Investment risk management

The company's investment plan is drawn up annually and determines and describes the securing and yield goals of investment operations, the direction of investment operations and the instruments to be used, the organisation of foreign currency business, as well as decentralisation and liquidity goals. The investment plan is confirmed by the Board of Directors. As part of the plan the Board of Directors also confirms the principles for the use of derivatives.

Investment risks are managed, for example, by following the company's market-based total risk position, the development of realised investment income compared to the required rate of return, and the development of risks and returns by asset type. The limits and decision-making authorities approved by the Board of Directors have been set for risk taking. Furthermore, the preparation of investment decisions, supervision of compliance with the limits set, and reporting on risks and returns have been separated to different units. The independent Risk Management and Controller unit reports on the solvency as well as risks and yield of investment operations to the Board of Directors monthly and to the members of the Investment Committee operating under the Managing Director weekly, and, if necessary, even on a daily basis.

The selection of the investment strategy is regulated e.g. by the asset category-specific yield and volatility expectations and correlations on the market, the amount of the company's solvency margin, solvency position, profit margin, and the interest rate required for the liabilities. Optimal return-risk ratio is targeted through versatile decentralisation both between and inside asset categories. Furthermore, the aim is to anticipate the effects of events related to investment operations that are improbable but disastrous if realised. Pension Fennia guards itself from those risks through systematic risk adaptation and derivative protection.

Asset category-specific risks are managed by following over- and under-weight proportioned to the comparison index which reflects the decentralisation inside the asset category. Part of the price risk of equities has been transferred to the responsibility of the system. For that purpose a buffer, unit-linked provision for bonuses, has been set up; it buffers the equity risk by the amount that equals 10 per cent of the technical provisions. Unit-linked provision for bonuses may amount to a maximum of 5 per cent of the technical provisions and a minimum of -10 per cent of the technical provisions.

The price risk of equity investments is managed by decentralising the investments geographically, by line of business, by company, to different investment types and funds. The price risk of the equities portfolio can also be limited with protective equity and equity index derivatives. The interest rate risk is managed by following and changing the duration of investments by buying and selling cash investments with different durations and by using interest rate derivatives. Credit risk is managed by decentralising investments to different lines of business and credit classes, and geographically. In case of bonds, credit risk is managed by limiting both individual investments by credit class and the combined share of a specific credit class of the bond portfolio and by using credit derivatives. Liquidity risk is managed by keeping a sufficient part of investments in liquid items. In the fixed-income portfolio, the aim is to optimise the return/risk ratio of the investments while taking the liquidity of the loans into account. As for direct exchange rate risk, it has been separately estimated by asset category what kind of exchange rate risk the company is willing to take. Exchange rate risk is managed by following the currency position and hedging degree by asset category and by currency. Company analyses, customer monitoring and follow-up of loan securities are carried out in connection with corporate financing loans. In real estate investments, attention is paid to geographical distribution, division of rent income by line of business, timing of acquisitions, and division of types of use. Asset category-specific risks are also managed by using derivatives. The counterparty risk of standardised derivatives is managed through name-specific limitations. The counterparty risk of non-standardised derivatives is managed by using standard agreements approved by ISDA. Individual risk concentrations are limited by the gross margin and solvency act. Operational risks of investment operations are linked, for example, to the valuation of some investments and the availability of delayed market values, and the operational processes of the investment process.

In addition to solvency position and solvency ratio, VaR (Value-at-Risk) figure calculated for the total investments assets and by taking into account the share of the equities risk at the responsibility of the earnings-related pension scheme is used in making allocation decisions and monitoring and evaluating the company's total risk position. In addition, optimisation of the investment portfolio, and stress tests of solvency are carried out. The Risk Management and Controller unit reports about asset category-specific risks and income, including derivatives, monthly to the Board of Directors and weekly to the portfolio managers and members of the Investment Committee. The development of realised returns compared with the company's yield requirement is monitored weekly. The Investment unit follows the development of risk and income on a daily basis. Furthermore, the Risk Management and Controller unit reports the derivative positions and certain risk figures to the portfolio managers on a daily basis.

In addition to hedging of assets, derivatives are used for making allocation changes. The principles on the use of derivatives approved by the Board of Directors describe by asset category those types of derivatives and derivative strategies that may be used. The effect of derivatives is presented in the income and risk figures and risk-corrected asset distribution reported to the Board of Directors. New derivative agreements are also regularly reported. A report on the total effect of applying the grounds of the use of derivative agreements on the solvency limit is annually given to the Board of Directors of the company.

Investment decisions are prepared and implemented in the Investment line. The market valuation of investment assets and reporting to support operations, official yield, solvency and profit margin reporting and limit monitoring are produced in the Risk Management and Controller unit. Grounds in accordance with the real risk of investments approved by the Board of Directors of Pension Fennia are applied in the solvency rating of investments. Classification in accordance with the risk is made on the basis of the realised volatility and correlations, taking into account the effect of possible extreme observations. In addition, any incomplete yield history and liquidity is taken into account in the classification, unless it is taken into account in volatility and correlation. The effect of applying the grounds on the company's solvency is followed weekly. A report on the application of the rating grounds and its effect on the company's solvency position is annually given to the Board of Directors of the company for approval.

The aim is to ensure the correctness of the reports drawn up by the Risk management and Controller unit through regular balancing routines, good professional skills, and close co-operation and flow of information between the Risk Management and Controller unit and the Investment unit. The correctness of the technical provisions used in the calculation of the solvency limit is confirmed by the Insurance Technique unit and the Actuary. During the year the technical provisions are estimated in the Risk Management and Controller unit, and their correctness is confirmed through close co-operation with the insurance technique unit and the Actuary. The market valuation of the capital market instruments is done in the Risk Management and Controller unit on the basis of the latest quotations available. As for unlisted equities, private equity funds and real estate funds, the

Risk Management and Controller unit ensures that the market values have been priced in accordance with the agreed principles. There is a temporal delay related to the determination of the market values, but its effect is minimal.