Insurers’ investments weather the crisis despite tensions

Investments by insurers established in France reached EUR 2,813 billion at end-2019, up EUR 211 billion on the previous year. Under pressure from the further fall in interest rates, insurers favoured bonds issued by the private sector and by non-euro area issuers as well as diversification assets (real estate, structured securities, etc.).

Thanks to large unrealised capital gains, they were able to partly cushion the health and economic crisis in the first half of 2020. While asset valuations deteriorated sharply in the first quarter of 2020 (down EUR 131 billion, i.e. almost all the increase recorded in 2019), the market rebound in the second quarter offset more than half of this decline. The crisis had little effect on the ratings of the bonds held. Liquid investments enabled insurers to meet their short-term commitments.

<table>
<thead>
<tr>
<th>EUR 2,813 billion</th>
<th>value of French insurers’ investments at end-2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>50%</td>
<td>share of highly rated liquid assets in total non-unit linked investments</td>
</tr>
<tr>
<td>0.9%</td>
<td>share of high-risk high-yield bonds in total rated bonds held directly at end-June 2020</td>
</tr>
<tr>
<td>3.1%</td>
<td>share of green bonds and labelled funds in total investments at end-June 2020</td>
</tr>
</tbody>
</table>

Changes in the valuation of securities held by resident insurers, before application of the look-through approach (EUR billions)

Sources: ACPR, Banque de France; Solvency II quarterly and annual submissions.
Note: Applying the look-through approach replaces shares/units in CIUs by assets held through these CIUs.
1 The situation of insurers in 2019, prior to the health crisis: stable asset allocation in a low interest rate environment

In 2019, with EUR 2,813 billion worth of assets, France was still the leading market in the euro area in terms of balance sheet size, as insurers established in France and subject to the Solvency II directive held 35% of investments managed by euro area insurers. Life and composite insurance remains by far the leading activity of French insurers: it accounts for 91% of insurers’ outstanding investments.

Assets allocated towards safe, diversified and long-term investments

It is the responsibility of insurers to hold sufficiently safe and liquid assets in order to have the necessary funds should an unexpected event occur in the future. Insurers therefore have a stable asset allocation from year to year (see Chart 1), the slight changes observed between 2018 and 2019 being mainly due to valuation effects related to rising stock markets. The proportions of shares/units in collective investment undertakings (CIU) and equities are up (by 0.8% and 0.4% respectively), while those of bonds and fixed assets are down (by 1.2% and 0.1% respectively).

Insurers continue to favour bonds, which in 2019 accounted for 58% of investments, mainly sovereign bonds (25% of total outstandings) and financial corporate bonds (22%). Insurers hold mainly debt securities with a maturity of more than one year (for an amount of EUR 1,599 billion, compared with 20 billion securities with a maturity of less than one year), generally held to maturity, which mitigates the effects of cyclical shocks.

Equities and participating interests account for 10% of investments. However, this overall figure masks a significant difference between life and composite insurers, which hold 8% of their asset portfolio in equities and participating interests, and non-life insurers, which hold more than a quarter (27%) of their portfolio in equities and participating interests. This difference is mainly due to the fact that non-life insurers hold a greater proportion of participating interests than life and composite insurers (respectively 23% and 4% of the outstanding amount). In the end, direct investments in equities reach the same proportions for non-life, life and composite insurers.

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composite and Life</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial sector bonds</td>
<td>2394</td>
<td>2368</td>
<td>2547</td>
</tr>
<tr>
<td>Non-financial corporate bonds</td>
<td>234</td>
<td>234</td>
<td>266</td>
</tr>
<tr>
<td>Equities and participating interests</td>
<td>2,628</td>
<td>2,601</td>
<td>2,813</td>
</tr>
<tr>
<td>Total</td>
<td>2,628</td>
<td>2,601</td>
<td>2,813</td>
</tr>
<tr>
<td>All insurers</td>
<td>2,628</td>
<td>2,601</td>
<td>2,813</td>
</tr>
</tbody>
</table>

Sources: ACFR, Banque de France; Solvency II annual submissions.
Scope: Before application of the look-through approach to French CIUs (see Appendix 2).
Notes: The breakdown of insurers by activity (life/composite or non-life) is drawn from the authorisations granted by insurers. Reinsurers are classified with life and composite insurers. Applying the look-through approach replaces shares/units in CIUs by assets held through these CIUs. This process makes it possible to identify the final beneficiaries of the investments made by CIUs.

2 Securities held for control purposes and not for portfolio investment purposes.
As regards the sectoral allocation of directly held investments, insurers invest primarily in the financial sector (31% of their investments), given the weight of their participating interests and the financial sector’s share of the bond issuance market, followed by general government (25%) and non-financial corporations (15%), see Chart 2.

After applying the look-through approach to French shares/units in CIUs, the predominance of the financial sector is more pronounced (38%, the same as in 2018). Applying the look-through approach hardly affects the share of general government (27%, after 26% in 2018), as CIUs invest little in government securities. On the other hand, it raises the share of non-financial companies (22%, after 23% in 2018).

**For life insurers: an asset allocation that varies according to the nature of contracts**

Life and composite insurers’ investments account for 91% of assets held by insurers. However, the asset allocation differs whether it concerns investments related to insurance liabilities of contracts with a capital guarantee or investments related to unit linked contracts, see Chart 3.

---

3 At end-2019, the financial sector accounted for 34% of outstanding bond issues in France (against 45% in the euro area), general government 51% (against 47% in the euro area), and non-financial corporations 15% (against 8% in the euro area). Source: STAT INFO “Securities issues by French residents – Q4 2019”, https://www.banque-france.fr/en/statistics/securities-issues-french-residents-2019q4
Insurers hold EUR 2,145 billion worth of assets to cover their insurance liabilities non related to unit linked contracts, mainly euro-denominated contracts offering capital or yield guarantees. In order to meet their obligations, insurers favour investments with steady income and a stable redemption value. Consequently, 75% of these vehicles are invested in bonds (compared with 76% in 2018).

Investments related to unit linked contracts (EUR 402 billion) represent an increasing share of life and composite insurers’ assets (15.8%, after 14.8% in 2018), although net inflows (including arbitrages) on unit linked contracts only amount to EUR 5.1 billion, a level four times lower than in 2018. In these contracts, the risks associated with investments are borne by the policyholders and not by the insurers. They thus allow for riskier management through CIUs in order to obtain higher returns. Shares/units in CIUs account for 82% of investment outstandings related to unit linked contracts. After applying the look-through approach, equities represent 32% of the amounts held by policyholders in unit linked related investments, while foreign equity fund shares/units and foreign mixed fund shares/units account for respectively 14% and 5% of these amounts. In total, close to 50% of outstanding amounts related to unit linked contracts are invested in equities or similar instruments. By way of comparison, after application of the look-through approach, the remaining share of life insurers’ investments includes only 12% of equities and participating interests (plus 1% of foreign equity fund shares/units and 0.5% of foreign mixed fund shares/units). In unit linked related investments, after application of the look-through approach, bonds represent 33% of the total (after 35% in 2018).

Bond yields under pressure

Insurers benefit from a stock of old bonds issued several years ago, which enables them to offer relatively high rates of return in the current environment. However, from year to year, this stock has been shrinking as these securities reach maturity. Since insurers are unable to renew these old bonds at such advantageous rates, the decline in rates of return on newly acquired securities contributes to lowering the average return on assets held.

Bonds with yields above 3% account for 41% of fixed-coupon bonds held by insurers (compared with 48% at end-2018). However, at end-2019, almost half of these bonds were to reach maturity in less than four years, representing 19% of fixed-coupon bonds outstanding (see Chart 4).

C4 Shares of fixed-coupon rates according to residual maturity for directly held bonds at end-2019

(x-axis: residual maturity in years; y-axis: coupon rate %; discs: shares in %)

Sources: ACPR, Banque de France; Solvency II 2019 annual submissions.
Key: Outstanding bonds with a rate of between 4% and 5% and a residual maturity of less than two years account for 4% of total outstanding bonds.

The lower yields on the bond portfolio weigh on insurers’ income and the returns they offer to policyholders. For example, 69% of the portfolio of fixed-coupon bonds with a residual maturity of more than four years has a yield of less than 3%, compared with 40% for the portfolio with a residual maturity of strictly less than four years.

### Unrealised capital gains on the rise in 2019

Lower interest rates raise the value of the assets held by insurers who invest mainly in long-term bonds. In 2019 unrealised capital gains rates thus remained high, at a level of approximately 17% for all investments, an increase of three percentage points over 2018.

Indeed, in 2019, the 10-year OAT rate reached an all-time low of 0.13% on average with episodes of negative rates and bonds, which made up 58% of insurers’ portfolios, recorded a 3 percentage point average increase in the percentage of capital gains between 2018 and 2019 (see Chart 5).

In addition, the 26% increase in the CAC 40 index in 2019 benefited the unrealised capital gains rates on listed equities: after dropping sharply to zero in 2018, they returned to their 2017 level (around 15%) in 2019. Tangible fixed assets continued to show very high unrealised capital gains rates (65% in 2019), reflecting the continued rise in real estate prices.

### Diversification of investment flows in 2019

Rates reached a new stage in the summer of 2019: in July, the monthly average rate on the 10-year benchmark bond became negative and remained so until November 2019, with a low point reached on 28 August (~0.44%).

In this context, and alongside the commercial strategies adopted by life insurers in recent years to reduce the cost or lengthen the duration of their liabilities (lower guaranteed rate, investments blocked in the early years, offer geared towards unit linked products, etc.), insurers have also changed the composition of their investments. Furthermore, increased diversification could enable them to benefit from higher returns or returns uncorrelated from traditional asset classes, and to align the duration of their assets with that of their liabilities.

In this regard, insurers have shifted their investments from government bonds to private sector bonds (see Chart 6). In 2019, they cut back their net purchases of government bonds (from EUR 13 billion to 11 billion). At the same time, they increased their net purchases of private sector bonds (from EUR 3 billion to EUR 19 billion) and substantially raised their net purchases of bonds issued by the rest of the world (from EUR 6 billion to EUR 17 billion), mostly in the United States where yields are higher.
Despite the fall in bond yields, insurers did not switch to equities or funds with an equity component (see Chart 7). They became net sellers of listed equities to the tune of EUR 3 billion in 2019 (after EUR 2 billion net purchases in 2018) and net sellers of equity and mixed fund shares/units to the tune of EUR 9 billion and EUR 4 billion respectively (after net purchases of EUR 6 billion and EUR 1 billion).

Insurers increased their direct holdings of diversification assets (see Table 1). At end-2019, the outstanding amount of diversification assets reached EUR 388 billion, a rise of 12% in one year and 25% in three years that incorporates valuation effects and net investments. Their share in total investments increased from 12% at end-2016 to 14% at end-2019. This growth is mainly driven by real estate (up EUR 60 billion), which accounted for 7% of total investments.
2 The effects of the health crisis on insurers’ investments

The rise in the value of assets in 2019 was offset by the health crisis in the first quarter of 2020

The health crisis, which started in Europe in the first quarter of 2020, opened up a period of great uncertainty, marked by a fall in stock and bond markets (see Chart 8). This decline resulted in a reversal of the gains recorded in insurers’ securities portfolios in 2019 (a EUR 131 billion loss in the first quarter of 2020, after a EUR 133 billion gain in 2019 and a EUR 72 billion loss in 2018). Thus, at the end of March 2020, French insurers’ investments amounted to EUR 2,586 billion\(^5\) down 5% compared with the end of the previous year.

This drop in valuation is primarily attributable to a EUR 65 billion fall in shares/units in CIUs in the first quarter of 2020, or 9% of the total amount held at end-2019 (see Chart 9). While the rise in long-term interest rates in the fourth quarter of 2019 weighed on bond values (down EUR 29 billion over the quarter, see Chart 9), the rise in spreads in the first quarter of 2020 produced similar effects, leading to a further drop in bond values (down EUR 39 billion). Finally, the movements observed on stock markets in the first quarter of 2020 (a 30% fall in the CAC 40, see Chart 8) led to a sharp drop in the value of equities to the tune of EUR 27 billion over the same period, i.e. 10% of the total amount of equities held by insurers and the equivalent of the increase in value recorded over the whole of 2019 (up EUR 25 billion).

In the second quarter of 2020, following the fall in interest rates and the stock market recovery, the value of bonds, equities and shares/units in CIUs rose by EUR 74 billion, offsetting 57% of the decline in value in the first quarter.

C9 Changes in the quarterly valuation of insurers’ securities portfolio by instrument, before application of the look-through approach

(131)

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

C8 Changes in the CAC40 and the 10-year benchmark bond rate

(CAC 40 in points; OAT rate\(^6\) in %)

a) From January 2018 to June 2020

Sources: Bloomberg and Banque de France.

a) Obligation assimilable du Trésor (French Treasury bond).

5 The quarterly figures in this article are calculated on the basis of insurers subject to quarterly reporting, i.e. approximately 96% of the population in terms of outstanding amounts (the annual figures concern the total population).
At end-June, insurers’ outstanding financial investments thus rose by EUR 81 billion, up 3% compared with the first quarter of 2020, but still down 2% compared with end-2019, to stand at EUR 2,666 billion.

However, the health crisis affected issuers in different ways. In the first quarter of 2020, the bond values of financial institutions and non-financial corporations fell sharply compared with the previous quarter, decreasing by EUR 15 billion and EUR 8 billion respectively (see Chart 10). Sovereign bonds were less impacted by the rise in spreads and recorded a less significant decline (down EUR 3 billion). In the second quarter of 2020, all debt securities posted a recovery: bond values of financial institutions, non-financial corporations and general government were up by EUR 1 1 billion, EUR 5 billion and EUR 6 billion respectively.

The decline in the valuation of CIUs recorded in the first quarter of 2020 was mainly attributable to equity funds (down EUR 35 billion), mixed funds (down EUR 20 billion) and bond funds (down EUR 9 billion). This fall was half offset by a EUR 36 billion increase, in particular in equity, mixed and bond funds, which were up by EUR 19 billion, EUR 12 billion and EUR 5 billion respectively in the second quarter (see Chart 11).

However, the health crisis is generating considerable uncertainty regarding the evolution of interest rates and unrealised capital gains of the various asset classes. The fall in asset values in early 2020 directly affects the level of insurers’ unrealised capital gains. Even if hedging techniques are available (see Box 1), this decline could reduce the room for manoeuvre of insurers, which regularly make gains by selling some of their capital gain-bearing assets.

The quality of investments remains stable

French insurers invest mainly in bonds with low credit risk (see Chart 12 below), i.e. with a rating of AA- or higher. At end-June 2020, these high-quality bonds represented 56.1% of rated bonds held directly (compared with 55.5% in December 2019 and 56.4% in December 2018). Their share in rated bonds held indirectly through CIUs is lower (22%).
Box 1

Risk mitigation techniques: hedging via derivatives

In the second quarter of 2020, the notional value of derivatives amounted to EUR 370 billion, representing 20% of the total investments of entities reporting that they hold derivatives. These instruments are mainly used (98% of the total notional value) for hedging purposes, mainly against interest rate risk, but also equity and currency risk. Approximately 2% of the notional amount is devoted to other objectives, including efficient portfolio management.

Over-the-counter derivatives make up almost all (98%) of insurers’ exposure. Insurers’ main counterparties in derivative transactions are major French and foreign banks: ten of these entities account for 80% of the notional value.

Reflecting insurers’ concerns in the current interest rate environment, interest rate risk accounts for 79% of the notional value, compared with only 8% for equity risk, 4% for currency risk and 1% for credit risk (see Chart A).

Calls, which are the most common derivatives used by insurers, account for 61% of the notional value (see Chart B), compared with 16% for swaps, 11% for puts and 9% for forwards.

CA Types of risks covered by derivatives in Q2 2020

<table>
<thead>
<tr>
<th>Risk Type</th>
<th>Notional Value (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity</td>
<td>0.11</td>
</tr>
<tr>
<td>Interest rate</td>
<td>79</td>
</tr>
<tr>
<td>Currency</td>
<td>4</td>
</tr>
<tr>
<td>Credit</td>
<td>1</td>
</tr>
<tr>
<td>Disaster and climate</td>
<td>8</td>
</tr>
<tr>
<td>Other</td>
<td>7</td>
</tr>
</tbody>
</table>

CB Types of derivatives used by insurers in Q2 2020

<table>
<thead>
<tr>
<th>Derivative Type</th>
<th>Notional Value (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calls</td>
<td>61</td>
</tr>
<tr>
<td>Swaps</td>
<td>16</td>
</tr>
<tr>
<td>Puts</td>
<td>11</td>
</tr>
<tr>
<td>Forwards</td>
<td>9</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
</tr>
</tbody>
</table>

Sources: ACPR, Banque de France; Solvency II 2020 quarterly submissions.

Derivatives as a hedge against rising or falling interest rates

Caps dedicated to interest rate hedging account for more than two-thirds of call options. 23% of the notional value of these options gives insurers the possibility of purchasing bonds at a predetermined price in order to hedge against a fall in interest rates.

Less frequently used, swaps account for 16% of the notional value. Insurers mainly use simple interest rate swaps or combined interest rate and currency swaps, which account respectively for 46% and 38% of the notional value in this category. 43% of the notional value of simple interest rate swaps correspond to positions where insurers pay the fixed leg and receive the variable leg, which enables them to hedge against rising rates. 38% of the notional value corresponds to positions where insurers pay the variable leg and receive the fixed leg in order to hedge against falling rates.

Put options account for 11% of the notional value and are used mainly to hedge against equity risk. Lastly, 80% of forwards are composed of interest rate and currency forwards.
The share of high yield bonds (with a credit rating below BBB) increased slightly between end-2019 and the second quarter of 2020. For indirect investments through CIUs, it increased from 6.6% in 2018 to 7% in 2019 and 7.7% in the second quarter of 2020, and for direct investments, it was relatively stable at less than 1%.

The rating of securities in insurance portfolios is all the less impacted as insurers’ exposure to business sectors directly affected by the health crisis appears low (see Chart 13). The transport, retail and hotel sectors, including restaurants, account for less than 3.5% of direct exposures: 2.8%, 0.4% and 0.2% respectively.

In addition to financial ratings, insurers also take into account extra-financial criteria in their investment policy (see Box 2).
Insurers’ green and socially responsible investments

Since 2015,1 French insurers have been subject to transparency obligations regarding their compliance with environmental, social and governance (ESG) objectives in their investment policies. They are required to publish extra-financial reporting on the way in which they take into account climate risks and the measures taken to contribute to the energy and ecological transition.2 This increased transparency encourages insurers to focus on socially responsible investments, whose long-term perspective corresponds to their investment horizon and which also answer a growing concern of savers.

At end-2015, in order to support financial players in this approach, the public authorities created two labels: the ISR (investissement socialement responsable) label for CIUs with a socially responsible approach; and the Greenfin label dedicated to the ecological transition.3 The Pacte law4 of 22 May 2019 also contains several measures to increase the role of the financial sector in the ecological transition and reduce the climate footprint: in particular, it requires that, from 2020, insurers offer at least one ISR, Greenfin or solidarity-labelled product among their unit-linked products. From 2022, life insurers will have to reference the three categories in their unit linked contracts and will be required to inform savers, prior to subscription, of the quantity of labelled unit linked products. For euro-denominated funds, an annual communication on the share of labelled funds will also be required.

The analysis below also includes insurers’ holdings of “green bonds”.5 The figures presented here are underestimated as the analysis is based solely on the two French public labels (ISR and Greenfin) and green bonds, whereas a larger proportion of investments may also be part of a responsible approach and meet foreign or private standards.

At end-June 2020, for the quarterly submissions6 alone, insurers’ green and socially responsible investments amounted to EUR 81.3 billion, i.e. 3.1% of their investments, up EUR 19.4 billion compared with end-2019 (representing a 31% increase in six months). At end-June 2020, 55% of assets under management were invested in ISR-labelled funds (EUR 45.1 billion) and 43% in green bonds (EUR 34.7 billion), with the remaining 2% being invested in Greenfin-labelled funds (EUR 1.0 billion) and both ISR and Greenfin-labelled funds (EUR 0.6 billion). The EUR 19.4 billion increase in outstanding investments over six months is mainly attributable to the EUR 14.9 billion rise in ISR-labelled funds, reflecting the significant impact of the provisions of the Pacte law. The amount of green bonds held by insurers has also posted strong growth over the last two years, increasing threefold between December 2017 (EUR 10.3 billion) and June 2020 (EUR 34.7 billion).

1 Article 173-VI of the law of 17 August 2015 on energy transition for green growth.
4 Law of 22 May 2019 on business growth and transformation.
5 See Appendix 1.
6 In the fourth quarter of 2019, the outstanding quarterly submissions corresponded to 96.3% of the total outstanding amount, including annual submissions. Quarterly outstandings therefore correspond to a good approximation of total outstanding.
56% of ISR-labelled funds are held through non-unit linked vehicles but unit linked products are proportionally more invested in ISR-labelled funds (5.3% compared with 1.1% for other vehicles). Conversely, almost all of the EUR 35 billion worth of green bonds is held via the general fund. French insurers thus play an important role in green and socially responsible financing: at end-June 2020, resident insurers held 23% of ISR-labelled funds, 7% of Greenfin-labelled funds, 8% of green bonds issued worldwide and 34% of French green OATs.

Breakdown of outstanding green bonds and units of Greenfin and ISR-labelled funds before application of the look-through approach (EUR billions)

<table>
<thead>
<tr>
<th></th>
<th>ISR funds</th>
<th>Greenfin funds</th>
<th>ISR and Greenfin funds</th>
<th>Green bonds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q2 2020</td>
<td>34.7</td>
<td>81.3</td>
<td>45.1</td>
<td>0.6</td>
</tr>
</tbody>
</table>

Sources: ACPR, Banque de France; Solvency II Q2 2020 quarterly submission.
Note: ISR refers to investissement socialement responsable (socially responsible investment).

Low liquidity risk

The health crisis and its repercussions on the financial markets have not put any significant pressure on insurers’ liquidity.

In an environment of persistently low interest rates, life insurance has not recorded any massive withdrawals linked to a loss of confidence in products or the emergence of competing savings products. The outflows observed since the health crisis reflect an adjustment in the supply behaviour of insurers rather than a disaffection of savers with life insurance, which is likely to weigh on insurers’ liquidity.

For the non-life insurance sector, the health crisis has introduced uncertainty for certain lines of business, such as provident insurance for example. The potential delays in premium payments and the reduction in the premium base due to short time work, combined with the risk of increased claims, have led insurers to step up the monitoring of their liquidity situation.

In this context, French insurers maintained a high level of liquidity in the first six months of the year. Between end-2019 and the end of the first half of 2020, deposits remained stable at EUR 48 billion and immediately available cash increased significantly, climbing from EUR 21 billion to EUR 26 billion (see Chart 14).

In addition to the cash available to them, French life and composite insurers hold a significant proportion of high-quality and liquid assets. By applying to each asset class a coefficient (between 0 and 1) reflecting insurers’ ability to rapidly convert these assets into liquidity on the private markets, the proportion of high-quality and liquid assets in all non-unit linked investments was stable between end-2019 and the second quarter of 2020, at 50%.

C14 Changes in liquidity for all insurers before application of the look-through approach to French CIUs and excl. unit linked funds (EUR billions)

<table>
<thead>
<tr>
<th></th>
<th>Money market fund shares/units</th>
<th>Cash</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q4 2019</td>
<td>74</td>
<td>21</td>
</tr>
<tr>
<td>Q1 2020</td>
<td>84</td>
<td>24</td>
</tr>
<tr>
<td>Q2 2020</td>
<td>70</td>
<td>24</td>
</tr>
</tbody>
</table>

Sources: ACPR, Banque de France; Solvency II quarterly submissions.
Insurers’ investments weather the crisis despite tensions

In life insurance, half of insurers showed a ratio of between 33% and 55% at end-2019, compared with a ratio of 34% and 55% at end-June 2020 (see Chart 15).

In non-life insurance, the liquidity risk borne by insurers can be assessed by relating the amounts of claims observed over a given period to the amount of high-quality and liquid investments. The high-quality and liquid assets of French non-life insurers cover approximately the equivalent of thirty months’ worth of claims. At the end of June 2020, 50% of non-life insurers were able to cover between 14 and 39 months of claims thanks to available liquidity (see Chart 16).
Appendix 1
Definitions

Diversification assets

They include:

- infrastructure investments (including infrastructure funds);
- Structured securities: hybrid securities combining a bond component and a derivative component (hedging mechanisms such as credit default swaps (CDS), credit maturity swaps (CMS) and credit default options (CDO), as well as securitisation);
- real estate, with a distinction made between the negotiable part (listed equities of real estate companies and shares/units of real estate funds) and the non-negotiable part (unlisted equities of real estate companies, shares/units of property investment companies and buildings);
- other diversification assets (shares in hedge funds and private equity funds as well as convertible and hybrid bonds);
- loans to unrelated companies (not belonging to the insurance group).

Duration

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

Green bonds

There is no single internationally accepted definition of green bonds. In order to justify this label, an issuer can refer to the principles laid down by the International Capital Market Association (ICMA) and request validation by an international private body such as the Climate Bond Initiative. The list of green bonds used here corresponds to debt securities for which the main purpose of the funds raised is explicitly mentioned in the issue prospectus as a green activity. A European taxonomy on green activities and a European standard for green financial products are currently being developed.

Unrealised capital gains rate

It represents the difference in percentage between the market value and the net book value of the securities held.
Appendix 2
Methodology

Legal forms of insurers

Insurers take several legal forms:

• insurance companies and mutual insurance companies governed by the Insurance Code;

• mutual 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 (companies or professional branches).

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

Population studied

The sample used in the 2019 study includes the 423 active insurers subject to the Solvency II Directive and its implementing legislation (mainly regarding a balance sheet size criterion). These 423 insurers held EUR 2,813 billion in investments at market value at 31 December 2019.

These insurers are broken down into two categories:

• life and composite insurers, which manage the bulk of euro-denominated contracts and all unit linked contracts. Their commitments are essentially long-term;

• non-life (or property and casualty) insurers, which cover property damage, personal injury and civil liability. Their commitments 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 closing data is 31 December 2019 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 using the valuation approach required by the Directive, i.e. mainly at market value. Quarterly statements are also used.

Application of the look-through approach to CIUs

The look-through approach is applied to shares/units in CIUs held by insurers by using the Banque de France databases (mainly CIU inflows). This process makes it possible to identify the final beneficiaries of the investments made as the shares/units in CIUs in the insurers’ portfolios are replaced by the shares in which these CIUs invest.

At the end of this process, 72% of insurers’ investments in CIU shares/units were allocated to the various underlying financial instrument categories. The remaining 28% corresponded to non-resident CIUs.

Method for calculating flows

The flows, revaluations and reclassifications are calculated on the basis of data reported by insurers in the detailed asset statements (S.06.02), supplemented by data collected from CIUs and other available reference frameworks (CSDB, etc.). The change in outstandings is broken down into flows (economic transactions), valuation effects (price effects) and reclassifications according to the following formula:

$$\text{Outstanding}_t - \text{Outstanding}_{t-1} = \text{Flows} + \text{Valuations} + \text{Reclassifications},$$

1 Eurosystem’s Centralised Securities Database.
Flows, reclassifications and valuations are calculated on a security by security basis and then aggregated. Outliers (in terms of valuation and/or flows) resulting from the calculation are removed.

Flows and reclassifications are calculated first. Valuations are then calculated as the change in outstanding amounts minus flows and reclassifications.

For euro-denominated equities, the formula for calculating flows is as follows:

\[ \text{Flows}_t = (\text{Quantity}_t - \text{Quantity}_{t-1}) \times (\text{Price}_t + \text{Price}_{t-1}) / 2 \]

Where \text{Quantity}_t is the quantity of securities held at time \( t \) and \text{Price}_t is the equity’s unit price at market value. For debt securities, flows are calculated by neutralising accrued interest for securities sold, having reached maturity or purchased and adding interest income for all securities held at the end of the period under review. In addition, a negative flow may correspond either to the sale of securities or to the non-renewal of securities having reached maturity.

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

**Method for calculating the liquidity ratio**

The method for calculating this ratio is based on the standards developed by the Basel Committee, within the framework of Basel III, which introduce a liquidity coverage ratio (LCR) whose purpose is to strengthen banks’ short-term resilience to liquidity risk. This ratio, used in particular by the European Insurance and Occupational Pensions Authority (EIOPA), is the ratio of unencumbered high quality liquid assets (HQLA), which may be easily and immediately converted into liquidity on the private markets in the event of a liquidity crisis lasting three calendar days, to total investments.