

UCITS Risk Reporting

1 July to 31 December 2018

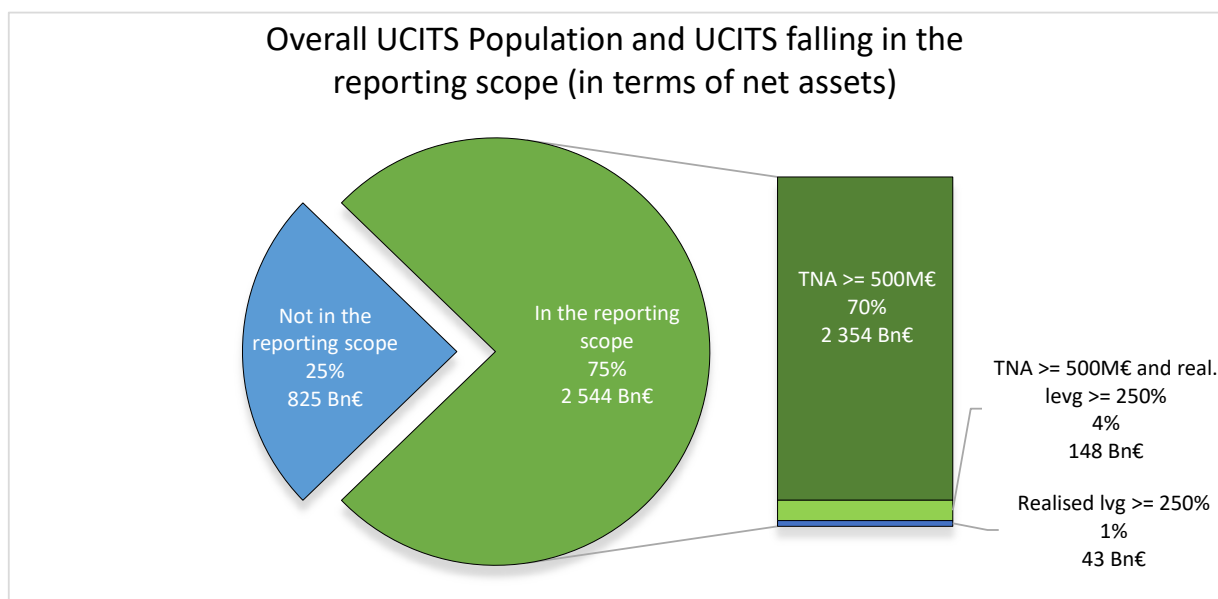
UCITS Risk Reporting - 31 December 2018

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1 - General description of the population

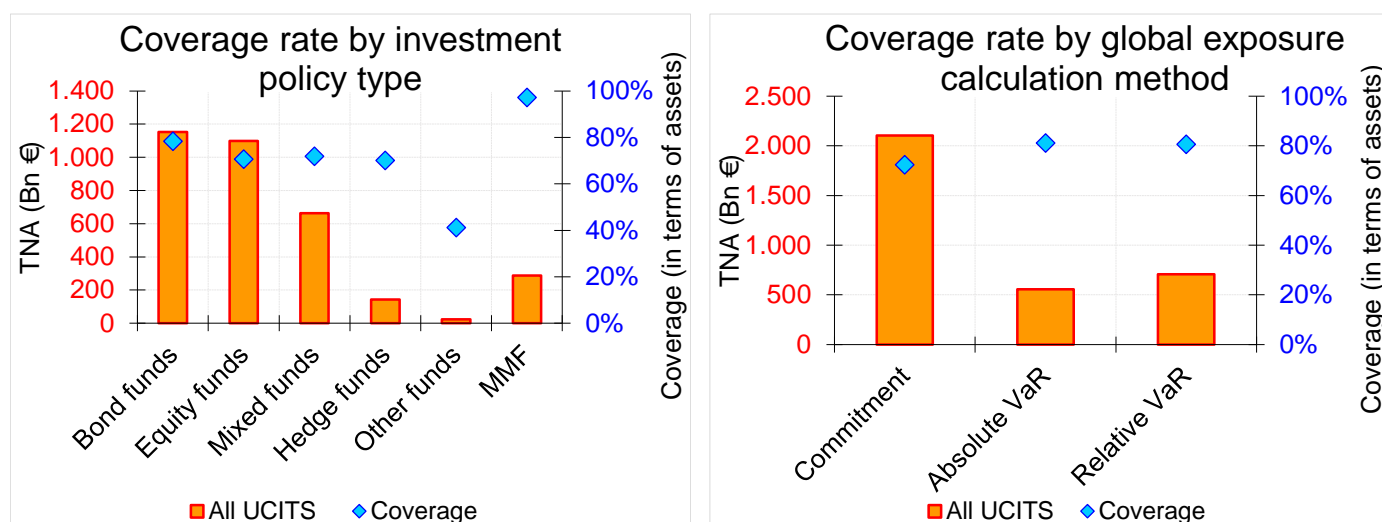
1.1 - Overall UCITS population and full reporting scope



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

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

1.2 - Coverage rate by investment policy type³ and by global exposure calculation method



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

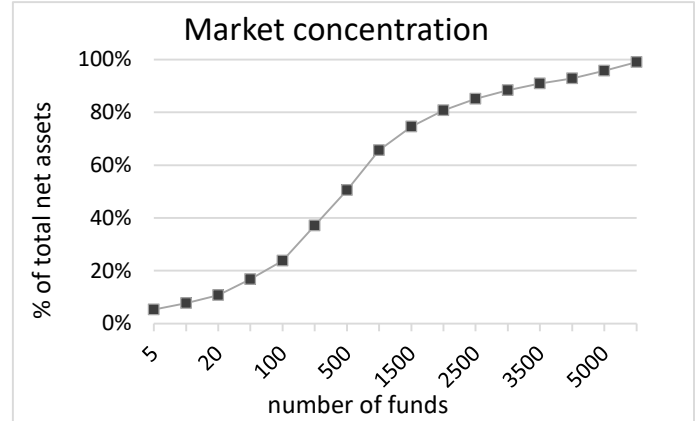
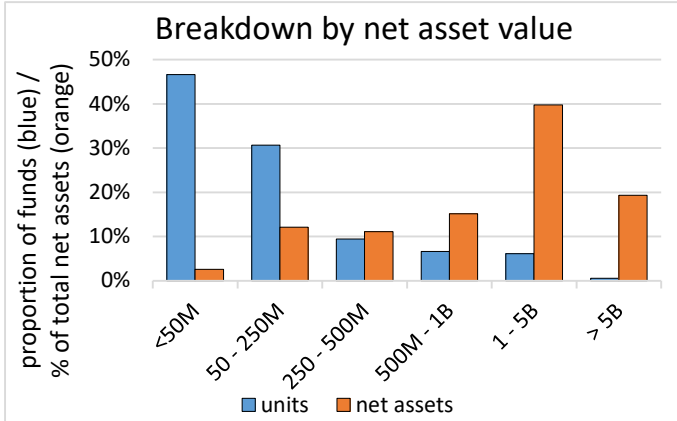
² In accordance with the rules set out in the applicable regulation, the gross leverage is calculated as the notional sum of the derivatives used.

³ Fund classifications are based on the BCL investment policy types. The category “Hedge funds” includes funds that implement alternative strategies while respecting the UCITS regulatory framework (often referred to as “liquid alternative funds”).

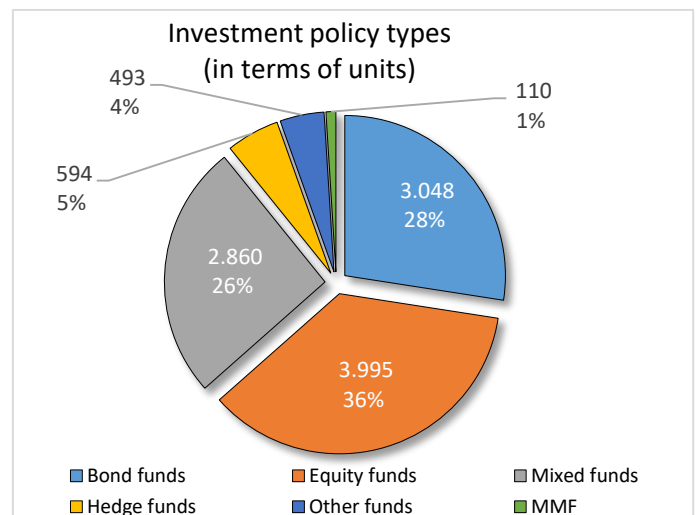
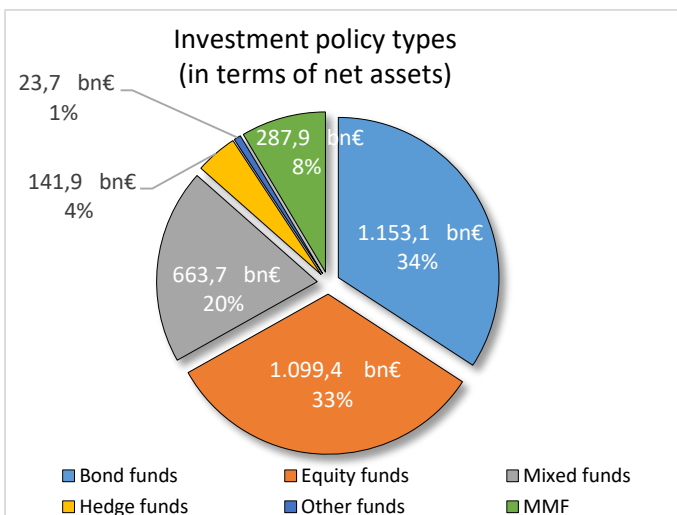
2 - Overall UCITS population

2.1 - Main characteristics

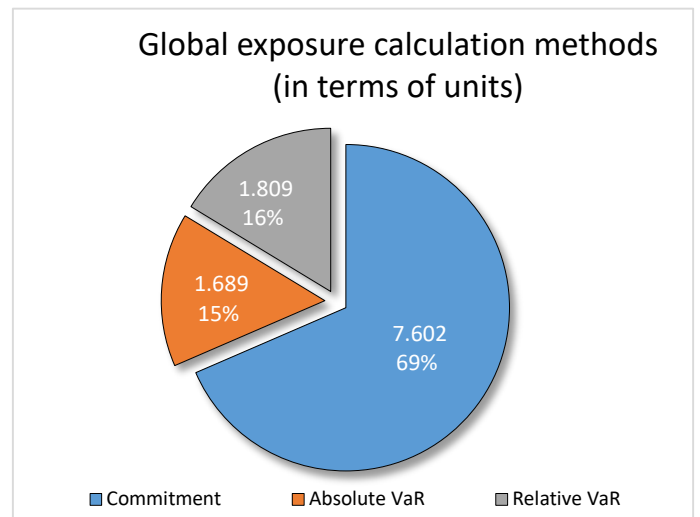
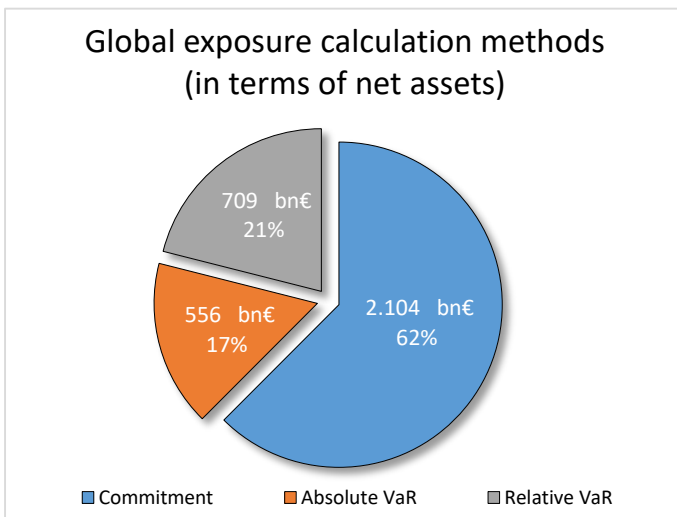
a) Net assets



b) Investment policy types

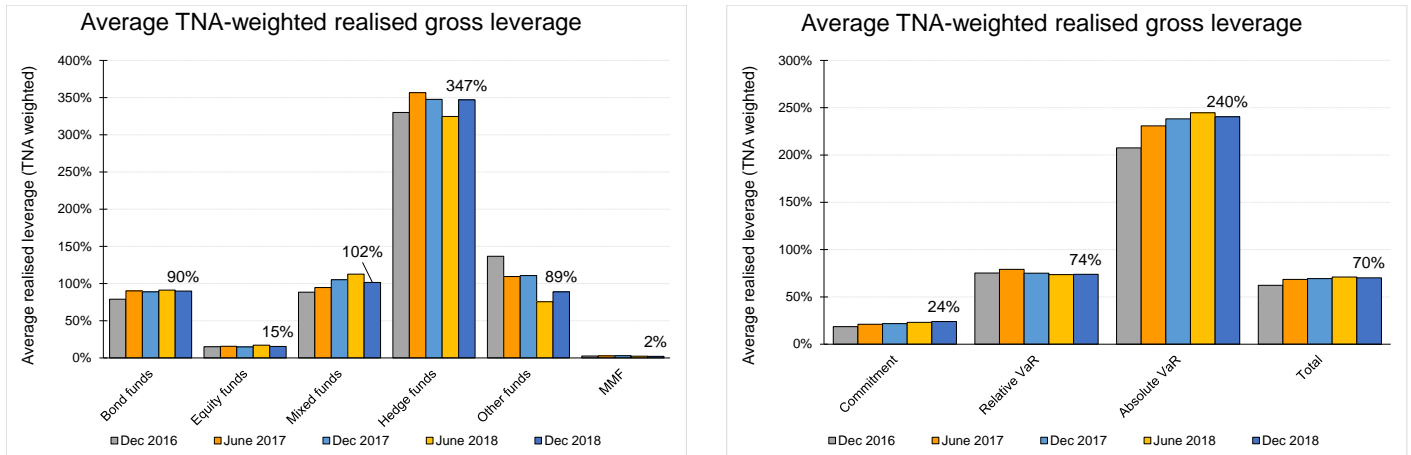


c) Global Exposure calculation methods



2. 2 - Realised leverage

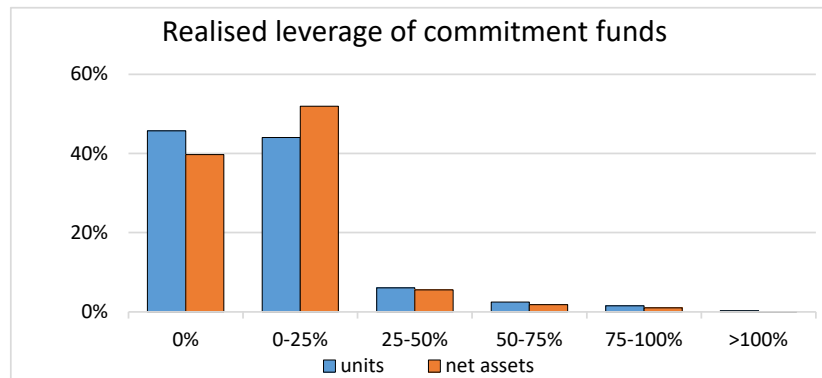
a) Realised gross leverage by investment policy type and by global exposure calculation method (all UCITS)



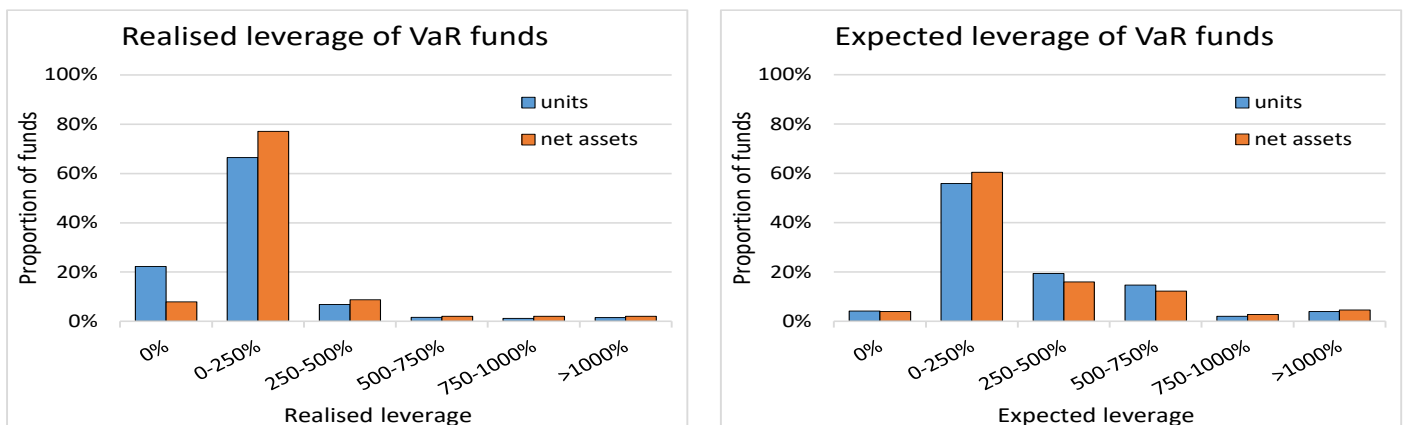
Methodology note : for the purpose of this sub-section, the realised leverage level is

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

b) Funds under the commitment approach



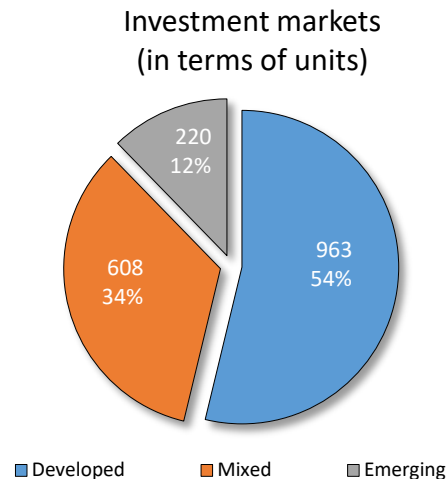
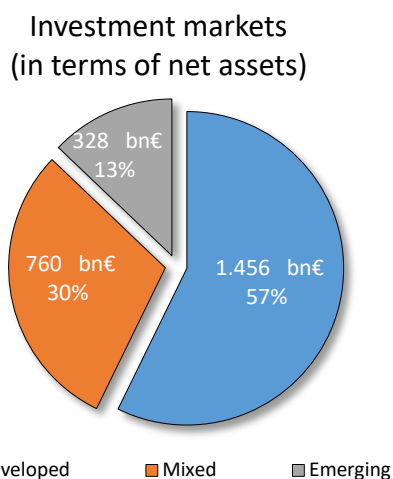
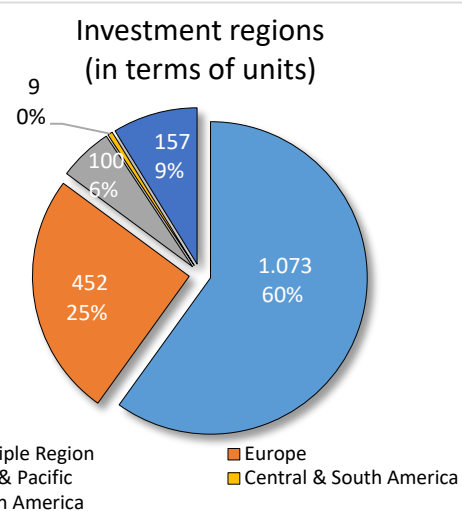
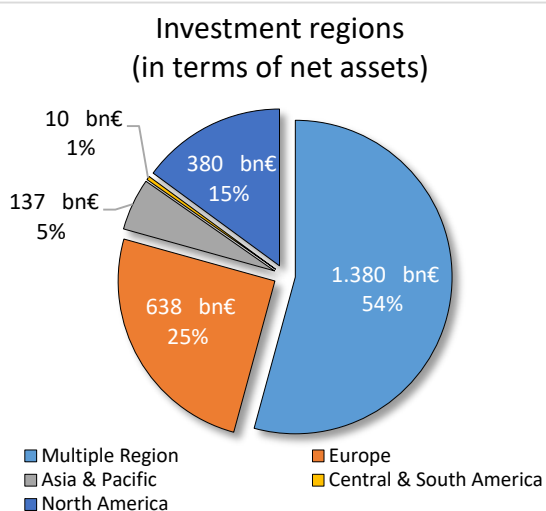
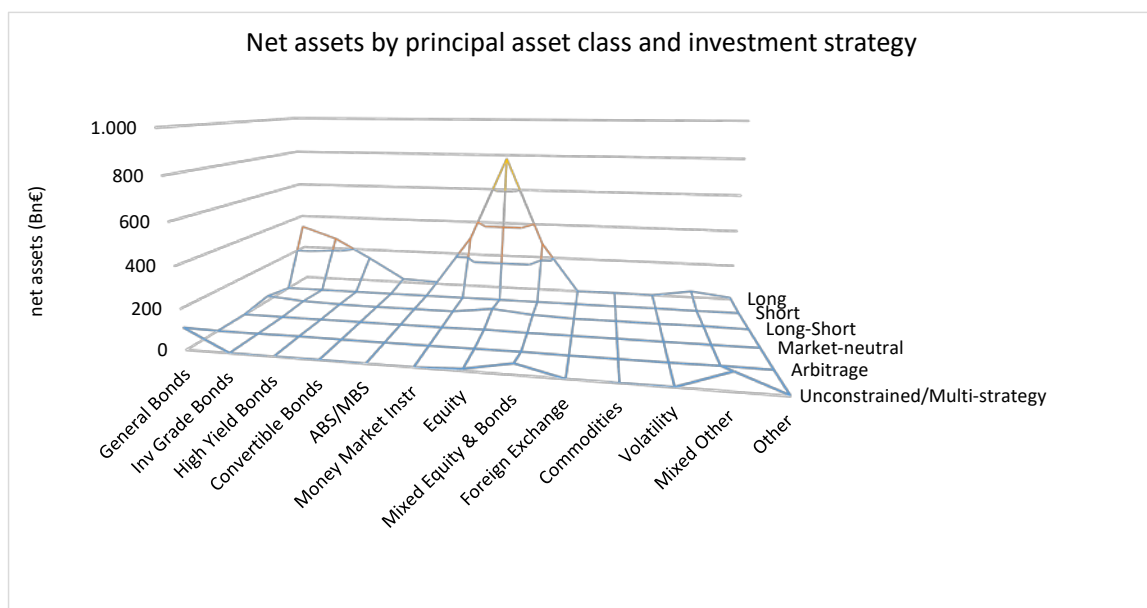
c) Funds under the VaR approach⁴



⁴ By convention, where several levels of leverage are disclosed in the prospectus (for example an expected and a maximum or a range with minimum and maximum), the expected gross leverage reported in this analysis is based on the highest number.

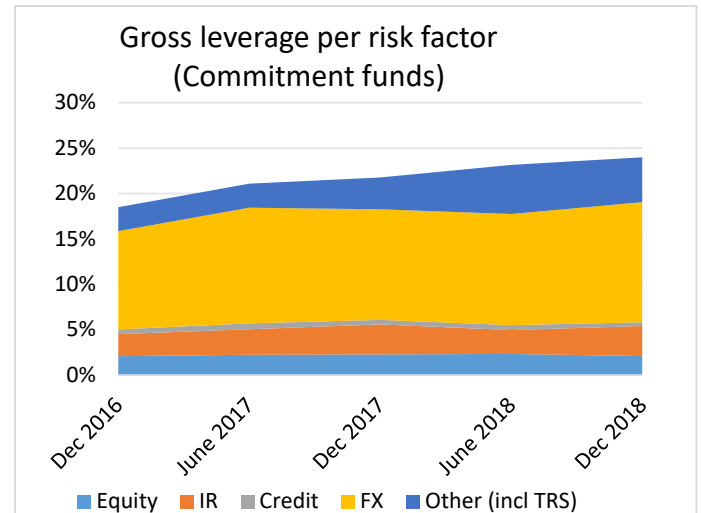
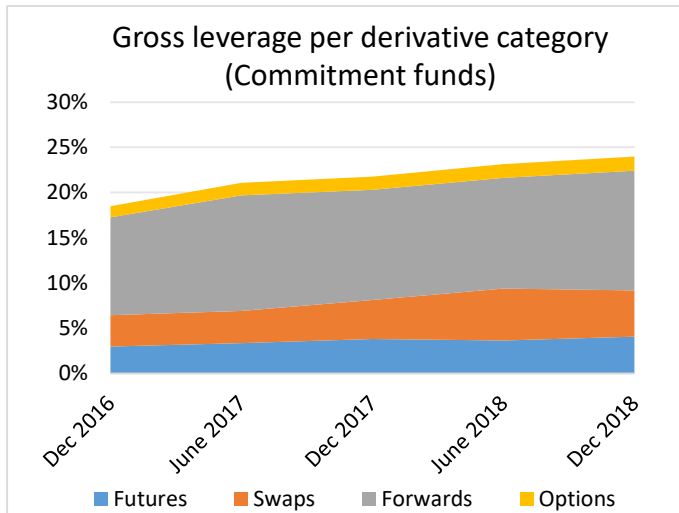
3 - UCITS in the full reporting scope

3.1 - Main characteristics

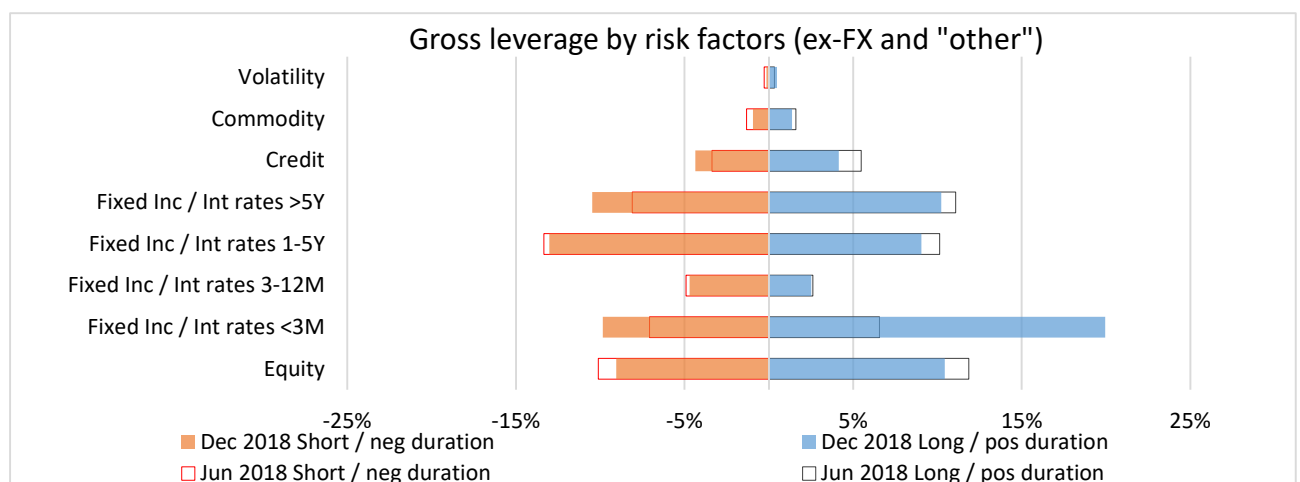
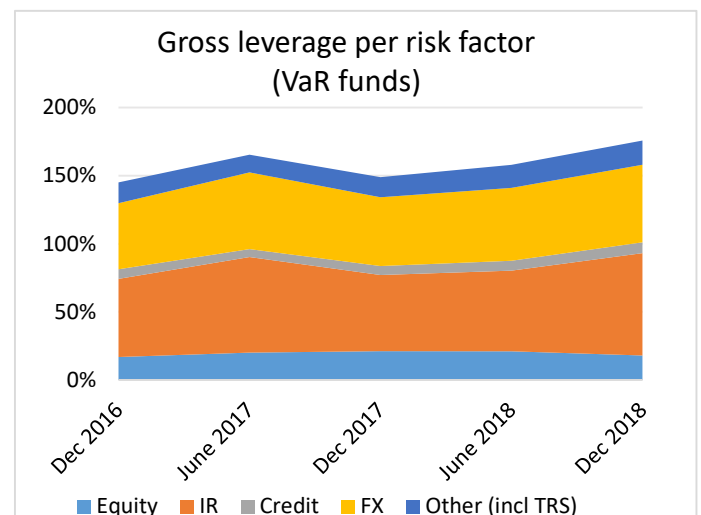
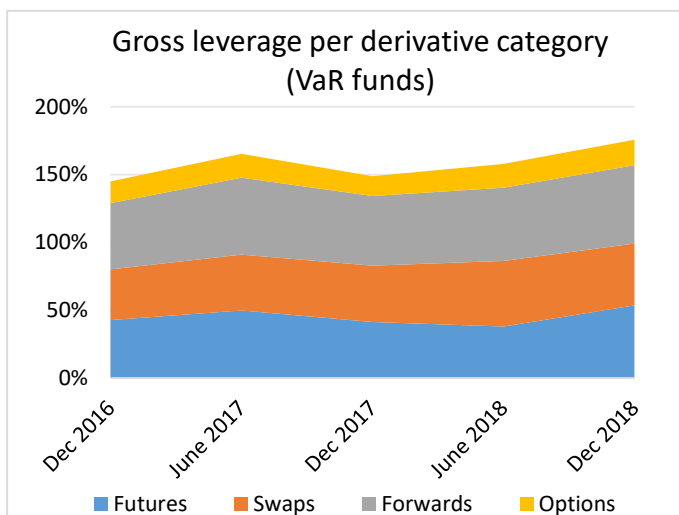


3.2 - Global exposure and leverage

a) Funds under the Commitment approach

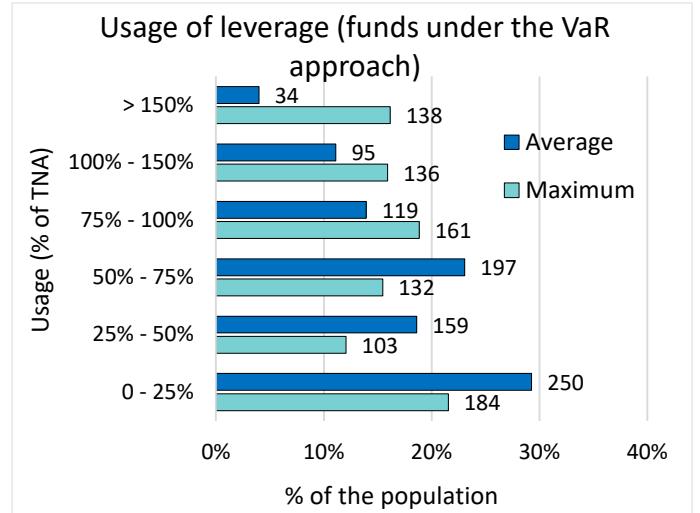
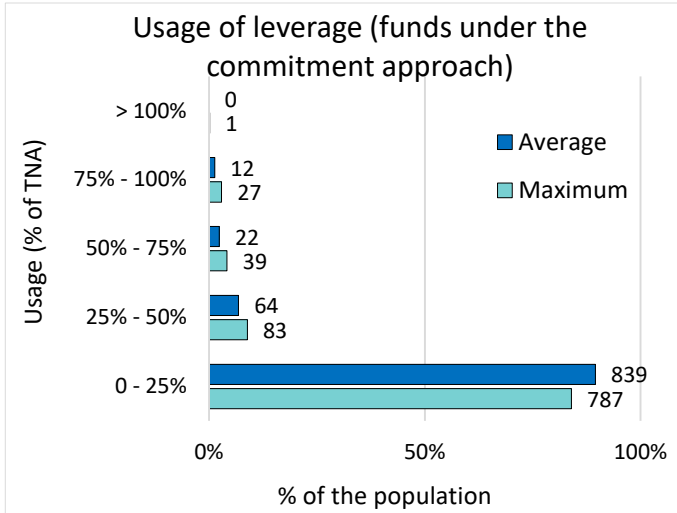


b) Funds under the VaR approach

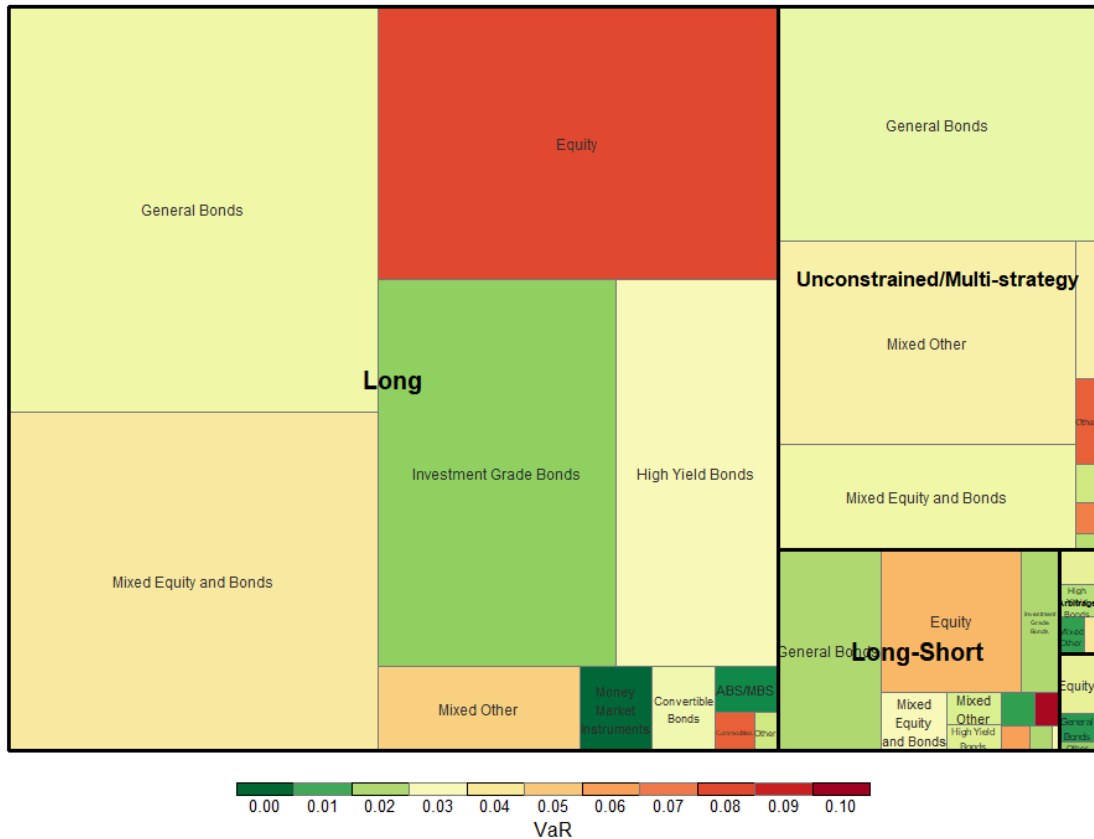


Note: As per the guidelines, “positive” interest rate and credit spread duration correspond to long exposure on bonds. It represents exposures such as fixed rate receiver of an IRS or protection seller of a CDS.

c) Usage of leverage⁵



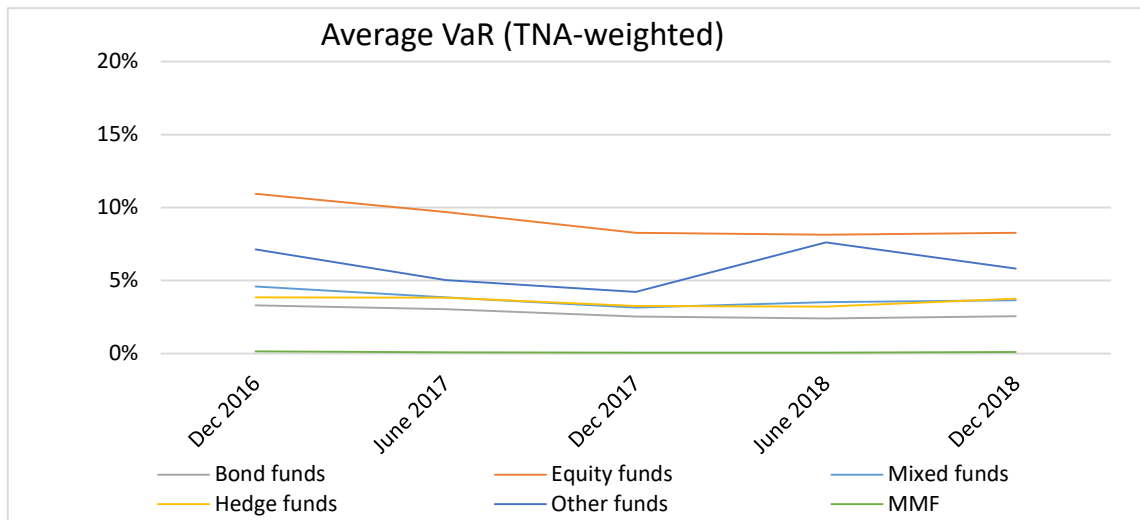
d) Value-at-Risk (VaR)⁶

Net assets and average TNA-weighted VaR by principal asset class and principal investment strategy⁷

⁵ For the purpose of this report, the usage of leverage is defined as the ratio of the realised to the regulatory limit for funds under the commitment approach, respectively the ratio of the realised to the expected level of gross leverage disclosed in the prospectus for funds under the VaR approach.

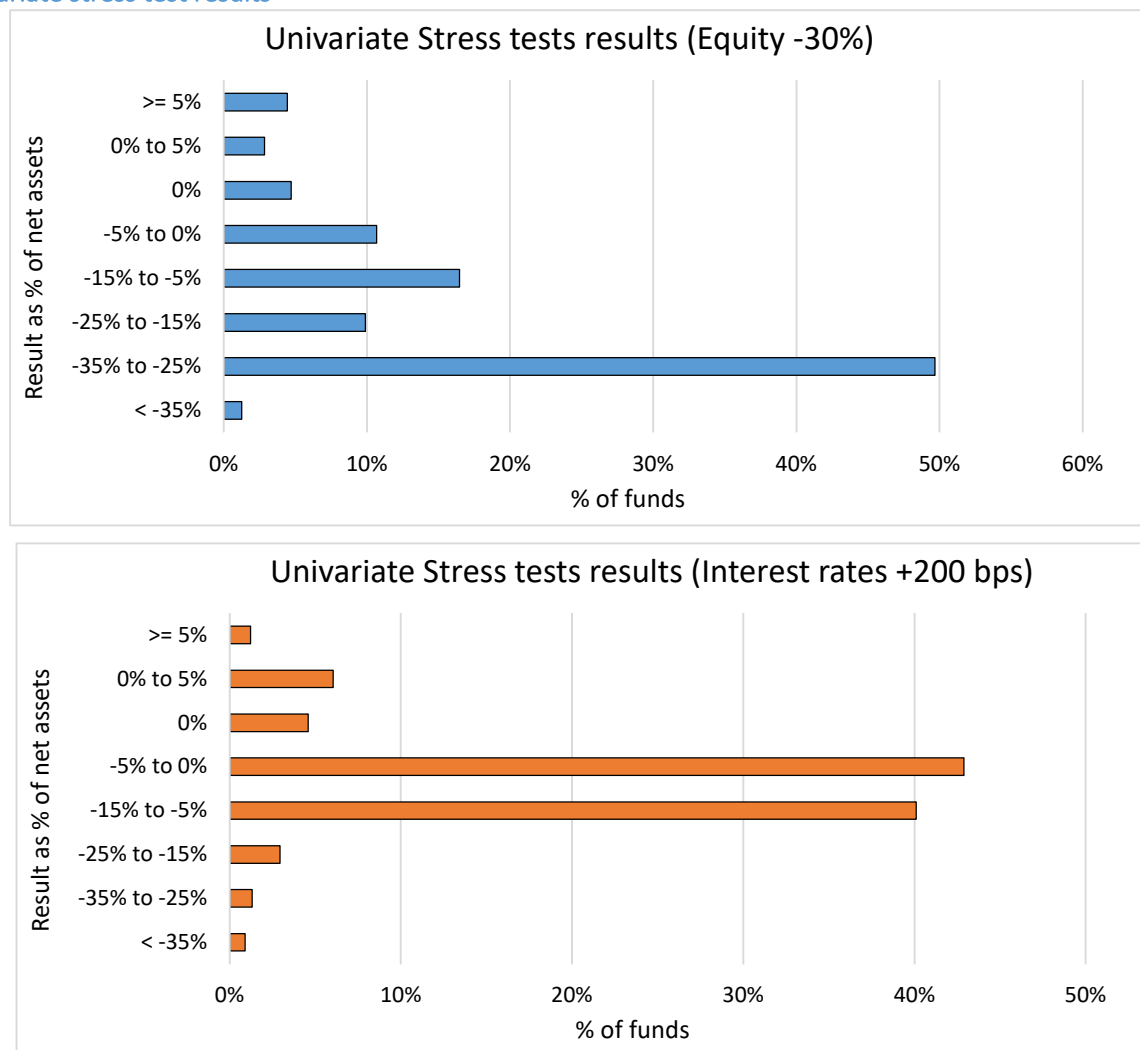
⁶ Value-at-risk for a confidence interval of 99% and holding period of 1 month (20 days). For the avoidance of doubt, the graph is based on the absolute VaR levels of both UCITS under an absolute and a relative VaR approach.

⁷ In the “heatmap” graph each fund category is represented by a rectangle whose size is proportional to its net assets and whose colour reflects its average absolute VaR.

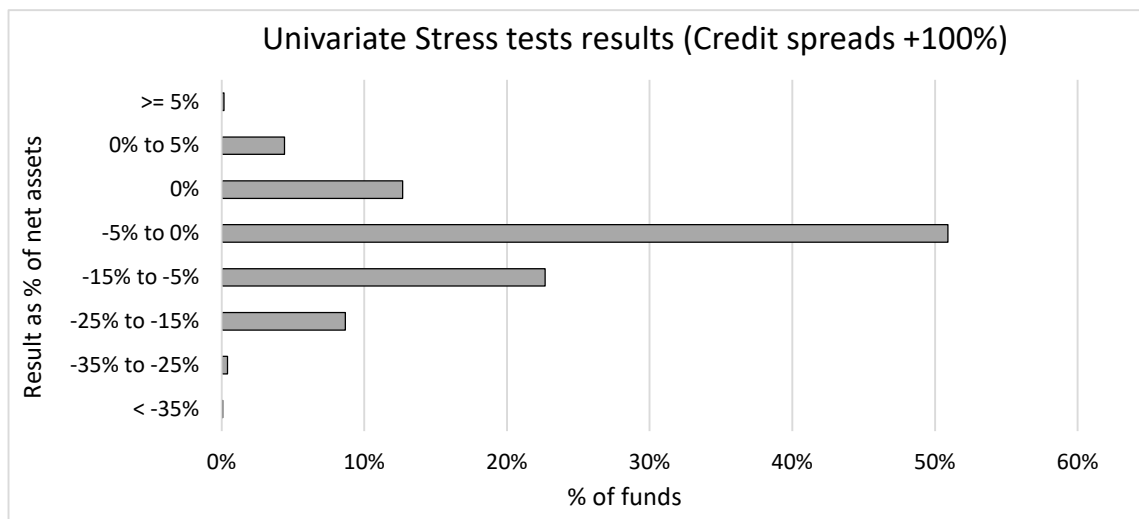


3.3 - Stress testing and other risk indicators

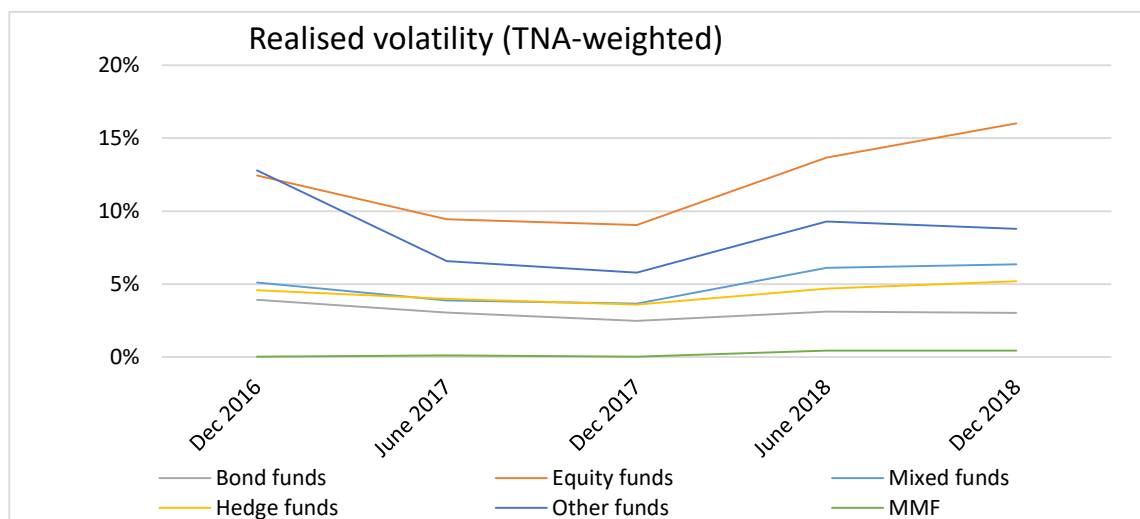
a) Univariate stress test results⁸



⁸ As set out in the guidelines, the univariate stress test results should not take into account dependencies/correlations between risk factors. For the sake of readability, Bond funds and MMF (resp. Equity funds) are excluded from the graph illustrating the univariate stress test on equities (resp. on interest rates and on credit spreads).

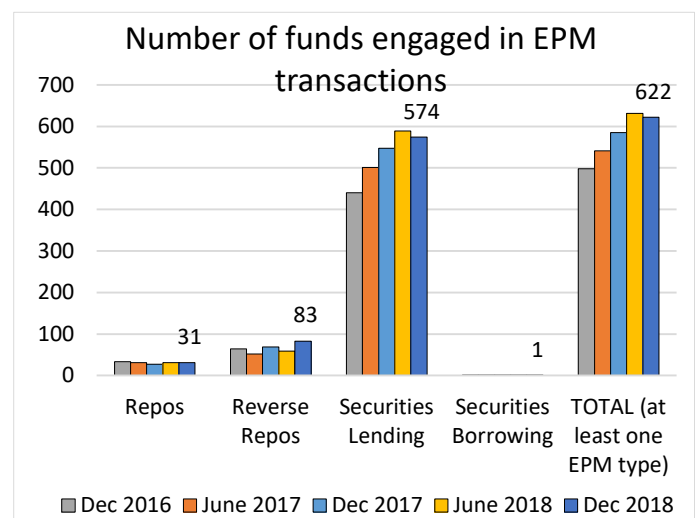
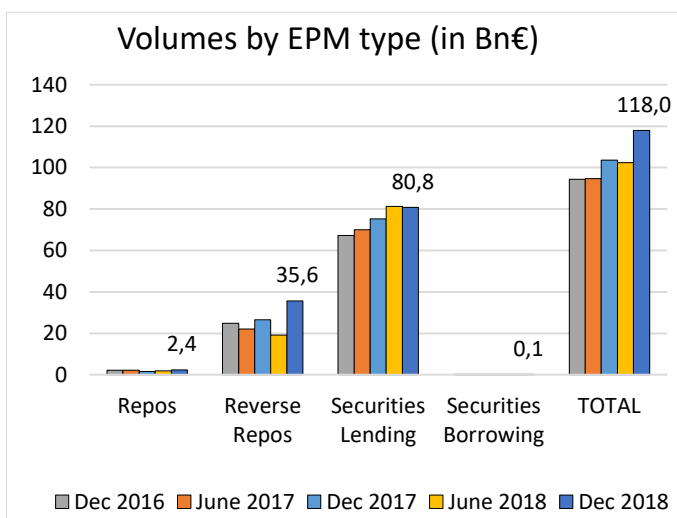


b) Realised volatility

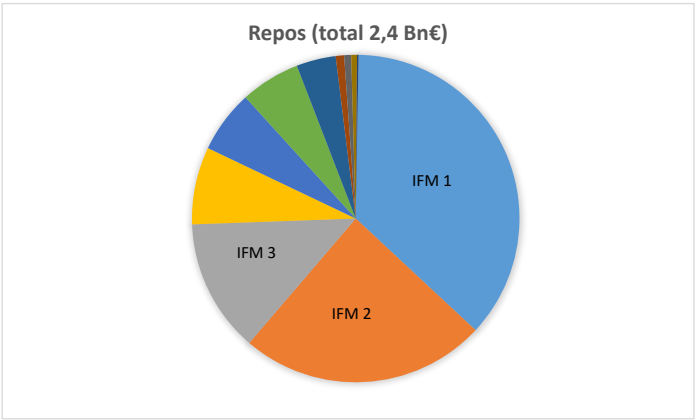
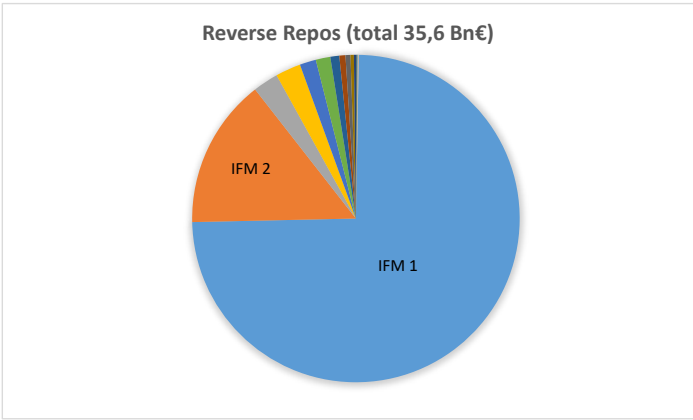
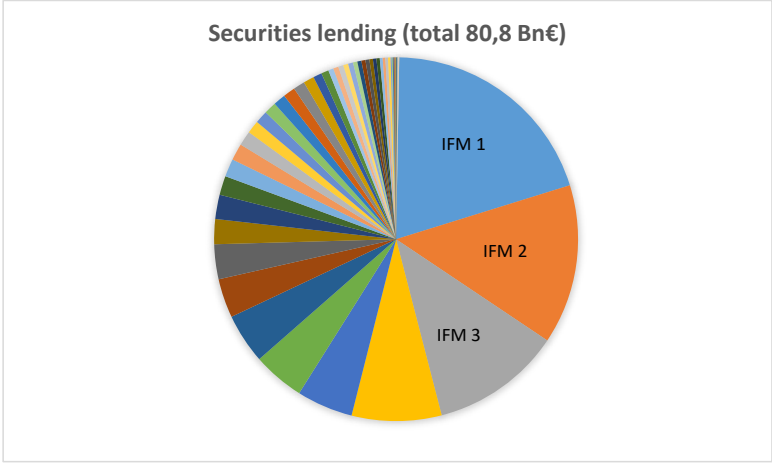


3.4 - Efficient portfolio management (EPM) techniques

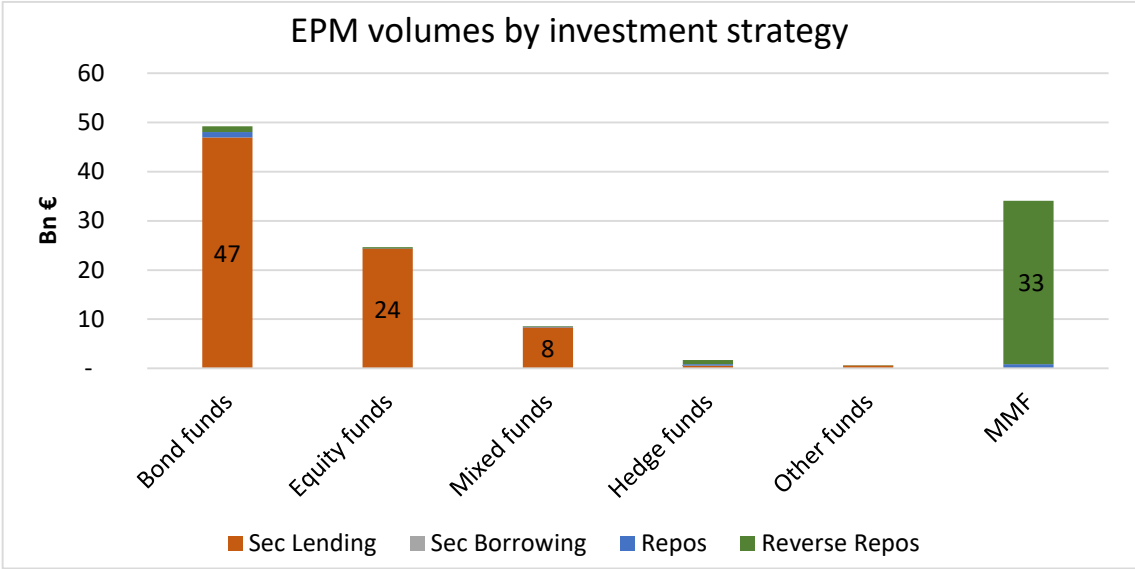
a) Evolution of volumes and number of active funds by EPM type



b) Main active Investment Fund Managers (IFMs) per EPM type⁹

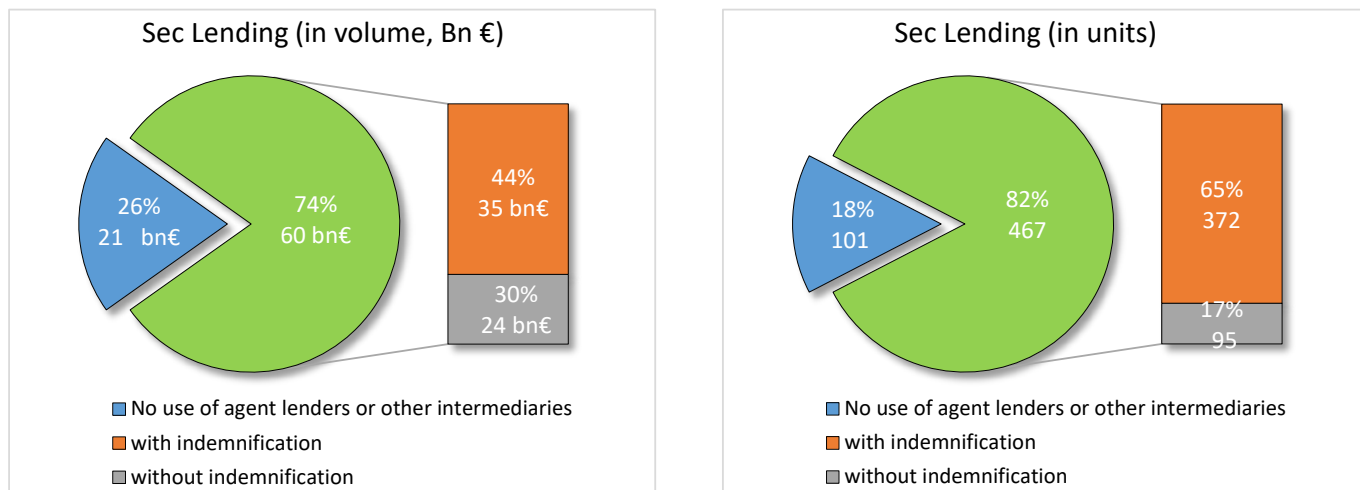


c) EPM volumes by investment strategy

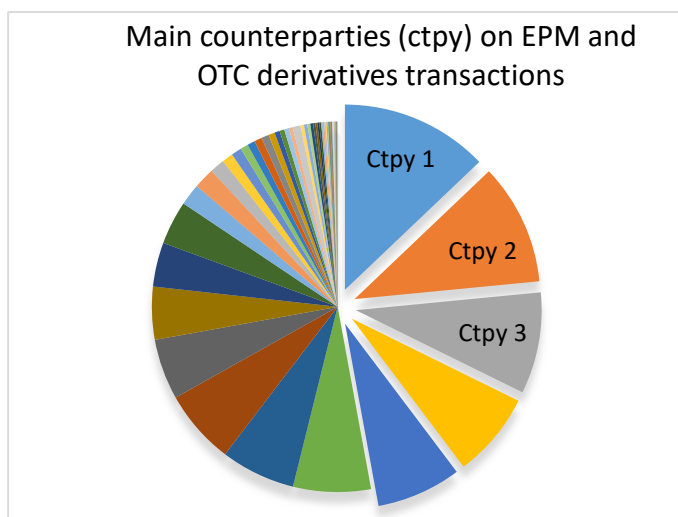
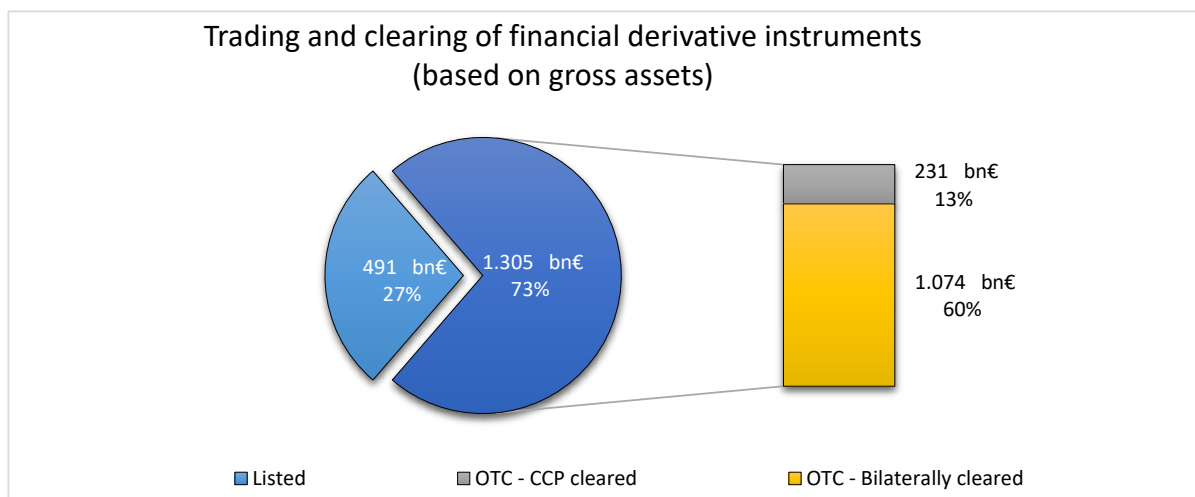


⁹ The graphs represent the IFMs with the largest aggregate UCITS exposures arising from the use of EPM transactions at semester-end.

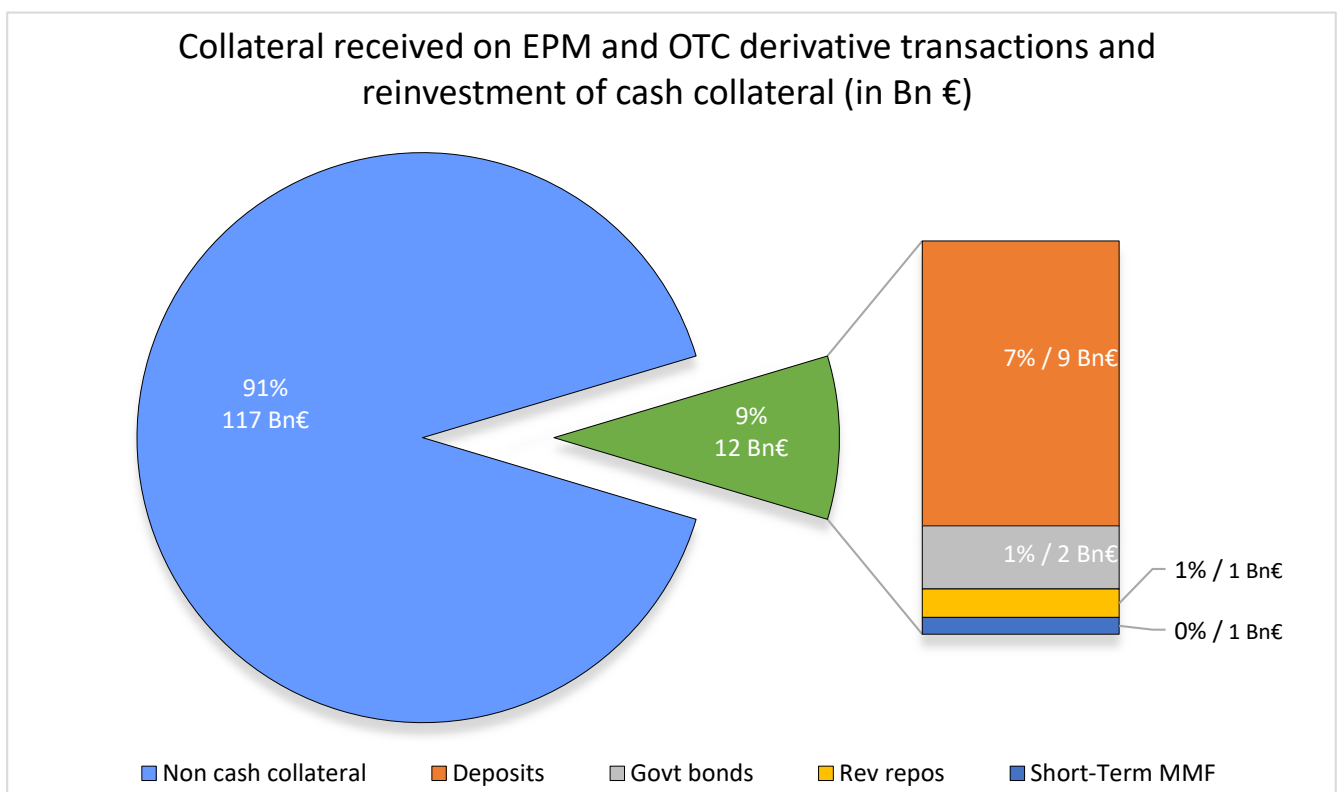
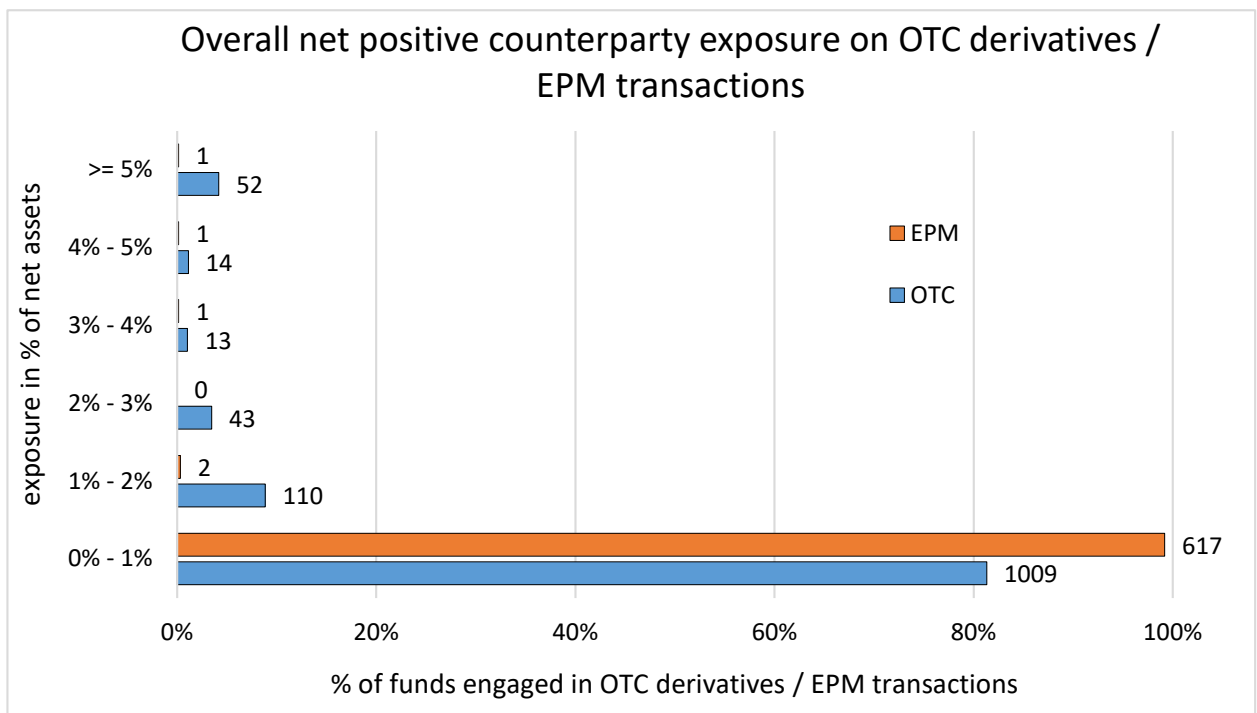
d) Securities Lending: Use of Agent lenders & indemnification against borrower default



3.5 - Counterparty risk and collateral in relation to EPM techniques / OTC and traded derivatives

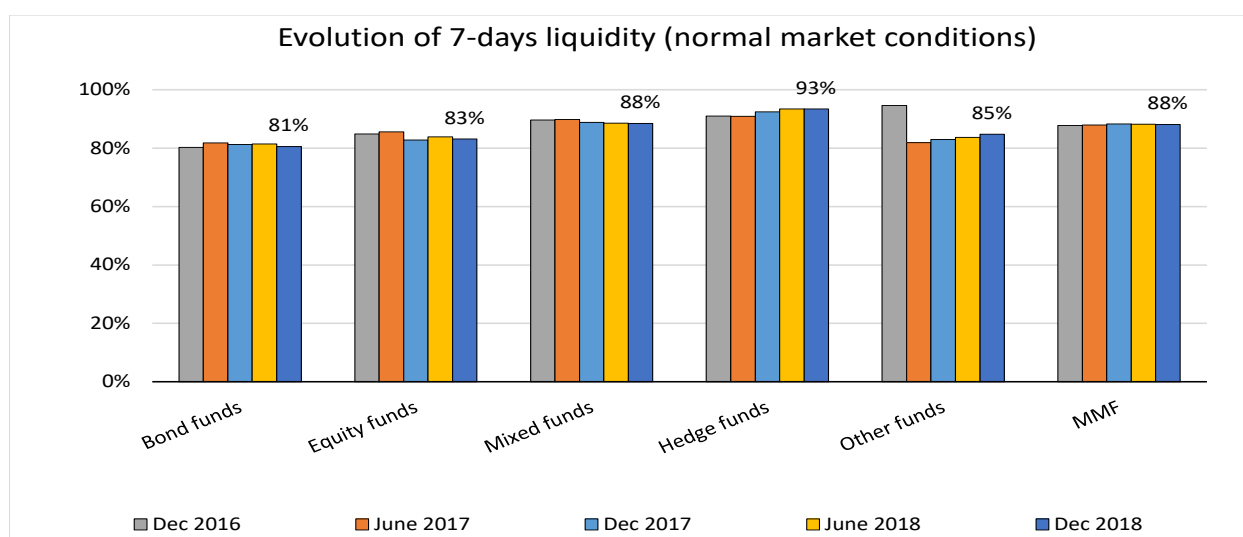
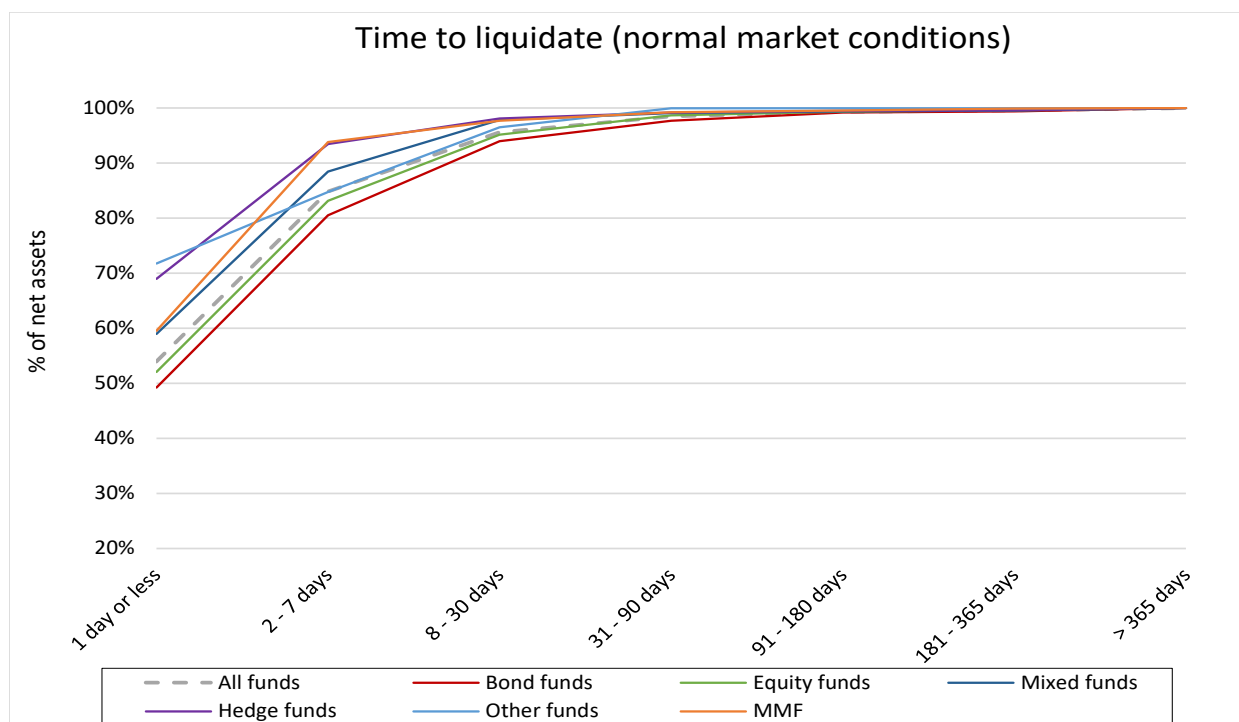


Methodology note: The graph represents the biggest counterparties of UCITS in terms of (positive and negative) net counterparty exposure of UCITS in the full reporting scope. More specifically, the main counterparties are determined based on the sum of the absolute values of the net exposures of all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



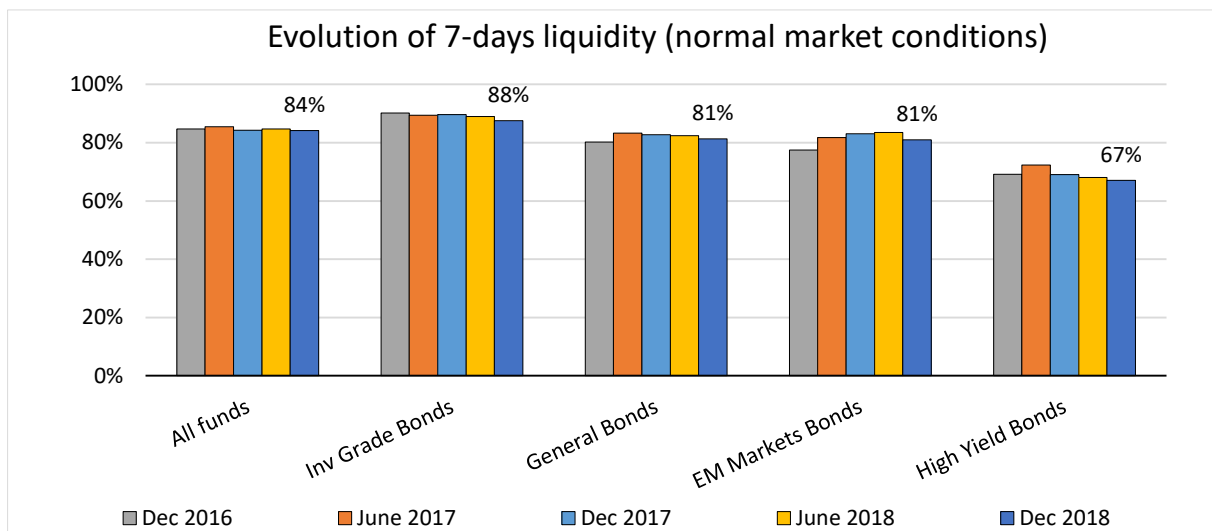
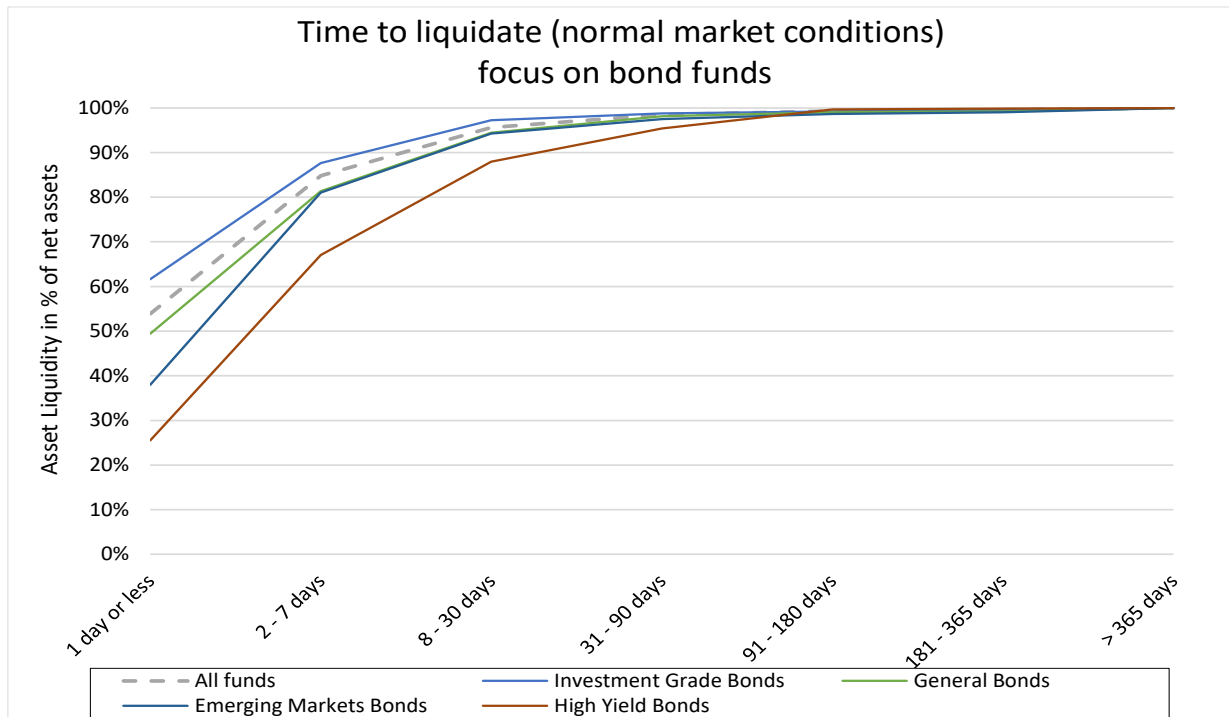
3.6 - Liquidity

a) Portfolio liquidity at semester-end in normal market conditions¹⁰

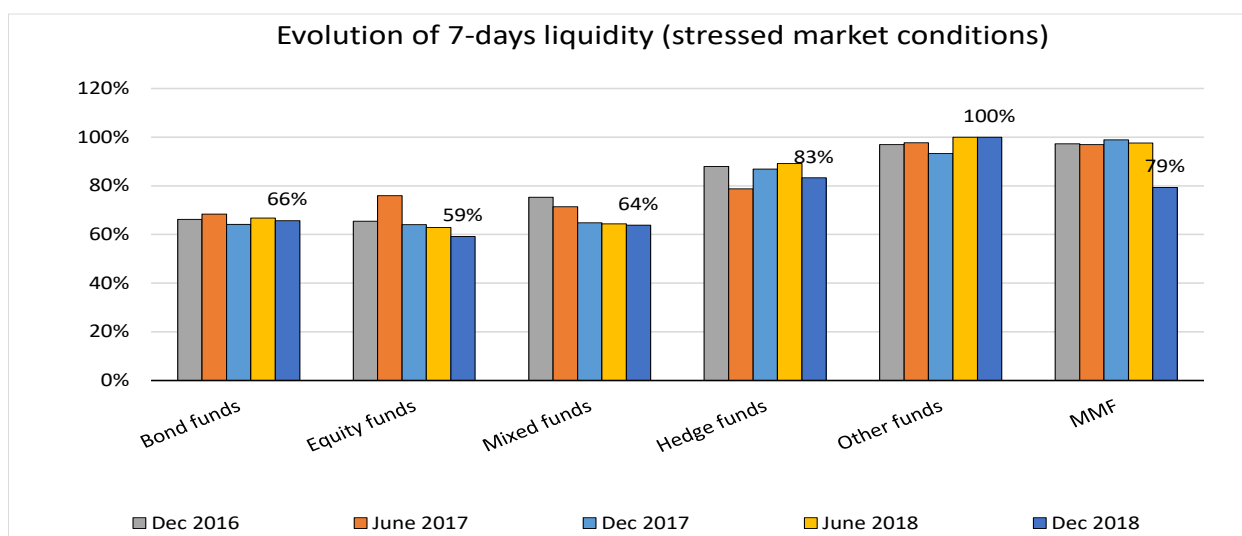
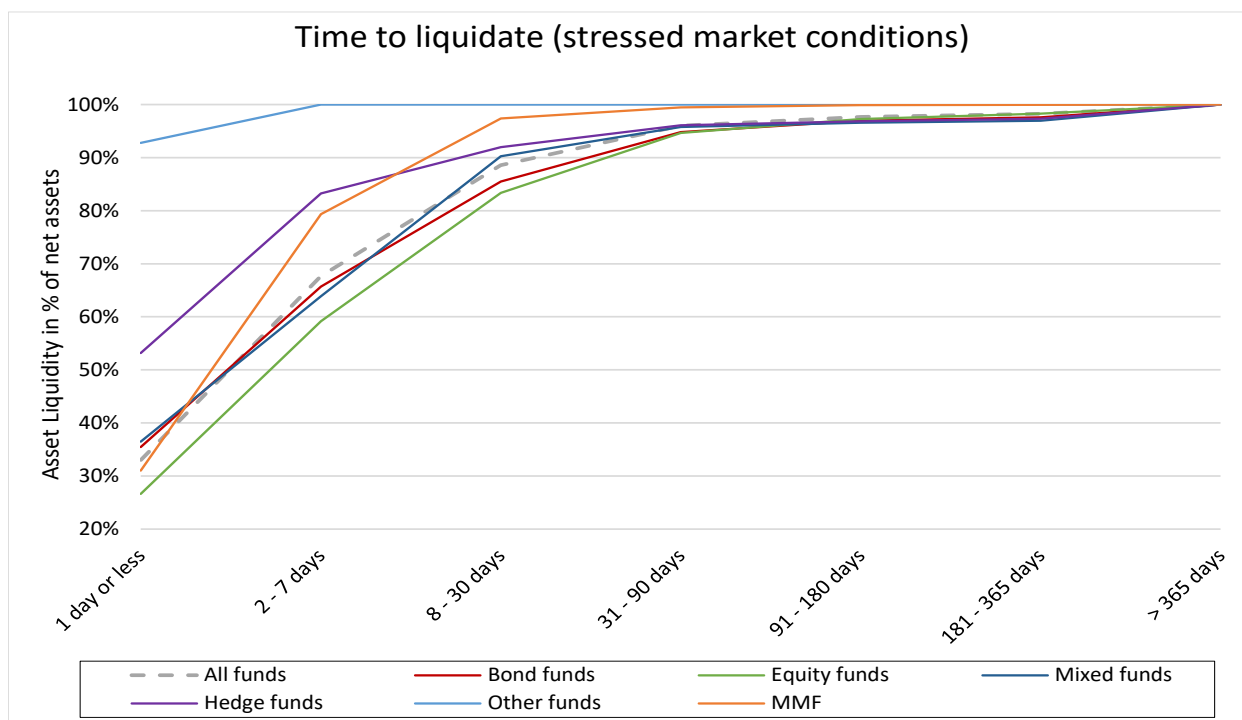


¹⁰ The figures are based on the self-assessment of the IFMs on the time to liquidate of their funds under normal market conditions and appear relatively over-optimistic.

b) Portfolio liquidity at semester-end in normal market conditions (bond funds)

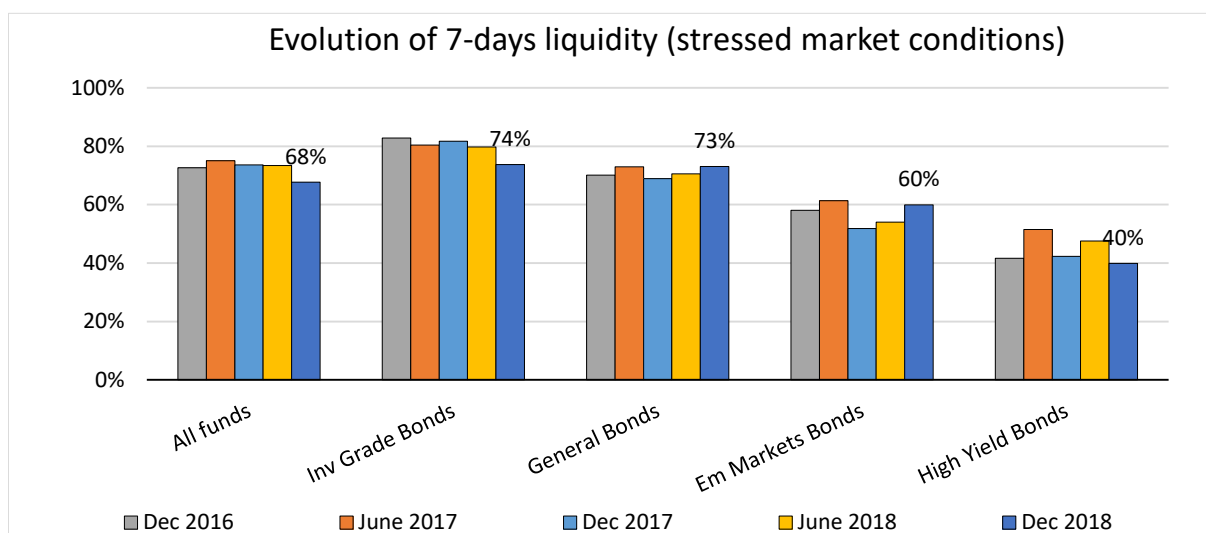
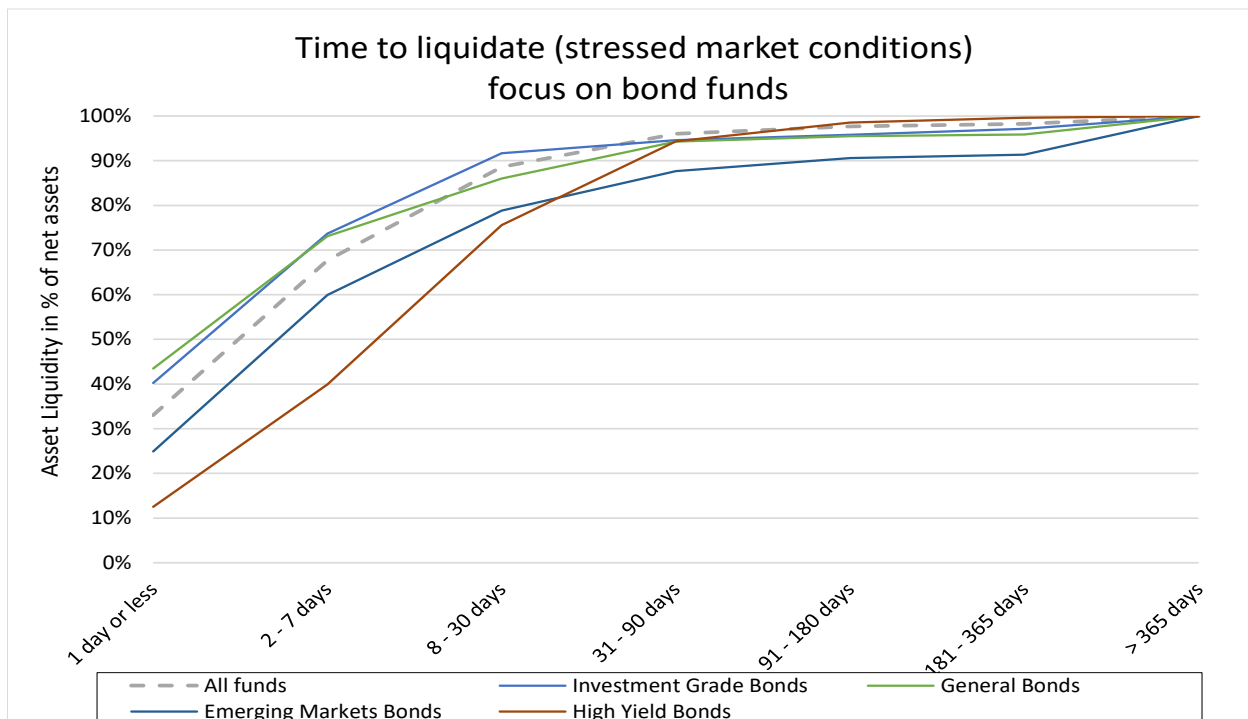


c) Portfolio liquidity at semester-end in stressed market conditions¹¹

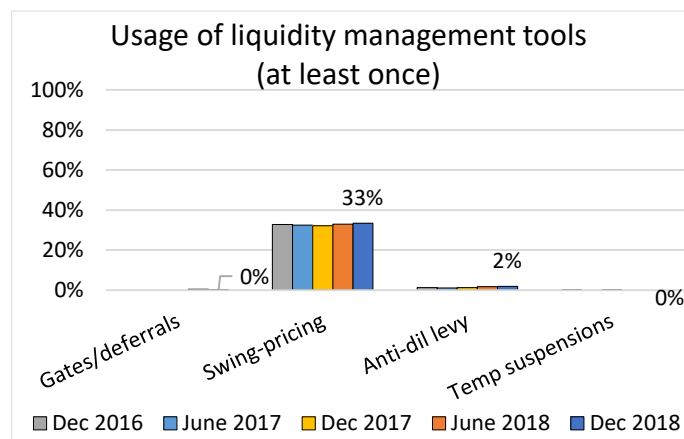
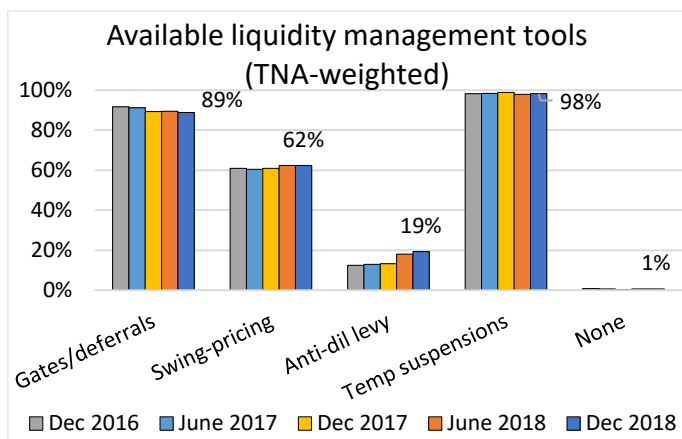


¹¹ As per the guidelines, this sub-section is optional and was filled in by a minority of funds (about 25% of the full reporting scope, more specifically in terms of number of funds per category: 254 Bond, 158 Equity, 68 Mixed, 40 Hedge, 3 Other and 20 MMF funds). It is critical to stress that the results are based on different methodologies and/or assumptions.

d) Portfolio liquidity at semester-end in stressed market conditions (bond funds)

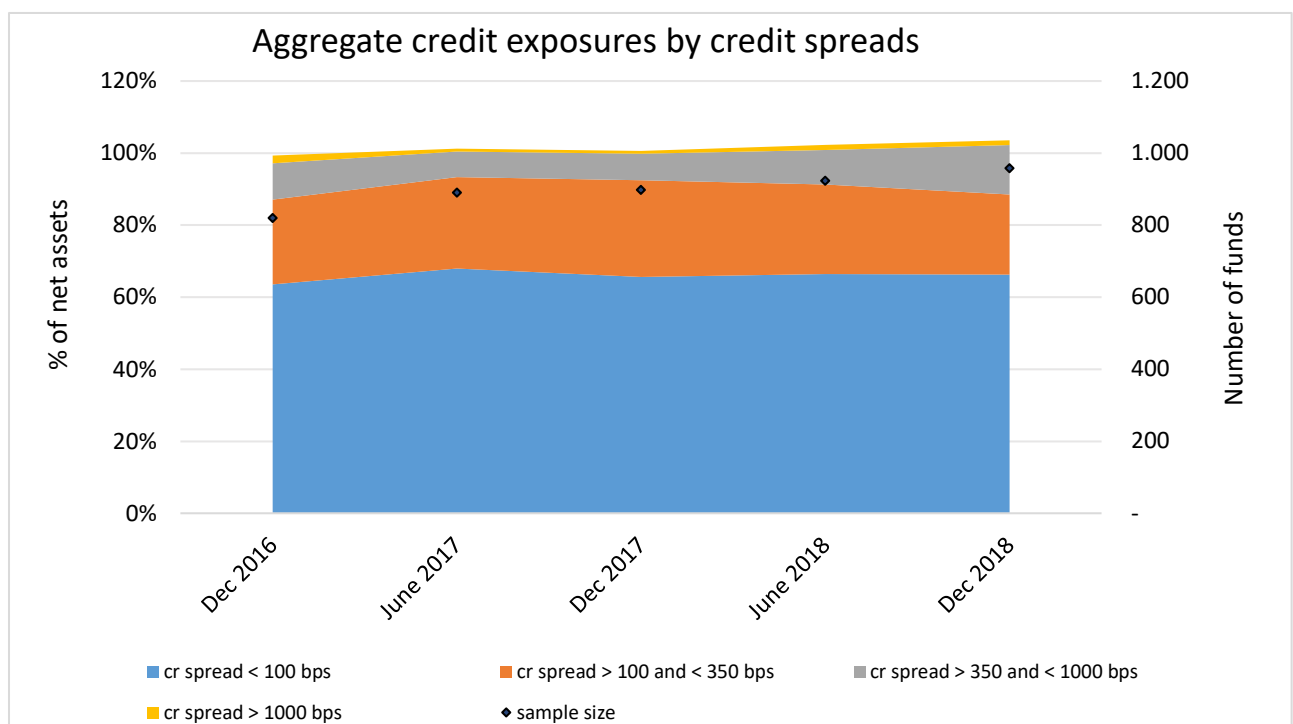
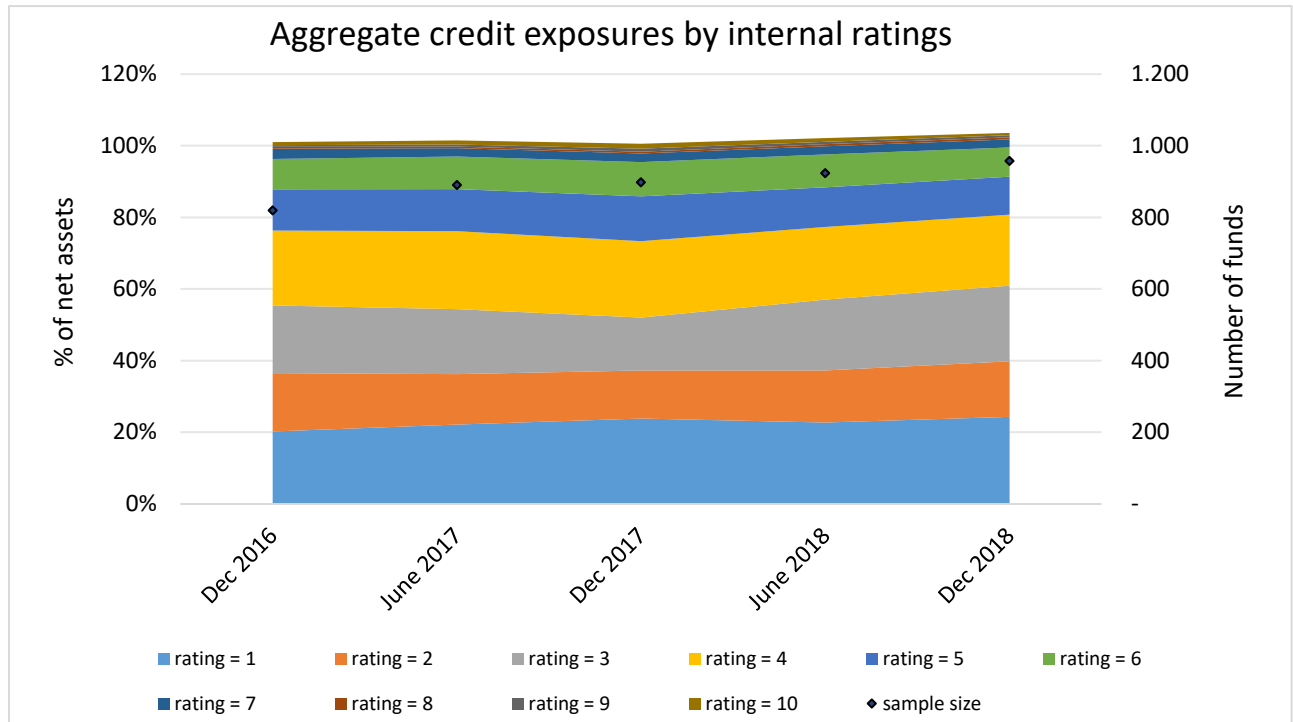


e) Liquidity Management Tools



3.7 – Credit

a) Aggregate credit exposure by internal ratings¹² and by credit spreads¹³



¹² As per the guidelines, exposures to debt securities should be broken down by credit rating from 1 to 10 with reference to an internal assessment of the credit quality of the said instruments, whereby rating 1 is deemed to be the upper credit rating (i.e. the highest quality) and 10 relates to defaulted securities.

¹³ According to the guidelines, this sub-section is only applicable, with a few exceptions (e.g. funds of funds), to UCITS within the full reporting scope which have a total debt portfolio exposure (direct or indirect) at semester-end greater than or equal to 50% of the UCITS total net assets.