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Credit and financing

French insurers' investments remain under pressure from low rates

In a context of falling stock markets in the fourth quarter of 2018, the value of French insurers' investments remained stable at EUR 2,601 billion at market value, dipping by 1% at end-2018 before rebounding by 3.3% in the first quarter of 2019. French insurers maintained a stable asset allocation strategy between 2017 and 2018. They invested predominantly in France or in the euro area, and primarily in fixed-income securities (sovereign or financial sector bonds). Against a backdrop of falling interest rates, the bond portfolio weighed down on the profitability of their investments. In particular, the maturing of high-coupon bonds reduced the performance of the asset portfolio. As a result, insurers pursued diversification strategies for a limited share of their investments (EUR 347 billion).

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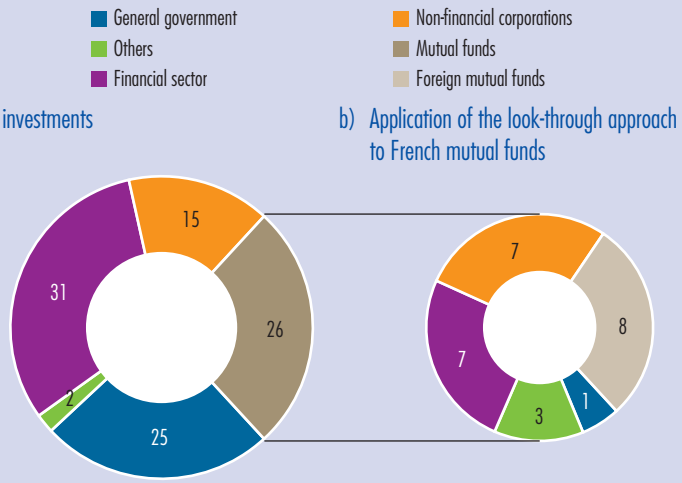
EUR 2,601 billion
the value of French insurers' investments

25%
the share of fixed-rate bonds with a maturity of less than six years and rates between 3% and 5%

EUR 347 billion
the amount invested by insurers in diversification assets

Sectoral breakdown of insurers' investments at end-2018
(%)



Sources: ACPR, Banque de France; 2018 Solvency II annual submissions after application of the look-through approach based on the Banque de France's investment fund data collection.
Note: Before application of the look-through approach, mutual fund units are isolated. The look-through approach is only applied to French mutual funds, due to the lack of sufficient data on foreign mutual fund portfolios.

1 The structure of French insurers at end-2018

Investments mainly focused on fixed income products

Insurers established in France and subject to the Solvency II Directive[1] hold 35% of the assets managed by euro area insurers. France, the largest European market in terms of balance sheet size, remains dominated by life insurance: 91% of French insurers' assets are held by life or composite insurers.

The overall structure of French insurers' portfolio subject to Solvency II is stable over time (see Chart 1). Close to 60% of their investments are made up of bonds, in particular sovereign and financial sector bonds. This high proportion poses a particular challenge in the current environment of persistently low interest rates (see below).

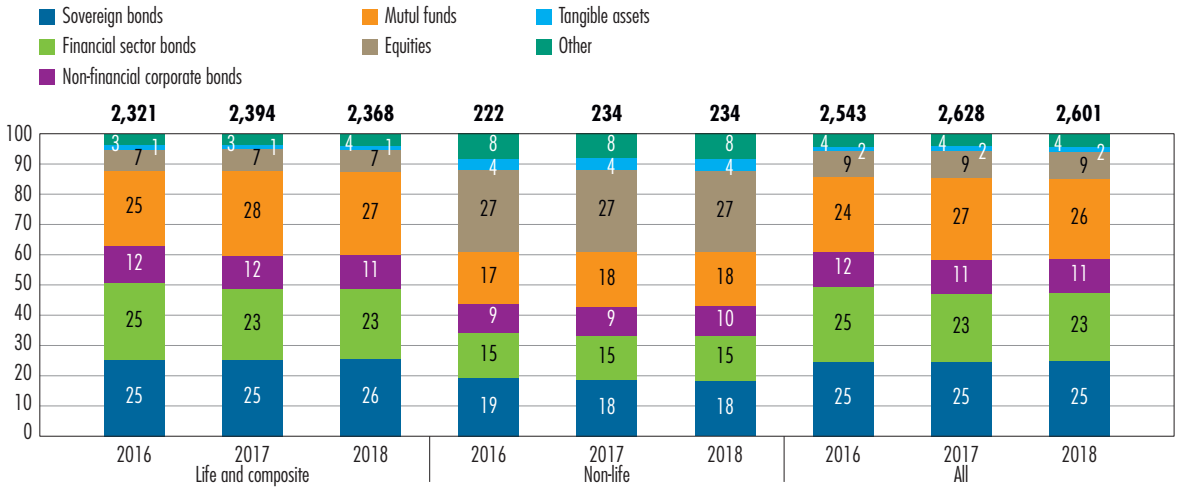
Equities account for almost 30% of the balance sheet of non-life insurers, compared to less than 10% for life and composite insurers. This can be explained by the amount of the former's participating interests. Excluding participating interests, the two categories of insurers hold the same proportion of equities in their investments.

A decrease in net purchases of mutual fund shares, in particular shares of French mutual funds.

The relative share of mutual funds in the financial investments of insurers established in France[2] fell slightly in 2018 (down 0.8 points), in contrast to what was observed in 2017.

Net purchases of mutual fund shares dropped sharply in 2018, slipping to EUR 10.4 billion from EUR 55.6 billion in 2017 (see Chart 2a). On the one hand, insurers were net sellers of money market fund

C1 Breakdown of insurers' investments according to their activity and by type of security, at end-2016, 2017 and 2018, at market value
(breakdown in %; annual amount in EUR billions)

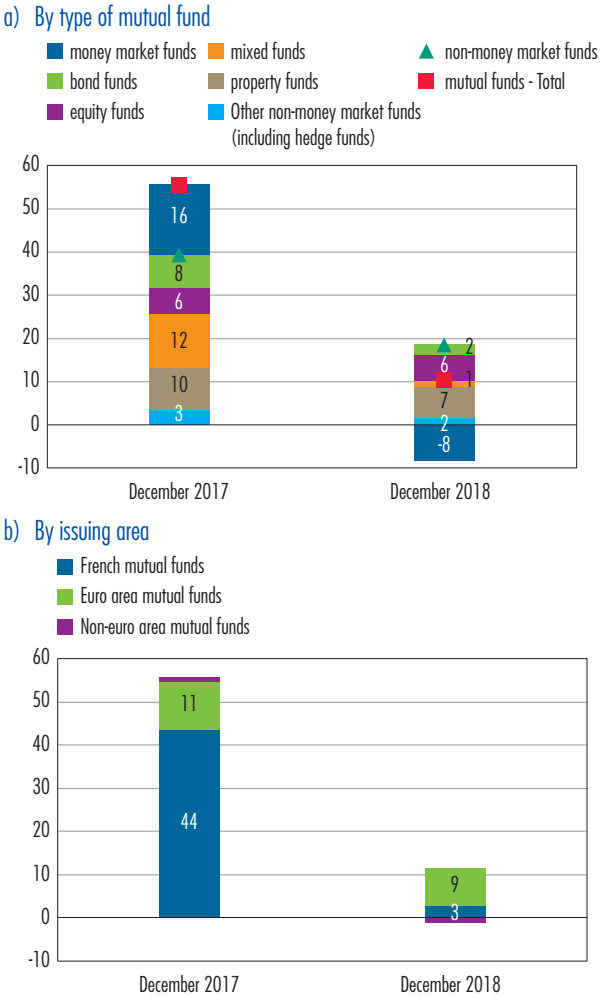


Scope: Before applicaton of the look-through approach to French mutual funds.
Sources: ACPR, Banque de France; 2018 Solvency II annual submissions.
Note: The look-through approach is applied to French mutual funds to identify the final beneficiaries of the investments made. The breakdown of insurers according to their life/composite or non-life activity is taken from the reports made by insurers in the Solvency II submissions. Reinsurers are classified either under life and composite insurers or under non-life insurers according to their activity.

1 L'éco en bref, "La supervision des assurances", *https://abc-economie.banque-france.fr/la-supervision-des-assurances*

2 "A growing share of investment funds in the financial investments of insurers established in France in 2017", *Banque de France Bulletin*, No. 220/4, November-December 2018, *https://publications.banque-france.fr/en/growing-share-investment-funds-financial-investments-insurers-established-france-2017*

C2 Insurers' investments in mutual fund shares (year-on-year flows)
(EUR billions)



Sources: ACPR, Banque de France; 2018 Solvency II annual submissions.

shares (–EUR 8.2 billion), after having been net buyers in 2017 (+EUR 16.3 billion). On the other hand, net purchases of non-money market fund shares fell by half to stand at EUR 18.5 billion in 2018, compared to EUR 39.3 billion in 2017.

Within non-money market funds, insurers maintained a high level of net purchases of equity funds (EUR 6 billion in 2018 and 2017) and real estate funds (EUR 7.4 billion in 2018, after EUR 9.8 billion in 2017). This trend reflects an attempt to diversify and a search for yield (such as rents for real estate funds) in a context of persistently low interest rates.

At the same time, insurers significantly cut back their net purchases of bond and mixed mutual fund shares, thus reducing the share of their investments intermediated through investment funds compared to 2017.

The sharp decline in net purchases of mutual fund shares between 2017 and 2018 primarily affected resident funds, which only captured EUR 2.7 billion in 2018, compared with EUR 43.6 billion in 2017 (see Chart 2b). By comparison, net purchases of euro area mutual funds were more resilient : they stood at EUR 8.7 billion at end-2018, compared with EUR 11.0 billion at end-2017. To a small extent, this redistribution of investments towards foreign funds can be explained by the recent relocation of French funds to other euro area countries :[3] only EUR 2 billion out of the EUR 8.7 billion corresponded to funds previously registered in France and relocated to a euro area country.

A resumption of direct bond purchases

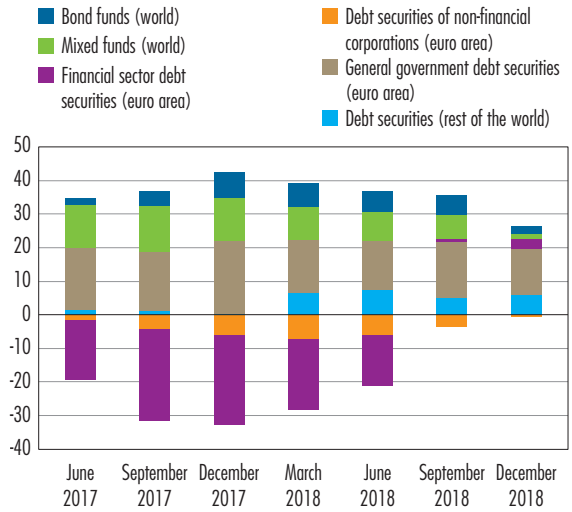
At the same time, insurers once again became net direct buyers of bonds in 2018 (EUR 22.4 billion) after having been net sellers[4] to the tune of EUR 10.4 billion in 2017 (see Chart 3). Insurers continued to favour euro area government bonds even though they cut back their net purchases to EUR 13.4 billion from EUR 22.1 billion in 2017. On the other hand, they considerably increased their net sales of non-euro area securities, illustrating a search for higher yields than those observed in the euro area. The turnaround in net bond flows mainly benefited the euro area financial sector (from –EUR 26.6 billion to +EUR 3.1 billion). At the same time, insurers slowed their net sales of euro area non-financial corporate bonds (from –EUR 6.1 billion to –EUR 0.4 billion), thereby interrupting the trend of reducing their direct exposure to the euro area corporate sector that had been observed in 2017.

3 "French non-money market investment funds: a sharp decrease in outstanding amounts in 2018", *Banque de France Bulletin*, No. 225/5, September-October 2019, *https://publications.banque-france.fr/en/french-non-money-market-investment-funds-sharp-decrease-outstanding-amounts-2018*

4 Including non-renewal of matured obligations.

C3 Year-on-year flows of bond holdings and units of mutual funds with a bond component held by insurers

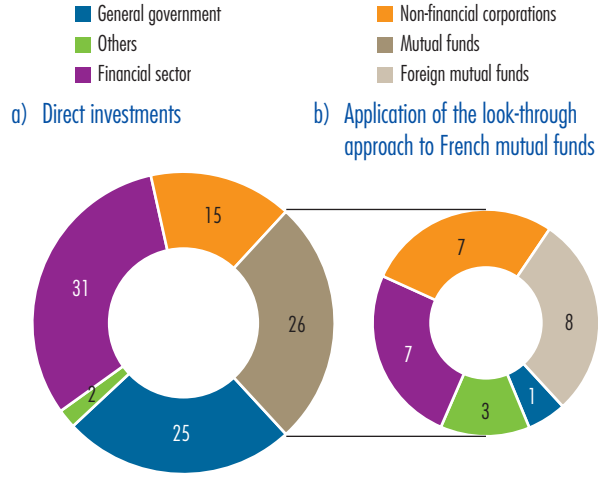
(EUR billions)



Sources: ACPR, Banque de France; 2018 Solvency II annual submissions

C4 Sectoral breakdown of insurers' investments at end-2018

(%)



Sources: ACPR, Banque de France; 2018 Solvency II annual submissions after application of the look-through approach based on the Banque de France's investment fund collection.
Note: Before application of the look-through approach, mutual fund units are isolated. The look-through approach is only applied to French mutual funds, due to the lack of sufficient data on foreign mutual fund portfolios.

An asset portfolio dominated by the financial sector

All categories of securities taken together, and before application of the look-through approach to French mutual funds, the financial sector remained insurers' preferred sector (see Chart 4), with 31% of investments in 2018, after 30% in 2017. This can be explained by the weight of bond issuance in this sector, which is the second largest issuer after the public sector.[5] Insurers maintained a stable asset allocation over time, with year-on-year changes being driven either by asset valuation effects or a change in insurers' strategy. Mutual funds therefore ranked second, down from 27% in 2017 to 26% in 2018. The share of general government was stable at 25%. At end-2018, the financing of non-financial corporations via bonds, equities or loans accounted for 15% of the portfolio (after 16% in 2017).

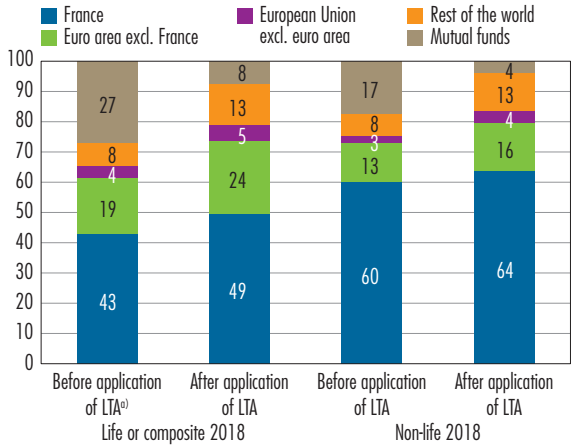
The predominance of the financial sector in insurers' portfolio is even more apparent after application of the look-through approach (38%, after 37% in 2017), as insurers hardly invest in the public sector. The share of non-financial corporations decreased to 23% (after 24% in 2017).

Investments made mainly in France and in the euro area

French insurers invested mainly in France and in the other euro area countries (see Chart 5): in particular,

C5 Breakdown of insurers' investments according to their activity and by issuing area, at end-2018

(%)



a) LTA: look-through approach.
Sources: ACPR, Banque de France; 2018 Solvency II annual submissions.

5 The financial sector accounts for 33% of the outstanding amount of bonds issued by French issuers (compared with 44% at the euro area level), compared with 51% issued by French general government (compared with 48% at the euro area level). Source: Stat Info "Securities issues by French residents - Q2 2019", *https://www.banque-france.fr/en/statistics/securities-issues-french-residents-2019q2*.

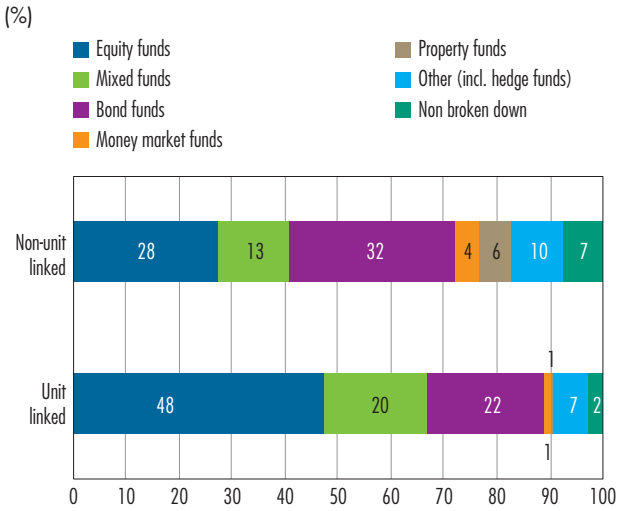
non-life insurers invested 80% of their assets in the euro area (after application of the look-through approach to French mutual funds). The geographical breakdown of insurers' portfolios was stable compared to 2017.

Units of account very heavily invested in equities and foreign mutual funds

In 2018, investments underlying unit-linked contracts accounted for 15% of the outstanding investments of life and composite insurers. These were invested in mutual funds to the tune of 83%, in order to enable insurers to offer higher yields than bond yields. After applying the look-through approach to French mutual funds, 30% of the amounts held by policyholders in unit-linked products were heavily invested in equities, compared with 11% in the general fund.[6] The share of equities in unit-linked ring-fenced funds was even higher. Thus, the look-through approach residual, consisting of foreign mutual fund shares, was made up of equity fund shares to the tune of 48% and mixed fund shares to the tune of 20% (see Chart 6). Cumulative investments in bonds accounted for 35% of investments.

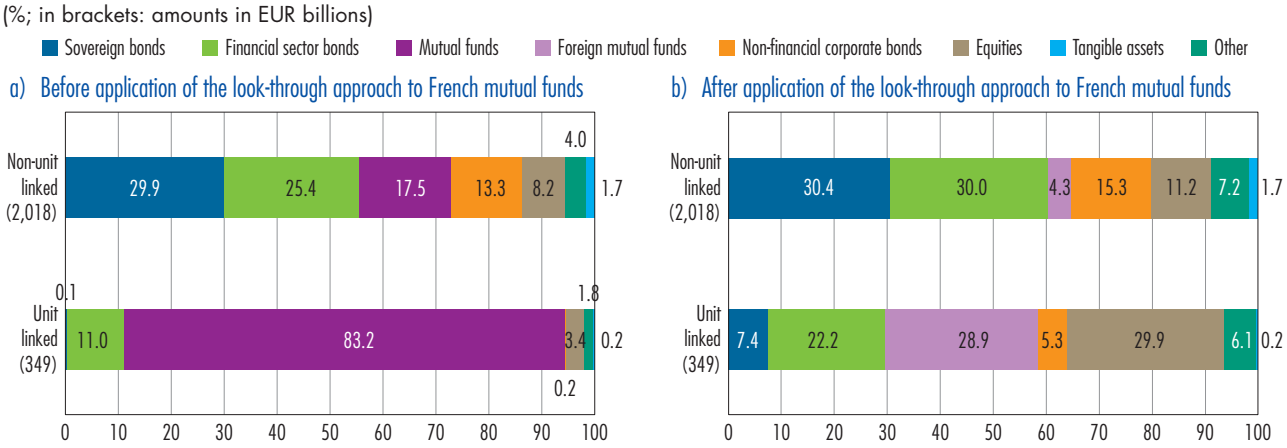
Investments underlying life insurance liabilities for the general fund were mainly made in bonds. In view of the guarantees offered on this type of contract (capital guarantee or yield guarantee), insurers favoured investments offering recurring income and a stable repayment value. Thus, after applying the look-through approach to French mutual funds, bonds accounted for 76% of insurers' non-unit linked investments. Conversely, they restrained their equity investments, whose value,

C6 Breakdown by type of foreign mutual fund held by life and composite insurers after application of the look-through approach to French mutual funds at end-2018
Distinction between unit linked products and the rest of the portfolio



Sources: ACPR, Banque de France; 2018 Solvency II annual submissions after application of the look-through approach based on the Banque de France's investment fund collection.

C7 Breakdown of life and composite insurers' investments at end-2018
Distinction between unit linked products and the rest of the portfolio



Sources: ACPR, Banque de France; 2018 Solvency II annual submissions after application of the look-through approach based on the Banque de France's investment fund collection.

6 The general fund corresponds to assets and liabilities for which no ring fencing has been established. Ring fencing is an accounting method for managing assets and liabilities. There are two types of ring fencing: legal and contractual. Assets and liabilities that are segregated by canton are managed and organised separately from the other activities of insurance companies.

by nature, fluctuates: their share represented only one-third of that held in unit-linked ring-fenced funds, which do not offer any guarantee of recovering paid-up capital (see Chart 7).

BOX 1

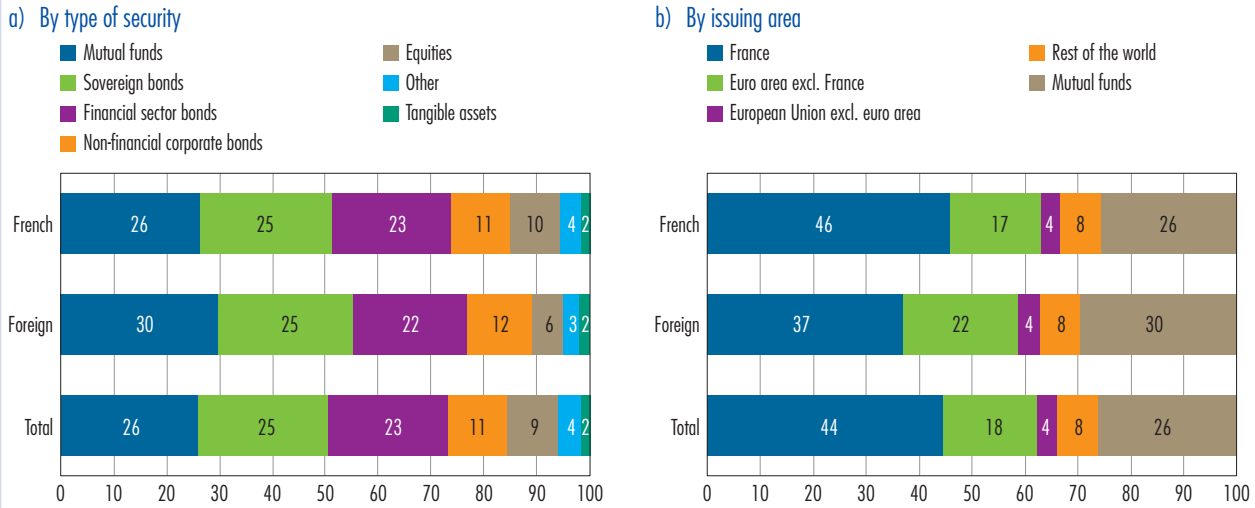
Structure of insurers' investments according to the origin of the parent group

The investments of insurers authorised in France and owned by a parent company established abroad totalled EUR 372 billion, out of the EUR 2,601 billion of the total French market.

Overall, the structure of investments by type of security is comparable regardless of the origin of the parent company. Nevertheless, foreign-owned insurers invest more in funds (30%) than insurers authorised in France (26%), to the detriment of direct shareholdings (6%, compared with 10%). Furthermore, insurers with a French parent company invest comparatively more in France than those with a foreign parent company (46%, compared with 37%) and less in other euro area countries (17%, compared with 22%).

Breakdown of insurers' investments according to the origin of their capital, before application of the look-through approach to French mutual funds, at end-2018

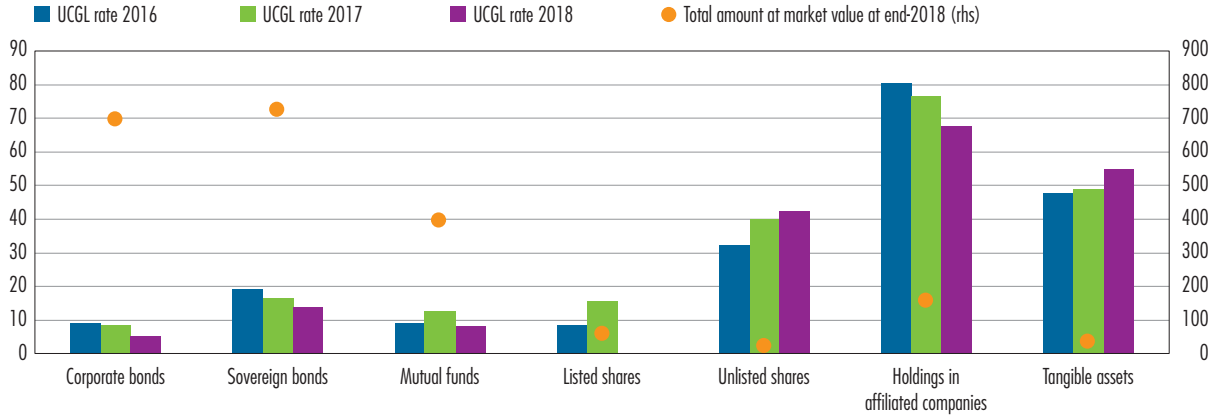
(%)



Sources: ACPR, Banque de France; 2018 Solvency II annual submissions.

C8 Unrealised capital gains or losses rate (UCGL) and amount of main investments at end-2018, before application of the look-through approach to French mutual funds

(rates in %; amounts in EUR billions)



Sources: ACPR, Banque de France; 2018 Solvency II annual submissions.

2 The impact of the low interest rate environment on insurers' bond portfolios

Slight decline in unrealised capital gains

Against the backdrop of persistently low interest rates, the rate of unrealised capital gains[7] remained high, at around 14% for all investments, but was down one percentage point from 2017.

Indeed, the capital gains rate of bonds, which made up almost 60% of insurers' portfolios, dropped by three percentage points on average between 2017 and 2018 (see Chart 8). Insurers invested the proceeds of old bonds maturing in 2017, as well as new inflows from euro funds, in new bonds with much lower coupon rates. In addition, in 2018, unrealised capital gains on listed equities and holdings in affiliated companies declined sharply (by 0% and 68% respectively, compared to 15% and 76% in 2017) as a result of the fall in equity markets at end-2018.

By contrast, tangible assets continued to post very high unrealised capital gains (55%), reflecting the continued rise in real estate prices.

High rate fixed coupons maturing soon

French insurers, in particular life and composite insurers, enjoyed significant recurring income thanks to bonds acquired several years ago, when rates were high. These high-coupon bonds gradually matured and were renewed by lower-yield bonds.

More specifically, at end-2018, 48% of the bond portfolio held by insurers was to mature over the following six years, almost half of which with coupon rates between 3% and 5% (see Chart 9, red box).

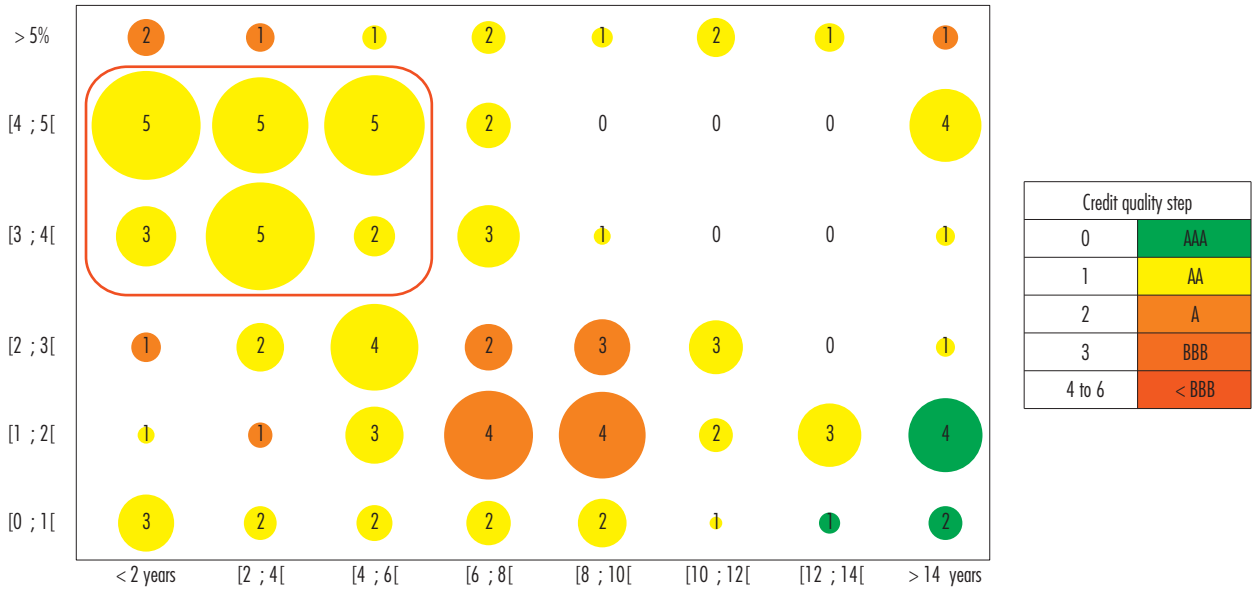
High quality bonds

The vast majority of French insurers invested in securities rated as safe (see Charts 9 and 10), i.e. with a rating of AA or above, in a proportion that remained stable between 2017 and 2018. Securities rated AAA and AA accounted for 55% of investments, 78% of which were French sovereign bonds. Investments rated BBB were mainly made up of French securities (25%) and Italian securities (22%).

7 The rate of unrealised capital gains represents the percentage difference between the market value and the net book value of securities held.

C9 Share of fixed coupon rates according to the residual maturity for directly held bonds

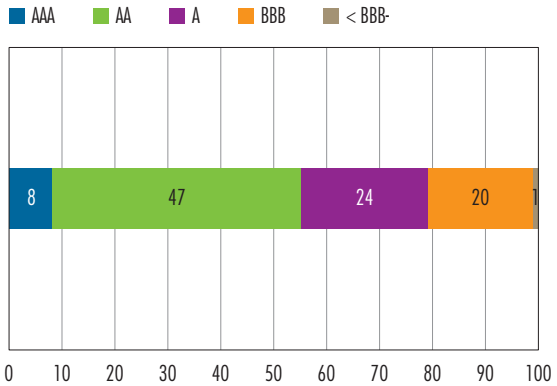
(x-axis: residual maturity in years; y-axis: coupon rate in %; disks: share in %)



Sources: ACPR, Banque de France; 2018 Solvency II annual submissions.
Note: The colour corresponds to the average rating of the investment pocket. Fixed coupons with a rate of 4% or above and less than 5%, and with a residual maturity of less than two years, represent 5% of bonds and have an average rating of between 1 and 2. The red box corresponds to the bond portfolio maturing within six years and whose coupon rates are between 3% and 5%.

C10 Rating of bonds at end-2018

(%)



Sources: ACPR, Banque de France; 2018 Solvency II annual submissions.
Note: Standard & Poor's and Fitch rating.

3 Diversification strategies

Growth in diversification investment

The persistently low interest rate environment has encouraged insurers to diversify their portfolios, in order to seek higher yields or yields that are uncorrelated to traditional asset classes, and to align the duration[8] of their assets with that of their liabilities.

Diversification assets are valued before application of the look-through approach to French mutual funds and cover:

- infrastructure investments (including infrastructure funds);
- structured securities: hybrid securities combining a bond component and a derivative component (hedging mechanisms such as credit default swaps (CDSs), constant maturity swaps (CMSs) and credit default options (CDOs), as well as securitisation;

8 The duration of an interest-bearing financial instrument is the average lifespan of its cash flows weighted by their present value.

- real estate, a distinction is made between the negotiable part (listed shares of real estate companies and units of real estate funds) and the non-negotiable part (unlisted shares of real estate companies, units of non-trading real estate companies and buildings);
- other diversification assets (units in diversification funds and private equity funds as well as convertible and hybrid bonds);
- private debt held by insurers in non-affiliated companies (not belonging to the insurance group).

Diversification assets amounted to EUR 347 billion in 2018 (i.e. 13.3% of the total). They posted a year-on-year increase of EUR 13 billion (up 3.8%) and a two-year increase of EUR 36 billion (up 11.5%) (see Table 1). This rise is mainly due to an increase in real estate investments, up by EUR 39 billion over two years, whose outstandings accounted for 6.7% of the total at end-2018. Only part of this increase results from the rise in real estate prices: the commercial property price index, on which insurers' investment is concentrated, climbed by 2.4% in 2018.

The amounts invested in the other diversification asset classes remained stable overall in absolute value terms (infrastructure, private debt, diversification funds and private equity, convertible and hybrid bonds); only the value of structured financing fell by EUR 6 billion between 2016 and 2018.

The share of infrastructure investment in total investment rose only slightly to 1.3% at end-2018, compared with 1.2% at end-2017,[9] but rebounded in the first quarter of 2019. Even though this type of investment generally produces a return on investment after several years, it is suited to insurers' long-term liabilities. Besides, the Solvency II regime provides for a preferential prudential treatment for certain infrastructure investments that meet strict criteria. Thus, 25% of infrastructure investments made by French insurers benefit from a lower capital charge as authorised by the regulations.

T1 Annual change in the outstanding amount of diversification investments, before application of the look-through approach to French mutual funds

(EUR billions)

	December 2016	December 2017	December 2018
Total investments	2,543.8	2,627.7	2,601.5
Total diversification assets	311.4	334.5	347.2
Infrastructure	33.9	32.8	34.3
Structured financing	92.3	90.1	86.3
Securitisation	*4.6*	*4.0*	*4.0*
Other structured securities	*87.7*	*86.1*	*82.3*
Real estate	134.4	158.4	173.5
Non negotiable real estate	*83.4*	*89.4*	*97.4*
Negotiable real estate	*51.0*	*69.0*	*76.1*
Other diversification assets	43.6	45.1	44.2
Diversification funds and private equity	*29.6*	*33.7*	*32.1*
Convertible and hybrid bonds	*13.9*	*11.4*	*12.1*
Corporate private debt (excl. equity interests)	7.2	8.1	9.0

Sources: ACPR, Banque de France; 2018 Solvency II annual submissions.

9 The outstanding amount of infrastructure investments at end-2017 has been revised compared to last year's amount after correcting reporting errors for 2016 and 2017.

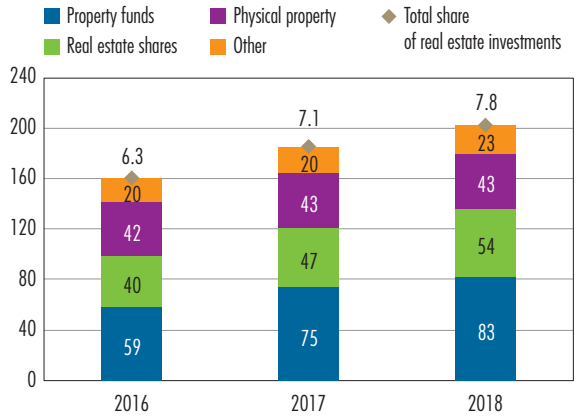
BOX 2

Insurers' exposure to the real estate sector

Insurers' exposure to the real estate sector[1] has increased over the past two years: it rose from 6.3% of investments in 2016 (i.e. EUR 161 billion) to 7.8% in 2018 (i.e. EUR 203 billion) (see chart). In 2018, property funds outstandings amounted to 41%, while shares in real estate companies and physical property accounted for 27% and 21% of investments in this sector respectively.

Breakdown of insurers' real estate investments between 2016 and 2018

(EUR billions)



Sources: ACPR, Banque de France; 2018 Solvency II annual submissions.

Real estate investments are mainly located in France (90%). The remaining investments break down as follows: 4% in other European Union countries and 3% in the rest of the world.

The 22.9% increase in outstandings in property funds between 2016 and 2017 was mainly due to investment flows (up 16.1%), while the rise in unit prices contributed only 3.2% to the rise.[2] Investment in property funds continued in 2018, albeit at a slower pace.

Conversely, net investment flows into physical property reduced outstandings by 3.9% in 2018 (after a rise in 2017), as a result of transfers of self-owned buildings to real estate companies. The sharp 4% increase in the valuation of property recorded on insurers' balance sheets in 2018 was not enough to absorb this decline.

1 The figure for real estate investments shown in this box corresponds to the top value of the range which, compared with the figure shown in the diversification investment table, also takes into account the debt financing provided to companies in the real estate sector, i.e. EUR 30 billion.

2 The balance of the change is due to reclassifications (reporting corrections by insurers).

Appendix
Methodology

Legal forms of insurers

Insurers take several legal forms:

- insurance companies and mutual insurance companies governed by the Insurance Code;
- mutual benefit societies governed by Book II of the Mutual Insurance Code, which mainly insure health risks;
- provident institutions governed by the Social Security Code. Historically, provident institutions, which are joint governance structures, have specialised in group insurance (company or professional branches).

Mutual insurance companies, mutual benefit societies and provident institutions are non-profit structures. Mutual benefit societies and provident institutions mainly insure individuals.

Population studied

The sample in the 2018 study includes the 457 active insurers subject to the Solvency II Directive and its implementing legislation (mainly on a balance sheet size criterion). These 457 insurers held EUR 2,601 billion in investments at market value at 31 December 2018.

These insurers are broken down into two broad categories.

- Life and composite insurers, which manage the majority of euro-denominated contracts and all unit-linked contracts. Their liabilities are essentially long-term.
- Non-life (or damage) insurers, which cover property damage, bodily injury and civil liability. Their liabilities are essentially short-term as they generally settle claims within less than two years, with a few exceptions such as civil liability, surety and construction insurance.

Study data

The reference accounting closing date is 31 December 2018 and, unless otherwise stated, the investment data used are those taken from the annual statements known as the "list of assets" (S.06.02). The values of investments are disclosed according to the valuation approach required by the Directive, i.e. mainly at market value. Quarterly closing dates are also used.

Application of the look-through approach to mutual funds

The look-through approach is applied to mutual fund shares/units held by insurers by exploiting the Banque de France's databases (mainly investment fund inflows). It is then possible to identify the final beneficiaries of the investments made: the mutual fund shares/units held in insurers' portfolios are thus replaced by the shares/units in which these mutual funds invest.

At the end of this process, 71% of insurers' investments in mutual fund shares/units were allocated among the various categories of underlying financial instruments. The remaining 29% correspond to non-resident mutual funds.

Method of calculating flows

Flows, revaluations and reclassifications are calculated using the data reported by insurers in the detailed asset statements (S.06.02), supplemented by data collected from mutual funds and other available repositories (CSDB,[1] etc.). The variation in outstandings is broken

1 Centralised Securities Database.

down into flows (economic transactions), valuation effects (price effects) and reclassifications according to the following formula:

$$Outstandings_t - Outstandings_{t-1} = Flows_t + Valuations_t + Reclassifications_t$$

Flows, reclassifications and valuations are calculated security by security, and then aggregated. Outliers (in terms of valuations and/or flows) resulting from the calculation are removed.

Flows and reclassifications are calculated first. The valuation is then calculated as the variation in outstandings minus the flow and reclassification.

For a share in euros, the formula for calculating the flows is as follows:

$$Flow_t = (Quantity_t - Quantity_{t-1}) \times (Price_{t-1} + Price_t) / 2$$

Where *Quantityt* is the quantity of securities held at time *t* and $Prix_t$ is the unit price at market value of the share.

For debt securities, the flow is calculated by neutralising the accrued interest on securities sold, reaching maturity or purchased, and by adding the interest income for all securities held at the end of the period under review. In addition, a negative flow may reflect both sales and non-renewals of mature securities.

When a characteristic of a security changes (e.g. its issuing sector), and in the absence of corrective submissions on previous outstanding amounts, the series break is dealt with via a reclassification.

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