

Report of the Board of Directors 2018

The economic operating environment

The economic year 2018 ended in a climate of restlessness

Risks in the economic operating environment intensified towards the end of the year, and there was clear restlessness in the markets. The global economy has topped out and growth is expected to slow down. Growth persisted for a long time in the cross-pressures of increasing political risks. The real economy indicators are partially mixed, and growth is expected to slow down, but there are no signs of a sharp decline in economic growth in sight.

In the United States, strong economic growth continued. Tax cuts boosted the economy, and a strong improvement in the employment rate supported private consumption growth. At the same time, trade policy moves have influenced businesses' future plans and earnings expectations. China's economic growth is clearly slowing down.

The eurozone outlook became more subdued, and growth is expected to decline. The overall picture is influenced especially by the unresolved Brexit situation, the riots in France and their impact on public finances, and the European Commission's flexibility on Italy's financial policy.

The US central bank, the Fed, hiked its benchmark rate four times during the year. The next steps are expected to be more conservative. The European Central Bank also normalised its monetary policy and announced that it would be winding down its bond purchase programme. The central banks are making changes to their monetary policy stance in demanding circumstances, and market reactions are strong. The basic monetary policy setup in the eurozone continues to promote economic growth.

Finland's economy has topped out

Finland's economy gained momentum late compared to our competitor countries. In 2018, the economy was still going strong and employment improved substantially. Late in the year, the employment rate achieved the 72% target set by the government. The labour market was characterised by a mismatch between demand and supply and difficulties in finding competent workforce.

Finland is a small, open economy, whose prosperity and potential to finance well-being are largely dependent on economic growth. Growth is expected to continue, although at a slower pace, and the employment level is set to improve further. In the longer term, the low investment rate and weak development of productivity undermine the economy's productive potential, the strengthening of which is vital also for the financing of earnings-related pensions.



The state of public finances has markedly improved, thanks to faster economic growth and adjustment measures. In the coming years, the increasing age-related costs will allow less latitude, and the window for getting prepared will close.

Statistics Finland published a new population projection in November. The birth rate has been declining for several years in a row. Changes in the expected development of the population structure have weakened the latest estimates on the sustainability gap in public finances gap and will also be reflected in the earnings-related pension system in the long term.

Earnings-related pension system

The recovery of employment and the sustained positive trend in the capital markets support the financing of pensions, a moderate level of pension contributions and the long-term sustainability of the earnings-related pension system. Longer careers are needed to secure the financing of pensions and sustainability of public finances. The number of new disability pensions increased over the year. Varma strives for longer careers by cooperating with customers in workability management. The importance of work productivity and competence will be highlighted in the future as the population ages and the labour supply declines.

During 2018, Varma prepared for the introduction of the Incomes Register together with the earnings-related pension sector, the authorities and its customers. The extensive project required changes in insurance and close co-operation between different parties. The objective of the national Incomes Register is to reduce the administrative workload, create cost savings and improve efficiency.

During the year under review, the earnings-related pension system was investigated to assess the possibilities of integrating the municipal pension system with the private earnings-related pension system.

Pension contributions and return requirement on technical provisions

In 2018, the average TyEL contribution was 24.4% of the salaries or wages. Employees under the age of 53 and over the age of 62 contributed 6.35% of their pay, while the rate for employees aged 53–62 was 7.85%. Entrepreneurs' YEL contribution was 24.1% of the confirmed earnings for those under the age of 53 and over the age of 62, and 25.6% for those aged 53–62.

The return requirement on technical provisions consisted of a 3.00% fund rate, a pension liability supplementary factor and the return on equity component. The value of the supplementary factor was 1.31% on average in 2018. The return on equity component in 2018 was -8.42%. The technical rate of interest, which is used to determine the interest rate of the oldest premium loans and a number of other items, was 5.50% throughout the year. The insurance contribution interest rate, used to calculate pension contributions, stood at 2.00% throughout the year.



Varma's financial trends

Varma's total result at fair value was EUR -1,741 (1,524) million. The total quarterly result varied during the financial year, such that the third-quarter result was the strongest and the fourth-quarter result the weakest.

Varma's solvency declined during 2018 by EUR 1,916 million, and at the end of the year, solvency capital amounted to EUR 9,619 (11,534) million. Varma's pension assets in relation to technical provisions (solvency ratio) were 127.5% (133.5%). Solvency capital was at a secure level, i.e. at 1.6 (1.7) times the solvency limit. The solvency limit is changed in accordance with the risk level of the investments. Varma's strategic goal is to maintain the company's strong solvency through stable returns and operational efficiency.

The return on investments at fair value was EUR -902 (3,343) million, which represents -2.0% (7.8%) of the invested capital. The interest credited on the technical provisions was EUR 913 (1,890) million. Thus, the investment result for 2018 totalled EUR -1,816 (1,453) million. Operating expenses were 40% (33%) lower than the expense loading included in insurance contributions, and the loading profit stood at EUR 56 (45) million. The underwriting result was EUR 23 (34) million and other result was EUR -4 (-8) million.

At the end of 2018, EUR 153 (161) million was transferred to the provision for current bonuses reserved for client bonuses. The transfer represents roughly 0.8% (0.8%) of the estimated payroll of the insured.

The composition of client bonuses was changed as of the beginning of 2017, and client bonuses to be paid to Varma's customers for 2018 include the full loading profit. In addition to this, 1% of the solvency capital is distributed as a part of the client bonuses. Varma's strong solvency and excellent operational efficiency benefit its clients in full.

The TyEL payroll of those insured by Varma totalled roughly EUR 20.4 (19.4) billion in 2018. The payroll is estimated to have grown by 5.3%. Varma's premiums written totalled EUR 5,118 (4,867) million, of which TyEL insurance accounted for EUR 4,935 (4,683) million and YEL insurance for EUR 183 (184) million.

At the end of the financial year, 559,981 (537,241) individuals were insured by Varma. At the end of 2018, the number of valid insurance policies totalled 62,745 (61,493), covering 36,715 (35,918) self-employed persons and 523,266 (501,323) employees.

During 2018, a total of 2,832 (2,780) new TyEL insurance policies and 5,983 (5,862) YEL insurance policies came into force at Varma.

During 2018, EUR 5 million in premiums written were transferred to Varma from other earnings-related pension companies, and EUR 60 million in new TyEL policies were sold. Varma did especially well in the small company segment.

Earnings and employment notifications received during the year totalled 2,451,838 (2,113,398), of which 97% (96%) were received electronically.



Varma provides policyholders with services through its own service channels and through the service networks of If P&C Insurance and the Nordea Group.

In 2018, a total gross amount of EUR 5,668 (5,544) million in pensions was paid out. The number of pension recipients increased, and at year-end, Varma was paying pensions to 343,400 (342,600) people.

A total of 22,476 (24,507) new pension decisions were made during the year. The number of new pension decisions decreased 8.3% compared to 2017, and the total number of all pension decisions was 2.9% higher than in 2017. Old-age pension decisions numbered 11,137 (12,801), disability benefit decisions 6,024 (5,116) and partial early old-age pension decisions 1,967 (2,705). Continuation decisions on temporary pensions totalled 4,488 (4,390), and other decisions numbered 24,093 (17,305). Other decisions include decisions and preliminary decisions required as a consequence of the changes in pension rights. The share of rejected new disability pension applications was 33.0% (33.4%). Pension applications made online accounted for 50% (54%) of all new pension applications.

The number of disability pension applications was up 10% compared to the previous financial year. This is believed to be due to hidden disability risks detected as a result of the improved employment situation, the application procedures of the active model and the increase in the retirement age. Varma's total processing time for pension applications in 2018 was 31 days, which was 9 days shorter than the average processing time in the earnings-related pension sector.

Vocational rehabilitation is an alternative to disability pension, and the number of rehabilitation cases at Varma increased again. Rehabilitation has proven to be successful, as about 76% of those who received rehabilitation through Varma returned to the job market either in full or partly. Varma has for years been a forerunner in vocational rehabilitation, and the company actively steers those with a workability risk to rehabilitation. A larger share of Varma's customers use rehabilitation to return to working life than retire on disability pension. Throughout 2018 Varma assisted its client companies in managing personnel risks through client-oriented coordination of workability management, rehabilitation services and pension decision services in order to support the management of pension costs and longer careers.

Varma also contributed to the costs of customers' workability management projects in accordance with jointly agreed and often multi-year plans and contracts. Varma has been publishing its new well-being at work contracts since April 2017.



	31 Dec	31 Dec	CI.
	2018	2017	Change
Number of insured			
TyEL	523,266	501,323	21,943
YEL	36,715	35,918	797
Total	559,981	537,241	22,740
Number of insurance policies			
TyEL	26,030	25,575	455
Number of pensioners			
Part-time pension	377	937	-560
Partial early old-age pension	3,585	2,430	1,155
Survivors' pension	50,350	50,713	-363
Disability pension	22,646	24,039	-1,393
Old-age pension	253,595	251,023	2,572
Early old-age pension	12,859	13,439	-580
Years-of-service pension	2	0	2
Total ¹	343,414	342,581	833
¹ Those receiving YEL pension	29,431	29,655	-224
Those receiving TEL/YEL supplementary pension	43,442	43,715	-273

In terms of customer service, Varma's eServices are a key service channel. Through Varma's online services, the insured can obtain the most recent estimate of their pension amount at their planned retirement age. Of these estimates, 91.1% were calculated online. Pensions can also be applied for, and the status of the application can be tracked, online. A total of 14,135 (13,637) applications were submitted electronically during the year.

Varma sends a pension record to the insured once every three years. A total of 197,404 (230,000) such records were sent out in 2018. The record shows information on earnings that apply to pension as well as the pension that has accrued until the end of the preceding year. The pension record is also available via Varma's eServices, and the use of this service has increased significantly.

Technical provisions

Varma's technical provisions declined 0.5% (increased 9.5%) to EUR 36,521 (36,696) million. They contain a provision of EUR 154 (162) million for current bonuses reserved for client bonuses, a provision of EUR 1,486 (2,265) million for future bonuses contained in the solvency capital, and EUR -255 (769) million in an equity-linked provision for current and future bonuses.



Changes in insurance portfolio

Varma received part of the insurance portfolio of a pension fund during the financial year. The amount of pension liabilities transferred to Varma totalled EUR 0.1 million.

Investments

Varma's investment returns for 2018 were weak, due to increased market turbulence in the last quarter of the year. The return on investments stood at -2.0% (7.8%), and at the end of December the value of investments amounted to EUR 44,015 (45,409) million. As a result of this, Varma's solvency ratio weakened during the year to 127.5% (133.5%).

The weaker global economic outlook and increased political uncertainty led to a very weak performance in the investment market towards the end of the year. The year under review was the weakest in the global equity markets since the financial crisis, and the performance in December the weakest since the launch of the MSCI All Country World Index in 1988. Unlike earlier in the year, the end-of-the-year turbulence also hit the US stock markets hard, with share prices dropping over 9% in December. Long-term government bond rates started to fall clearly at the end of the year, although the Fed continued to hike its benchmark interest rates. The eurozone interest rates also fell, and the market's faith in the ECB's ability to raise benchmark rates in the environment of slower economic growth was tested. In the eurozone, the interest rate difference between Italy and Germany remained high, although the difference became significantly lower at the end of the year. In the corporate bond market, the risk premiums for higher risk corporate bonds experienced a clear upswing in the wake of the equity markets, reflecting not only a liquidity squeeze but also fears of a major slowdown in economic growth.

The weak and at times imbalanced market development has made asset allocation challenging. The extremely low interest rate level and the high hedging costs for dollar-denominated investments also cut the return potential of the fixed-income investments. However, diversification especially in unlisted investments has limited the risks resulting from volatility in the equity and fixed income markets, although the plummeting equity markets and the increase in corporate bond risk premiums created pressure on the return development of unlisted equities. In Varma's investment allocation, the weight of listed equites was decreased further in the fourth quarter.

The return on Varma's investments was weak in the bear market environment of the year. Private equity investments, real estate and hedge funds generated the strongest investment returns in 2018, although hedge funds also were negatively affected by the year-end market turbulence. Fixed income investments suffered from widened credit risk premiums, the steep slide of emerging market currencies and monetary policy normalisation, and the returns were negative. Of individual investments, low-risk corporate bonds performed strongly towards the end of the year. The U.S. dollar gained clear momentum against most currencies during the year. At the end of the year, the average nominal investment return over five years was 4.3%, and over ten years 6.0%. The corresponding real returns were 3.7% and 4.8%.

The return on fixed-income investments was negative and stood at -1.8% (3.7%). The weak result was due to weaker growth outlook, increased political uncertainty, and tightened dollar liquidity. These weakened emerging countries' currencies and raised the risk premiums of lower credit rating bonds. The interest rates for eurozone



government bonds became differentiated as the year progressed. The long-term rates for Germany, which is seen as a safe haven, fell to a near-zero level, while Italy's rates remained clearly higher, reflecting concerns over the country's debt sustainability. The eurozone money market rates remained negative, as faith in the ECB's ability to normalise its monetary policy weakened. The return on the loan portfolio was 3.7% (2.2%), on public sector bonds -4.2% (4.0%), on other corporate bonds -2.0% (6.2%), and on other money-market instruments -0.1% (-1.9%).

The global equity markets performed very poorly during the year, and many equity indices showed a two-figure fall. There was strong turbulence in the equity market already early in the year, but by the third quarter, following a correction, the returns were back on an upward trajectory. There were, however, major differences between geographical areas. This changed in the last quarter, which was exceptionally weak. Finnish equities generated somewhat stronger returns than the rest of Europe, but as a whole, returns on equity investments were clearly negative. Listed equities generated a return of -8.3% (11.6%). Of all the asset classes, private equity investments generated the highest returns during the year at 17.5% (7.9%), while unlisted equity investments yielded 3.8% (18.5%).

The return on real estate investments was 5.5% (4.9%). Direct real-estate investments yielded a return of 3.9% (2.9%) and real-estate investment funds 10.6% (12.0%). Rental activity was at a high level, and the portfolio's occupancy rate was excellent. During the year, the real estate portfolio was further developed through transactions, new development projects in Finland and investments abroad. For example, the construction project of the Uusikumpu school in Espoo was started during the year.

The return on other investments remained negative, at -1.4% (9.3%). Hedge funds were effective in diversifying the equity and fixed-income market risk, yielding a return of 1.6% (8.5%), while alternative risk premium investments, included in other investments, were negatively influenced by the simultaneous fall in the equity, fixed-income and credit risk markets and the rise in market volatility at the end of the year.

Varma has US-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. During the year, the appreciation of the US dollar supported equity returns to some extent. 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.

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 1,777 (1,218) million.

Varma's share ownership policy

The central principles in Varma's ownership policy are high-quality governance in the companies in which it has a holding, transparency of operations, active engagement, and the monitoring of incentive schemes for key



personnel. The share ownership policy was updated in late 2018, and the policy is available on Varma's website. In 2018, Varma actively participated in the Annual General Meetings of the domestic companies in which it owned shares and in the work of companies' Shareholders' Nomination Boards. Varma's website contains a list of the company's memberships on the Nomination Boards of listed companies.

Operating expenses

Varma's operational efficiency is very good. Varma used 60% (67%) of the expense loading, included in the pension insurance contributions, to cover operating expenses. Controlling operating expenses is a key objective while simultaneously improving operational efficiency. Good operational efficiency benefits Varma's customers by means of client bonuses. Varma's goal is to manage the assets of both present and future pensioners as efficiently as possible.

Increasing operational efficiency also requires continuous control of human resources and, in particular, IT system expenses, as these account for most of Varma's operating expenses. Overall operating expenses decreased 3%, totalling EUR 125 (129) million.

Varma is actively involved in the development and administration of the pension sector's joint information systems, and expects from the joint systems transparency and efficiency in terms of costs.

Personnel

The average number of the parent company's personnel and the salaries paid during the financial year are shown in the table below.

	2018	2017	2016	2015	2014
Average number of personnel Salaries and remunerations,	532	524	540	549	552
EUR million	40.1	39.3	36.0	39.6	40.1

Tieto Esy, which is included in the Consolidated Financial Statements using the equity method, had an average of 38 employees in 2018.

At year-end, Varma's personnel were distributed as follows: pension services 28%, insurance and actuary services 16%, customer service departments 12%, investment operations 13%, and other functions 31%.

Varma introduced a revamped job requirements system during the financial year, and the company's work culture was developed together with personnel through different projects.



Group companies and associates

At the end of 2018, the Varma Group comprised 128 (139) subsidiaries and 17 (17) associates. The most important subsidiaries and associates are Tieto Esy Ltd (50.1%), NV Kiinteistösijoitus Oy (45.0%), Serena Properties Ab (43.0%) and CMCV Kungens Kurva Holdco Ab (45.0%). The Varma Group also owns 50% of the guarantee capital of Kaleva Mutual Insurance Company. Most of the subsidiaries and associate companies are real estate companies.

Governance

At Varma's Annual General Meeting, policyholders have about 78%, the insured about 20%, and the Sampo Group (the owner of the guarantee capital) about 2% of the votes. Varma's Annual General Meeting was held on 15 March 2018. The Annual General Meeting approved the financial statements and discharged the Board of Directors, the Supervisory Board and the President and CEO from liability for the financial year 2017.

The new members elected to the Supervisory Board are Eero Broman, Jukka Erlund, Kari Kauniskangas, Pekka Kuusniemi and Petri Vanhala.

Kari Jordan (Chairman), Saana Siekkinen (Deputy Chairman), Satu Wrede (Deputy Chairman), Juri Aaltonen, Petri Castrén, Erkki Etola, Stig Gustavson, Olavi Huhtala, Juha Häkkinen, Jukka Jäämaa, Niina Koivuniemi, Ville Kopra, Tapio Korpeinen, Timo Koskinen, Päivi Leiwo, Olli Luukkainen, Jari Suominen, Leena Vainiomäki, Jorma Vehviläinen, Christoph Vitzthum and Anssi Vuorio continued as Supervisory Board members. Göran Åberg resigned from the Supervisory Board on 30 November 2018 and Jari Latvanen on 11 December 2018.

Authorised Public Accountants Antti Suominen and Jenni Smedberg have served as Varma's auditors. Authorised Public Accountant Robert Söderlund and Ernst & Young Oy, with Authorised Public Accountant Tuija Korpelainen as chief auditor, have served as the deputy auditors.

In 2018, Varma's Board of Directors was composed of Jari Paasikivi (Chairman), Antti Palola (Deputy Chairman), Kai Telanne (Deputy Chairman), Riku Aalto, Eila Annala (as of 7 March 2018), Johanna Ikäheimo, Rolf Jansson, Ari Kaperi, Casimir Lindholm (until 2 March 2018), Jyri Luomakoski, Petri Niemisvirta, Ilkka Oksala and Pekka Piispanen, and deputy members Eila Annala (until 7 March 2018), Eija Hietanen, Liisa Leino and Risto Penttinen (as of 7 March 2018).

At its meeting on 18 December 2018, Varma's Board of Directors re-elected Jari Paasikivi as Chairman, and Antti Palola and Kai Telanne as Deputy Chairmen of the Board, effective 1 January 2019.

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 with the aim of ensuring transparent financial reporting that conforms to best practices.



Capital and reserves

Varma has 71 guarantee capital shares, which are held by Sampo Plc and Mandatum Life Insurance Company Limited. Under the Articles of Association, interest approved by the Annual General Meeting is paid on the guarantee capital of EUR 11.9 million each year. The maximum rate is the technical interest rate applied to the insurance provided in accordance with the legislation on employee pensions plus one percentage point.

Risk management

The risks related to Varma's result and solvency are primarily affected by the result of investment activities. The most important operative risk concerns IT systems, which have a key role particularly in the processing of pensions and insurance and in the networked operating environment of the pension system.

In the earnings-related pension system, the liquidity risk is manageable, as pension expenditure can be accurately forecast and investments are strongly focussed on liquid instruments. Varma's insurance business risks, which are minor, are linked to the sufficiency of the insurance contributions collected and the technical provisions accumulated from them in relation to the pensions that are the company's responsibility.

Varma's investment plan determines the general security goals set for investments, the diversification and liquidity goals of investments, and the principles for organising currency risk hedging. The Board of Directors assesses the investment risks in terms of changes in value, expected returns, security and the principles of foreign currency policy, the company's risk-bearing capacity in terms of investments, and the development of the company's solvency. The basic allocation laid down in the investment plan also lays down the basic level for the total portfolio risk. Deviations from the basic allocation are allowed within defined limits. The maximum risk level is measured so that even after a 25% drop in the value of listed equity investments and certain hedge fund investments, the solvency capital still exceeds the minimum solvency capital by at least the amount of the VaR and is, in any case, always at least at the solvency limit. The diversification of the investment portfolio is based on allocation that takes into account the return correlations of asset classes. Risks are managed by, for example, diversifying investments by asset class and item, by analysing the investment portfolio and items, by avoiding risk concentrations, by securing guarantee policy, through careful valuation practice, by using derivatives, and by applying a supervision and follow-up system.

With the introduction of the national Incomes Register at the beginning of 2019, earnings on which insurance contributions are based are now reported in a centralised manner to a system maintained by Tax Administration. Operators in the earnings-related pensions sector also receive the information required for insurance through centralised systems shared by the sector. The new operating model-introduced new operative risks, which Varma has prepared for as part of the system reforms.

The defined-benefit nature of earnings-related pension provides security and financial predictability. Securing the pension benefits of the young and future generations strengthens the future of the earnings-related pension system. Agreeing on the contribution level until the end of this decade is an important stabilising factor for companies in the current challenging economic situation. Due to the agreed benefit adjustments, balancing the



financing of pensions with a reasonable cost burden is possible. The increase in the retirement age will facilitate financing in the longer term.

More information about insurance, investment, operative and other risks, as well as related quantitative data, is provided in the notes to Varma's financial statements.

Responsibility

The most essential impacts of Varma's CSR are defined in the company's CSR programme. The programme was revised in 2018, and its focal areas are promoting workability and good working life, mitigating climate change, ethical business, open communication and responsibility for Varma employees.

Varma has assessed its CSR risks relating to operations and business relations and has put in place comprehensive management systems and sufficient and appropriate processes, which ensure duty of care as regards these risks.

Varma's CSR targets and measures are explained more broadly in a separate report conforming to the Global Reporting Initiative (GRI) guidelines. The report is integrated in Varma's online annual report. The report will be published in mid-March.

Report on non-financial information

Business model description

Varma has a responsible core task – to secure pensions. The biggest impacts of Varma's investments operations relate to environmental responsibility, social responsibility, responsibility for Varma's employees, respecting human rights and fighting corruption and bribery. Taking care of personnel and responsibility for the environment hold the greatest importance in Varma's own operations and in the supply chain.

The key policies guiding Varma's responsible business operations are the Corporate Social Responsibility Programme, Code of Conduct, Principles for Responsible Investment, Climate Policy for Investments, and Supplier Code of Conduct.

Social responsibility and employee-related responsibility

For Varma, social responsibility means high-quality and smooth implementation of pension provision and promoting our customers' workability. In recent years, Varma has been improving its pension application processing to provide faster pension decisions to its customers. The average processing time of all pension applications shortened from 37 days in 2017 to 31 days in 2018. This is 9 days shorter than the average for the sector.

Varma's goal is to lengthen the careers of its client companies' employees and reduce disability pensions by developing workability management and offering effective rehabilitation. In 2018, the average disability pension contribution category of Varma's client companies was 3.7 (3.7). Varma's clients are happy with our workability



management services, and the willingness to recommend Varma is at a high level: the NPS score, which measures the likelihood of a customer recommending the company, was 62 (65). Of Varma's vocational rehabilitation customers, 76%, i.e. 1,760 people, returned to working life during the year.

During the financial year, Varma rejected 33.0% (33.4%) of new disability pension applications. The rejection rate for all earnings-related pension companies was 31.5% (33.7%). The Pension Appeal Board changed Varma's disability pension decisions in 13.9% (13.1) of the cases it handled. The corresponding rate for the entire private earnings-related pension sector was 13.2% (14.1).

Varma takes care of the well-being at work, competence, and equal and non-discriminative treatment of its personnel. The achievement of goals in the different areas is monitored through an annual employee survey. The PeoplePower Index, which measures Varma employees' satisfaction and engagement, stood at 72.2 (71.4), which is a good level.

The realisation and experience of equality and non-discrimination are measured through a separate survey, which is conducted once every two years to identify any areas needing improvement. In 2018, Varma focused on reforming the job requirements system, developing the work culture, and improving equality and diversity.

Environmental responsibility and mitigation of climate change

Varma's opportunities to influence the environment can be examined in terms of its operations (Varma's office building and the environmental impact of the work performed in it), its supply chain and its investments. The biggest opportunities for influencing are through Varma's investment operations.

In 2016, Varma determined the carbon footprint of its investments and drew up a climate policy, which sets targets for carbon footprint reduction in direct investments by asset class and states that the portfolio will be developed in line with the target of two degrees Celsius agreed on at the Paris climate conference.

In 2018, the carbon footprint of Varma's listed equity investments in relation to net sales declined 17% from the baseline of 2015 and was 27% lower than Varma's benchmark index. The carbon footprint of Varma's listed corporate bond investments in relation to net sales was 28% lower than in 2015 and 47% lower than Varma's benchmark index. The CO₂ footprint of real estate investment was 17% lower per gross square metre than in 2015.

Climate risk management and reporting

In 2018, Varma did well in an international comparison which assessed pension funds' approach to climate-related risks and opportunities. Varma ranked fifth in Asset Owners Disclosure Project's (AODP) climate index, which included the world's 100 largest global pension funds.

Varma constantly analyses the financial risks and opportunities brought by climate change. Varma reports on business impacts caused by climate change in accordance with the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD) for the first time in its 2018 CSR report. Varma's TCFD reporting will be developed and expanded in 2019.



Varma requires it investees to have a plan for reducing their emissions and, like TCFD, encourages companies to disclose information about how climate change is included in the company's governance, strategy and risk management, especially in emissions-intensive industries.

Varma has excluded investments in companies that rely on coal- or lignite-based operations for more than 30% of their net sales. Varma has also identified industries with higher environmental, social and governance risks, i.e. where there is a need for enhanced ESG screening. More comprehensive ESG monitoring and analysis concerns, for example, industries that have a high exposure to climate risks.

From the perspective of carbon intensity, Varma has identified the oil & gas industry, electricity & heat production, and the automotive, mining, concrete and transport industries as industries that are significantly exposed to the climate risk. In 2018, Varma looked into the proportion of these industries in listed equity and fixed-income investments. At the end of 2018, the total share of high-risk industries in the analysed asset classes was smaller than in the global benchmark index. In future, Varma will regularly monitor the weight of industries exposed to climate risks in its investments and expand the high-risk industry analysis to other asset classes.

Analysing climate risks in real estate investments

Varma also performed a climate risk analysis for direct real estate investments in autumn 2018. Of the real property directly owned by Varma, 70% is located in the Helsinki metropolitan area. This means that the buildings are located within a radius of approximately 10 kilometres from the seashore, and thus their climate burden is higher than average. In addition to the risk of a sea flood, slanted rain and strong winds may cause problems in controlling moisture levels in the buildings. At Varma, this is taken into account in building condition surveys and facade solutions for new buildings.

A sea flood analysis was also performed on Varma's real estate portfolio. The results show that the risk of a sea flood is low. By 2100, only five Varma-owned real estate sites are exposed to risk, when examined at a frequency of 1/1000 years. Varma takes the sea flood risk into account especially in new development projects and when purchasing new buildings.

Environmental impacts of our own operations and the supply chain

The environmental impacts of Varma's own operations are controlled using WWF's Green Office system, which was certified in 2016. In order to reduce the carbon footprint of its own operations, Varma has shifted to using green electricity and had a solar power system installed on the roof of its office building. The carbon footprint of the company's own operations was 34% lower compared to the 2015 baseline.

The environmental aspects of the supply chain are taken into account in the Supplier Code of Conduct, in which our suppliers are encouraged to use a certified environmental system or a documented operating method for managing their environmental matters.



Respecting human rights and fighting corruption and bribery

In its Code of Conduct, Varma is committed to operating on market terms, combating the grey economy and bribery, and responsible investment principles. Varma is also committed to operating in accordance with the UN's principles concerning business and human rights and expects the same from its supply chain.

Varma own operations do not entail major human rights risks. Varma's Code of Conduct provides anti-bribery and anti-corruption guidelines concerning, for example, offering and accepting gifts and hospitality and avoiding conflicts of interest. An online course helps raise awareness of the Code of Conduct, and in 2018, the course was completed by 91% of Varma's employees. The course is taken every two years.

The Code of Conduct is complemented by other internal guidelines and instructions relating to, for example, data security and data protection, and the identification of money laundering.

Responsible supply chain management

Varma has analysed its supply chain in order to identify responsibility matters, and determined the responsibility requirements which are contained in the Supplier Code of Conduct. The premise is that Varma expects its direct service providers to commit to the responsibility requirements. A direct service provider is responsible for its own supply chain. The Supplier Code of Conduct covers, among other things, good business practices, human rights, occupational safety and health, and respect for the environment. It also includes a notification requirement and a permission for audits.

The Supplier Code of Conduct is attached to all new contracts. The first tier of Varma's supply chain mainly covers Finland alone: of all purchases made in 2018, Finnish service and goods providers accounted for 98.8% (99.1%). Main purchases relate to construction activities, the real estate business, and IT services.

EcoVadis, an international corporate social responsibility assessment specialist, awarded Varma the CSR Rating Gold in 2018. Varma's CSR practices were rated as excellent, with its overall score in the top 5% of the 45,000 companies analysed. Suppliers of goods and services were assessed on their sustainability performance in terms of environment, labour practices, fair business practices and sustainable procurement.

Evaluation of investees' responsibility

Varma expects the listed companies that it invests in to comply with local legislation and international standards and agreements, typically the principles of the UN Global Compact initiative on social responsibility and, for example, respecting human rights. Varma reviews the compliance with the standards with the help of an external service provider, which examines Varma's direct listed equity investments, listed corporate bond investments and equity funds twice a year.

The review of compliance with standards, performed in October 2018, covered all of Varma's direct equity investments in listed companies, direct listed corporate bonds and active equity funds. The review covered 34% of Varma's investment portfolio. At the end of the year, listed equity investments and listed corporate bond



investments included one company with a confirmed environmental violation. Varma is involved in a class action lawsuit against the company in question.

For ethical reasons, Varma excludes from its direct investments companies that concentrate on the manufacture of tobacco and companies that manufacture controversial weapons, such as nuclear weapons, anti-personnel mines, cluster bombs, and chemical and biological weapons.

Varma signed the UN-supported Principles for Responsible Investment (PRI) in 2011. Varma reports on its responsible investment annually in accordance with the PRI framework.

Environmental ratings are a concrete way to develop the sustainability of real estate. Varma's goal is to have its most important buildings certified according to the BREEAM environmental rating system by 2025. The quality system is particularly aimed at improving how energy efficiency is monitored and verified. The goal is to achieve a rating of at least "Good" or "Very Good". In 2018, fifteen buildings owned by Varma were granted BREEAM In-Use environmental certification, among them shopping centres, a spa hotel and office buildings. At year-end 2018, a total of 38 of Varma's real properties had environmental certification, making up 34% of the real estate base under our direct ownership.

Outlook

Following a long period of global economic growth, the growth can be expected to slow down, especially due to the impact of China and the eurozone. We expect the market situation to remain challenging. Faith in central banks' ability to normalise their monetary policies is being tested. Political risks show no signs of subsiding. The elections to the European Parliament will be held in the spring, and the UK's difficult Brexit process continues.

Finland's economic performance has been good in recent years, and employment has shown strong improvement. Despite the weaker growth outlook, employment is expected to continue improving. In the longer term, the sustainability of public finances depends on continuing with structural reforms in areas that create conditions for growth, improve employment and strengthen public finances.

Varma continues to effectively implement the earnings-related pension system.