

NOVEMBER 2021 OVERVIEW AND INVENTORY OF FRENCH FUNDS' LIQUIDITY MANAGEMENT TOOLS: DYNAMIC VIEW SINCE 2017 AND UPDATE AS AT MID-2021

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ABSTRACT:

This article presents an update of the analysis of French-domiciled funds' prospectuses carried out jointly by the Autorité des marchés financiers and the Banque de France (Darpeix, LeMoign, Même, Novakovic, 2020). The first contribution of this new study is to bring a time dimension to the study of the deployment of liquidity management tools in investment funds since the implementation of the recommendations of the Financial Stability Board (2017) and of the International Organization of Securities Commissions (2018). These tools, introduced into the French regulatory framework, are a response to the financial stability issues that have been identified concerning liquidity in investment funds around the world.

The second contribution of this article is to allow for a granular assessment of LMTs' uptake, by fund type and according to various fund characteristics (funds serving as units for unit-linked insurance products, employee savings funds, ETFs, regulatory nature – UCITS or AIFs) via merges with other databases.

The main result from this article is that even if a progression of the deployment is indeed observed in certain categories of funds, there is still to this day a significant margin of improvement for the liquidity management tools to become a market standard for French investment funds.

Keywords: Investment fund, prospectus, Liquidity Management Tools, text-mining.

JEL Classification: G23

RÉSUMÉ :

Cet article présente une mise à jour de l'analyse de la base de prospectus des fonds de droit français menée conjointement par l'Autorité des marchés financiers et la Banque de France (Darpeix, LeMoign, Même, Novakovic, 2020). Le premier apport de cette étude est d'apporter une dimension temporelle à l'étude du déploiement des outils de gestion de liquidité dans les fonds d'investissement depuis la mise en place des recommandations du Conseil de Stabilité Financière (2017) et de l'Organisation Internationale des Commissions de Valeurs (2018). Ces outils, introduits dans le cadre réglementaire français, sont une réponse aux enjeux de stabilité financière qui ont été identifiés concernant la liquidité dans les fonds d'investissement dans le monde.

Le second apport de cet article est de pouvoir étudier ce déploiement de manière granulaire, par catégorie et caractéristiques des fonds (fonds plus ou moins dédié à la gestion de produits en unité de compte, fonds d'épargne salariale, ETF, nature règlementaire – OPCVM ou FIA) via des recoupements avec d'autres bases de données.

Il faut retenir de cet article que même si une progression du déploiement s'observe effectivement dans certaines catégories de fonds, il reste encore à ce jour une marge de progression importante pour que les outils de gestion de liquidité deviennent un standard de marché pour les fonds d'investissement français.

Mots-clés : fonds d'investissement, prospectus, outils de gestion de liquidité, recherche textuelle.

Classification JEL : G23

This article reflects the opinions of its authors, and does not necessarily express the views of the AMF or to those of the Banque de France. It is published in parallel and simultaneously in the Banque de France *Working Papers* series, as n°845.



NON TECHNICAL SUMMARY:

In July 2020, the Banque de France and the AMF published a joint study on the liquidity management tools (LMTs) of French funds.¹ The primary objective was to describe as precisely as possible the regulatory framework applicable to the various LMTs and to explain how they work. Secondly, the study presented an original method for automated reading of fund prospectuses aimed at identifying, via a textual search (a.k.a. text-mining), the funds that were equipped with LMTs. The program had been run on an exhaustive database of prospectuses of French funds that were live on 31 December 2019. Extraction of classification and net asset data based on regulatory reports had made it possible to refine the analysis (i.e. provide an analysis by volume and a detailed analysis according to the main asset classes in the portfolio).

In June 2021, a fresh study combined the results of the identification of LMTs with data from the French insurance sector supervisor to illustrate the existence of a potential lower rate of adoption of LMTs in funds mainly serving in unit-linked life insurance policies.²

This follow-up analysis's contribution offers a dynamic view of the adoption of LMTs by fund managers. After extensive work to optimize the computer code (which helped to significantly improve computation time), the program was applied to the historical prospectus databases corresponding to funds outstanding as of 31/12/2017, 31/12/2018, 31/12/2019 (this date corresponds to the calculation date in the of the previous study published in July 2020), as well as 30/06/2020, 31/12/2020 and 30/06/2021. The mid-year calculation date for 2020 aims to identify a possible sharp pickup in adoption in the wake of the financial crisis in March.³ The results obtained were combined with another extraction from the AMF regulatory reports (by a uniform method between the six calculation dates).

This new study supplements the previous one in several ways. First, from a dynamic viewpoint, it highlights the fact that, despite the continuing adoption of LMTs by the fund managers, substantial efforts are still needed. It also makes it possible to refine the initial observations by comparing the degree of adoption of the various LMTs according to certain fund characteristics (ETFs, employee savings scheme funds, funds used by unit-linked insurance products, legal nature).

Inherently, automated reading based on non-standardised prospectuses implies that the findings of this study are only estimates. However, the application of the same method at various dates indeed makes it possible to consider the evolution of LMT deployment over time.

The findings are therefore as follows:

- Anti-dilution levies (ADLs) are used especially in equity and "other" funds, whereas swing-pricing is found mainly in bond funds (and to a lesser extent in equity and diversified funds). Gates, meanwhile, are provided for chiefly in alternative funds (31% of fund classes and 60% of net assets at end-June 2021) and real estate funds (31% of fund classes and 25% of net assets at end-June 2021). However, they still concern around 10% of the fund classes of equity, bond and diversified funds.
- The equity, bond and diversified funds which are predominantly used for unit-linked insurance products (i.e. serving as units for unit-linked products) are generally characterised by a lower rate of adoption of ADLs, swing-pricing and gates than funds in which unit-linked policies are less predominant.

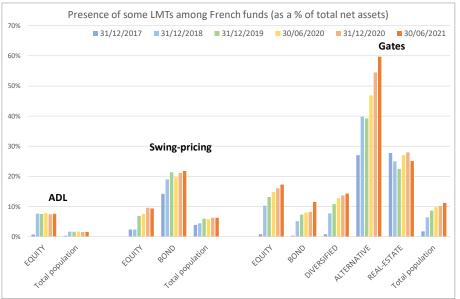
¹ Darpeix, Le Moign, Même, Novakovic (2020). <u>Overview and inventory of French funds' liquidity management tools</u>. *AMF Risk and Trend Mapping*, 17 July 2020, 34 p.

² Darpeix, Mosson (2021). <u>Identification of funds marketed through life insurance or used by insurers as investment vehicles: new data collected</u> and preliminary analysis in relation to liquidity management tools *AMF Risk and Trend Mapping*, 10 June 2021, 11 p.

³ As a reminder, at end-March 2020, the AMF had momentarily eased the rules for putting in place anti-dilution levies (ADLs).



- Employee savings scheme funds have less liquid liabilities, to the extent that these products are marketed via employee savings plans (PEEs) or employee retirement savings plans (PERCOs), respectively locked up in theory for five years (except in the case of early release of funds) and until retirement.⁴ The rate of adoption of various LMTs (including complete suspension) is very much lower where these are concerned.
- Conversely, ADLs and gates are far more common to equity ETFs than to other equity funds. Equity ETFs offer redemption in kind less often and they do not resort to swing-pricing.
- Lastly, the rate of adoption of the various LMTs differs depending on the nature of the funds. UCITS (and especially VaR UCITS) generally make more use of swing-pricing and gates than AIFs.



Source: Prospectus Analysis, AMF-Banque de France

In the near future, the national regulatory reporting framework (BIO) will be enriched to collect, directly from fund managers, the information relating to the introduction of liquidity management tools in the regulatory documentation of their funds, thus relieving reliance on textual analysis. The new reporting system will also make it possible to monitor precisely the effective activation and deactivation of the various LMTs.

⁴ For a summary of employee savings schemes in France, refer for example to Annex 1 of Darpeix, Mosson (2019). <u>Costs and performance of</u> <u>employee investment undertakings</u>, *AMF Risk and Trend Mapping*, Dec. 2019.



1. OVERVIEW OF THE DATA

1.1. PROSPECTUS DATABASES

Asset management companies must keep their funds' prospectuses up-to-date (in particular by updating the fee levels and the LMTs that can be activated). Each updated version must be sent to the AMF, which therefore has an exhaustive historical database of the prospectuses of funds domiciled in France (and subject to its supervision), generally in PDF format. The AMF can thus extract the latest updated version of each prospectus according to its date.

In addition to the calculation date of 31/12/2019, which had served as a working basis to build the automated prospectus reading tool,⁵ the prospectuses then applicable were retrieved for year-ends 2017, 2018 and 2020. An additional extraction was performed for end-June 2020 to observe a possible sharp pickup in adoption of liquidity management tools in the immediate aftermath of the crisis. The severe stress in March could indeed have acted as a catalyst for the introduction of LMTs, by raising the awareness of both fund managers and investors of these tools' usefulness for liquidity management purposes. More specifically, it is interesting to observe whether the temporary easing of the conditions for adoption of anti-dilution levies (ADL) decided by the AMF Board at its meeting of 31/03/2020 had increased the number of inclusions of these measures in prospectuses. Finally, an extraction of prospectuses applicable at end-June 2021 has allowed the figures to be updated at the closest possible juncture to the date of publication of this study.

The study is based on six prospectus extractions, each representing around 8GB. The program for automated detection of LMTs in prospectuses was run for each of these six prospectus folders. Table 1 below gives in detail, for each calculation date, the volume of data processed by the automated prospectus reading program.

	end 2017	end 2018	end 2019	mid 2020	end 2020	mid 2021
number of PDF documents in the initial database	10 135	10 032	9 902	9 828	9 837	10 005
Size of the database (Go)	7.0	8.1	8.3	8.5	9.1	9.4
Total number of pages	295 116	328 836	320 746	345 783	355 829	374 944
Output files of the program	10 103	9 998	9 861	9 810	9 820	9 954
Files not executed by the program	32	34	41	18	17	51
Readable files	9 570	9 404	9 221	9 176	9 158	9 289
Unreadable PDFs (scan or image)	533	594	640	634	662	665
Fund class ISINs extracted from the readable documents	15 654	16 023	16 462	16 552	16 933	17 065

Table 1: Volume of prospectuses analysed

Source: Prospectus Analysis, AMF-Banque de France

1.2. IMPROVEMENT OF THE CODE INFRASTRUCTURE

The algorithm described in detail in the first inventory of liquidity management tools (Darpeix et al, 2020) remained unchanged for this study. The database and the algorithm's input settings (character strings and synonyms searched for) are also unchanged. The main purpose of this study is to provide an historical view of the results of the first study, which corresponded to year-end 2019. The results obtained by this algorithm remain an estimate and may not be considered definitive, even though they do indicate the underlying trend.

⁵ See Darpeix, Le Moign, Même, Novakovic (2020). <u>Overview and inventory of French funds' liquidity management tools</u>. *AMF Risk and Trend Mapping*, 17 July 2020, 34 p.

See also Darpeix, Mosson (2021). Identification of funds marketed through life insurance or used by insurers as investment vehicles: new data collected and preliminary analysis in relation to liquidity management tools AMF Risk and Trend Mapping, 10 June 2021, 11 p.



The fact that the results are only estimates is due to the very nature of the program, which offers automated reading applied to non-standardised prospectuses. As shown by Table 1, each database corresponds to about 300,000 pages to be analysed, which would require more than 1,000 days dedicated to this reading if it were to be performed by a human reader (reading one page every two minutes). In the future, new automated reading technologies, could be developed to improve the accuracy of these results so as to come as close as possible to the identification performed by a human reader.

The historical view described in detail in this analysis was achieved by a change made to the tool's infrastructure, which increased the speed of the document reading process. This was made possible by a parallel computing method of automated document reading, which was necessary given the large volume of the databases, and which divided the algorithm execution time by about six compared with the first study published in July 2020.

1.3. REGULATORY REPORTING (BIO DATABASE)

Funds domiciled in France are subject to a reporting obligation to the AMF. Fund managers report the total net assets, the number of fund units outstanding and the net asset value per share (NAV) of each of the fund classes that they manage each time the NAV is calculated (i.e. according to their frequency of valuation: at least once a year, but usually every day). Fund managers also provide a large quantity of information of an administrative nature concerning (i) the fund or (ii) the company which manages the fund. The total net asset data can therefore be aggregated by type of fund (i.e. nature of the underlying assets), by asset management company, etc. It should be stressed that this database was designed was designed to supervise funds individually (at a micro-level), and that the aggregations involve substantial adjustments. Apart from reporting errors (which are corrected when detected), there are also cases of failures to report certain structural changes (such as changes of classification or fund closures).

For each of the fund classes present in the regulatory database (BIO) and for each of the six calculation dates adopted, the latest total net asset data entered by the fund manager was extracted. Several restrictions were then applied:

- Elimination of reports which were more than one year old, as well as of the fund classes / funds closed before the considered calculation date;
- 7 Elimination of fund classes that were outstanding but reported zero net assets; and finally
- For funds with a daily net asset valuation frequency, elimination of observations corresponding to a NAV more than three months old.

The same filters were applied for each of the calculation dates in order to provide a uniform basis for work.

	31/12/2017		31/12	/2018	31/12	/2019	30/06	/2020	31/12	/2020	30/06/2021	
	€bn	# classes	€bn	# classes	€bn	# classes	€bn	# classes	€bn	# classes	€bn	# classes
EQUITY	361.27	3 581	292.32	3 635	323.74	3 472	286.40	3 445	324.93	3 462	360.79	3 514
BOND	286.95	2 160	269.03	2 239	280.69	2 218	256.28	2 159	265.69	2 223	260.90	2 221
DIVERSIFIED	373.60	4 949	332.99	4 985	386.54	5 387	387.41	5 541	418.45	5 717	448.53	5 881
MONEY-MARKET	366.07	647	352.67	544	339.48	486	348.12	474	412.95	471	381.23	458
VENTURE	64.21	2 645	65.25	2 701	71.26	2 899	68.81	2 769	74.54	2 799	95.23	2 781
ALTERNATIVE	6.57	139	4.99	114	5.31	96	5.51	91	6.13	92	6.46	94
EMPLOYEE	44.00	584	39.66	578	47.47	580	39.79	578	43.15	565	49.76	566
REAL-ESTATE	67.88	447	80.04	497	89.84	531	91.58	515	93.22	514	117.32	535
OTHER	59.41	590	82.82	917	89.72	950	82.76	1 006	104.20	1 138	134.12	1 171
Total	1 629.96	15 742	1 519.77	16 210	1 634.06	16 619	1 566.67	16 578	1 743.26	16 981	1 854.34	17 221

Table 2: Number of fund classes and total net assets of French fundsSplit by major fund category

Source: AMF, BIO database

NB: "Employee" includes only the employee savings scheme funds invested in the very company's securities. The other employee savings plan investment funds (FCPEs) are distributed among the other categories according to their investment strategy.



Note that the figures presented here are somewhat different from those published in the previous two studies:

- 7 For the calculation date of 31/12/2019, Darpeix et al. (2020) indicated cumulative net assets of €1,618 billion and 16,175 different fund share classes;
- 7 For the calculation date of 30/06/2020, Darpeix and Mosson (2021) gave cumulative net assets of €1,617 billion.

Apart from the fact that certain incorrect values in the reports were subsequently corrected, these differences can be explained by improvements in the database request process: the superposition of different reporting frequencies and recurrent omission to report closed funds, as well as the presence of numerous fund share classes for which the total net assets are systematically zero, make it difficult to identify precisely fund classes that are effectively active. The filters applied during the previous extractions were not exactly the same: in particular, in Darpeix and Mosson (2021), broader filters had been adopted (e.g. retaining funds that had been closed recently) to be able to reconcile the insurers' portfolio data with the AMF supervisory database.

In the present study, the same filters are applied at all the calculation dates to have a uniform dynamic view. As a reminder, the latest total net asset values available were extracted for each fund class present in the AMF supervisory database (BIO), and this for each calculation date considered. Several eliminations were then performed:

- Values that were more than 365 calendar days old were eliminated (90 days for funds with a daily NAV);
- 7 Values corresponding to funds/fund classes reported as closed before the calculation date; and
- **7** Fund classes associated to total net assets equal to zero.

This filter is not perfect (for example, certain funds closed two months earlier and having failed to indicate the closing date would not be eliminated), but it has the advantage of being easy to present and being applied in the same way at all the calculation dates.

Moreover, it should be pointed out that the proportion of equity funds and bond funds has decreased significantly, whereas the proportion of diversified funds has increased compared to previous analyses. The allocation of certain former sub-categories of funds⁶ has been altered: in particular, " diversified funds with a bond focus" and "diversified funds with an equity focus", previously grouped with the classifications of their focus have been reallocated here to the "diversified funds" category.

The figures relating to money market funds (MMFs) are not exactly identical to those that are presented in the study that was devoted to the distortion of their portfolios.⁷ The cumulative net assets amounted to \leq 334 billion for MMFs at 31/12/2019, versus \leq 339 billion at the same date in Table 2. This is due to the fact that the MMFR, a Regulation that came into effect in 2019, introduced new classifications for money market funds (standard VNAV funds and short-term VNAV funds), which superseded the ones used previously. A few rare funds still claim their former classification even if it is no longer valid (they are no longer MMFs according to MMFR). However, this study included them in the major "money market" category for historical consistency (since these classifications were considered as "money market" before the MMFR).

Figure shows the change in total net assets of the various major categories of funds domiciled in France over time. Each major asset class is represented by a different colour. The lighter fields show the total net assets of funds whose prospectuses could be read by the program, while the shaded fields correspond to the prospectuses that could not be processed.

The decline in net assets between end-2017 and end-2018 is due to the stock market correction in the last quarter of 2018,⁸ while the inflection observed for the calculation date of 30/06/2020 reflects the consequences of the coronavirus pandemic.⁹

⁶ As a reminder, since 2017 and <u>the FROG initiative</u>, most of the official AMF classifications have become optional (only the "money market fund" and "employees' funds invested in the very company's securities" classifications remain mandatory).

⁷ Darpeix and Mosson (2021). <u>Detailed analysis of the portfolios of French money market funds during the Covid-19 crisis in early 2020</u>. AMF Risk and Trend Mapping, 18 May 2021, 41 p.

⁸ See AMF (2019). 2019 Markets and Risk Outlook. AMF Risk and Trend Mapping, 2 July 2019, 107 p.

⁹ See AMF (2021). 2021 Markets and Risk Outlook. AMF Risk and Trend Mapping, 5 July 2021, 111 p.



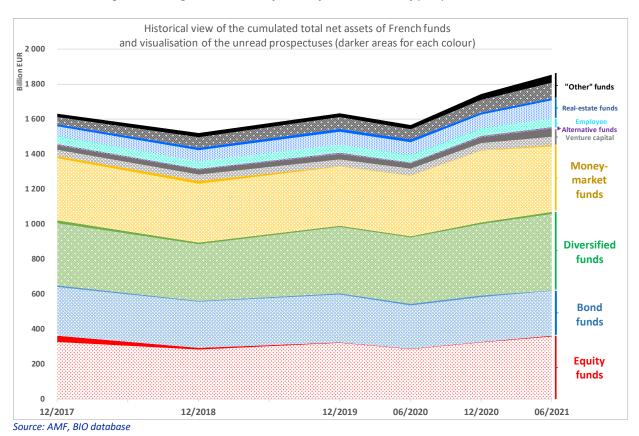


Figure 1: Change in net assets of French funds and view of prospectuses not read

The proportion of funds for which prospectuses could not be read is very small for the four main fund categories (Equity, Bond, Diversified, Money Market), and for the employees' funds invested in the company's own securities ("Employee"). On the other hand, the percentage is far higher for real estate funds, venture capital funds, and the residual category of other funds. This is due to two main factors: first, the frequency of valuation of these funds is generally far lower, and the filter applied to select net asset values may therefore capture funds that are in fact inactive; and second, the prospectuses are far less standardised. Remember, again, that the results obtained with the automated prospectus reading tool are estimates. Future versions of the program could help improve the accuracy of this estimate. The coming introduction of enhanced reporting to the regulator (and the extension of the information requested, in particular concerning LMTs) should help avoid resorting to these estimates in the future.

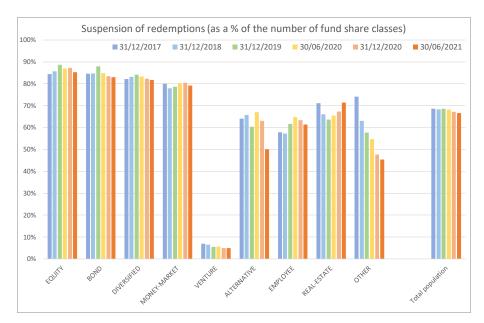
Throughout the remainder of the analysis, the presence of liquidity management tools will be measured relative to the figures presented in Table 2.

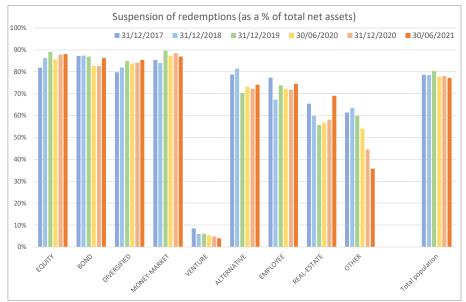


2. PRESENTATION OF THE RESULTS

2.1. SUSPENSION OF REDEMPTIONS

Figure 2: Mention of the possibility of suspension of redemptions (as a percentage of the number of fund share classes and as a percentage of total net assets)





Source: Prospectus Analysis, AMF-Banque de France

The possibility of suspending redemptions in periods of stress ("when this is warranted by exceptional circumstances and if it is in the best interest of shareholders/unitholders or the public", cf. Monetary and Financial Code) must be indicated in the fund's regulations or statutes to be able to be triggered (and not necessarily in the prospectuses).¹⁰

¹⁰ NB: The possibility of suspending redemptions under the conditions provided for by the regulations is one of the standard statements in the fund's rules or statutes (in the form of a settlement time of up to 30 days). Cf. Standard template for fund rules: Annexes XV of Instructions



However, as was noted in the previous study, Figure 2 shows that the mention of suspensions is widely inserted in French fund prospectuses (67% of fund share classes and 77% of total net assets for the calculation date of mid-2021), and in particular in the four main fund categories (equity, bond, diversified and money market, with penetration rates of 79% to 85% in terms of the number of fund share classes and of 85% to 88% of the total net assets at mid-2021).

Venture capital funds stand out clearly from the other fund categories: only 5% of fund classes and 4% of net assets reported the possibility of suspending redemptions in exceptional circumstances at end-June 2021.

On the whole, no significant change is noted regarding the inclusion of suspension in funds' prospectuses, except a decrease in number and volume for "other" funds and a slight increase (in number only) for employee's funds invested in the company's own securities.

2.2. ANTI-DILUTION LEVIES

Anti-dilution levies (ADLs) consist in ensuring that exiting investors (entering investors, respectively) bear the cost of liquidity resulting from the sale (purchase, respectively) of the securities corresponding to the shares redeemed (issued, respectively).

They are designed to prevent waterfall selling (i.e. where the fund manager sells in order of priority the liquid securities – for which it is easier to find a buyer and which have a narrower bid-ask spread), which would substantially distort the portfolio's profile to the detriment of the remaining investors. In order to be activated, ADLs must be mentioned in the fund's prospectus.

Figure shows that, at the end of 2020, only 0.7% of fund classes had introduced ADLs (1.6% of the total net assets). This tool is present especially in equity funds: 3% of the fund classes of equity funds mention ADLs (7.6% of the total net assets). ADLs concern 1.7% of the fund classes of "other" funds (1.7% in volume).

During the pandemic-related crisis, at its meeting of 31 March 2020, the AMF Board decided to temporarily ease the conditions governing the introduction of, or increase in, ADLs (by eliminating the obligation of special information issued to fund-holders associated with the possibility of exiting without fees). This easing was effective until one month after the end of the health-related state of emergency – i.e. until 10 August 2020.¹¹

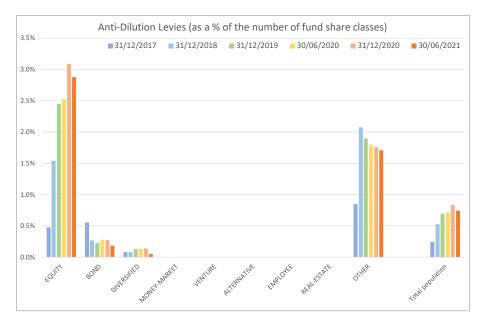
The analysis at the June 2020 calculation date does not show a sharp increase in the rate of presence of ADLs in the first half of 2020. Moreover, the increase recorded for the full-year 2020 is less than the annual increases observed in 2018 and 2019 respectively.

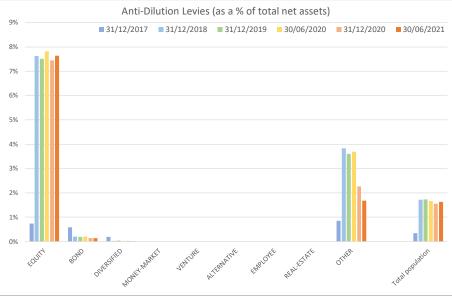
<u>AMF-2011-19</u> (UCITS) and <u>AMF-2011-20</u> (FIVGs): "However, if, under exceptional circumstances, redemption requires prior liquidation of the assets in the fund, this deadline may be extended, without exceeding 30 days". It is therefore generally considered a standard feature of French funds.

¹¹ The health-related state of emergency was introduced by <u>Act No. 2020-290 of 23 March 2020 urgently in response to the Covid-19 epidemic</u> (for a period of two months) and was extended until 10 July by <u>Act No. 2020-546 of 11 May 2020</u>. See AMF (2020). <u>Continuity of management</u> <u>activities during the coronavirus crisis – the AMF continues to support market participants</u> (version updated on 14 May 2020).



Figure 3: Mention of ADLs (as a percentage of the number of fund share classes and as a percentage of total net assets)

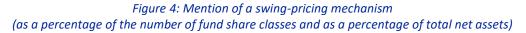


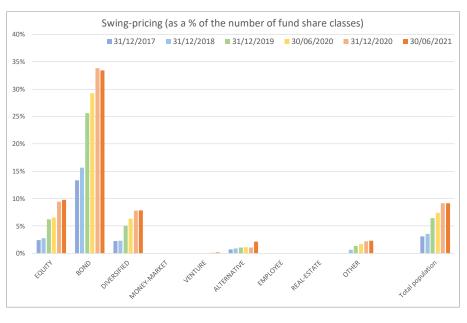


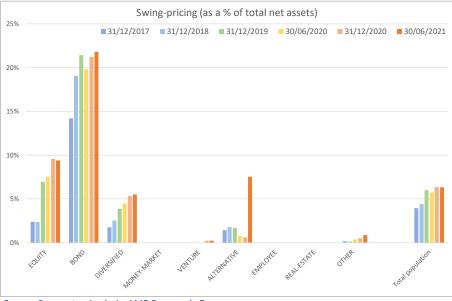




2.3. SWING-PRICING









Swing-pricing is conceptually highly similar to ADLs. In both cases, the aim is to estimate the cost of liquidity and make sure it is borne by investors who enter or exit the fund. However, they differ in that ADLs take the form of fees applied to transactions (subscriptions/redemptions), whereas swing-pricing consists of an adjustment of the fund's very net asset value (and hence of the price at which transactions are performed). Like ADLs, swing-pricing can only be applied if it is mentioned explicitly in the prospectus (even though the details of its parameters must remain secret to prevent opportunistic behaviours of certain investors).

At end-June 2021, swing-pricing concerned 9% of French fund share classes and 6% of the total net assets (cf. Figure). It is present especially in bond funds (33% of bond fund classes and 22% of net assets), and slightly less



frequently in equity funds (10% of fund classes; 9% of net assets) and diversified funds (8% of fund classes; 6% of net assets).

There has clearly been a sharp increase in the inclusion of swing-pricing in French funds. Since the previous study (stock-take as of December 2019), the prevalence in terms of the number of fund classes has increased by 3 percentage points for equity funds and diversified funds, and by 8 points for bond funds. In volume terms, the growth is especially significant for equity funds and diversified funds.

Lastly, the difference in magnitude of the percentages by number and volume for bond funds indicates that the funds that introduced swing-pricing are generally smaller than the average.

2.4. GATES

Figure 5 shows that the automated prospectus reading tool detected potential redemption capping mechanisms (a.k.a. *gates*) in 9% of fund classes overall at end-June 2021 (+3 percentage points compared with end-2019). Gates would therefore concern 11% of the total net assets of French funds (+2.5 points compared with end-2019).

Regulatory analyses carried out following on from the publication of Darpeix et al. (2020) led the authors to interpret the results of the prospectus-screening program cautiously in the case of gates: the AMF General Regulation¹² specifies, in particular, that to activate a gate, the mere mention of the mechanism in the prospectus is necessary but not sufficient: it is also necessary to at least describe in the fund's statutes or rules 1) the activation threshold, 2) the procedures for processing unexecuted orders and 3) the maximum number of net asset values calculations for which gates can be applied. Accordingly, the figures in Figure 5 should be understood as an upper bound of the effective presence of gates.

While keeping this limitation in mind, we nevertheless note that gates mechanisms are indicated especially in the prospectuses of alternative funds (31% of fund classes and 60% of total net assets at end-2020) and real estate funds (31% of fund classes and 25% of total net assets). Possible gates were mentioned in more than 10% of equity and bond funds share classes, and in 10% of diversified fund share classes.

Historically, one notes a sharp increase in mentions of gates in prospectuses in 2019, and a stable upward trend for most fund categories.

¹² See in particular <u>Art. 411-20-1</u> for the specific case of UCITS, and Article <u>425-25</u> for general purpose AIFs.



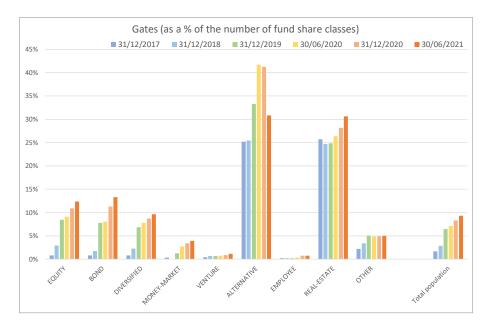
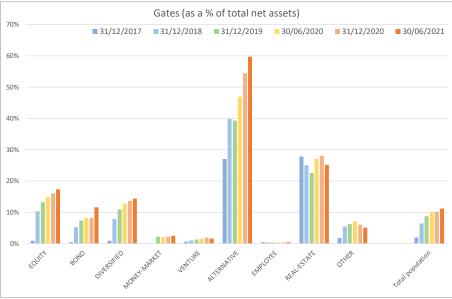


Figure 5: Mention of potential gates (as a percentage of the number of fund share classes and as a percentage of total net assets)



Source: Prospectus Analysis, AMF-Banque de France

2.5. SIDE-POCKETS

As a reminder, the ability to set up a side-pocket does not depend on its explicit mention in the prospectus. Detection of the keywords related to this LMT by the computer program therefore does not identify the funds entitled to use it, but rather identifies funds that had to implement it.

Up to the calculation date of June 2020, side-pockets concerned less than half a percent of French funds share classes and less than one-quarter of a percent of the total net assets. The funds associated with side-pockets were



then mostly alternative funds (13% of the number of fund classes and 17% of the net assets of this category had side-pockets as at 30 June 2020).¹³

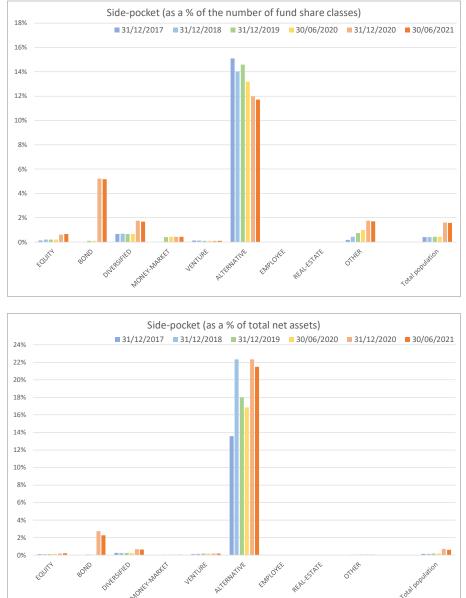


Figure 6: Mention of the existence of an associated side-pocket (as a percentage of the number of fund share classes and as a percentage of total net assets)

Source: Prospectus Analysis, AMF-Banque de France

The difficulties encountered by the UK asset management company H2O LLP in 2019 and 2020 resulted in the suspension of eight funds governed by French law (mostly bond funds and diversified funds) at the end of August 2020 and the setting-up of side-pockets to ring-fence their illiquid assets. Despite this, at end-June 2021, funds

¹³ For detecting funds associated with side-pockets, the text analysis described in Darpeix et al. (2020) was supplemented by a detailed manual check of funds whose name pointed to the existence of a side-pocket arrangement ("SP" or "canton"). This adjustment was made necessary by certain enigmatic expressions (not detected by the automated reading tool) used in prospectuses to indicate the existence of an associated side-pocket (e.g. "*This fund has undergone a spin-off in accordance with Article L.214-8-7 of the Monetary and Financial Code*"). This example illustrates the limitations of the exercise due to the numerous possible formulations.



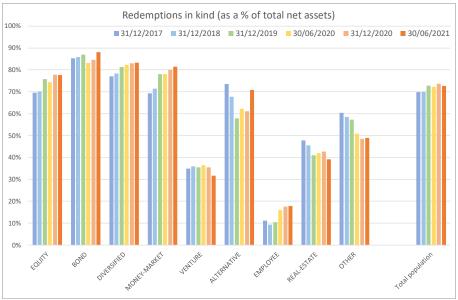
associated with a side-pocket represented scarcely more than half a percentage point of the total net assets of French funds.

2.6. REDEMPTIONS IN KIND

At the end of June 2021, 63% of the French fund share classes indicated in their prospectuses that they could offer redemptions in kind, i.e. 73% of the total net assets (cf. Figure 7).

Figure 7: Mention of a possibility of redemption in kind (as a percentage of the number of fund share classes and as a percentage of total net assets)





Source: Prospectus Analysis, AMF-Banque de France



As a reminder, this type of arrangement is not very easy to apply in practice. It requires (i) the agreement of the exiting investor in case he were to be given a representative share of the fund's total assets (i.e. if the redemption represents x% of the fund's net assets, the exiting investor would receive x% of each asset in the fund's portfolio), and (ii) the agreement of all the unit holders otherwise (i.e. if the assets delivered to the redeeming investor would distort the structure of the portfolio).

The arrangement exists especially in bond funds (81% of fund share classes at end-2020), equity funds (79% of fund classes) and diversified funds (74% of fund classes), and slightly less in money market funds (66%).

One notes a steady increase in the existence of the possibility of redemption in kind in the prospectuses of these four major families of funds.

Conversely, redemption in kind is relatively seldom introduced in the prospectuses of venture capital funds and those of employees' funds invested in the company's own securities (less than one-quarter of fund classes in each case in June 2021).

3. CASE OF FUNDS MARKETED MAINLY VIA UNIT-LINKED INSURANCE POLICIES

By comparing the portfolio data of French life insurers as at 30 June 2020 with the funds' regulatory reports at the same date, Darpeix and Mosson (2021) estimated the proportion represented by French insurers' unit-linked policies within the liabilities of French funds. This information is used to study the adoption of LMTs over time depending on whether they are primarily used for unit-linked insurance policies (i.e. their primary purpose is to serve as units for unit-linked products).

The fund population is broken down into six different groups:

- The first group comprises all the funds that Darpeix and Mosson (2021) did not retrieve in insurers' portfolios (whether in life insurance or non-life insurance). It should be noted that belonging to this category may mean either that French insurers effectively do not hold these funds, or that they are not sufficiently well identified in the insurer's reports;
- The second group comprises the funds that were found in the insurers' portfolio, but not in representation for unit-linked policies (i.e. these are investments made on behalf of the non-life business or else for the guaranteed-capital euro fund);
- The four other groups correspond to increasing proportions of unit-linked policies in the funds' liabilities (by buckets of 25%).

Table 3 describes the breakdown of the population of French funds according to these six groups established based on the holdings of French insurers as of end-June 2020.

In the remainder of the analysis, we shall focus on the following three fund categories: equity, bond and diversified. This choice is justified by the fact that these three categories have more than 100 different fund classes in each of the six sub-groups formed (with the exception of bond funds, for which the last two sub-groups are merged), which ensures the significance of the means. We also analyse money market funds, but due to the limited number of funds we segment the population into only two subgroups; funds held by insurers in representation of unit-linked policies (irrespective of the proportion held, while bearing in mind that very few money market funds are used more than 25% for unit-linked policies) and the others (whether or not they be held by insurers).



Table 3: Breakdown of the population of French funds according to the presence of French insurers on the liability side Split by major fund category

		31/12/2017		31/12	/2018	31/12	/2019	30/06/	/2020	31/12	/2020	30/06	/2021
			# classes	€bn	# classes	€bn	# classes		# classes	€bn	# classes	€bn	# classes
	No Insurer	112.81	1 230	80.24	1 008	88.35	839	81.08	801	94.25	863	106.78	951
	No UL	31.48	207	27.31	232	31.43	225	25.67	220	28.28	216	30.16	216
EQUITY	0% <ul≤25%< td=""><td>99.08</td><td>985</td><th>84.53</th><td>1 096</td><td>93.66</td><td>1 158</td><td>83.10</td><td>1 175</td><td>93.08</td><td>1 149</td><td>103.68</td><td>1 132</td></ul≤25%<>	99.08	985	84.53	1 096	93.66	1 158	83.10	1 175	93.08	1 149	103.68	1 132
D D	25% <ul≤50< td=""><td>53.88</td><td>569</td><th>43.59</th><td>630</td><td>45.59</td><td>625</td><td>40.83</td><td>631</td><td>47.67</td><td>626</td><td>53.17</td><td>611</td></ul≤50<>	53.88	569	43.59	630	45.59	625	40.83	631	47.67	626	53.17	611
ŭ	50% <ul≤75< td=""><td>39.77</td><td>300</td><th>34.47</th><td>349</td><td>37.86</td><td>341</td><td>32.33</td><td>338</td><td>35.99</td><td>334</td><td>38.75</td><td>331</td></ul≤75<>	39.77	300	34.47	349	37.86	341	32.33	338	35.99	334	38.75	331
	75% <ul≤100%< td=""><td>24.25</td><td>290</td><th>22.19</th><td>320</td><td>26.85</td><td>284</td><td>23.38</td><td>280</td><td>25.66</td><td>274</td><td>28.25</td><td>273</td></ul≤100%<>	24.25	290	22.19	320	26.85	284	23.38	280	25.66	274	28.25	273
	No Insurer	113.64	912	96.29	808	106.09	711	103.44	688	115.68	777	108.79	787
	No UL	54.85	190	52.35	211	56.67	238	55.59	235	54.55	230	54.13	225
9	0% <ul≤25%< td=""><td>105.00</td><td>839</td><th>104.60</th><td>954</td><td>98.57</td><td>982</td><td>80.48</td><td>951</td><td>80.82</td><td>926</td><td>83.73</td><td>923</td></ul≤25%<>	105.00	839	104.60	954	98.57	982	80.48	951	80.82	926	83.73	923
BOND	25% <ul≤50< td=""><td>7.56</td><td>131</td><th>9.31</th><td>166</td><td>11.70</td><td>179</td><td>10.04</td><td>180</td><td>7.62</td><td>184</td><td>7.40</td><td>180</td></ul≤50<>	7.56	131	9.31	166	11.70	179	10.04	180	7.62	184	7.40	180
	50% <ul≤75< td=""><td>1.60</td><td>32</td><th>1.94</th><td>46</td><td>2.31</td><td>53</td><td>2.43</td><td>57</td><td>2.48</td><td>57</td><td>2.41</td><td>59</td></ul≤75<>	1.60	32	1.94	46	2.31	53	2.43	57	2.48	57	2.41	59
	75% <ul≤100%< td=""><td>4.29</td><td>56</td><th>4.52</th><td>54</td><td>5.35</td><td>55</td><td>4.30</td><td>48</td><td>4.53</td><td>49</td><td>4.45</td><td>47</td></ul≤100%<>	4.29	56	4.52	54	5.35	55	4.30	48	4.53	49	4.45	47
	No Insurer	131.93	2 372	113.11	2 164	125.49	2 059	120.21	1 975	133.56	2 188	148.01	2 403
e	No UL	42.23	323	39.13	297	51.03	359	58.68	398	63.55	395	65.90	384
E	0% <ul≤25%< td=""><td>75.68</td><td>741</td><th>61.78</th><td>846</td><td>75.36</td><td>1 071</td><td>75.68</td><td>1 166</td><td>81.73</td><td>1 154</td><td>87.24</td><td>1 144</td></ul≤25%<>	75.68	741	61.78	846	75.36	1 071	75.68	1 166	81.73	1 154	87.24	1 144
DIVERSIFIED	25% <ul≤50< td=""><td>22.21</td><td>385</td><th>22.18</th><td>454</td><td>26.03</td><td>536</td><td>25.35</td><td>556</td><td>27.08</td><td>559</td><td>28.61</td><td>537</td></ul≤50<>	22.21	385	22.18	454	26.03	536	25.35	556	27.08	559	28.61	537
Σ	50% <ul≤75< td=""><td>27.10</td><td>331</td><th>26.71</th><td>352</td><td>31.33</td><td>393</td><td>30.51</td><td>416</td><td>31.34</td><td>404</td><td>33.80</td><td>410</td></ul≤75<>	27.10	331	26.71	352	31.33	393	30.51	416	31.34	404	33.80	410
	75% <ul≤100%< td=""><td>74.45</td><td>797</td><th>70.08</th><td>872</td><td>77.32</td><td>969</td><td>76.99</td><td>1 030</td><td>81.20</td><td>1 017</td><td>84.97</td><td>1 003</td></ul≤100%<>	74.45	797	70.08	872	77.32	969	76.99	1 030	81.20	1 017	84.97	1 003
F	No Insurer	47.37	327	42.06	207	34.85	152	34.24	139	35.60	142	33.66	1005
H K K	No UL	14.47	16	17.17	15	17.26	132	23.51	135	20.88	142	22.38	140
IAF	0% <ul≤25%< td=""><td>300.37</td><td>278</td><th>290.80</th><td>295</td><td>283.99</td><td>288</td><td>287.03</td><td>289</td><td>353.57</td><td>283</td><td>321.78</td><td>268</td></ul≤25%<>	300.37	278	290.80	295	283.99	288	287.03	289	353.57	283	321.78	268
MONEY-MARKET	25% <ul≤50< td=""><td>1.16</td><td>15</td><th>1.15</th><td>15</td><td>1.22</td><td>16</td><td>1.28</td><td>16</td><td>1.02</td><td>16</td><td>1.00</td><td>14</td></ul≤50<>	1.16	15	1.15	15	1.22	16	1.28	16	1.02	16	1.00	14
Ë,	50% <ul≤75< td=""><td>1.43</td><td>6</td><th>1.15</th><td>6</td><td>1.18</td><td>6</td><td>1.39</td><td>6</td><td>1.40</td><td>6</td><td>1.00</td><td>6</td></ul≤75<>	1.43	6	1.15	6	1.18	6	1.39	6	1.40	6	1.00	6
Ð	75% <ul≤100%< td=""><td>1.43</td><td>5</td><th>0.47</th><td>6</td><td>0.99</td><td>6</td><td>0.68</td><td>6</td><td>0.47</td><td>6</td><td>0.97</td><td>6</td></ul≤100%<>	1.43	5	0.47	6	0.99	6	0.68	6	0.47	6	0.97	6
	No Insurer	41.25	2 081	38.59	2 085	36.86	2 099	35.46	1 992	39.64	2 017	56.96	2 028
	No UL	22.63	544	26.19	592	33.61	760	32.43	735	33.90	739	37.42	713
VENTURE	0% <ul≤25%< td=""><td>0.07</td><td>13</td><th>0.10</th><td>13</td><td>0.18</td><td>23</td><td>0.19</td><td>23</td><td>0.20</td><td>23</td><td>0.24</td><td>23</td></ul≤25%<>	0.07	13	0.10	13	0.18	23	0.19	23	0.20	23	0.24	23
Ĕ	25% <ul≤50< td=""><td>0.07</td><td>2</td><th>0.10</th><td>6</td><td>0.18</td><td>23</td><td>0.19</td><td>23</td><td>0.20</td><td>8</td><td>0.24</td><td>5</td></ul≤50<>	0.07	2	0.10	6	0.18	23	0.19	23	0.20	8	0.24	5
Ϋ́	50% <ul≤75< td=""><td>0.15</td><td>2</td><th>0.22</th><td>0</td><td>0.42</td><td>3</td><td>0.40</td><td>4</td><td>0.12</td><td>5</td><td>0.15</td><td>5</td></ul≤75<>	0.15	2	0.22	0	0.42	3	0.40	4	0.12	5	0.15	5
	75% <ul≤100%< td=""><td>0.13</td><td>5</td><th>0.14</th><td>5</td><td>0.02</td><td>6</td><td>0.09</td><td>7</td><td>0.12</td><td>7</td><td>0.17</td><td>7</td></ul≤100%<>	0.13	5	0.14	5	0.02	6	0.09	7	0.12	7	0.17	7
		2.44	79	1.68	62	1.95	49	2.32	46		48	2.90	50
ų	No Insurer No UL	3.77	32	3.10	32	3.20	30	3.06	30	2.75 3.19	30	3.37	30
ALTERNATIVE	0% <ul≤25%< td=""><td>0.23</td><td>25</td><th>0.19</th><td>18</td><td>0.16</td><td>50 17</td><td>0.14</td><td>15</td><td>0.19</td><td>14</td><td>0.19</td><td>14</td></ul≤25%<>	0.23	25	0.19	18	0.16	50 17	0.14	15	0.19	14	0.19	14
RN,	25% <ul≤50< td=""><td>0.23</td><td>1</td><th>0.19</th><td>10</td><td>0.10</td><td>17</td><td>0.14</td><td>15</td><td>0.19</td><td>14</td><td>0.19</td><td>14</td></ul≤50<>	0.23	1	0.19	10	0.10	17	0.14	15	0.19	14	0.19	14
Ë				0.01	1								
A	50% <ul≤75< td=""><td>0.01</td><td>1</td><th></th><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></ul≤75<>	0.01	1		1								
EMPLOYEE	75% <ul≤100%< td=""><td>0.01</td><td>584</td><th>0.01</th><td>578</td><td>47.47</td><td>E 00</td><td>20 70</td><td>578</td><td>43.15</td><td>565</td><td>49.76</td><td>FCC</td></ul≤100%<>	0.01	584	0.01	578	47.47	E 00	20 70	578	43.15	565	49.76	FCC
CIVIPLUTEE	No Insurer	44.00		39.66			580	39.79					566
ų	No Insurer	39.33	301 108	47.96	343	51.97	359	52.71	351	53.56	353	76.41	374
TAI	No UL	15.57		17.02	112	19.32	126	19.49	117	19.73	115	20.79	115
-ES	0% <ul≤25%< td=""><td>0.05</td><td>5</td><th>0.06</th><td>6</td><td>0.24</td><td>9</td><td>0.30</td><td>10</td><td>0.34</td><td>10</td><td>0.39</td><td>10</td></ul≤25%<>	0.05	5	0.06	6	0.24	9	0.30	10	0.34	10	0.39	10
REAL-ESTATE	25% <ul≤50< td=""><td>0.66</td><td>5</td><th>0.72</th><td>8</td><td>0.85</td><td>8</td><td>0.85</td><td>8</td><td>0.86</td><td>7</td><td>0.92</td><td>7</td></ul≤50<>	0.66	5	0.72	8	0.85	8	0.85	8	0.86	7	0.92	7
THE SECOND	50% <ul≤75< td=""><td>1.13</td><td>2</td><th>1.45</th><td>2</td><td>2.13</td><td></td><td>2.35</td><td></td><td>2.44</td><td></td><td>2.61</td><td>2</td></ul≤75<>	1.13	2	1.45	2	2.13		2.35		2.44		2.61	2
	75% <ul≤100%< td=""><td>11.15</td><td>26</td><th>12.84</th><td></td><td>15.32</td><td>27</td><td>15.89</td><td>27</td><td>16.29</td><td>27</td><td>16.20</td><td>27</td></ul≤100%<>	11.15	26	12.84		15.32	27	15.89	27	16.29	27	16.20	27
	No Insurer	38.61	401	46.24		46.06	564	44.64	581	64.07	725	86.61	793
۲	No UL	8.62	67	15.73	150	18.54	158	15.40	184	17.44	183	27.20	180
OTHER	0% <ul≤25%< td=""><td>0.46</td><td>7</td><th>3.89</th><td>43</td><td>4.42</td><td>53</td><td>4.05</td><td>60</td><td>3.69</td><td>59</td><td>3.63</td><td>50</td></ul≤25%<>	0.46	7	3.89	43	4.42	53	4.05	60	3.69	59	3.63	50
6	25% <ul≤50< td=""><td>0.03</td><td>2</td><th>0.20</th><td>4</td><td>0.12</td><td>7</td><td>0.10</td><td>7</td><td>0.11</td><td>6</td><td>0.13</td><td>6</td></ul≤50<>	0.03	2	0.20	4	0.12	7	0.10	7	0.11	6	0.13	6
	50% <ul≤75< td=""><td>1.05</td><td>11</td><th>1.78</th><td></td><td>2.06</td><td>22</td><td>2.10</td><td>25</td><td>2.31</td><td>24</td><td>2.15</td><td>24</td></ul≤75<>	1.05	11	1.78		2.06	22	2.10	25	2.31	24	2.15	24
	75% <ul≤100%< td=""><td>10.64</td><td>102</td><th>14.98</th><td></td><td>18.53</td><td>146</td><td>16.46</td><td>149</td><td>16.59</td><td>141</td><td>14.40</td><td>118</td></ul≤100%<>	10.64	102	14.98		18.53	146	16.46	149	16.59	141	14.40	118
	Total	1 629.96	15 742	1 519.77	16 210	1 634.06	16 619	1 566.67	16 578	1 743.26	16 981	1 854.34	17 221

Source: BIO database (AMF), Insurers' portfolios (ACPR)

In Figure 8, the funds receiving insurers' investments generally indicate more often in their prospectuses the possibility of a total suspension of redemptions by the fund manager than the rest of the population. For diversified funds, there seems to be a slight tendency towards increased prevalence according to the proportion of unit-linked policies in the funds' liabilities.



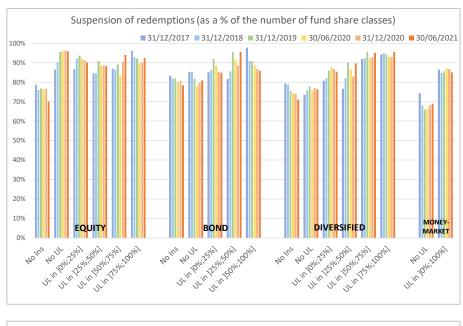
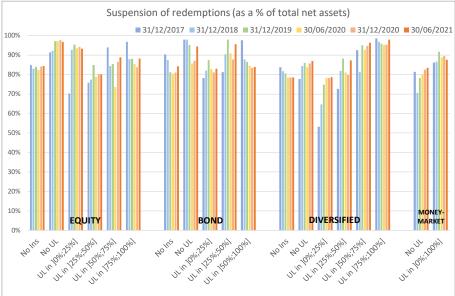


Figure 8: Mention of the possibility of suspension of redemptions according to the proportion of insurers on the funds' liability side (as a percentage of the number of fund share classes and as a percentage of total net assets)

is a percentage of the namber of fana share classes and as a percentage of total her asset



Source: Prospectus Analysis, AMF-Banque de France, Insurers' portfolios (ACPR)

Figure 9 highlights the very low rate of adoption of ADLs in funds serving mostly as unit-linked policies. In particular, there are practically no ADLs in equity and bond funds serving more than 25% as unit-linked policies, nor in diversified funds used more than 50% as unit-linked policies.



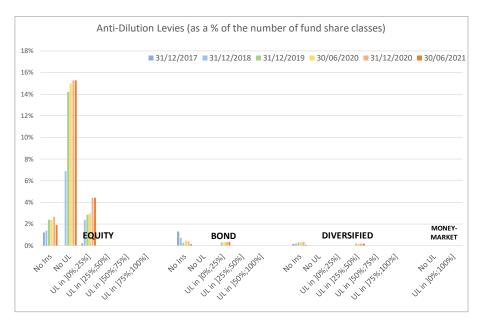
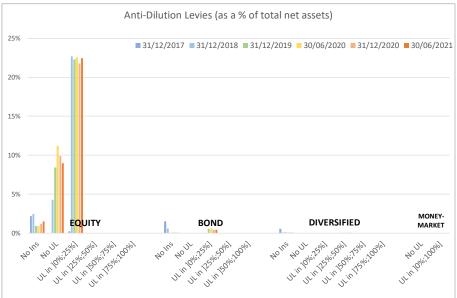


Figure 9: Mention of ADLs in prospectuses according to the proportion of insurers on the funds' liability side (as a percentage of the number of fund share classes and as a percentage of total net assets)



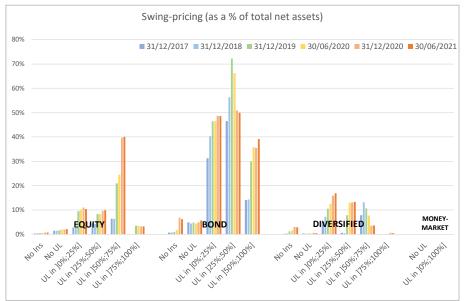
Source: Prospectus Analysis, AMF-Banque de France, Insurers' portfolios (ACPR)

In Figure 10, we note that funds used for more than 75% as unit-linked products have introduced a swing-pricing mechanism far less often than the rest of the population (this is especially the case for equity and diversified funds). On the other hand, we note that the rates of ADL adoption are higher where French insurers' unit-linked policies are present but do not represent the majority of the funds' liabilities.



Figure 10: Mention of swing-pricing in prospectuses according to the proportion of insurers on the funds' liability side (as a percentage of the number of fund share classes and as a percentage of total net assets)





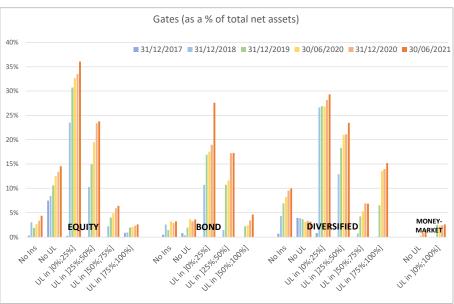
Source: Prospectus Analysis, AMF-Banque de France, Insurers' portfolios (ACPR)

Lastly, Figure 11 shows the decrease in the rate of presence of gates according to the proportion of the funds' liabilities consisting in unit-linked policies.





Figure 11: Mention of gates in prospectuses according to the proportion of insurers on the funds' liability side (as a percentage of the number of fund share classes and as a percentage of total net assets)



Source: Prospectus Analysis, AMF-Banque de France, Insurers' portfolios (ACPR)

4. CASE OF EMPLOYEE SAVINGS SCHEME FUNDS

We now consider the specific case of employee savings scheme funds. These are investment funds dedicated to employee savings plans (*Plans d'épargne en entreprise*, PEEs) or employee retirement savings plans (*Plans d'épargne pour la retraite collectifs*, PERCOs). Some of these funds are invested in securities of the company itself (see "EMPLOYEE" category in the previous sections) and the others (the large majority) are included in the major fund categories according to the asset classes in which they invest. There are therefore equity, bond, diversified, money market and "other" employee savings investment funds (*Fonds communs de placement en entreprise*, FCPEs). However, there is no venture capital, alternative or real estate FCPE (cf. Table 4).

	31/12	2/2017	31/12	2/2018	31/12	31/12/2019		/2020	31/12/2020		30/06/2021	
	€bn	# classes	€bn	# classes	€bn	# classes	€bn	# classes	€bn	# classes	€bn	# classes
EQUITY (excl. FCPEs)	344.29	3 166	276.05	3 229	304.52	3 086	267.70	3 068	304.20	3 075	336.06	3 076
EQUITY FCPEs	16.99	415	16.27	406	19.21	386	18.70	377	20.73	387	24.73	438
BOND (excl. FCPEs)	271.46	1 956	253.52	2 036	262.69	2 024	236.84	1 963	245.69	2 025	240.72	2 008
BOND FCPEs	15.49	204	15.51	203	18.00	194	19.44	196	19.99	198	20.18	213
DIVERSIFIED (excl. FCPEs)	346.19	4 260	305.67	4 319	353.21	4 680	354.92	4 841	383.89	4 979	409.72	5 069
DIVERSIFIED FCPEs	27.41	689	27.32	666	33.33	707	32.49	700	34.56	738	38.81	812
MONEY-MARKET (excl. FCPEs)	344.72	477	331.23	392	319.01	354	326.57	352	391.58	345	359.82	328
MONEY-MARKET FCPEs	21.35	170	21.44	152	20.47	132	21.55	122	21.37	126	21.42	130
VENTURE (Ø FCPE)	64.21	2 645	65.25	2 701	71.26	2 899	68.81	2 769	74.54	2 799	95.23	2 781
ALTERNATIVE (Ø FCPE)	6.57	139	4.99	114	5.31	96	5.51	91	6.13	92	6.46	94
EMPLOYEE FCPEs	44.00	584	39.66	578	47.47	580	39.79	578	43.15	565	49.76	566
REAL-ESTATE (Ø FCPE)	67.88	447	80.04	497	89.84	531	91.58	515	93.22	514	117.32	535
OTHER (excl. FCPEs)	57.65	491	81.70	807	88.36	834	81.56	889	102.67	1 022	132.37	1 055
OTHER FCPEs	1.75	99	1.12	110	1.37	116	1.20	117	1.53	116	1.75	116
Total	1 629.96	15 742	1 519.77	16 210	1 634.06	16 619	1 566.67	16 578	1 743.26	16 981	1 854.34	17 221

Table 4: Breakdown of the population of French funds isolating employee savings scheme fundsSplit by major fund category

Source: BIO database (AMF)

In the following graphs, we shall compare the FCPE funds of each classification with the remainder of the funds of the same classification (for the classifications where FCPEs are present). We will also show, as a reminder, the figures corresponding to employee funds investing in the very company's securities. The savings lock-in mechanisms inherent in PEE and PERCO schemes mean that LMTs are far less useful in this type of fund.

Generally speaking, we indeed note that the employee savings scheme funds have far fewer liquidity management tools than the other funds of the same classification. The rate of presence of the total suspension of redemptions is between 20 and 30 percentage points less for FCPE funds (with the exception of "other" FCPEs, which seem to indicate suspensions more often than the non-FCPE funds in this category, cf. Figure 12). No FCPE fund has introduced ADLs (cf. Figure 13) and gates are mentioned in only four employee funds invested in the company's own securities and in two diversified FCPE funds at end-2020 (Figure 15). Lastly, swing-pricing is less present in FCPE funds (cf. Figure 14) and no growth dynamic can be identified in its prevalence over the past four years, contrary to non-FCPE funds (except possibly for diversified FCPEs, with a surge in June 2020).



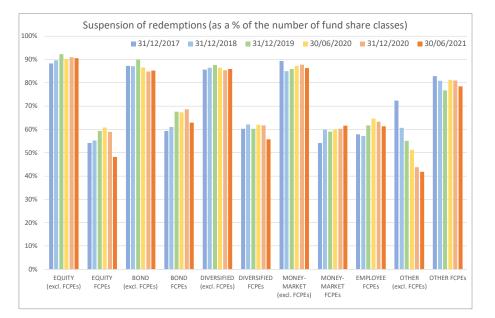
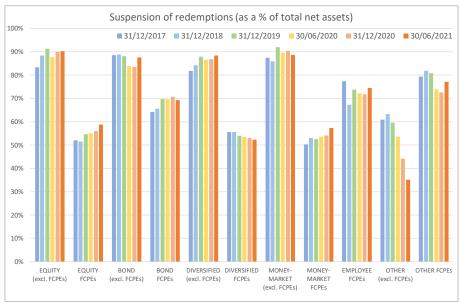
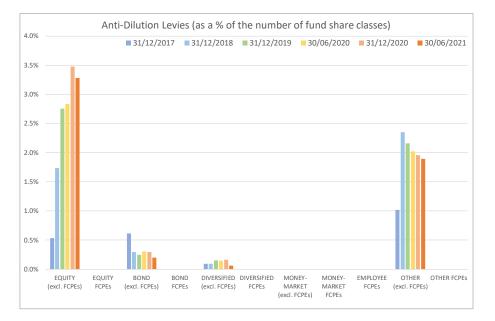


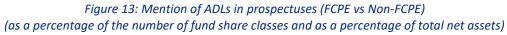
Figure 12: Mention of the suspension of redemptions in prospectuses (FCPE vs Non-FCPE) (as a percentage of the number of fund share classes and as a percentage of total net assets)

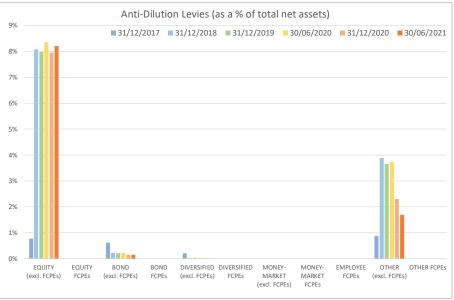


Source: Prospectus Analysis, AMF-Banque de France









Source: Prospectus Analysis, AMF-Banque de France





Figure 14: Mention of swing-pricing in prospectuses (FCPE vs Non-FCPE) (as a percentage of the number of fund share classes and as a percentage of total net assets)

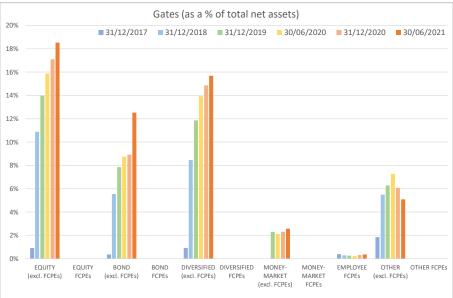


Source: Prospectus Analysis, AMF-Banque de France





Figure 15: Mention of gates in prospectuses (FCPE vs Non-FCPE) (as a percentage of the number of fund share classes and as a percentage of total net assets)



Source: Prospectus Analysis, AMF-Banque de France



5. FOCUS ON ETFS

Exchange traded funds (ETFs) are passive management funds replicating the performance of a financial index (i.e. a basket of underlying securities) and traded continuously.

The up-to-date exhaustive list of ETFs listed on Euronext can be accessed via the platform's website.¹⁴ Euronext also kindly provided historical registers of the ETFs listed at each year-end since 2017. By merging these lists with the main database, it is possible to monitor specifically the introduction of LMTs in the population of ETFs listed on Euronext and domiciled in France.¹⁵

Table 5 gives an idea of the population of French ETFs by type of underlying assets, by number of different fund classes (right-hand sub-columns) and in terms of net assets (left-hand).

One can observe that this population consists almost exclusively of equity ETFs. There were less than about ten fund classes of bond ETFs, diversified ETFs and other ETFs. The other types of funds are not represented among ETFs.

Table 5: Population of French ETFs

	31/12/2017		31/1	2/2018	31/1	31/12/2019		30/06/2020		31/12/2020		6/2021
	€bn	# classes	€bn	# classes	€bn	# classes	€bn	# classes	€bn	# classes	€bn	# classes
EQUITY (excl. ETFs)	330.94	3 501	260.18	3 504	293.50	3 376	259.95	3 348	296.50	3 375	328.62	3 428
EQUITY ETFs	30.33	80	32.15	131	30.24	96	26.45	97	28.43	87	32.17	86
BOND (excl. ETFs)	285.88	2 153	267.79	2 230	279.11	2 209	254.75	2 149	264.35	2 213	259.67	2 213
BOND ETFs	1.07	7	1.24	9	1.58	9	1.53	10	1.33	10	1.23	8
DIVERSIFIED (excl. ETFs)	370.29	4 932	332.59	4 980	386.31	5 382	387.27	5 536	418.35	5 713	448.39	5 879
DIVERSIFIED ETFs	3.31	17	0.40	5	0.23	5	0.15	5	0.10	4	0.14	2
OTHER (excl. ETFs)	59.41	590	79.78	906	87.40	941	80.42	996	102.58	1 128	132.57	1 161
OTHER ETFs			3.04	11	2.32	9	2.34	10	1.62	10	1.55	10

Source: BIO database (AMF), Euronext

In what follows, we focus on equity ETFs, which are most representative of the French market. We compare the various LMTs' prevalence rates in ETFs with those observed for non-ETF equity funds. Figure 16 illustrates major disparities between equity ETFs and the general population of equity funds in terms of adoption of the various liquidity management tools. Note in particular that ETFs' prospectuses mention far more frequently the possibility of total suspension of redemptions, and the existence of ADLs or gates. Conversely, swing-pricing is absent from ETFs, and the mention of redemption in kind is far less widespread (57% of ETF fund share classes at end-June 2021 versus 79% in non-ETF equity funds).

¹⁴ See Euronext, <u>ETFs all markets</u>

¹⁵ NB: for the calculation date of mid-year 2020, we selected both the ISIN codes present on the list at end-2019 and those present at end-2020.



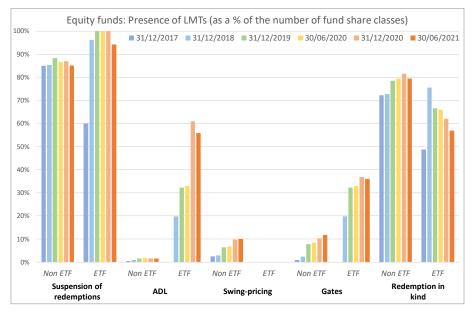
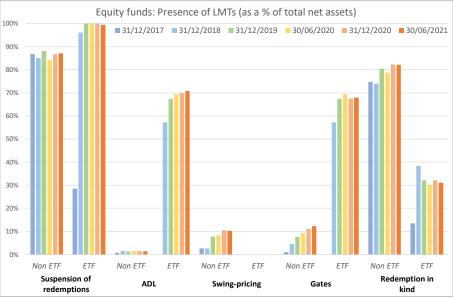


Figure 16: Mention of the various LMTs of French equity funds, depending on whether or not they are ETFs (as a percentage of the number of fund share classes and as a percentage of total net assets)



Source: Prospectus Analysis, AMF-Banque de France, Euronext

6. ANALYSIS BY TYPE (UCITS VS AIFS)

To complete this analysis, we endeavour to investigate a possible difference in the various LMTs' rate of presence depending on the type of product (i.e. by comparing UCITS, coming under the Undertakings for Collective Investments in Transferable Securities – UCITS – Directive and AIFs coming under the Alternative Investment Funds Managers – AIFM – Directive). We will further make a distinction between UCITS that use the Value-at-Risk method (VaR UCITS) and the others.

Since all real estate, alternative and venture capital funds (as well as all FCPE funds) fall under the AIFM Directive, we only analyse the equity, bond, diversified, money market and "other" classifications (cf. Table 6). Note, moreover, the small number of VaR UCITS in the money market and "other" categories. As a consequence, the percentages shown for these two groups should be treated cautiously.

		31/12/2017		31/12	31/12/2018		/2019	30/06	/2020	31/12	/2020	30/06	/2021
		€bn	# classes	€bn	# classes	€bn	# classes	€bn	# classes	€bn	# classes	€bn	# classes
	AIFs	104.04	1 051	97.33	1 080	113.28	998	102.90	979	117.57	984	131.39	1 047
EQUITY	UCITS	248.97	2 477	189.00	2 498	203.58	2 422	176.94	2 413	199.34	2 416	220.16	2 399
	VaR UCITS	8.27	53	5.99	57	6.88	52	6.55	53	8.02	62	9.23	68
	AIFs	130.58	712	127.51	692	143.04	699	138.17	693	143.58	691	137.37	690
BOND	UCITS	136.48	1 2 1 1	113.98	1 302	109.90	1 250	96.14	1 208	101.32	1 213	103.74	1 221
	VaR UCITS	19.89	237	27.54	245	27.75	269	21.97	258	20.79	319	19.79	310
	AIFs	193.95	2 599	174.81	2 537	211.67	2 725	216.64	2 772	235.06	2 831	251.70	2 978
DIVERSIFIED	UCITS	129.62	1 967	117.66	2 064	136.54	2 276	137.23	2 399	148.54	2 487	160.24	2 526
	VaR UCITS	50.04	383	40.52	384	38.33	386	33.55	370	34.84	399	36.59	377
MONEY-	AIFs	60.55	261	57.40	198	42.07	172	41.91	161	43.39	163	40.38	167
MARKET	UCITS	303.98	379	294.20	339	296.26	307	305.29	306	368.62	302	339.73	285
WARKET	VaR UCITS	1.54	7	1.07	7	1.14	7	0.93	7	0.93	6	1.12	6
VENTURE	AIFs	64.21	2 645	65.25	2 701	71.26	2 899	68.81	2 769	74.54	2 799	95.23	2 781
ALTERNATIVE	AIFs	6.57	139	4.99	114	5.31	96	5.51	91	6.13	92	6.46	94
EMPLOYEE	AIFs	44.00	584	39.66	578	47.47	580	39.79	578	43.15	565	49.76	566
REAL-ESTATE	AIFs	67.88	447	80.04	497	89.84	531	91.58	515	93.22	514	117.32	535
	AIFs	52.20	521	72.81	799	81.39	841	75.66	896	97.77	1 031	127.53	1 066
OTHER	UCITS	5.94	58	8.71	90	7.55	83	6.41	85	5.94	85	6.15	90
	VaR UCITS	1.26	11	1.30	28	0.78	26	0.69	25	0.49	22	0.44	15
Total		1 629.96	15 742	1 519.77	16 210	1 634.06	16 619	1 566.67	16 578	1 743.26	16 981	1 854.34	17 221

Table 6: Distribution of French funds by type

Source: BIO database (AMF)

UCITS mention the suspension of redemptions in their prospectuses more often than AIFs (cf. Figure 17). Likewise, ADLs (Figure 18), swing-pricing (Figure 19) and gates (Figure 20) have been introduced in UCITS more extensively than in AIFs (and even more so in VaR UCITS than in conventional UCITS). The only exception to this observation concerns the presence of ADLs in equity AIFs, when considering the proportion as a number of fund classes.



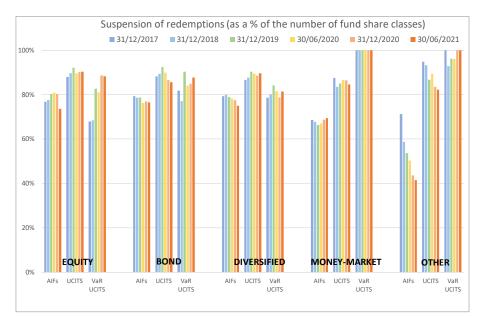
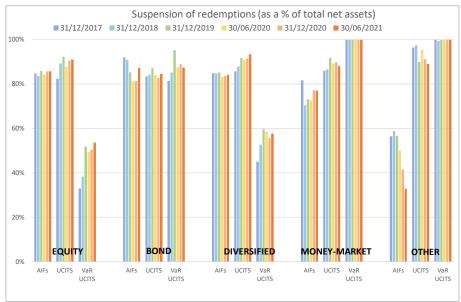


Figure 17: Mention of suspensions in prospectuses (UCITS vs AIFs) (as a percentage of the number of fund share classes and as a percentage of total net assets)

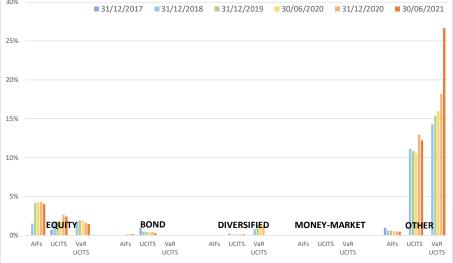


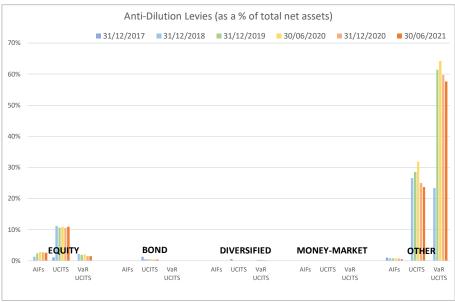
Source: Prospectus Analysis, AMF-Banque de France





Figure 18: Mention of ADLs in prospectuses (UCITS vs AIFs)





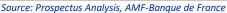
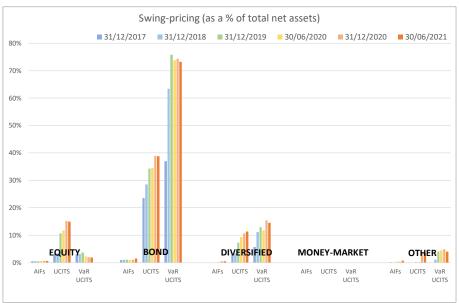






Figure 19: Mention of swing-pricing in prospectuses (UCITS vs AIFs) (as a percentage of the number of fund share classes and as a percentage of total net assets)



Source: Prospectus Analysis, AMF-Banque de France



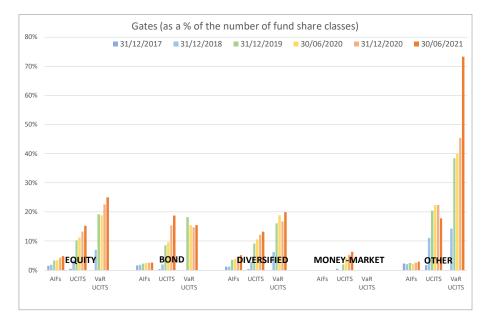
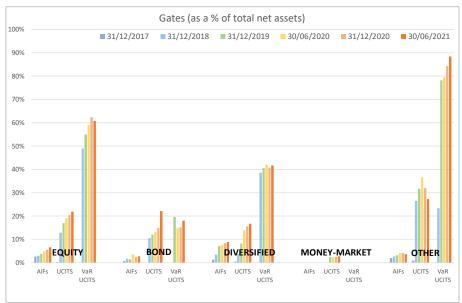


Figure 20: Mention of gates in prospectuses (UCITS vs AIFs) (as a percentage of the number of fund share classes and as a percentage of total net assets)



Source: Prospectus Analysis, AMF-Banque de France



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