

Varma's half-year report 1 January-30 June 2020

The comparison figures in parentheses are from 30 June 2019, unless otherwise indicated.

- Total result: EUR -2,829 (1,374) million.
- The six-month return on investments was -5.7% (6.9%), and the market value of investments stood at EUR 45.3 (48.7 on 1 Jan) billion.
- Solvency capital amounted to EUR 8,818 (11,646 on 1 Jan) million, i.e. 1.7 times (1.8 on 1 Jan) the solvency limit.

Impacts of the coronavirus pandemic on Varma's operations

When the coronavirus epidemic turned into a pandemic in the spring, it brought far-reaching changes to Varma's operating environment. While economic activity has begun to recover somewhat, in many industries both demand and supply are significantly lower than usual. The intense market volatility and escalating uncertainty of the first quarter of 2020 levelled out in the course of the second quarter, and the investment environment settled down. Varma's solvency remained good, thanks to active portfolio management measures and a strong solvency position at the start of the year.

Varma complies with the guidelines issued by the authorities in all its operations. Varma's employees have been teleworking since March, and Varma's customer service and customer meetings have been taking place online. Varma's remote working practices have proved to be effective during the crisis, and the provision of earnings-related pension has continued without interruption.

The earnings-related pension system has been a significant source for the flexible approaches that have been implemented due to the exceptional circumstances and which aim to safeguard and maintain business continuity. Varma has implemented in its systems extended payment deadlines for earnings-related pension contributions as well as a temporary reduction in earnings-related pension contributions starting in May. Varma supported its hotel and restaurant sector customers by providing rental reliefs. These tenants of Varma's business premises were given the opportunity to postpone their rental payments for a period of two months, and other solutions have been negotiated on a case-by-case basis for other tenants during this exceptional situation.

Economic operating environment

Although the recession is expected to be short term, its extent is immense. Central banks and governments alike reacted to the coronavirus crisis by stimulating the economy with unprecedented force, which bolstered confidence and set off an exceptionally quick recovery in the equity and fixed income markets. In addition, the removal of shutdown measures undertaken to control the spread of the virus strongly supported economic growth in May and June, although it will take longer for economic activity to return to the pre-recession level. So far, the outlook for the rest of the year remains uncertain, and in terms of the outlook for the markets, the biggest risk remains a second wave of the pandemic, potentially leading economies to impose new restrictions.

Recovery, like a pandemic, progresses in stages. The U.S. is still the driving force of the global economy, despite China's growing significance. The U.S.'s economic problems set the tone for the global economic outlook, as it is an important export market for both Europe and China. An interruption or stall in its recovery would strongly overshadow Europe's recovery from the crisis.



Europe bottomed out. The economy has started to recover, but the development can be expected to be uneven. It bears noting that the countries that suffered most from the epidemic, in terms of both number of cases and impacts on the economy, are the same countries that were in deep trouble in the euro crisis that came in the aftermath of the financial crisis. In these countries, the public economy was already in debt. The European Central Bank responded to the crisis rather successfully and at the right time.

Finland's economic growth, however, has collapsed in domestic markets and exports alike. The rapid decline in demand was the most intense initially in the service sector. Efforts to climb out of the demand ditch caused by the pandemic have begun, and companies' confidence in the economy increased a smidge in June. Expectations in retail trade continued to improve. It is worth noting that the service industry's outlook notched slightly upwards. In the Finnish market, there is considerable pent-up demand that, once released, may be quite strong in some areas.

Industry confidence weakened somewhat in June. The gradual recovery of the global economy is affecting demand for the production of Finnish companies. Industrial production volumes contracted at a quite moderate pace. A European Commission forecast from the summer estimates that Finland's recovery will be the slowest in the eurozone. Finland's economic growth is strongly linked to the domestic market, but the weakening employment situation and consumers' cautiousness are limiting the growth in domestic demand.

The sustained improvement in the employment rate took an expected downward turn when the shutdown measures slashed economic activity. Finland's temporary lay-off system proved its effectiveness in the coronavirus crisis, but if the recession deepens, many companies may be forced to lay people off.

Earnings-related pension system

Numerous exceptional measures were taken in earnings-related pensions. The goal is to ensure that the long-term financing of pensions is not jeopardised due to the crisis. Headed by the Ministry of Social Affairs and Health, regulations were prepared in anticipation of steep movements in market valuations that could escalate in a way that would substantially weaken the solvency position of earnings-related pension investors. This regulation has not yet been implemented. The pension liability supplementary factor was set at zero as of 1 April 2020. The funds are not supplemented for a fixed period, which reinforces the solvency of earnings-related pension companies during a difficult market situation.

Employers' share of earnings-related pension contributions was reduced by 2.6 percentage points from the start of May until the end of this year. The impact of the reduction will be compensated entirely by increasing the share of earnings-related pension contributions paid by employers in 2022–2025. While the insurance contribution reduction is in effect, earnings-related pension companies will not distribute client bonuses. Therefore, only a third of the full year's client bonuses will be paid to customers. In addition to the temporary reduction in the share of earnings-related pensions contributions paid by employers, a decision was made to grant additional time for the payment of TyEL and YEL contributions. An insurance contribution interest rate of 2% will be charged during the extended payment period related to the extraordinary circumstances.

A strong earnings-related pension system brings stability to the economy during a crisis. Some of the changes will weaken the liquidity of earnings-related pension companies. Varma's financial situation and solvency position are stable. Solvency provides protection and leeway for making investment allocation decisions during exceptionally challenging market situations.

Varma's economic development

The total result at fair value for six months amounted to EUR -2,829 (1,374) million. The most significant factor of the total result is the investment result, which was EUR -2,843 (1,338) million. The return on investments at fair



value amounted to EUR -2,766 (3,027) million, and the interest credited on the technical provisions was EUR 77 (1,689) million. The estimated technical underwriting result was EUR -3 (14) million and the loading profit was EUR 17 (23) million.

Varma's solvency remained at a good level despite the weak development in the markets. The solvency capital, which serves as a risk buffer for investment operations, was EUR 8,818 (11,646 on 1 Jan) million at the end of June, and 123.5% in relation to the technical provisions (130.8% on 1 Jan).

Varma's solvency capital was on a sustainable level, i.e. 1.7 (1.8 on 1 Jan) times the solvency limit.

Tables illustrating Varma's financial development are presented as attachments to this interim report.

Insurance business

Varma's pension recipients totalled 344,000 at the end of June (344,000 on 1 Jan). Claims paid in January–June amounted to EUR 2,908 (2,843) million. By the end of June, 11,534 new pension decisions were made, which is 4.3% more than in the corresponding period last year. A total of 27,983 pension decisions were made in January–June.

In the first half of the year, Varma gained a total of EUR 56 (65) million in premiums written. This includes the net impact of new sales and insurance policies transferred from other pension companies. Varma continuously develops its disability risk management and offers its customers information and tools for managing work ability, the latest ones being the new survey tools for the early identification of work-ability risks.

At the end of June, Varma provided insurance for 538,000 (542,000 at the end of 2019) employees and self-employed persons.

Investments

Varma's investment returns decreased in the first half of 2020 as the coronavirus pandemic caused the worst downturn in the global economy since the Great Depression of the 1930s. Varma's investment returns picked up in the second quarter of the year, but ended the half-year period clearly in negative territory, at −5.7% (6.9%). At the end of June, the value of Varma's investments stood at EUR 45,279 (46,540) million. Varma's solvency ratio was 123.5% at the end of the first half of the year (130.8% on 1 Jan).

The global economy spiralled downwards when measures taken to stop the spread of the coronavirus confined people to their homes in many parts of the world. The sudden halt in the economy had dramatic impacts on companies' cash flows, and both central banks and numerous governments announced extensive measures aimed at helping healthy businesses avoid a cash crisis and limiting a rise in unemployment. The unwinding of the strictest measures, however, supported growth in the second quarter, after having hit rock-bottom in April.

On the financial markets, the massive stimulus measures implemented by central banks and governments, as well as expectations of the rapid recovery of economies, were received with a sigh of relief. The equity and corporate bond markets bounced back very quickly from the lows of March, and after some panic selling, risk-taking appetites returned to the markets. The outlook for macroeconomies and businesses was very hazy, but the combination of the strongest stimulus measures of all time and the gradual unwinding of restrictions guided funds back to higher-risk asset classes, as a result of which, share prices recovered at a record pace and the risk premiums on corporate bonds sank. In the course of the spring, the Fed announced several new support measures for companies and the financial markets, and in June, the European Central bank expanded its purchase programme. The European financial markets were also supported by a proposal for an EU recovery fund, initiated by Germany and France, to support the countries hardest hit by COVID-19 by means of co-financed grants and loans. EU



member countries reached an agreement in July on EUR 750 billion in emergency funding that includes both grants and long-term loans. The aim of the funding is to ensure Europe's competitiveness and mitigate the impacts of the recession.

The second quarter of 2020 was a very strong period of recovery in the equity markets. As risk appetites grew, industries that are more dependent on economic cycles and which were hardest hit by the pandemic recovered rapidly from the crash of the spring. In addition to the economic recovery on the horizon, the equity markets were bolstered by a belief in massive stimulus measures lasting a long time and in the record-low level of the so-called risk-free interest used to set the value of share prices. Since the start of the year, the returns of nearly all of the most important equity indices remained negative. The interest on government bonds remained largely unchanged in the second quarter, but in the corporate bond markets, the strong support from central banks and the recovery of risk appetites and capacity clearly pushed their risk premiums towards more normal levels following the March turbulence. Of the different asset classes, the strongest movements by far were seen in the commodities markets where, for example, the prices of different types of oil recovered by more than 80–90% from the level at the end of March. Nevertheless, their prices are still clearly below the level of the start of the year.

In the first half of 2020, Varma's investments yielded a return of -5.7% (6.9%). Although returns picked up during the strong market upswing of the second quarter, they remained clearly negative due to the weak development in the first quarter. At the end of June, the average nominal investment return over five years was 3.1%, and over ten years 4.9%. The corresponding real returns were 2.5% and 3.7%.

The return on listed equity investments was -9.7% (15.3%). Geographical and industry-dependent differences in return development were great. U.S. equities showed the strongest development, European equities the weakest. The reported returns on private equity funds were negative, at -5.1% (4.5%), but they largely reflect the situation in the first quarter, which saw a severe collapse in the listed equity markets. The return on infrastructure and unlisted equities was -2.3% (-0.2%).

The return on fixed income investments was slightly negative in the first half of the year, at -1.3% (3.5%). The return on public-sector bonds, at 2.1% (2.8%), was relatively strong in spite of the low interest rate level, but the returns on other bonds remained negative, at -4.3% (4.9%). The return on the loan portfolio was rather modest, at 0.1% (2.1%), and the return on other money-market instruments was 0.0% (0.7%).

The return on real estate investments was 1.6% (1.9%). Direct real-estate investments yielded a return of 1.8% (2.0%) and real-estate investment funds 1.2% (1.6%). During the review period, the coronavirus epidemic had a major impact on the operating conditions of the hotel and food sector, and Varma announced measures to support its tenant customers. The situation will have a negative impact on rent income from business premises and hotels for this year. Varma acquired a property housing 105 rental flats that is under construction in Härmälänranta, Tampere, and announced the development of a residential and business premises block on Kutomotie 1, in Helsinki's Pitäjänmäki area, together with Skanska. The winner of the architectural competition for Katajanokan Laituri in Helsinki was announced, and town planning on the plot continues based on the winning design, called Spring.

The return on other investments was -8.9% (2.9%) in the first half of the year. In terms of other investments, the returns of the most important asset class by far, hedge funds, experienced a recovery in the second quarter, but at a slower pace than, e.g., listed equities or corporate bonds. The return on hedge funds making market-neutral investments was slightly positive during the review period, but in particular the values of hedge funds with credit risk decreased during the first quarter of the year, recovering partly in the second quarter.

Varma has U.S.-dollar-denominated investments in hedge funds, equities, corporate bonds and private equity funds. In accordance with Varma's investment policy, part of the currency risk is hedged. In terms of operations, foreign currency risks are managed as a single entity, and in financial reporting, the exchange rate impact is included in the investment returns of various asset classes. In the first half of the year, the movements of the U.S.



dollar were ultimately quite moderate, but on the whole, currency prices had a slightly negative impact on investment returns.

Varma's investment activities focussed on maintaining the company's strong solvency and broad diversification of investments, with a strong emphasis on risk management. In its investment risk management, the company used derivatives for hedging purposes and to control the risk level of the portfolio.

The market risk of investments is the greatest risk affecting the company's result and solvency. Equities constitute by far the greatest market risk. The VaR (Value-at-Risk) figure describing the total risk of Varma's investments stood at EUR 3,598 (1,591) million.

Operating expenses and personnel

Varma's total operating expenses in the reporting period were EUR 65 (68) million. The insurance contribution component for 2020 that is intended to cover Varma's operating expenses decreased by an average of 7%, which thus reduces the efficiency ratio. In addition, the reduced economic activity caused by the coronavirus pandemic is expected to lower the insured payroll for the full year, and thereby also the loading income. The loading profit for the period was EUR 17 (23) million. According to a full-year estimate, Varma's efficiency ratio will weaken compared to the 2019 level.

Varma's parent company employed an average of 536 people in the first half of the year (537 in 2019). At the end of June, Varma's personnel were distributed as follows: pension services 18%, insurance services 17%, customer service departments 10%, disability risk management 14%, investment operations 13%, and other functions 28%.

Corporate Governance

Varma's Supervisory Board held its constitutive meeting on 13 May 2020. Christoph Vitzthum continues as Chair of the Supervisory Board, and Satu Wrede and Petri Vanhala continue as vice chairs.

An up-to-date Corporate Governance Statement based on the recommendations of the Finnish Corporate Governance Code is presented on Varma's website. Varma publishes quarterly interim reports.

Sustainability

Varma joined the global real estate and construction industry initiative Net Zero Carbon Buildings Commitment, which advocates for carbon-neutral buildings. Varma's goal is to switch to fossil-free energy consumption in the properties it owns by 2030.

Varma joined an international group of investors in calling on pharmaceutical companies to develop a coronavirus vaccine and work together in the fight against COVID-19. The initiative also stresses fair and equitable access to medications and vaccines.

Varma has also begun to chart the implementation of human rights within the company, its investments and supply chain. The objective is, among other things, to update the monitoring processes related to human rights.

In spring of 2020, Varma participated in the general meetings of 79 public companies. Due to the coronavirus pandemic, many companies organised remote meetings or limited the number of participants in the meetings. As a responsible owner, Varma supported the measures taken by companies and made active use of proxy and advance voting opportunities. Information about Varma's positions and votes at the general meetings is published on Varma's website.



Varma's sustainability efforts focus on climate change mitigation, promoting work ability and good working life, ethical business, open communication and responsibility for Varma employees.

Risk management

Along with the change in the global economy, Varma's risk position also changed during the review period, on the basis of which Varma updated its risk and solvency assessment.

Varma's greatest risks are related to investment operations and information processing. The most significant financial risks are those concerning investments. The risk level of investments was intensely adjusted during the review period in response to the changes taking place in the market. The measures taken considerably mitigated the impacts of the market changes. Varma's liquidity remains at a secure level.

The risks of pension insurance operations are related to pension and insurance processing and to the effectiveness of the joint systems used in the sector. In this respect, operations under the exceptional circumstances have proceeded well and the risk level has remained low.

The Board of Directors has confirmed the principles for the company's internal control and risk management system. More information about insurance, investment, operative and other risks, the means for managing them, as well as related quantitative data, are provided in the notes to Varma's financial statements.

Varma's Board of Directors' investment plan lays down the general security goals for investments, diversification and liquidity goals, and the principles governing the company's currency risk hedging. The diversification of the investment portfolio is based on allocation that takes into account the return correlations of asset classes.

Outlook

At this time, it is especially difficult to assess changes in the economic operating environment, as the coronavirus crisis deviates in a decisive way from the normal economic cycle and other crises. Right now, along with the epidemic, the most significant uncertainty currently surrounds the recovery of the U.S. economy. The global infection situation has significantly worsened since the end of the review period. If the situation leads to major new economic shutdown measures and growing uncertainty among consumers, the relatively strong recovery that has begun will be interrupted. The eurozone's emergency funding is expected to mitigate the impacts of the recession.

Uncertainty in the capital markets continues. Throughout the pandemic, there has been a certain disproportion between market expectations and the outlook for the real economy. This can be partly explained by the considerable stimulus measures and central banks' active monetary policy. Varma's strong solvency position is an important factor in securing pensions, and it gives the company leeway to make the most effective allocation decisions possible.

Helsinki, 21 August 2020

Risto Murto President and CEO



The figures presented in this half-year report are unaudited figures of the parent company.

Varma Mutual Pension Insurance Company is a responsible and solvent investor. The company is responsible for the statutory earnings-related pension cover of 900,000 people in the private sector. Premiums written totalled EUR 5.3 billion in 2019 and pension payments stood at EUR 5.9 billion. Varma's investment portfolio amounted to EUR 45.3 billion at the end of June 2020.

FURTHER INFORMATION:

Pekka Pajamo, Senior Vice President, Finance and Internal Services, tel. +358 10 244 3158 or +358 40 532 2009 Katri Viippola, Senior Vice President, HR, Communications and Corporate Responsibility, tel. +358 10 244 7191 or +358 400 129 500

ATTACHMENT: Graphs and charts www.varma.fi/en www.varma.fi/annualreport



Balance sheet at fair values (Parent Company)

| € million | 6/2020 | 6/2019 | 12/2019 |
|--------------------------------------------------------|--------|--------|---------|
| Assets | | | |
| Investments | 45,279 | 46,540 | 48,709 |
| Receivables | 1,671 | 1,245 | 1,161 |
| Furniture and fixtures | 3 | 4 | 4 |
| | 46,953 | 47,789 | 49,873 |
| Liabilities | | | |
| Capital and reserves | 127 | 133 | 136 |
| Valuation differences | 8,354 | 9,667 | 10,721 |
| Provision for future bonuses | 338 | 1,194 | 790 |
| Off-balance-sheet items | -1 | -1 | -1 |
| Solvency capital, total | 8,818 | 10,992 | 11,646 |
| Provision for current bonuses (for client bonuses) | 86 | 77 | 171 |
| Equity-linked provision for current and future bonuses | 847 | 723 | 1,424 |
| Actual technical provision | 36,624 | 35,623 | 36,223 |
| Total | 37,471 | 36,346 | 37,647 |
| Other liabilities | 578 | 374 | 409 |
| | 46,953 | 47,789 | 49,873 |

Income statement at fair values (Parent Company)

| € million | 1-6/2020 | 1-6/2019 | 1-12/2019 |
|--------------------------------|----------|----------|-----------|
| Premiums written | 2,581 | 2,633 | 5,286 |
| Claims paid | -2,908 | -2,843 | -5,623 |
| Change in technical provisions | 315 | -1,388 | -2,610 |
| Net investment income | -2,752 | 3,042 | 5,268 |
| Total operating expenses | -65 | -68 | -124 |
| Other income/expenses | 0 | 0 | 8 |
| Taxes | -1 | -3 | -7 |
| Total result 1) | -2,829 | 1,374 | 2,197 |

¹⁾ Result at fair value before the change in provision for current and future bonuses and equalisation provision

| € million | 1-6/2020 | 1-6/2019 | 1-12/2019 |
|--------------------------|----------|----------|-----------|
| Underwriting profit/loss | -3 | 14 | -2 |
| Investment result | -2,843 | 1,338 | 2,139 |
| Loading profit | 17 | 23 | 53 |
| Other income/expenses | 0 | 0 | 8 |
| Total result | -2,829 | 1,374 | 2,197 |

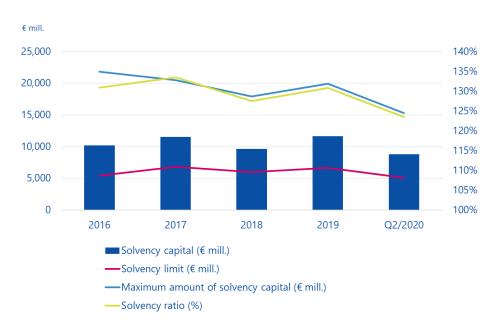


Solvency capital and limits

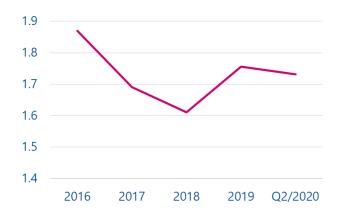
| | 30/06/2020 | 30/06/2019 | 31/12/2019 |
|----------------------------------------------|------------|------------|------------|
| | | | |
| Solvency limit (€ mill.) | 5,090 | 5,937 | 6,633 |
| Maximum amount of solvency capital (€ mill.) | 15,270 | 17,812 | 19,900 |
| Solvency capital (€ mill.) | 8,818 | 10,992 | 11,646 |
| Solvency ratio (%) ¹ | 123.5 | 130.2 | 130.8 |
| Solvency capital/Solvency limit ² | 1.7 | 1.9 | 1.8 |

¹ Pension assets in relation to the technical provisions under §11 of the Ministry of Social Affairs and Health's decree governing pension institutions (614/2008).

Solvency development



Solvency position, solvency capital in relation to the solvency limit



² Solvency capital in relation to the solvency limit

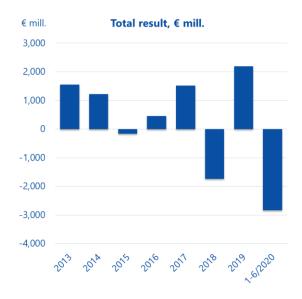


Investments at fair value

| | | 30 Jun 2020 Market value | | | | 2019 value | 1-6/2020 Return | 1-6/2019 Return | 1-12/2019 Return | 24 m | |
|---------------------------------------------|-------------|-----------------------------|--------------|-----|----------|---------------|--------------------|--------------------|---------------------|------|--------|
| | Market Valu | ie | Risk positio | n | Market V | alue | Risk position | MWR | MWR | MWR | Vola- |
| | € mill. | % | € mill. | % | € mill. | % | € mill. | % | % | % | tility |
| Fixed-income investments ¹ | 12,733 | 28 | 12,779 | 28 | 12,957 | 27 | 13,052 2 | 7 -1.3 | 3.5 | 4.5 | |
| Loan receivables | 2,635 | 6 | 2,635 | 6 | 2,315 | 5 | 2,315 | 5 0.1 | 2.1 | 4.0 | |
| Bonds | 7,717 | 17 | 7,963 | 18 | 9,563 | 20 | 10,693 2 | 2 -2.0 | 4.1 | 5.1 | 6.1 |
| Public bonds | 2,937 | 6 | 3,210 | 7 | 3,577 | 7 | 4,707 1 | 0 2.1 | 2.8 | 2.6 | |
| Other bonds | 4,780 | 11 | 4,754 | 10 | 5,986 | 12 | 5,986 1 | 2 -4.3 | 4.9 | 6.6 | |
| Other money-market instruments and deposits | 2,380 | 5 | 2,180 | 5 | 1,079 | 2 | 44 | 0.0 | 0.7 | 0.4 | |
| Equity investments | 19,088 | 42 | 18,122 | 40 | 22,486 | 46 | 22,457 4 | 6 -8.4 | 12.5 | 22.8 | |
| Listed equities | 13,656 | 30 | 12,690 | 28 | 17,252 | 35 | 17,223 3 | 5 -9.7 | 15.3 | 25.4 | 19.4 |
| Private equity | 5,150 | 11 | 5,150 | 11 | 4,945 | 10 | 4,945 1 | 0 -5.1 | 4.5 | 15.1 | |
| Unlisted equities | 282 | 1 | 282 | 1 | 289 | 1 | 289 | 1 -2.3 | -0.2 | 16.9 | |
| Real estate investments | 4,619 | 10 | 4,619 | 10 | 4,413 | 9 | 4,413 | 9 1.6 | 1.9 | 4.1 | |
| Direct real estates | 2,822 | 6 | 2,822 | 6 | 2,792 | 6 | 2,792 | 6 1.8 | 2.0 | 3.9 | |
| Real estate funds | 1,796 | 4 | 1,796 | 4 | 1,622 | 3 | 1,622 | 3 1.2 | 1.6 | 4.7 | |
| Other investments | 8,841 | 20 | 8,841 | 20 | 8,853 | 18 | 9,548 2 | 0 -8.9 | 2.9 | 4.5 | |
| Hedge funds | 8,835 | 20 | 8,835 | 20 | 8,857 | 18 | 8,857 1 | 8 -7.9 | 3.1 | 5.0 | 9.8 |
| Commodities | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| Other investments | 5 | 0 | 5 | 0 | -5 | 0 | 691 | 1 | | | |
| Total investments | 45,279 | 100 | 44,360 | 98 | 48,709 | 100 | 49,471 10 | 2 -5.7 | 6.9 | 12.0 | 8.7 |
| Impact of derivatives | | | 919 | 2 | | | -762 - | 2 | | | |
| Investment allocation at fair value | 45,279 | 100 | 45,279 | 100 | 48,709 | 100 | 48,709 10 | 0 | | | |

The modified duration for all the bonds is 4.0.

Total result





The open currency position is 24.4% of the market value of the investments.

¹ Includes accrued interest



Summary of the key figures

| | 1-6/2020 | 1-6/2019 | 1-12/2019 |
|------------------------------------------------|----------|----------|-----------|
| Premiums written, € million | 2,581 | 2,633 | 5,286 |
| Net investment income at fair value, € million | -2,766 | 3,027 | 5,241 |
| Return on invested capital, % | -5.7 | 6.9 | 12.0 |
| | 6/2020 | 6/2019 | 12/2019 |
| Technical provisions, € million | 37,895 | 37,617 | 38,608 |
| Solvency capital, € million | 8,818 | 10,992 | 11,646 |
| in relation to solvency limit | 1.7 | 1.9 | 1.8 |
| Pension assets, € million | 46,354 | 47,395 | 49,445 |
| % of technical provisions | 123.5 | 130.2 | 130.8 |
| TyEL payroll, € million | 20,877 | 21,108 | 21,084 |
| YEL payroll, € million | 809 | 810 | 812 |

Investments at fair value, broken down as per the regulations of the Financial Supervisory Authority

4.0

| | Market value | | | | Risk position | | | | | | | |
|---------------------------------------------|--------------|-------|-----------|-------|---------------|-------|------------|-------|-----------|-------|-----------|-------|
| | 30 Jun 202 | 20 | 30 Jun 20 | 19 | 31 Dec 20 | 19 | 30 Jun 202 | 20 | 30 Jun 20 | 19 | 31 Dec 2 | 019 |
| | € million | % | € million | % | € million | % | € million | % | € million | % | € million | % |
| Fixed-Income Investments | 12,733 | 28.1 | 13,307 | 28.6 | 12,957 | 26.6 | 12,779 | 28.2 | 12,327 | 26.5 | 13,052 | 26.8 |
| Loan receivables | 2,635 | 5.8 | 1,968 | 4.2 | 2,315 | 4.8 | 2,635 | 5.8 | 1,968 | 4.2 | 2,315 | 4.8 |
| Bonds | 7,717 | 17.0 | 10,458 | 22.5 | 9,563 | 19.6 | 7,963 | 17.6 | 11,002 | 23.6 | 10,693 | 22.0 |
| Other money-market instruments and deposits | 2,380 | 5.3 | 880 | 1.9 | 1,079 | 2.2 | 2,180 | 4.8 | -643 | -1.4 | 44 | 0.1 |
| Equity investments | 19,088 | 42.2 | 20,253 | 43.5 | 22,486 | 46.2 | 18,122 | 40.0 | 19,670 | 42.3 | 22,457 | 46.1 |
| Listed equities | 13,656 | 30.2 | 15,467 | 33.2 | 17,252 | 35.4 | 12,690 | 28.0 | 14,884 | 32.0 | 17,223 | 35.4 |
| Private equity | 5,150 | 11.4 | 4,540 | 9.8 | 4,945 | 10.2 | 5,150 | 11.4 | 4,540 | 9.8 | 4,945 | 10.2 |
| Unlisted equities | 282 | 0.6 | 246 | 0.5 | 289 | 0.6 | 282 | 0.6 | 246 | 0.5 | 289 | 0.6 |
| Real estate investments | 4,619 | 10.2 | 4,086 | 8.8 | 4,413 | 9.1 | 4,619 | 10.2 | 4,086 | 8.8 | 4,413 | 9.1 |
| Direct real estates | 2,822 | 6.2 | 2,988 | 6.4 | 2,792 | 5.7 | 2,822 | 6.2 | 2,988 | 6.4 | 2,792 | 5.7 |
| Real estate funds | 1,796 | 4.0 | 1,098 | 2.4 | 1,622 | 3.3 | 1,796 | 4.0 | 1,098 | 2.4 | 1,622 | 3.3 |
| Other investments | 8,841 | 19.5 | 8,894 | 19.1 | 8,853 | 18.2 | 8,841 | 19.5 | 10,222 | 22.0 | 9,548 | 19.6 |
| Hedge funds | 8,835 | 19.5 | 8,896 | 19.1 | 8,857 | 18.2 | 8,835 | 19.5 | 8,896 | 19.1 | 8,857 | 18.2 |
| Commodities | 0 | 0.0 | -9 | 0.0 | 0 | 0.0 | 0 | 0.0 | -1 | 0.0 | 0 | 0.0 |
| Other investments | 5 | 0.0 | 6 | 0.0 | -5 | 0.0 | 5 | 0.0 | 1,327 | 2.9 | 691 | 1.4 |
| Total | 45,279 | 100.0 | 46,540 | 100.0 | 48,709 | 100.0 | 44,360 | 98.0 | 46,304 | 99.5 | 49,471 | 101.6 |
| Impact of derivatives | | | | | | | 919 | 2.0 | 235 | 0.5 | -762 | -1.6 |
| Total | 45,279 | 100.0 | 46,540 | 100.0 | 48,709 | 100.0 | 45,279 | 100.0 | 46,540 | 100.0 | 48,709 | 100.0 |

Modified duration of the bond portfolio



Net return on invested capital

| | Net investment return at fair value | Invested capital | Return % on invested capital | Return % on invested capital | Return % on invested capital |
|---------------------------------------------|-------------------------------------------|---------------------|------------------------------|------------------------------|------------------------------|
| | € million | 30 Jun 2020 | 0/ | 30 Jun 2019 | |
| Fixed-Income Investments | € million -169 | € million 13,084 | % -1.3 | % 3.5 | |
| Loan receivables | 1 | | | 2.1 | |
| Bonds | -171 | | | | |
| Other money-market instruments and deposits | C | | | | 0.4 |
| Equity investments | -1,800 | 21,308 | -8.4 | 12.5 | 22.8 |
| Listed equities | -1,529 | 15,823 | -9.7 | 15.3 | 25.4 |
| Private equity | -265 | 5,196 | -5.1 | 4.5 | 15.1 |
| Unlisted equities | -7 | 289 | -2.3 | -0.2 | 16.9 |
| Real estate investments | 72 | 4,532 | 1.6 | 1.9 | 4.1 |
| Direct real estates | 51 | 2,789 | 1.8 | 2.0 | 3.9 |
| Real estate funds | 21 | 1,743 | 1.2 | 1.6 | 4.7 |
| Other investments | -856 | 9,608 | -8.9 | 2.9 | 4.5 |
| Hedge funds | -756 | 9,554 | -7.9 | 3.1 | 5.0 |
| Commodities | C | 0 | | | |
| Other investments | -100 | 53 | | | |
| Total | -2,754 | 48,532 | -5.7 | 6.9 | 12.1 |
| Unallocated income, costs and operating | | | | | |
| expenses from investment activities | -12 | . 4 | | | |
| Net investment return | | | | | |
| at fair value | -2,766 | 48,536 | -5.7 | 6.9 | 12.0 |