of NAV. Government bonds excluded from other cash equivalents. Data for 28 EEA countries;
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.72
Equities

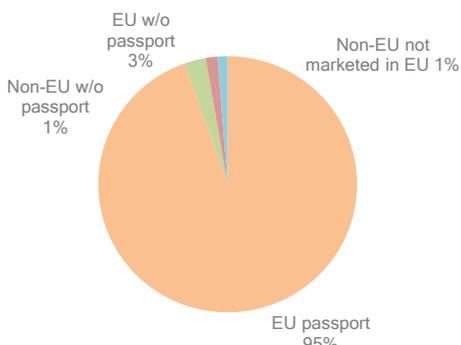


Note: Real estate funds' exposure to equity, AIFs reported quarterly, in % of NAV. AIFs managed and/or marketed by authorised EU AIFMs. Data for 28 EEA countries.
Sources: AIFMD database, National Competent Authorities, ESMA.

Hedge Funds

AIF characteristics

ASR-AIF-S.73
AIFMD passport



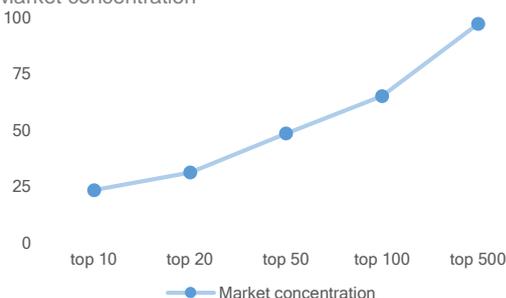
Note: NAV of hedge funds by manager's access to AIFMD passport, end of 2020, in %. Authorised EEA30 AIFMs with access AIFMD passport or marketing non-EEA30 AIFs w/o passport, subthreshold managers are registered only in national jurisdictions w/o passporting rights. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.74
EEA30 and non-EEA30 AIFs



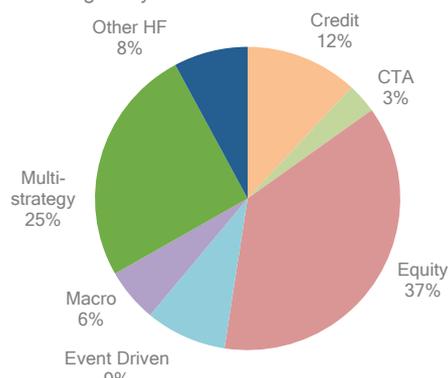
Note: Share of EEA30 and non-EEA30 AIFs managed and/or marketed by authorised AIFMs and sub-threshold managers registered only in national jurisdictions, end of 2020, in % on NAV. Non-EEA30 AIFs marketed w/o passport. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.75
Market concentration



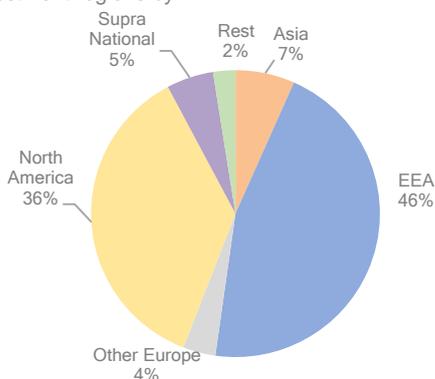
Note: Market concentration of the largest 10-to-500 hedge funds managed and/or marketed by authorised EU AIFMs and sub-threshold managers registered only in national jurisdictions, end of 2020, in % of NAV. Data for 28 EEA countries.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.76
Investment strategies by NAV



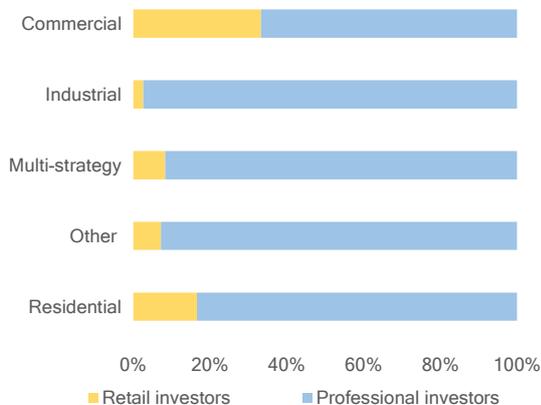
Note: Investment strategies of hedge funds, end of 2020, in % of NAV. Hedge funds managed and/or marketed by authorised EU AIFMs and sub-threshold managers registered only in national jurisdictions. HF=Hedge fund. Data for 28 EEA countries.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.77
Investment regions by NAV



Note: Regional investment focus of hedge funds managed and/or marketed by authorised AIFMs and sub-threshold managers registered only in national jurisdictions, end of 2020, in % of NAV. Geo-focus determined according to the domicile of investments, and the supranational category including investments without a predominant geo-focus. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.78
Investor type

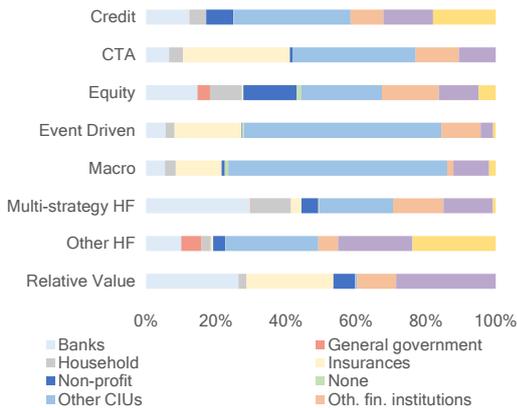


Note: Clients of real estate funds managed and/or marketed by authorised EU AIFMs and sub-threshold managers registered only in national jurisdictions, end of 2020, in % of NAV. RE = Real estate. Data for 28 EEA countries.

Liquidity and counterparty risk profile

ASR-AIF-S.79

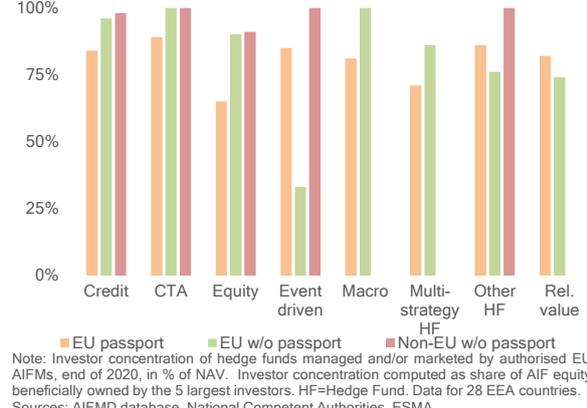
Ownership of AIFs



Note: Ownership of units in hedge funds managed and/or marketed by authorised EU AIFMs, end of 2020, in % of NAV. HF=Hedge fund. Data for 28 EEA countries. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.80

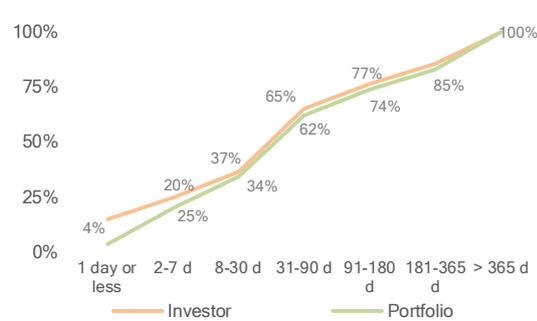
Top five beneficial owners



Note: Investor concentration of hedge funds managed and/or marketed by authorised EU AIFMs, end of 2020, in % of NAV. Investor concentration computed as share of AIF equity beneficially owned by the 5 largest investors. HF=Hedge Fund. Data for 28 EEA countries. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.81

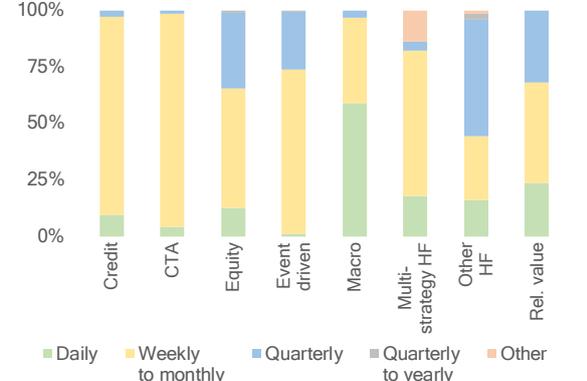
HF: liquidity profile



Note: Portfolio and investor liquidity profiles of hedge funds managed and/or marketed by authorised AIFMs, end of 2020. Portfolio liquidity defined as the percentage of the funds' assets capable of being liquidated within each specified period, investor liquidity defined as the shortest period for which investors can redeem. EEA30 and non-EEA30 AIFs by authorised AIFMs marketed, respectively, w/ and w/o passport. d=Days. Data for the EEA30. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.82

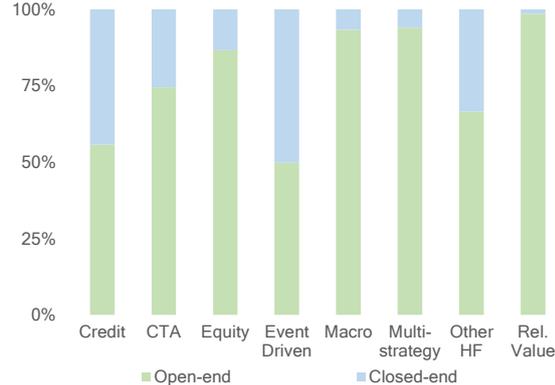
Redemption frequencies



Note: Investor redemption frequencies allowed by open-end hedge funds managed and/or marketed by authorised AIFMs, end of 2020, in % of NAV. EEA30 and non-EEA30 AIFs by authorised AIFMs marketed, respectively, w/ and w/o passport. HF=Hedge fund. Data for the EEA30. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.83

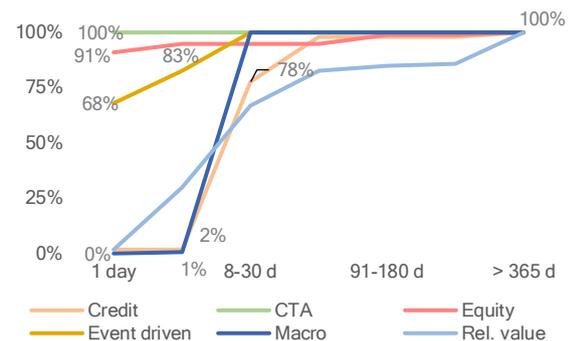
Redemption rights to investors



Note: Redemption rights provided in the ordinary course to investors in hedge funds managed and/or marketed by authorised EU AIFMs, end of 2020, in % of NAV. HF=Hedge fund. Data for 28 EEA countries. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.84

Liquidity financing

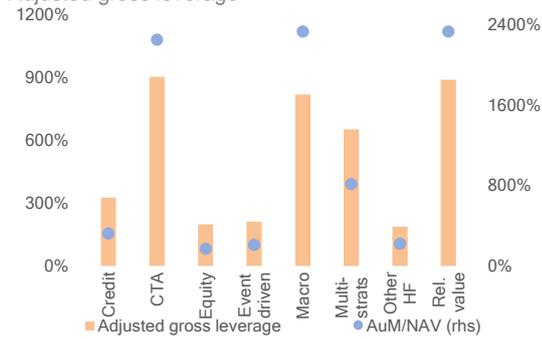


Note: Liquidity financing of hedge funds managed and/or marketed by authorised AIFMs, end of 2020. Aggregate amount of borrowing and cash financing divided depending on longest period for which creditors are contractually committed to provide such financing. Borrowing and cash financing include drawn and undrawn, committed and uncommitted lines of credit as well as any term financing. HF=Hedge fund. Data for the EEA30. Sources: AIFMD database, National Competent Authorities, ESMA.

Leverage and exposure

ASR-AIF-S.85

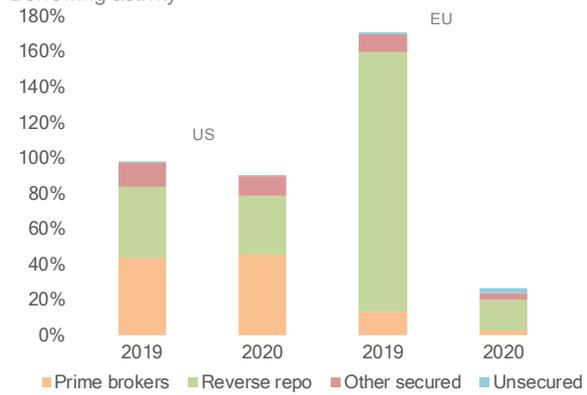
Adjusted gross leverage



Note: Adjusted gross leverage of funds of funds managed and/or marketed by authorised AIFMs, end of 2020, in % of NAV. Adjusted gross leverage computed as total exposure less IRDs with respect to NAV. FoF= Funds of funds, PE=Private equity fund, HF=Hedge fund. Data for the EEA30.
Sources: AIFMD database, National competent authorities, ESMA.

ASR-AIF-S.86

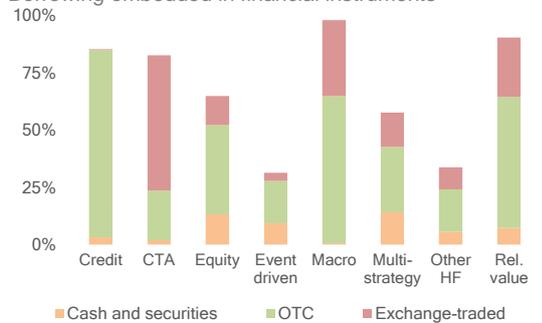
Borrowing activity



Note: Cash and securities borrowed by hedge funds, end of 2019 and 2020, in % of NAV. EEA30 and non-EEA30 AIFs by authorised AIFMs marketed, respectively, w/ and w/o passport. Data for the EEA30 and for the US.
Sources: AIFMD database, National Competent Authorities, SEC, ESMA.

ASR-AIF-S.87

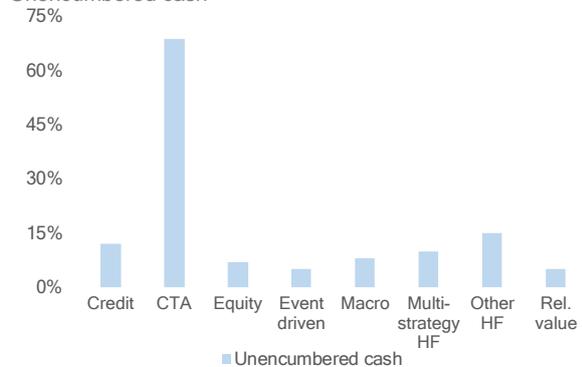
Borrowing embedded in financial instruments



Note: Borrowing of cash and securities or embedded in derivatives by hedge funds, end of 2020, in % of total exposure. AIFs managed and/or marketed by authorised AIFMs. OTC and exchange-traded derivatives net of margins. HF=Hedge fund. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

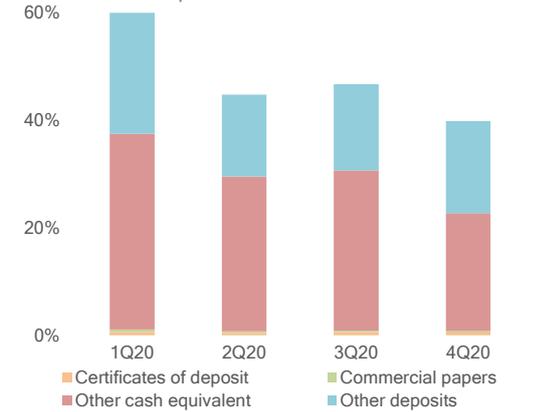
ASR-AIF-S.88

Unencumbered cash



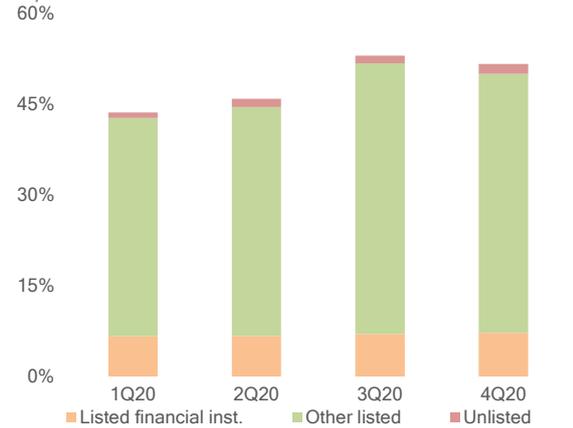
Note: Unencumbered cash held by hedge funds, end of 2020, in % of NAV. EEA30 and non-EEA30 AIFs by authorised AIFMs marketed, respectively, w/ and w/o passport. HF=Hedge fund. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.89
Cash and cash equivalents



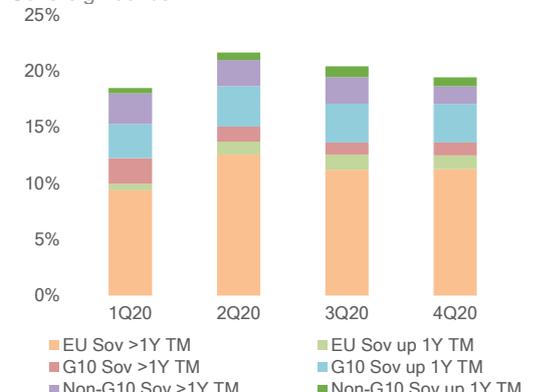
Note: Cash and cash equivalents exposure of hedge funds, AIFs reported quarterly, in % of NAV. Government bonds excluded from the other cash equivalents. Data for 28 EEA countries.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.90
Equities



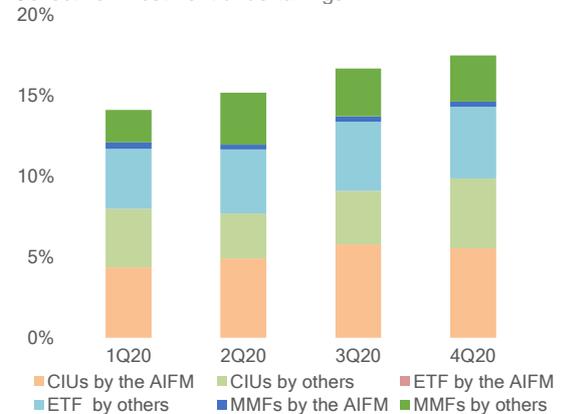
Note: Hedge funds' exposure to equity, AIFs reported quarterly, in % of NAV. AIFs managed and/or marketed by authorised EU AIFMs. Data for 28 EEA countries;
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.91
Sovereign bonds



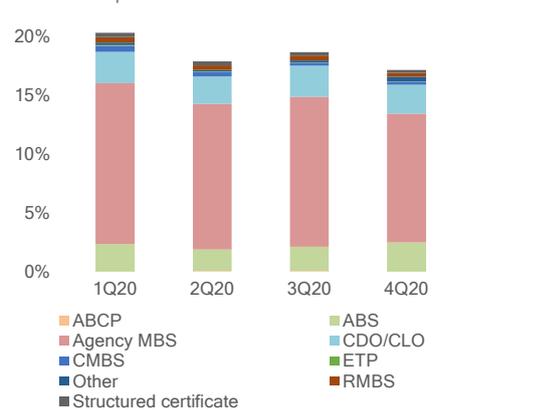
Note: Sovereign bonds exposure of hedge funds, AIFs reported quarterly, in % of NAV. AIFs managed and/or marketed by authorised EU AIFMs. Sov=Sovereign bonds, TM=Time to Maturity. Data for 28 EEA countries.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.92
Collective investment undertakings



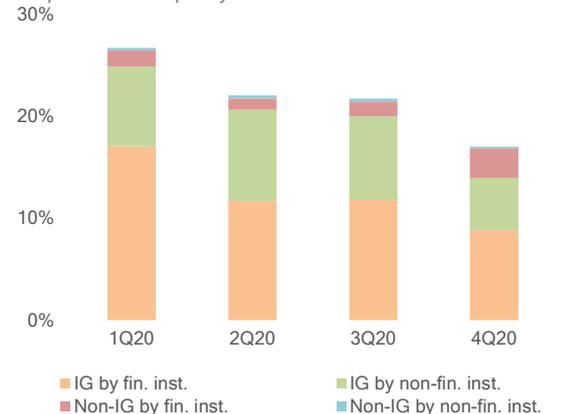
Note: Collective investment undertakings exposure of hedge funds, AIFs reported quarterly, in % of NAV. AIFs managed and/or marketed by authorised EU AIFMs. CIUs=Collective Investment Undertakings. Data for 28 EEA countries.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.93
Structured products



Note: Structured and securitised products exposure of hedge funds, AIFs reported quarterly, in % of NAV. AIFs managed and/or marketed by authorised EU AIFMs. Data for 28 EEA countries.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.94
Corporate bond quality

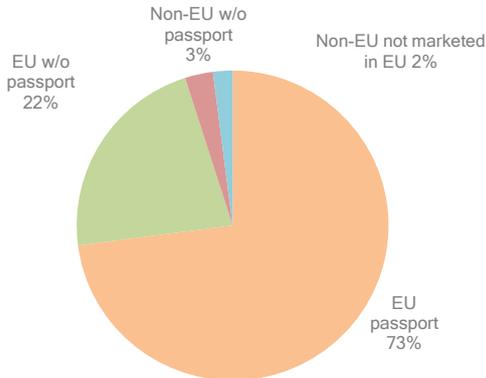


Note: Corporate bonds exposure of hedge funds, AIFs reported quarterly, in % of NAV. AIFs managed and/or marketed by authorised EU AIFMs. Data for 28 EEA countries.
Sources: AIFMD database, National Competent Authorities, ESMA.

Private Equity Funds

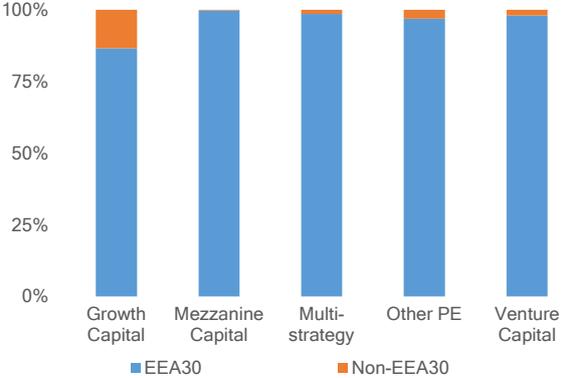
AIF characteristics

ASR-AIF-S.95
AIFMD passport



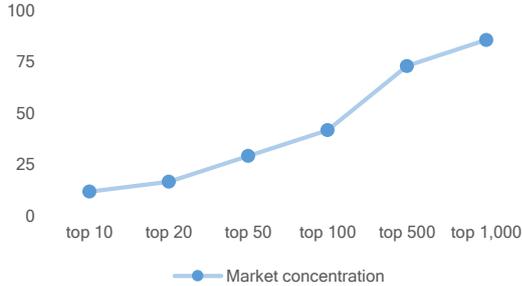
Note: NAV of private equity funds by manager's access to AIFMD passport, end of 2020, in %. Authorised AIFMs with access to AIFMD passport, sub-threshold managers registered only in national jurisdictions w/o passport. Data for the EEA30. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.96
EEA30 and non-EEA30 AIFs



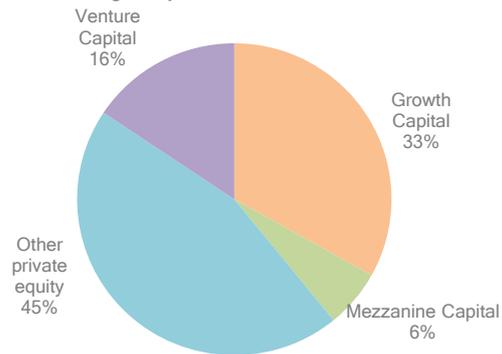
Note: Share of EEA30 and non-EEA30 AIFs managed and/or marketed by authorised AIFMs and sub-threshold managers registered only in national jurisdictions, end of 2020, in % on NAV. Non-EEA30 AIFs marketed w/o passport. Data for the EEA30. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.97
Market concentration



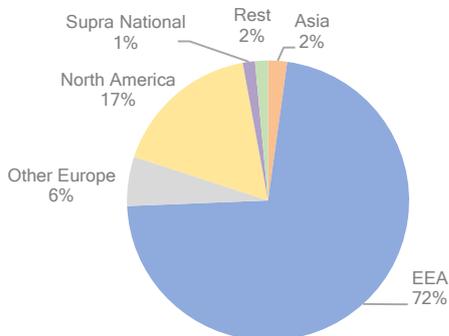
Note: Market concentration of the largest 10-to-1,000 private equity funds managed and/or marketed by authorised EU AIFMs accessing AIFMD passport and sub-threshold managers registered only in national jurisdictions, end of 2020, in % of NAV. Data for 28 EEA countries. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.98
Investment strategies by NAV



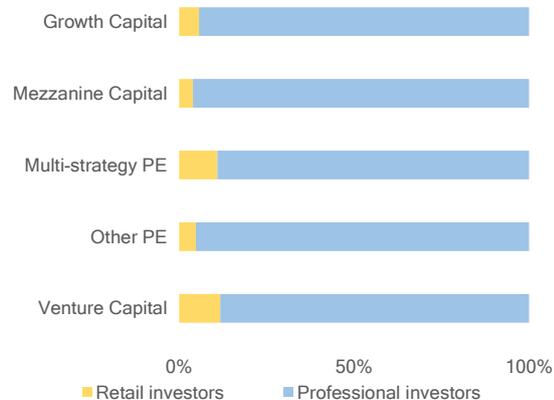
Note: Investment strategies of private equity funds, end of 2020, in % of NAV. Private equity funds managed and/or marketed by authorised EU AIFMs and sub-threshold managers registered only in national jurisdictions. Data for 28 EEA countries. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.99
Investment regions by NAV



Note: Regional investment focus of private equity funds managed and/or marketed by authorised AIFMs and sub-threshold managers registered only in national jurisdictions, end of 2020, in % of NAV. Geo-focus determined according to the domicile of investments, and the supranational category including investments without a predominant geo-focus. Data for the EEA30. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.100
Investor type

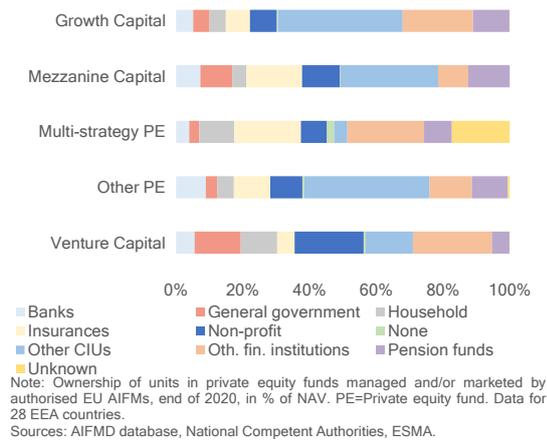


Note: Clients of private equity funds managed and/or marketed by authorised EU AIFMs and sub-threshold managers registered only in national jurisdictions, end of 2020, in % of NAV. PE = Private equity fund. Data for 28 EEA countries. Sources: AIFMD database, National Competent Authorities, ESMA.

Liquidity and counterparty risk profile

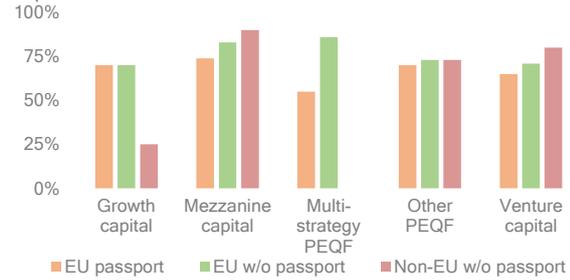
ASR-AIF-S.101

Ownership of PE funds



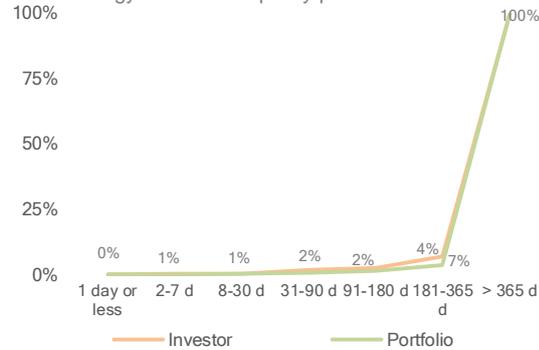
ASR-AIF-S.102

Top five beneficial owners



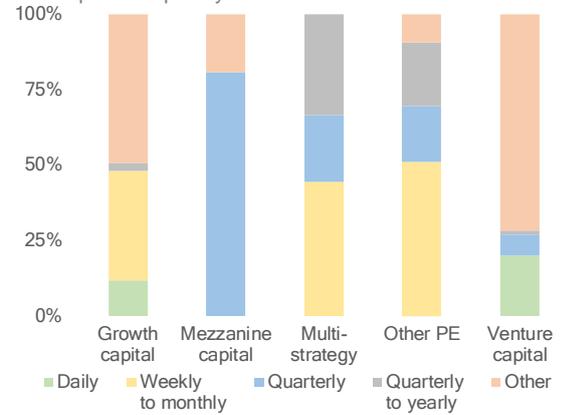
ASR-AIF-S.103

Multi-strategy PE funds: liquidity profile



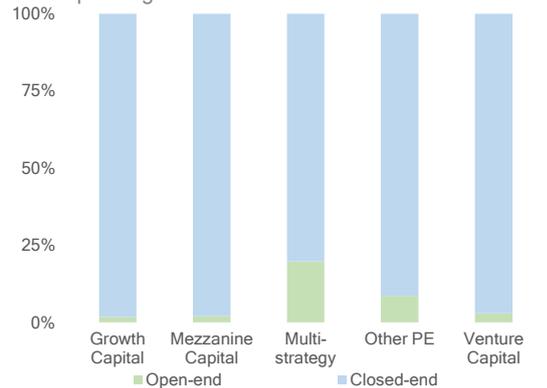
ASR-AIF-S.104

Redemption frequency



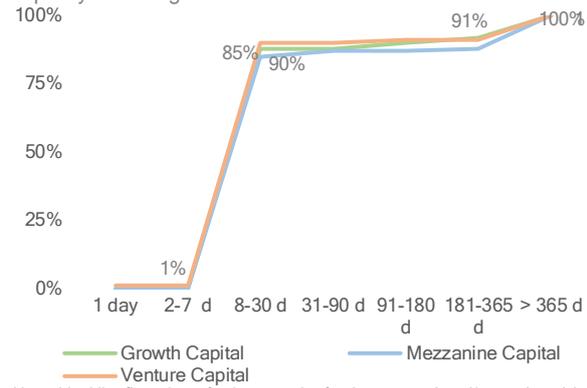
ASR-AIF-S.105

Redemption rights to investors



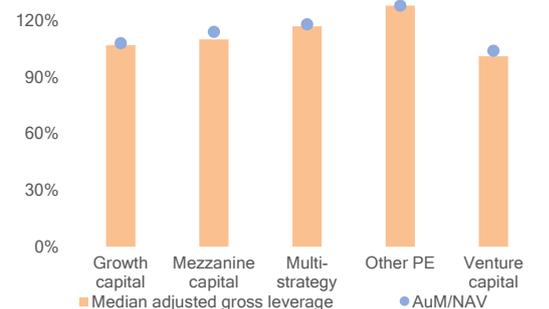
ASR-AIF-S.106

Liquidity financing



Leverage and exposure

ASR-AIF-S.107
Adjusted gross leverage



Note: Adjusted gross leverage of private equity funds managed and/or marketed by authorised AIFMs, end of 2020, in % of NAV. Adjusted gross leverage computed as total exposure less IRDs with respect to NAV. PE=Private equity fund. Data for the EEA30.

Sources: AIFMD database, National competent authorities, ESMA.

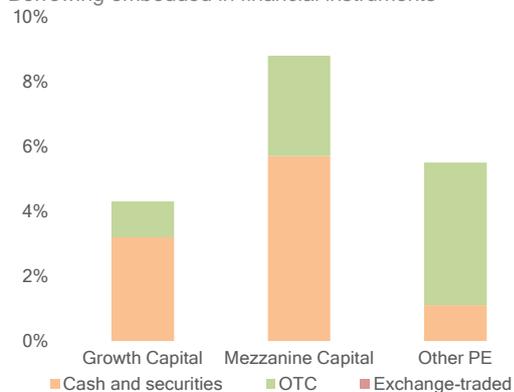
ASR-AIF-S.108
Adjusted gross leverage



Note: Leveraged and unleveraged private equity funds managed and/or marketed by authorised EU AIFMs and sub-threshold managers registered only in national jurisdictions, end of 2019, EUR bn. Leveraged funds identified using the AIF reporting code as specified in Annex 2 of ESMA guidelines on AIFMD reporting obligations Data for 27 EEA countries.

Sources: AIFMD database, National Competent Authorities, ESMA.

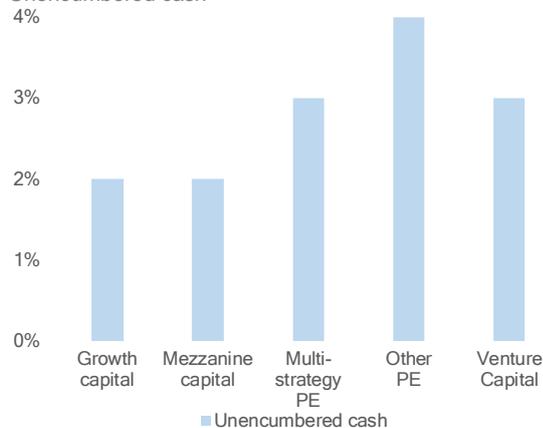
ASR-AIF-S.109
Borrowing embedded in financial instruments



Note: Borrowing of cash and securities or embedded in derivatives by private equity funds, end of 2020, in % of total exposure. AIFs managed and/or marketed by authorised AIFMs marketed. OTC and exchange-traded derivatives net of margins. PE=Private equity fund. Data for the EEA30.

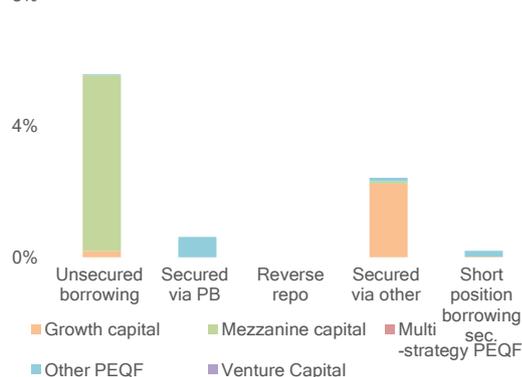
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.110
Unencumbered cash



Note: Unencumbered cash held by private equity funds, end of 2020, in % of NAV. EEA30 and non-EEA30 AIFs by authorised AIFMs marketed, respectively, w/ and w/o passport. PE=Private equity fund. Data for the EEA30.

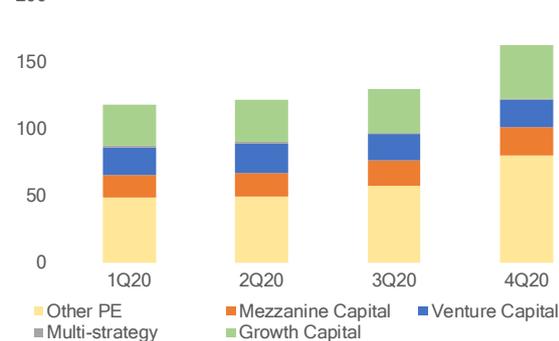
ASR-AIF-S.111
Financial leverage



Note: Cash and securities borrowed by private equity funds, end of 2020, in % of NAV. EEA30 and non-EEA30 AIFs by authorised AIFMs marketed, respectively, w/ and w/o passport. PEQF=Private Equity Fund. Data for the EEA30.

Sources: AIFMD database, National Competent Authorities, ESMA.

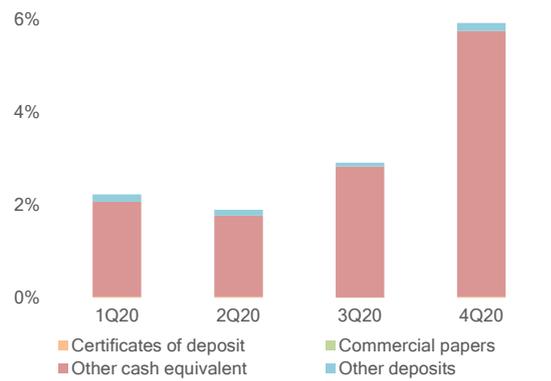
ASR-AIF-S.112
Total exposures



Note: Exposure of private equity funds managed and/or marketed by authorised AIFMs, funds quarterly reported, EUR tn. EEA30 and non-EEA30 AIFs by authorised AIFMs marketed, respectively, w/ and w/o passport. PE=Private equity fund. Data for the EEA30.

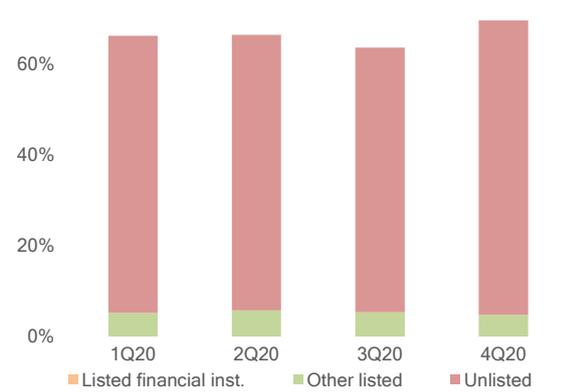
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.113
Cash and cash equivalents



Note: Cash and cash equivalents exposure of private equity funds, AIFs reported quarterly, in % of NAV. Government bonds excluded from other cash equivalents. Data for 28 EEA countries.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.114
Equities
80%

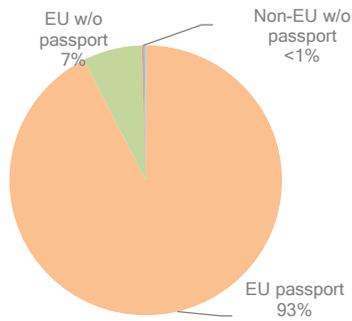


Note: Private equity funds' exposure to equity, AIFs reported quarterly, in % of NAV. AIFs managed and/or marketed by authorised EU AIFMs. Data for 28 EEA countries.
Sources: AIFMD database, National Competent Authorities, ESMA.

'Other AIFs'

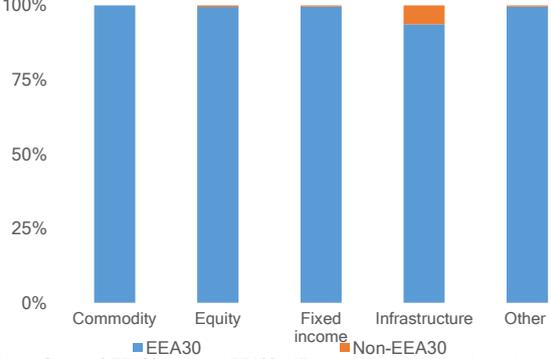
AIF characteristics

ASR-AIF-S.115
AIFMD passport



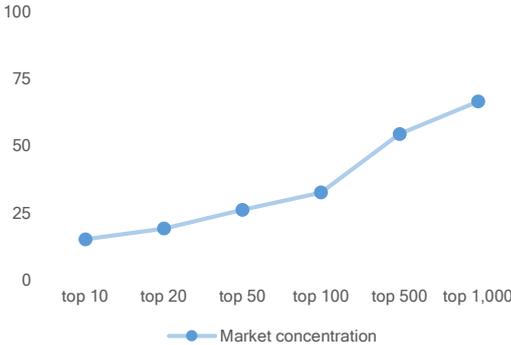
Note: NAV of AIFs classified as Other by manager's access to AIFMD passport, end of 2020, in %. Authorised EEA30 AIFMs with access to AIFMD passport or marketing non-EEA30 AIFs w/o passport, sub-threshold managers registered only in national jurisdictions w/o passporting rights. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.116
EEA30 and non-EEA30 AIFs



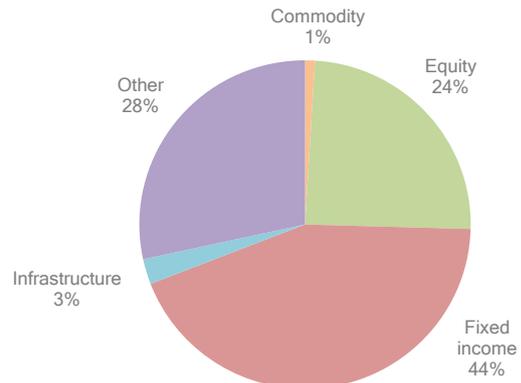
Note: Share of EEA30 and non-EEA30 AIFs managed and/or marketed by authorised AIFMs and sub-threshold managers registered only in national jurisdictions, end of 2020, in % on NAV. Non-EEA30 AIFs marketed w/o passport. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.117
Market concentration



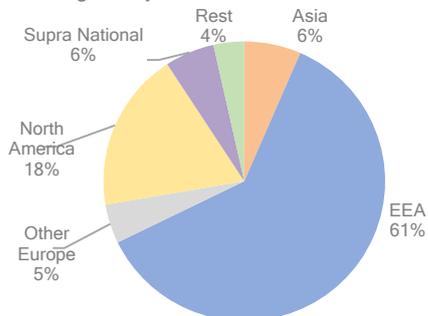
Note: Market concentration of the largest 10 to 1,000 AIFs classified as Other managed and/or marketed by authorised EU and sub-threshold managers registered only in national jurisdictions, end of 2020, in % of NAV. Data for 28 EEA countries.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.118
Investment strategy by NAV



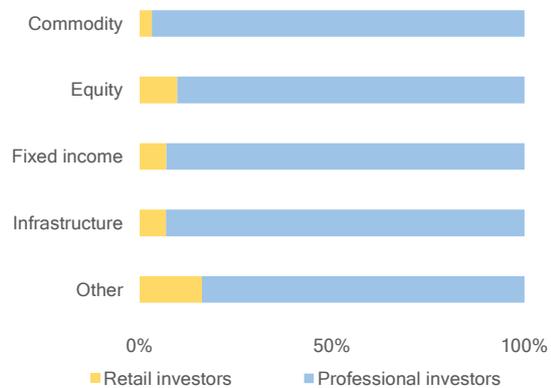
Note: Investment strategies of AIFs classified as Other, end of 2020, in % of NAV. AIFs managed and/or marketed by full scope EU AIFMs and sub-threshold managers registered only in national jurisdictions. Data for 28 EEA countries.
Sources: National Competent Authorities, ESMA.

ASR-AIF-S.119
Investment regions by NAV



Note: Regional investment focus of EU AIFs classified as Other, managed and/or marketed by authorised AIFMs and sub-threshold managers registered only in national jurisdictions, end of 2020, in % of NAV. Geo-focus determined according to the domicile of investments and the supranational category including investments without a predominant geo-focus. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

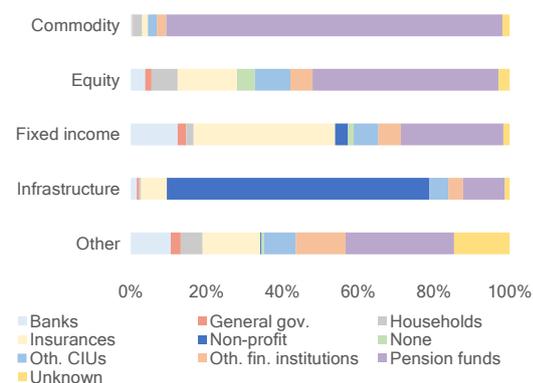
ASR-AIF-S.120
Investor type



Note: Clients of AIFs classified as Other AIFs managed and/or marketed by authorised EU AIFMs and sub-threshold managers registered only in national jurisdictions, end of 2020, in % of NAV. Data for 28 EEA countries.
Sources: AIFMD database, National Competent Authorities, ESMA.

Liquidity and counterparty risk profile

ASR-AIF-S.121
Ownership of 'other AIFs'



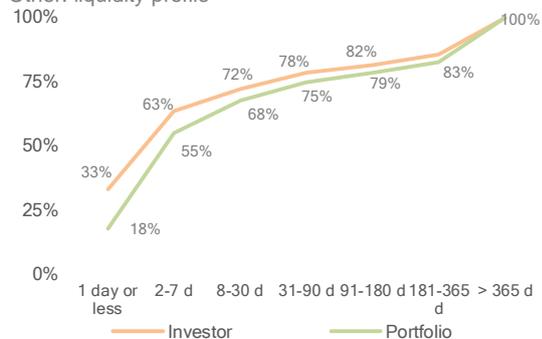
Note: Ownership of units in AIFs classified as Other AIFs managed and/or marketed by authorised EU AIFMs, end of 2020, in % of NAV. CIUs=Collective investment undertakings. Data for 28 EEA countries.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.122
Top five beneficial owners



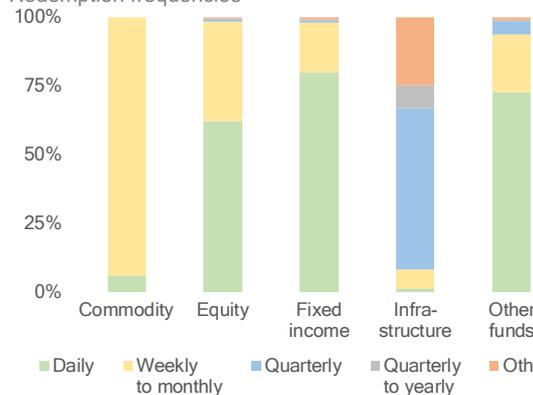
Note: Investor concentration of AIFs classified as Other managed and/or marketed by authorised EU AIFMs, end of 2020, in % of NAV. Investor concentration computed as share of AIF equity beneficially owned by the 5 largest investors. Data for 28 EEA countries..
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.123
Other: liquidity profile



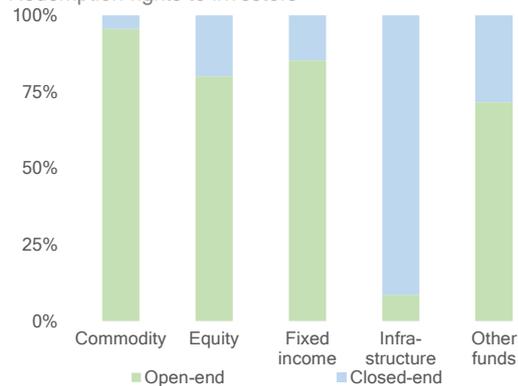
Note: Portfolio and investor liquidity profiles of AIFs classified as Other managed and/or marketed by authorised AIFMs, end of 2020. Portfolio liquidity defined as the percentage of the funds' assets capable of being liquidated within each specified period, investor liquidity defined as the shortest period for which investors can redeem. EEA30 and non-EEA30 AIFs by authorised AIFMs marketed, respectively, w/ and w/o passport. d=Days. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.124
Redemption frequencies



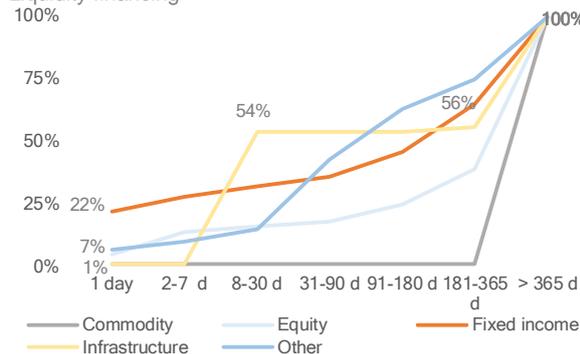
Note: Investor redemption frequencies allowed by open-end AIFs classified as Other managed and/or marketed by authorised AIFMs, end of 2020, in % of NAV. EEA30 and non-EEA30 AIFs by authorised EU AIFMs marketed, respectively, w/ and w/o passport. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.125
Redemption rights to investors



Note: Redemption rights provided in the ordinary course to investors in AIFs classified as Other managed and/or marketed by authorised EU AIFMs, end of 2020, in % of NAV. Data for 28 EEA countries.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.126
Liquidity financing

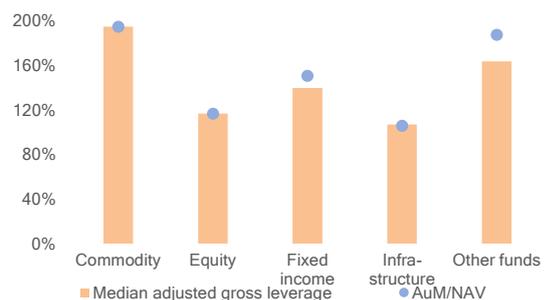


Note: Liquidity financing of AIFs classified as Other managed and/or marketed by authorised AIFMs, end of 2020. Aggregate amount of borrowing and cash financing divided depending on longest period for which creditors are contractually committed to provide such financing. Borrowing and cash financing include drawn and undrawn, committed and uncommitted lines of credit as well as any term financing. Data for the EEA30.
Sources: AIFMD database, National Competent Authorities, ESMA.

Leverage and exposure

ASR-AIF-S.127

Adjusted gross leverage

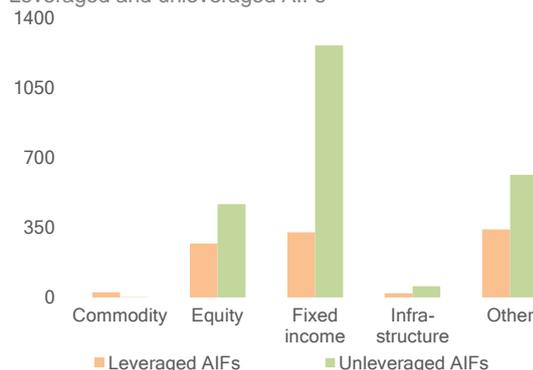


Note: Adjusted gross leverage of funds of funds managed and/or marketed by authorised AIFMs, end of 2020, in % of NAV. Adjusted gross leverage computed as total exposure less IRDs with respect to NAV. FoF= Funds of funds, PE=Private equity fund, HF=Hedge fund. Data for the EEA30.

Sources: AIFMD database, National competent authorities, ESMA.

ASR-AIF-S.128

Leveraged and unleveraged AIFs



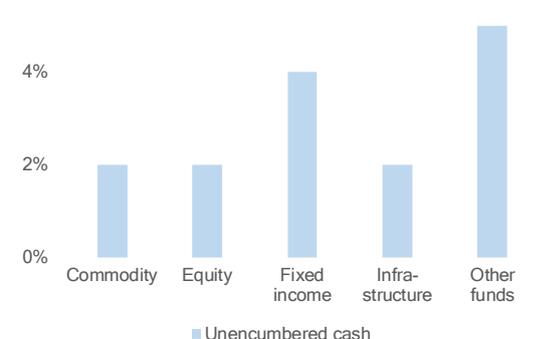
Note: Leveraged and unleveraged of AIFs classified as Other and managed and/or marketed by authorised EU AIFMs and sub-threshold managers registered only in national jurisdictions, end of 2019. Leveraged funds identified using the AIF reporting code as specified in Annex 2 of ESMA guidelines on AIFMD reporting obligations Data for 27 EEA countries.

Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.129

Unencumbered cash

6%



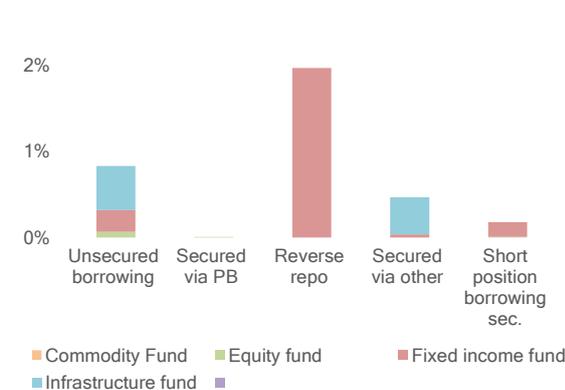
Note: Unencumbered cash held by AIFs classified as Other, end of 2020, in % of NAV. EEA30 and non-EEA30 AIFs by authorised AIFMs marketed, respectively, w/ and w/o passport. Data for the EEA30.

Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.130

Financial leverage

3%



Note: Cash and securities borrowed by AIFs classified as Other, end of 2020, in % of NAV. EEA30 and non-EEA30 AIFs by authorised AIFMs marketed, respectively, w/ and w/o passport. Data for the EEA30.

Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.131

Equities

30%



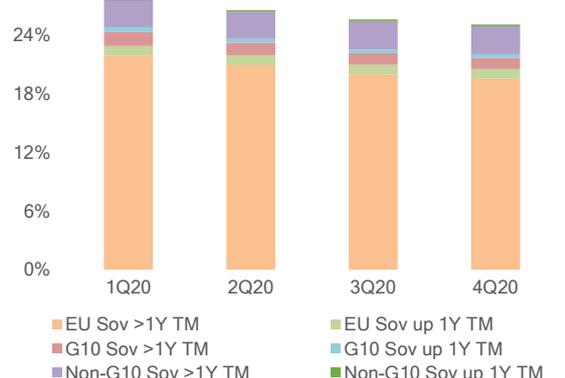
Note: Exposure to equity of funds classified as Other, AIFs reported quarterly, in % of NAV. AIFs managed and/or marketed by authorised EU AIFMs. Data for 28 EEA countries.

Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.132

Sovereign bonds

30%

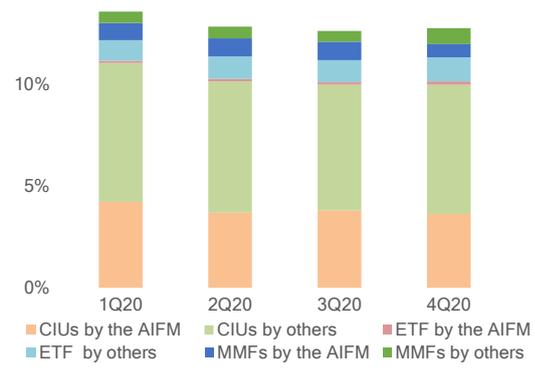


Note: Sovereign bonds exposure of classified as Other, AIFs reported quarterly, in % of NAV. AIFs managed and/or marketed by authorised EU AIFMs. Sov=Sovereign bonds, TM=Time to Maturity. Data for 28 EEA countries.

Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.133

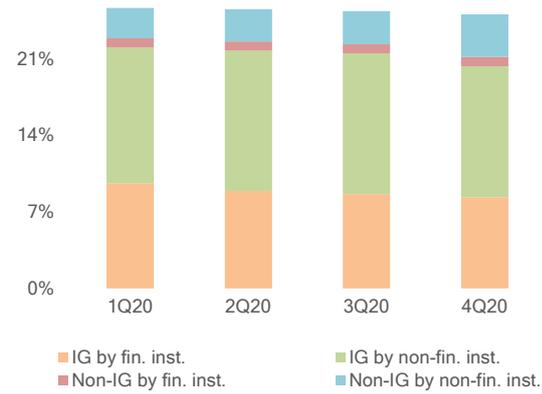
Collective investment undertakings
15%



Note: Collective investment undertakings exposure of funds classified as Other, AIFs reported quarterly, in % of NAV. AIFs managed and/or marketed by authorised EU AIFMs. CIUs=Collective Investment Undertakings. Data for 28 EEA countries.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.134

Corporate bond quality:
28%



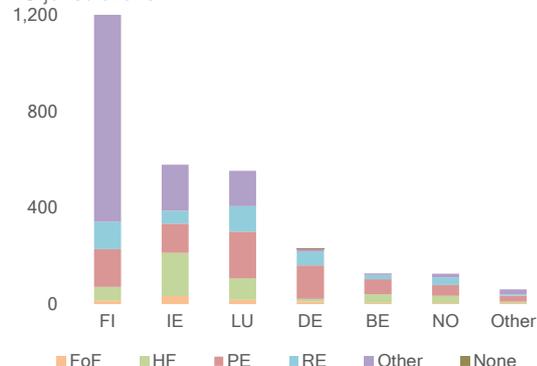
Note: Corporate bonds exposure of funds classified as Other, AIFs reported quarterly, in % of NAV. AIFs managed and/or marketed by authorised EU AIFMs. Data for 28 EEA countries.
Sources: AIFMD database, National Competent Authorities, ESMA.

Non-EU AIFs (NPPR)

AIF characteristics

ASR-AIF-S.135

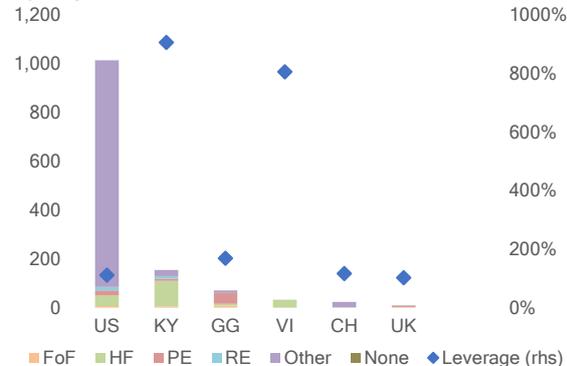
EU jurisdictions



Note: NAV by authorising EEA30 country of AIFs marketed by non-EEA30 AIFMs w/o passporting rights (art. 42 of AIFMD), end of 2020, in EUR bn. AIFs identified via international standard identifiers (LEIs, ISIN, Cusip). Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.136

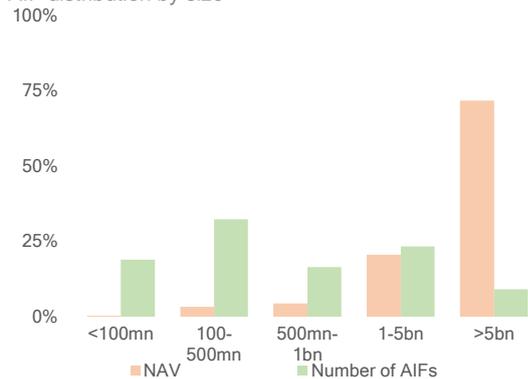
Non-EU AIFs' domicile



Note: NAV by domicile of AIFs marketed by non-EEA30 AIFMs w/o passporting rights (art. 42 of AIFMD), end of 2020, in EUR bn. AIFs identified via international standard identifiers (LEIs, ISIN, Cusip). Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.137

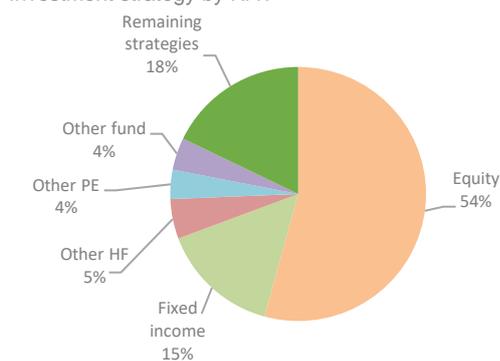
AIF distribution by size



Note: Share of NAV by authorising EEA30 country of AIFs marketed by non-EEA30 AIFMs w/o passporting rights (art. 42 of AIFMD), end of 2020, in EUR bn. AIFs identified via international standard identifiers (LEI, ISIN, Cusip). Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.138

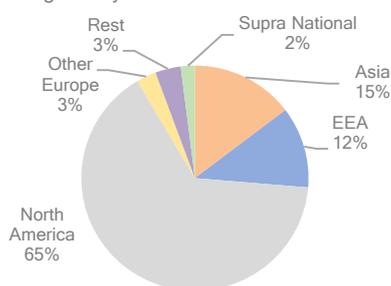
Investment strategy by NAV



Note: Investment strategies of AIFs marketed by non-EEA30 AIFMs w/o passporting rights (art. 42 of AIFMD), end of 2020, in % of NAV. AIFs identified via international standard identifiers (LEIs, ISIN, Cusip). Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.139

Investment regions by NAV



Note: Regional investment focus of AIFs marketed by non-EEA30 AIFMs w/o passporting rights (art. 42 of AIFMD), end of 2020, in EUR bn. AIFs identified via international standard identifiers (LEIs, ISIN, Cusip). Geo-focus determined according to the domicile of investments, supra national category including investments without predominant geo-focus. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.140

Investor type

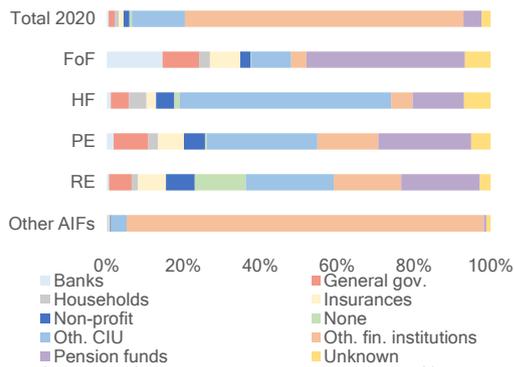


Note: Clients of AIFs marketed by non-EEA30 AIFMs w/o passporting rights (art. 42 of AIFMD), end of 2020, in % of NAV. AIFs identified via international standard identifiers (LEIs, ISIN, Cusip). FoF=Fund of Funds. Sources: AIFMD database, National Competent Authorities, ESMA.

Liquidity and counterparty risk profile

ASR-AIF-S.141

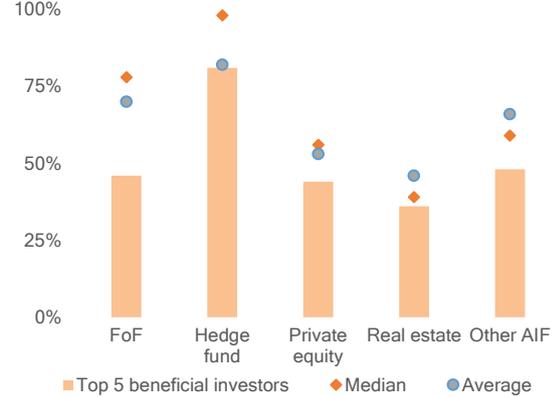
Ownership of 'other AIFs'



Note: Ownership of units in AIFs marketed by non-EEA30 AIFMs w/o passporting rights (art. 42 of AIFMD), end of 2020, in % of NAV. AIFs identified via international standard identifiers (LEIs, ISIN, Cusip). FoF=Fund of Funds; Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.142

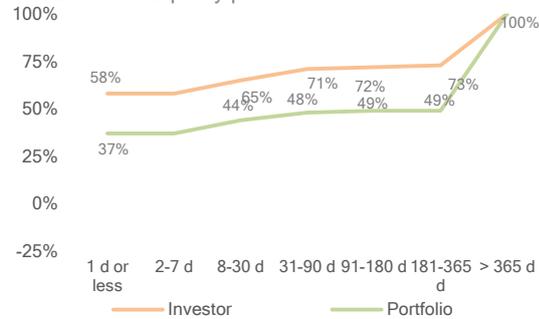
Top five beneficial owners



Note: Investor concentration of AIFs marketed by non-EEA30 AIFMs w/o passporting rights (art. 42 of AIFMD), end of 2020, in % of NAV. Investor concentration computed as share of AIF equity beneficially owned by the 5 largest investors. FoF=Fund of funds. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.143

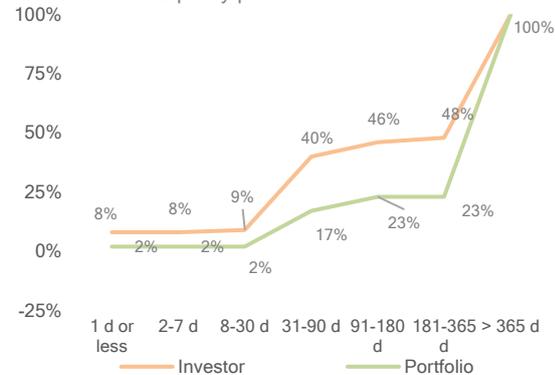
Non-EU AIFs: Liquidity profile



Note: Portfolio and investors liquidity profiles of AIFs marketed by non-EEA30 AIFMs w/o passporting rights (art. 42 of AIFMD), end of 2020. AIFs identified via international standard identifiers (LEIs, ISIN, Cusip). Portfolio liquidity defined as the percentage of the funds' assets capable of being liquidated within each specified period, investor liquidity defined as the shortest period for which investors can redeem. d= Days.

ASR-AIF-S.144

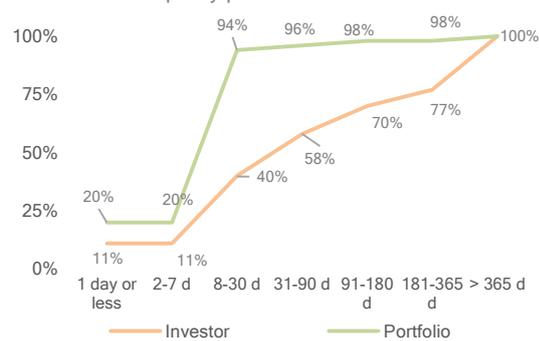
Non-EU FoFs: Liquidity profile



Note: Portfolio and investors liquidity profiles of funds of funds marketed by non-EEA30 AIFMs w/o passporting rights (art. 42 of AIFMD), end of 2020. AIFs identified via international standard identifiers (LEIs, ISIN, Cusip). Portfolio liquidity defined as the percentage of the funds' assets capable of being liquidated within each specified period, investor liquidity defined as the shortest period for which investors can redeem. d= Days. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.145

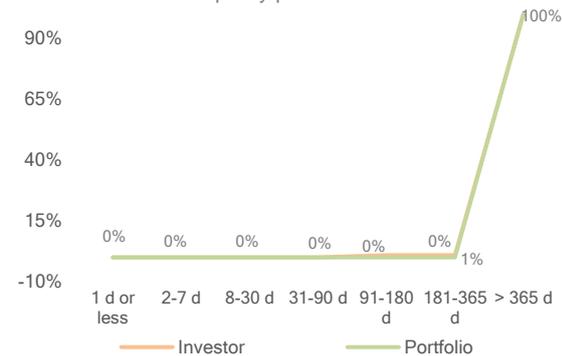
Non-EU HF: Liquidity profile



Note: Portfolio and investors liquidity profiles of hedge funds marketed by non-EEA30 AIFMs w/o passporting rights (art. 42 of AIFMD), end of 2020. AIFs identified via international standard identifiers (LEIs, ISIN, Cusip). Portfolio liquidity defined as the percentage of the funds' assets capable of being liquidated within each specified period, investor liquidity defined as the shortest period for which investors can redeem. d= Days. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.146

Non-EU PE funds: Liquidity profiles



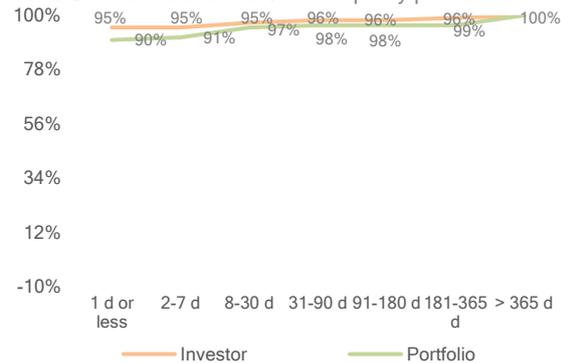
Note: Portfolio and investors liquidity profiles of private equity funds marketed by non-EEA30 AIFMs w/o passporting rights (art. 42 of AIFMD), end of 2020. AIFs identified via international standard identifiers (LEIs, ISIN, Cusip). Portfolio liquidity defined as the percentage of the funds' assets capable of being liquidated within each specified period, investor liquidity defined as the shortest period for which investors can redeem. d= Days. Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.147d
Non-EU RE funds: Liquidity profiles



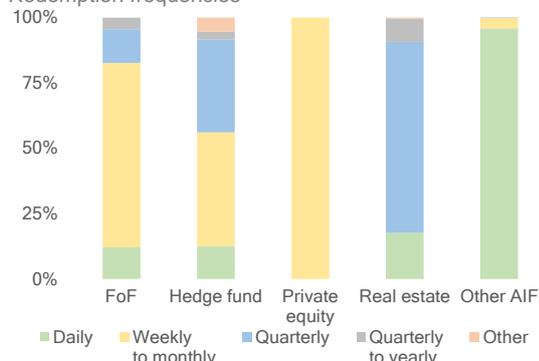
Note: Portfolio and investors liquidity profiles of real estate funds marketed by non-EEA30 AIFMs w/o passporting rights (art. 42 of AIFMD), end of 2020. AIFs identified via international standard identifiers (LEIs, ISIN, Cusip). Portfolio liquidity defined as the percentage of the funds' assets capable of being liquidated within each specified period, investor liquidity defined as the shortest period for which investors can redeem. d= Days.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.148
Non-EU AIFs classified as Other: Liquidity profile



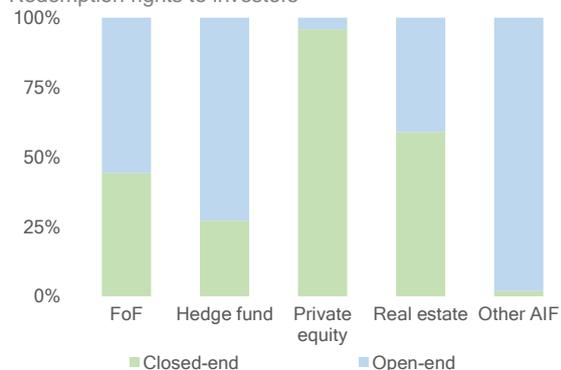
Note: Portfolio and investors liquidity profiles of AIFs classified as Other marketed by non-EEA30 AIFMs w/o passporting rights (art. 42 of AIFMD), end of 2020. AIFs identified via international standard identifiers (LEIs, ISIN, Cusip). Portfolio liquidity defined as the percentage of the funds' assets capable of being liquidated within each specified period, investor liquidity defined as the shortest period for which investors can redeem. d= Days.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.149
Redemption frequencies



Note: Investor redemption frequencies allowed by open-end AIFs marketed by non-EEA30 AIFMs w/o passporting rights (art. 42 of AIFMD), end of 2020, in % of NAV. AIFs identified via international standard identifiers (LEIs, ISIN, Cusip).

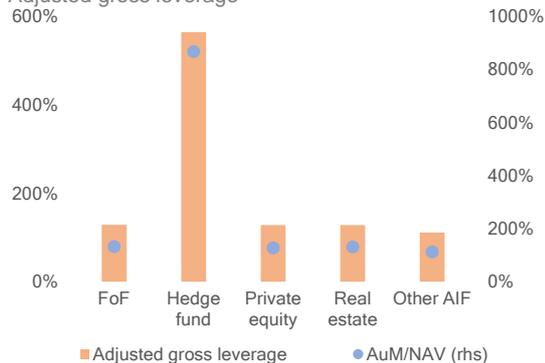
ASR-AIF-S.150
Redemption rights to investors



Note: Redemption rights provided in the ordinary course to investors in AIFs marketed by non-EEA30 AIFMs w/o passporting rights (art. 42 of AIFMD), end of 2020, in % of NAV. AIFs identified via international standard identifiers (LEIs, ISIN, Cusip). FoF=Fund of funds, None=No predominant type.
Sources: AIFMD database, National Competent Authorities, ESMA.

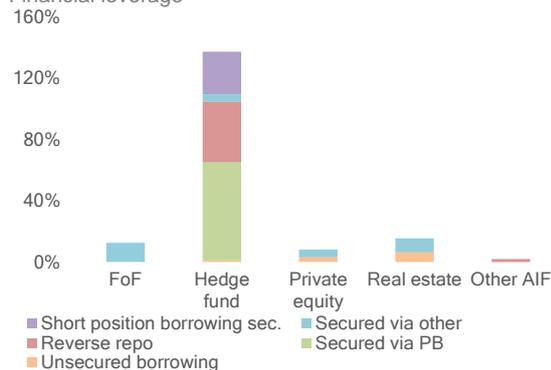
Leverage and exposure

ASR-AIF-S.151
Adjusted gross leverage



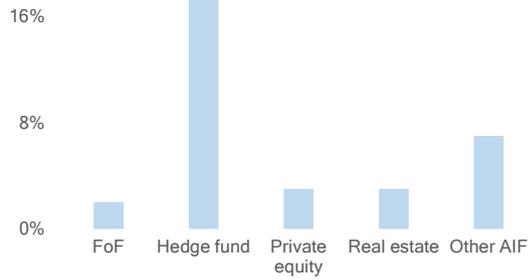
Note: Adjusted gross leverage of AIFs marketed by non-EEA30 AIFMs w/o passporting rights (art. 42 of AIFMD), end of 2020, in % of NAV. Adjusted gross leverage does not include IRDs. FoF= Fund of funds,
Sources: AIFMD database, National competent authorities, ESMA.

ASR-AIF-S.152
Financial leverage



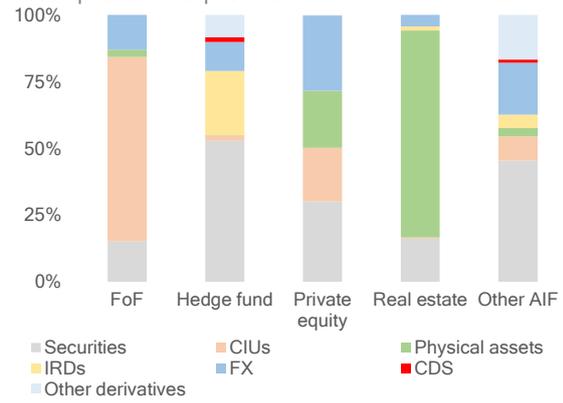
Note: Cash and securities borrowed, end of 2020, in % of NAV. marketed by non-EEA30 AIFMs w/o passporting rights (art. 42 of AIFMD) in EUR bn. AIFs identified via international standard identifiers (LEIs, ISIN, Cusip)
FoF=Funds of Funds,
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.153
Unencumbered cash
24%



Note: Unencumbered cash, end of 2020, in % of NAV. EEA30 and non-EEA30 AIFs by authorised EU AIFMs marketed, respectively, w/ and w/o passport. FoF=Fund of funds, None=No predominant type.
Sources: AIFMD database, National Competent Authorities, ESMA.

ASR-AIF-S.154
Decomposition of exposures



Note: Share of gross exposures by AIF type, end of 2020, in % of total. AIFs managed and/or marketed by authorised EEA30 AIFMs. FoF=Fund of funds, None=No predominant type.
Sources: AIFMD database, National Competent Authorities, ESMA.

Annex

EU AIFMD data reporting

Scope of ESMA AIF reporting

This report is based on data submitted by National Competent Authorities (NCAs) to ESMA, covering authorised EU and sub-threshold AIFMs on behalf of the AIFs they manage. Data for products marketed by non-EU AIFMs under the ART 42 AIFMD (NPPR) are described in the specific section 'Non-EU AIFs' (see page 36). The EU data does not include the UK anymore since this jurisdiction was not part of the EU in 2021, when data were transmitted to ESMA. Historical data for the EU before that date exclude the UK to maintain the same sample of countries over time.

The data are based on reports transmitted to ESMA by 28 NCAs. Around 34,010 reports of EU AIFs were transmitted to ESMA. Of those reports, we excluded around 2,250 nil reports (empty reports sent by new AIFs) and 1,690 feeder funds to avoid double counting. The final sample is composed of around 30,035 AIFs.¹⁵

The report relies on a set of risk indicators, a subset of the data provided under the AIFMD. The risk indicators were chosen based on their relevance for risk analysis and the quality of the data.¹⁶ Looking forward, ongoing cooperation with NCAs should allow ESMA to improve the set of risk indicators in future editions.

Data quality

AIFMD reporting obligations cover a wide range of indicators with different degrees of complexity in their calculation. Some very important indicators, such as leverage reported by AIFs, even if data quality improved, cannot be used at this stage owing to data-quality issues. A variety of reporting errors (formatting, monetary values instead of percentages, etc.) prevent us from using the reported leverage indicators. Some other indicators are not always mandatory and may not be requested at national level (e.g., the redemption frequency for open-ended AIFs), which makes the use of aggregate data more difficult. In this report, when the data used for the analysis are based on a subset of our sample, this is specified. A detailed inventory of analysed data and

indicators is provided in the inventory section at the end of the report.

Definition of terms

Under the AIFMD, some concepts have a different meaning from that commonly used in the industry. For clarification a glossary is provided at the end of the report. The main concepts used are the following:

- **Regulatory AuM:** Value of all assets in a portfolio, including all assets acquired through use of leverage (borrowing of cash or securities and leverage embedded in derivative positions). This meaning of AuM is different from the typical meaning of AuM in the industry, which relates to the assets on the balance sheet of the AIF based on a mark-to-market valuation.
- **NAV:** The net value of the assets of the AIF (as opposed to the NAV per unit or proportion of the AIF). The NAV is equal to the unit shares of the AIF, i.e. the money placed in the AIF by investors, which corresponds to the concept of total net assets sometimes used in the industry.
- **Leverage:** In this report, leverage is measured by the ratio of regulatory AuM to NAV.
- **Adjusted leverage:** This measure excludes IRDs from the computation of leverage, following the approach used in the previous reports (ESMA, 2019 and 2020). Indeed, the use of IRDs tends to inflate leverage measures, since IRDs are measured using notional amount (rather than adjusted by duration as done under the commitment approach).

AIF reference sample

AIF-specific information should be reported at the level of the compartments or sub-funds when the AIF takes the form of an umbrella fund.

¹⁵ A description of the defined reference sample of AIFs used in the analysis is available in the Annex.

¹⁶ The data inventory on page 76 summarises the coverage of each indicator used in this report.

ESMA Guidelines¹⁷ specify that AIFMs and AIFs that have commenced have to start reporting from the first day of the calendar quarter following authorisation or registration.

AIFMs and AIFs that have not started any activity must still report a nil return to the home competent authority. Relatedly, AIFMs have to provide a report upon liquidation of the AIFs they manage.

Each AIF managed within the scope of the Directive must have only one AIFM, responsible for compliance with the requirements of the AIFMD. For this reason, the inclusion in the analysis of products marketed by non-EU sub-threshold managers does not introduce any bias or create double counting of entities, as their AIFs cannot be passported.

As of 12 November 2020, NCAs have gathered and made available to ESMA 34,010 reports for the end of 2020 of AIFs managed and/or marketed by authorised EU and sub-threshold AIFMs. Of the initial data intake, around 2,250 AIFs reported a nil return. The definition of the AIFs' reference sample for the analysis requires further data cleaning operations and consistency checks (ASR-AIF.111).

The final reference sample is constituted by 30,035 AIFs. Overall, 81% of them are managed by full-scope AIFMs benefiting from the EU passport. The final sample includes 510 AIFs without a predominant type (i.e. reported as 'None').

Feeder funds are excluded from analysis to avoid any double counting of assets (ASR-AIF.112).

ASR-AIF.111

Data cleaning

Definition of the AIF reference sample

A series of preliminary operations are performed to define the sample of analysed AIFs and their characteristics. These include the following:

- Exclusion of reports that are not workable.

As for AIFMs, AIFs' reports may indicate that there is no information to be reported for the specified reporting period (nil return). Firms also have the opportunity to cancel previously submitted erroneous reports or amend existing ones. For this reason, multiple amended reports by the same fund for the same reporting period have to be detected so that the data can be properly consolidated.
 - Identification of feeder and master AIFs
 - Identification of each AIFM jurisdiction and managed and/o marketed AIFs domicile
-

ASR-AIF.112

Feeder AIFs

Prevalence of EU master-feeder AIFs

Feeder AIFs	EU	Non-EU	Total
		AIFs filing	
with EU master	895	49	944
without EU master	722	25	747
Total	1,617	74	1,691
		NAV (EUR bn)	
with EU master	127.5	4.5	132
without EU master	89.3	2.2	91.5
Total	216.7	6.9	223.6

Note: Number and NAV of feeder AIFs by domicile, end of 2020.
Source: AIFMD database, National Competent Authorities, ESMA.

¹⁷ Link to the Guidelines on reporting obligations under Articles 3(3)(d) and 24(1), (2) and (4) of the AIFMD:

Data inventory

Indicator	Description and reporting guidelines	Reporting content	Reporting items	Technical guidance	Data availability
Investment regions	Geographical breakdown of the investments held by the AIF by percentage of the total NAV of the AIF. See: ESMA guidelines, point 83; Q&As Section III, 4 and 73.	3(3)(d)- and 24(1)	78-85	Mandatory (all AIFs)	Total 100%
					FoF 100%
					HF 100%
					PE 100%
					RE 100%
OTH 100%					
Top five beneficial owners	NAV held by the five beneficial owners that have the largest equity interests in the AIF. See: ESMA guidelines, point 100. Note: 11% of AIFs (sold mostly to retail investors), report 0.	3(3)(d) and 24(1)	118	Mandatory (all AIFs)	Total 100%
					FoF 100%
					HF 100%
					PE 100%
					RE 100%
OTH 100%					
Clients	Investor concentration for retail and professional investors. See: ESMA guidelines, point 101; Q&As Section III, 80.	3(3)(d) and 24(1)	119-120	Mandatory (all AIFs)	Total 99%
					FoF 99%
					HF 99%
					PE 99%
					RE 100%
OTH 98%					
Ownership	Ownership of units in the AIF beneficially owned by investor type. See: ESMA guidelines, point 123 and Annex II.	24(2)	208-209	Mandatory (all AIFs)	Total 98%
					FoF 99%
					HF 99%
					PE 94%
					RE 97%
OTH 99%					
Redemption frequencies	Frequency of investor redemptions. In case of multiple classes of shares or units, the largest share class by NAV shall be considered. See: ESMA guidelines, point 121 and Annex II.	24(2)	194	Optional (AIFs must report if information is available)	Total 98%
					FoF 98%
					HF 99%
					PE 97%
					RE 96%
OTH 99%					
Liquidity profile – Portfolio	Portfolio liquidity profile. See: ESMA guidelines, points 118-120; Q&As Section III, 10, 11, 42 and 78.	24(2)	178-184, 186-192	Mandatory (all AIFs reporting under Article 24(2))	Total 90%
					FoF 93%
					HF 95%
					PE 88%
					RE 87%
OTH 92%					
Liquidity profile – Investor	Investor liquidity profiles. See: ESMA guidelines, points 118-120; Q&As Section III, 10, 11, 42 and 78.	24(2)	178-184, 186-192	Mandatory (all AIFs reporting under Article 24(2))	Total 89%
					FoF 92%
					HF 93%
					PE 66%
					RE 82%
OTH 92%					
Liquidity financing	Total financing amount by the longest period during which the creditor is contractually committed to providing such financing. See: Q&As Section III, 2, 67	24(2)	211-217	Optional (AIFs must report if information is available)	Total 26%
					FoF 18%
					HF 23%
					PE 32%
					RE 38%
OTH 26%					
Unencumbered cash	Value of unencumbered cash.	24(2)	185	Optional (AIFs must report if information is available)	Total 90%
					FoF 93%
					HF 94%
					PE 77%
					RE 87%
OTH 92%					
Financial leverage	Leverage created by direct borrowing of money or securities from counterparties. See: ESMA guidelines, point 124; Q&As Section III, 34, 44 and 69.	24(2) and 24(4)	283-286, 289	Optional (AIFs must report if information is available)	Total EU 43%
					FoF 47%
					HF 46%
					PE 20%
					RE 35%
OTH 47%					

Note: Main indicators and reporting template items analysed in the report. Relative coverage defined as the ratio of the total number of AIFs reporting it to the number of AIFs expected to report it. Optional items filled only when information is applicable.

Glossary

Alternative Investment Fund (AIF): An AIF is a collective investment undertaking, including investment compartments of such an undertaking, that raises capital to invest it in accordance with a defined investment policy for the benefit of investors. An AIF does not include an undertaking that requires authorisation under the UCITS directive.

Alternative Investment Fund Manager (AIFM): An AIFM is an entity that provides portfolio-management and risk-management services to one or more AIFs as its regular business, irrespective of where the AIFs are located or what legal form the AIFM takes.

AIFMD passport: The AIFMD passport allows AIFMs to manage or market AIFs across the EU, on the basis of a single authorisation in one EU Member State. Currently, only EU-authorised AIFMs managing or marketing EU-domiciled AIFs have access to the passport.

Assets under management (AuM): Under the AIFMD, AuM are defined as the value of all assets in a portfolio, including all assets acquired through the use of leverage (borrowing of cash or securities and leverage embedded in derivative positions). This concept of AuM is different from the industry approach to AuM, which typically relates to the assets of the balance sheet of the AIF.

Authorised Alternative Investment Fund Manager (AIFM): Authorised AIFMs are subject to more stringent requirements than registered AIFMs and can manage or market their AIFs across the EU.

Commitment leverage: Ratio of exposures to the NAV, where exposures are computed using the commitment approach, which takes into account netting and hedging, and adjusts IRDs by duration.

Financial leverage: The ratio of total assets to equity (NAV for funds), also called balance-sheet leverage. Financial leverage involves outright borrowing and is defined as the ratio of total assets to equity (or NAV for funds), in percentage. It can be measured by aggregating unsecured cash borrowing, the value of securities borrowed for short positions, collateralised/secured cash borrowing via prime broker, reverse repo or by other means.

Gross exposure: The absolute sum of all portfolio's positions, long and short. It includes gross notional value for derivatives. This measure provides a complete appreciation of all the leverage that is employed by a fund to gain market exposure.

Gross leverage: Leverage computed under the gross method, as indicated in Commission Delegated Regulation (EU) No 231/2013. It is expressed as the proportion of total gross exposure to NAV, in percentage. Under the gross method, exposures are calculated as the absolute value of all positions in the portfolio by including all assets and liabilities, relevant borrowings, derivatives (converted into their equivalent underlying positions) and all other positions, even those held purely for risk-reduction purposes. Cash held in the base currency of the AIF is excluded.

Interest rate derivatives (IRDs): Under the AIFMD reporting requirements, IRDs exposures are reported as the total gross notional value of the AIF's outstanding IRD contracts, including the total notional value of futures and the delta-adjusted notional value of options. For the purpose of computing the commitment leverage, IRDs are adjusted for duration.

Leverage: Ratio of fund market exposures to NAV. Market exposures can be defined according to a variety of approaches, including the gross approach and the commitment approach.

Liquidity management tools (LMTs): Provisions and techniques established by a fund manager as part of the share redemption policy for its funds. LMTs are generally communicated upfront in fund disclosure documents.

Net asset value (NAV): The net value of the assets of the AIF (as opposed to the NAV per unit or proportion of the AIF).

Registered Alternative Investment Fund Manager: Registered AIFMs are subject to lighter requirements than authorised AIFMs and do not have access to the AIFMD passport.

List of abbreviations

AIF	Alternative Investment Fund
AIFM	Alternative Investment Fund Manager
AIFMD	Alternative Investment Fund Manager Directive
AuM	Assets under Management
CIU	Collective Investment Undertakings
CLO	Collateralised Loan Obligation
CRE	Commercial Real Estate
CTA	Commodity Trading Advisor
ECB	European Central Bank
EEA	European Economic Area
EFAMA	European Fund and Asset Management Association
ESCB	European System of Central Banks
ESMA	European Securities and Markets Authority
ESRB	European Systemic Risk Board
ETF	Exchange-traded fund
FoF	Fund of Funds
HF	Hedge Funds
IOSCO	International Organization of Securities Commissions
IRD	Interest Rate Derivative
ISIN	International Securities Identification Number
LEI	Legal Entity Identifier
LMT	Liquidity management tools
MMF	Money Market Fund
NAV	Net asset value
NCA	National Competent Authority
NPPR	National Private Placement Regime
PE	Private Equity
PA	Physical Assets
pp	percentage point
QIF	Qualifying investor fund
RE	Real Estate
S	Securities
UCITS	Undertakings for the Collective Investment in Transferable Securities

