

FUTURE OUTLOOK REPORT OF THE STATE PENSION FUND





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The pension expenditure and premium forecasts are based on calculations made by the Local Government Pension Institution Keva.

VER

VALTION ELÄKERAHASTO
STATENS PENSIONS FOND
THE STATE PENSION FUND

1. Summary

The purpose of this future outlook report is to provide a description of the State Pension Fund (VER) in its role balancing state's pension expenditure, discuss the challenges presented by increasing pension costs peaking in the forthcoming decades, and the background for the pre-funding of pensions undertaken by the State of Finland.

Originally, VER was created with a view to balancing the high pension cost of baby-boomers in order to level out the annual fluctuations in the state's pension expenditure. The main rationale for the fund was its mission to allocate pension expenditure to the period of time when the pension obligation arises.

The state makes preparations for balancing the pension costs of state employees by accumulating pension premiums in a fund. By doing so, the state will be able to cushion the impact of the dramatic increase in pension-related costs at or about the year 2030. Founded in 1990, VER was initially administered by the State Treasury but was established as a separate organisation in 2000.

One of the reasons underlying VER's establishment was the development of Finland's partially pre-

funded pension system in the 1980s. The roots of the employment pension system date back to the early 1960s. Another important player in this context was the Local Government Pension Institution Keva whose growth took off in the 1980s. When established, VER was modelled on these two partially pre-funded systems. Now, in 2014, the assets accumulated in the employment pension system cover 25–30 per cent of the pension liabilities incurred to date. Within Keva, this funding ratio already exceeds 30 per cent. For VER's part, the same ratio has grown from zero in 1990 to the current 17 per cent. VER's main mission is to balance the state's pension expenditure peak expected to occur 15 years from now.

Consequently, the return on investments is the key criterion for measuring VER's performance in accomplishing this mission. Since 2010, VER's average rate of return has been 5.5 per cent. Over the same period, the average cost of servicing government debt has been 3.7 per cent. As a result, VER has generated considerable added value for the State of Finland. By September 2014, the total amount of this increase had reached around EUR 3 billion.

VER PLAYS AN IMPORTANT ROLE IN THREE AREAS OF THE FINNISH PENSION SYSTEM AND IN THE EFFORTS TO ENSURE SUSTAINABLE MANAGEMENT OF GOVERNMENT FINANCES:

- VER helps balance the deficit in pension expenditure targeting the year 2030 when the cost will peak.
- VER's investment activities have contributed to government finances. The return on investments earned by VER exceeds the cost of servicing government debt. At the same time, VER helps ease the State's cost pressures in the long term.
- VER is one of the actors contributing to Finland's partially pre-funded pension system.

2. Increase in age-related expenditure impacts the sustainability gap in government and public sector finances

Public sector sustainability gap poses a major challenge

According to the Ministry of Finance (17 April 2014), the sustainability gap in public finances is 3 per cent relative to GDP. A sizeable portion of this gap is due to the increase in age-related expenditure. The state takes adjustment measures in order to reinforce government finances. Part of this sustainability gap is to be covered by a new pension system that will extend work careers at both ends.

Challenges facing the public sector expected to grow

Given the ageing population, not only pension expenditure but also health and medical care spending will increase in the next few decades. The plan is that Finland's public finances are established on a sustainable basis as the state needs to fund the growing cost due to the current demographic change.

3. Increase in the state's pension expenditure and VER's role in balancing costs

The state's pension expenditure has increased and will continue to do so over the next few years. As it is, annual expenditure has already grown to over EUR 4 billion from EUR 1.5 billion in 1990 when the fund was established. By 2030, the expenditure is expected to reach up to EUR 7 billion per year.

Table 1. Sharp increase in the state's pension expenditure by 2030

| | 1990 | 2014 | 2030 |
|-----------------------------|-----------------|-----------------|---------------|
| State's pension expenditure | EUR 1.5 billion | EUR 4.2 billion | EUR 7 billion |

Major structural changes in state employment already over

At the same time as pension costs have sharply increased, the number of state employees has fallen markedly. An important role in these developments was played by the incorporation of large government entities in the early 1990s. Among the companies established at that time were Sonera Corporation, Itella Plc and VR Ltd. When the companies were incorporated, the state assumed the pension liabilities accumulated until then. After the incorporation, pension premiums began to accrue

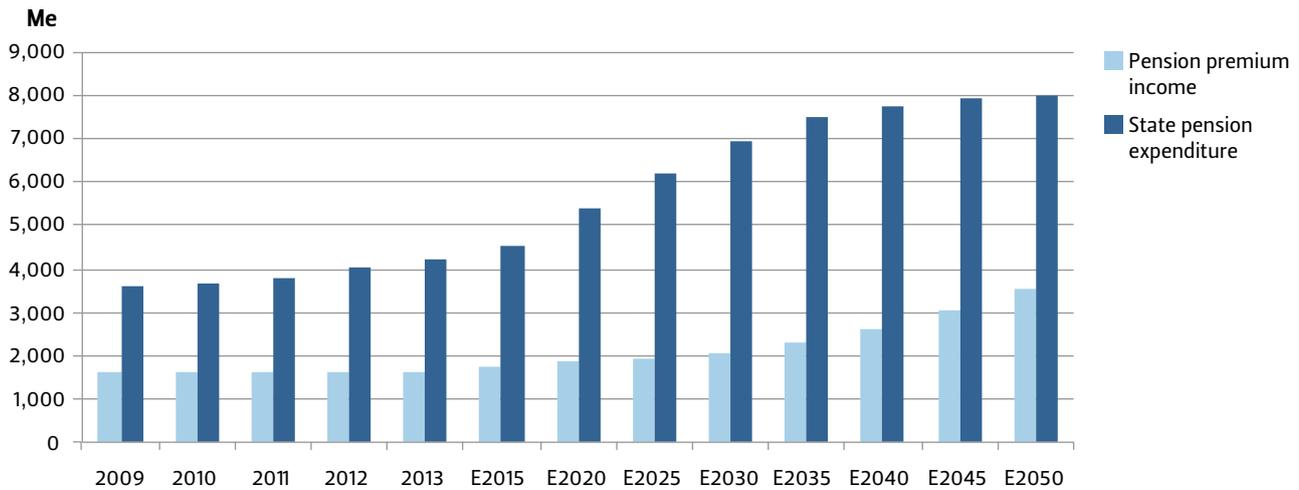
to the employment pension system. A new step was taken in 2008 when the Government decided to reform the university institution. At the same time, a decision was made to gradually transfer responsibility for the pension security of over 40,000 university employees to the private sector. Even so, the state was left with liability for the pensions of all employees born before 1980.

As a result of these two major developments, the number of state employees fell from 220,000 in the early 1990s to the current level of around 80,000. This change has also had significant implications for the pension system as large number of new employees have moved to the private pension system. At the same time, pension premiums have been transferred under the Employees Pension Act (TyEL). Over the same period, the number of retirees drawing pensions from the state under the State Pension Act (VaEL) has grown from 200,000 to 350,000.

State's pension costs growing sharply – VER's role expanding

The financial base for funding the state's pension costs has also changed. While pension expenditure

Figure 1. Increase in the state's pension expenditure by 2050



and premiums are still more or less equal in the private sector, the state's pension costs have exceeded EUR 4 billion even though its premium income has remained at around EUR 1.6 billion. Currently, the deficit is already EUR 2.6 billion, most of which is covered by the state through taxes.

In the future, VER's role in absorbing peaks in expenditure will be highlighted because net premium income has already turned negative. VER pays more to the state than it receives in premiums. More importantly, pension expenditure will increase at such a fast rate in the next few decades that the gap between state pension costs and premiums will only grow. For the state, the pressures due to pension costs and funding problems are greater than for other sectors and they will not ease, quite the contrary. As a result, the state needs to prepare to secure pension funding in various ways, an effort in which VER will play a key role.

VER in the partially pre-funded pension system

VER is part of Finland's partially pre-funded pension system. When established, VER was modelled on the TyEL private employment pension system (TyEL) in its then-current form. Currently, its funding ratio – the ratio of pension assets to pension liabilities – is 25–30 per cent depending on the interest rate used in the calculation. The target funding ratio defined for VER is 25 per cent. Whether this goal is achieved or not is determined by return on investments, pension premium income and transfers of funds to the government budget. Table 2 shows the funding ratios of private and public sector pension funds in Finland.

Funding ratio of state pensions lower than in municipalities and the private sector

In Finland, there are major differences in funding ratios between the various actors. Keva's high funding ratio is explained by the fact that the municipalities share collective responsibility for the pension liabilities incurred, and a significant increase

Table 2. Funding ratios of pension liabilities in Finland in 2012

| | Pension funds, EUR billion | Pension liabilities, EUR billion | Funding ratio, % |
|-----------------------------|----------------------------|----------------------------------|------------------|
| Private Employment Pensions | 96.4 | 333.8–397.7 | 24.2–28.9% |
| Local government/Keva | 34.4 | 108.7–127.9 | 26.9–31.6% |
| State/VER | 15.4 | 84.7–97.7 | 15.7–18.1% |

Source: Finnish Centre for Pensions 04/2013. Real discount rate 2.5%–3.5%.

in pension expenditure is foreseen. The state will face the same situation. In order for the state to achieve the same funding ratio as Keva, it should have EUR 10 billion more in pension assets than it currently does.

There are three reasons for the State's lower funding ratio. First, the accumulation of funds by the state was commenced later than by the rest of the Finnish pension system. The second lies in the 1990s recession when the State of Finland was unable to maintain a sufficient level of pre-funding. So far the State has failed to close this gap – the third reason for the lower funding ratio. As a result, the state will face the forthcoming decades and the challenges posed by an ageing population with a lower funding ratio than the rest of Finland's public and private sector.

Pre-funding of pensions allocates costs to the right generation

A fair question is why the state raises funding to finance pensions in the first place. Of course, the same questions may be put to the local government sector and the entire private pension system. The guiding principle of pre-funding is to allocate the burden of cost to the right generation; in other words, every employee makes a contribution towards his or her own pension. Finland has opted for a system where this cost burden is covered only partially (approximately one quarter) and administered through collective funds.

Each country has its own system: some accumulate no pre-funding while others provide full coverage. There are also countries where pre-funding is handled collectively and countries where it is up to each individual. In the Netherlands, pension liabilities are fully covered in advance. By contrast, Italy and Germany raise hardly any funds for future pensions: pension premiums are collected as pensions fall due. One of the challenges associated with this pay-as-you-go (PAYG) system is that the cost of the pension is not allocated to the generation whose pensions are being paid; instead, the bill is passed on to the future.

If the size of the population and number of employees increase, this will not present any problem because the number of contributors increases. Now that the generation born after World War II is going into retirement, these cost pressures over the next few decades will be exceptionally intense.

By collecting funds for future pensions, the state seeks to respond to the demographic change and the pressures resulting from this change in the form of growing pension expenditure. With the pension funds, the cost burden due to the pensions paid to baby-boomers can be spread out during the years when the expenditure reaches its peak. The objective of the pre-funding of pensions by the state is to allocate the cost of pensions to the right generation.

Any pension system takes decades to build up. Pension liabilities and the funds required to cover them are so huge that the equation cannot be resolved in a year or two – it takes efforts spanning several generations. Finland has created a system where the benefits are harmonised across the public and private sector. Therefore it is only natural that the efforts to cover future pension expenditure are governed by the same kind of thinking in all sectors. Similarly, it makes sense to collect pension premiums on an on-going basis at the same pace as pension liabilities are incurred.

The national pension administered by The Social Insurance Institution of Finland (Kela) is an exception. In many countries, social security is not pre-funded; instead, the costs are paid as they are incurred. As all these costs arise to meet the needs of the entire population and the cost of the use of the services, it is only natural that everybody contributes towards financing them through various forms of taxation.

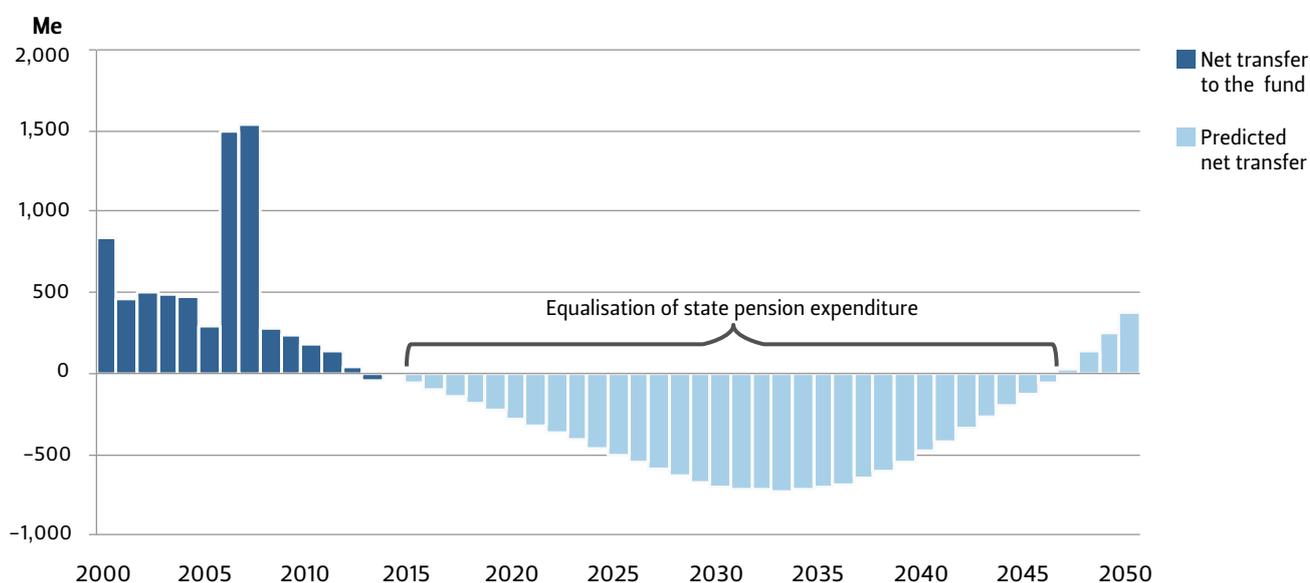
As of 2013, VER's contribution to the state will exceed its premium income

Fundamentally, the State Pension Fund's mission is to balance state's pension expenditure. Under the

act regulating its activities, VER annually transfers to the state an amount equivalent to 40 per cent of the state's total pension expenditure. VER net premium income – or its pension premium income less the amount transferred to the state – remained positive until 2013 when it turned negative. For 2013, the deficit was EUR 45 million. Over the next years, the negative net premium income will increase so that especially during the peak years around 2030, VER will even out the state's pension liabilities.

Movement in VER's net premium income is shown in Figure 2. As far as the next few years are concerned, the trend is explained by the growing pension expenditure payable by the state. The increase in pension expenditure will continue to grow even beyond 2030, albeit at a slower rate. Consequently, although net premium income is predicted to improve, it will not turn positive until 2045–2050.

Figure 2. Movement in VER's net premium income



4. Return on VER's investment activities and the state's financing cost

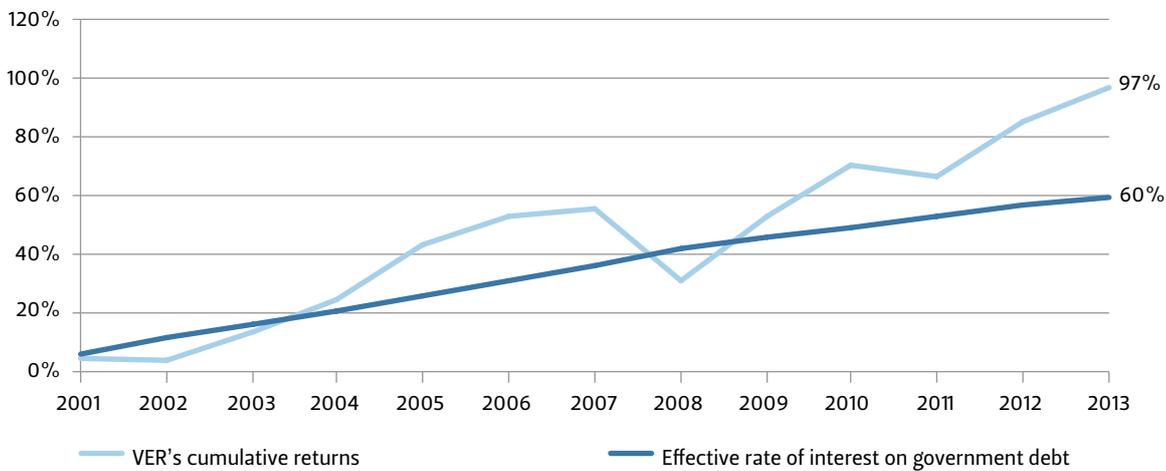
VER generates value from high-yield investments

As part of its main mission, VER also generates immediate value because its long-term returns exceed the cost of servicing government debt. Thus, it makes sense for the state to pre-fund pensions in advance, earn additional income and use it to finance pensions when the time of payment comes. VER exists to allocate the pension costs to the people and the period of time in respect of which the pension obligation arises. That the assets can be generated to

other earnings through returns on investments is an additional bonus.

Figure 3 shows the cumulative returns earned by VER during 2001–2013 as compared to the state's financing cost. VER's cumulative earnings are 97 per cent and the state's cumulative financing cost 60 per cent. By investing its assets, VER has generated substantial added value totalling around EUR 3 billion by September 2014.

Figure 3. VER's rate of return and the cost of servicing government debt 2001–2013



5. VER promotes economic growth and employment through its investment activities

Investments generate multiplier effects in Finland

VER's primary mission is to prepare to finance and balance state's future pension expenditure. However, VER's investments of some EUR 17 billion also have multiplier effects in Finland because investments in Finnish equities account for some 20 per cent of the total. Similarly, part of the investments in real estate properties and private equity funds and bonds are made in Finland, all of which have their own multiplier effects. Indirectly, they promote economic growth and employment in the country.

Recent investment targets involving VER include the Growth Fund of the Finnish Industry Investment; a fund focusing on logistics premises; an investment in a power transmission network; a fund investing in new rental housing production; a Finnish private equity fund, and so forth.

Over the past two years, VER has focused on new investments in the private credit market providing funding for companies as an addition to conventional bank loans. Additionally, VER has invested in several European funds, some of which also operate in Finland.

VER provided funding amidst the financial crisis

When share prices plummeted and companies got into difficulties with financing in 2008 and 2009, VER participated in several share and corporate bond issues. In a situation where many other institutional investors and banks were compelled to reduce their risk exposure, VER invested a total of EUR 1.5 billion in equities and corporate bonds. Additionally, VER is a major investor in commercial papers in the Finnish market.

Since VER's primary mission is to operate as a portfolio investor, it must always assess potential investments and opportunities in terms of return and risk. Accordingly, VER has not got involved in all projects. VER explores the opportunities available to its small organisation to invest in Finland cost-effectively.

Future investment opportunities in infrastructure

Across the world, institutional investors are increasingly turning their attention to infrastructure investments. Underlying this trend are the sophisticated investment instruments

and the growing need of governments to finance projects in collaboration with private investors. Several such projects have already been implemented in Finland and they are expected to increase in number. Ideally, they offer both partners a viable alternative for pursuing their respective interests.

6. VER's outlook

Over the past few years, the size of VER's investment portfolio has increased considerably. From slightly over EUR 4 billion in 2004, the total assets in the portfolio have grown to exceed EUR 17 billion in summer 2014. In recent years, about 52 per cent of the money has been invested in the fixed-income instruments, 40 per cent in equities and 8 per cent in other projects.

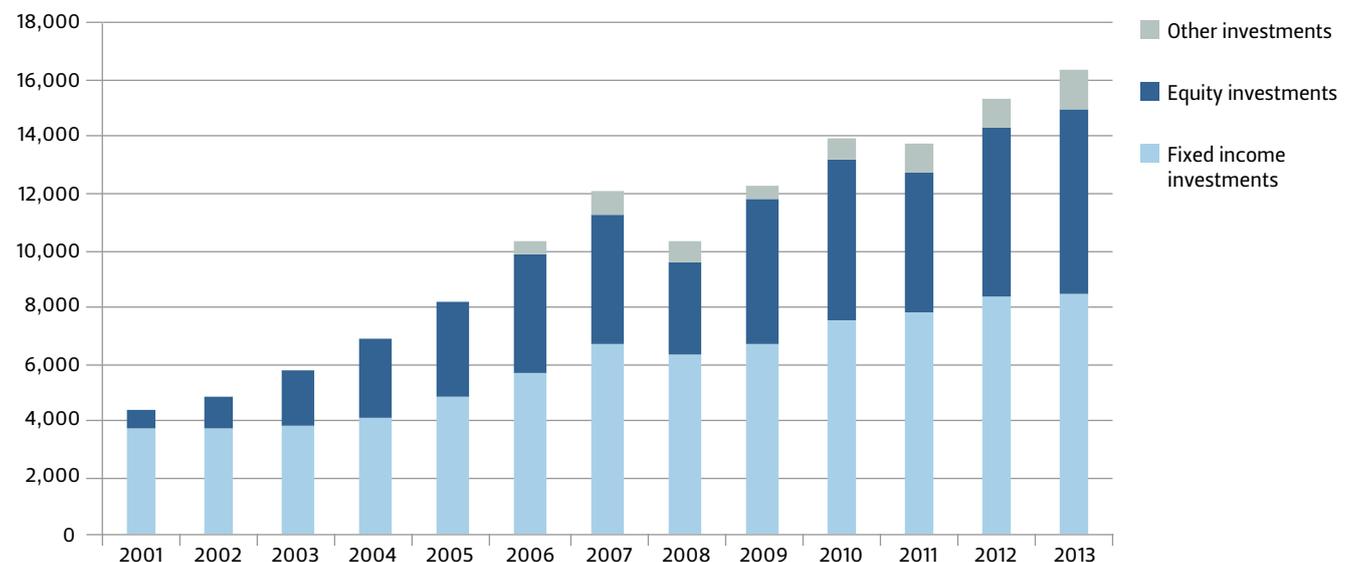
The average rate of return of VER's portfolio is 5.5 per cent. Experts estimate that with the existing allocation of investments the holdings could give a long-term yield of 5.2 per cent adjusted for business cycle effects. Currently, the effective rate of interest on government debt is about 2 per cent. The normal variation range of return is

VER has made a total of 10 investments in infrastructure funds in Europe, some of which have holdings in Finland. Future investment opportunities will very much depend on whether the public actors are willing to finance major infrastructure programmes through private-public partnerships (PPP), for which pension investors are needed.

considerable: typically it hovers 4–7 per cent above and below the annual average. In good times, the assets yield a higher return and vice versa. The long investment horizon of pension funds allows them to live with considerable fluctuations in value.

Volatilities are part and parcel of the life of an institutional investor. Usually, they are related to crises in world politics, business cycles and natural catastrophes. Under normal circumstances, the return on investments is determined by the knowledge of the markets and business cycles. In a crisis situation, a number of other factors affect the final outcome. At the same time, crises may offer attractive investment opportunities for a long-term investor.

Figure 4. Movement in VER's pension assets, EUR million



7. Conclusions

The State Pension Fund plays an important role in Finland's pension system. The state, municipalities, the church, The Social Insurance Institution of Finland and the private sector have, in various ways, accumulated and invested funds to cover future pension expenditure. Of the total of EUR 94 billion in pension liabilities incurred by the state to date, 17 per cent are covered with the assets held by the State Pension Fund when the target is 25 per cent. This is less than the average funding ratio for all pensions in Finland because the state commenced pre-funding later than the other actors of the Finnish pension system.

To a great extent, the sustainability gap of Finland's public finances stems from the challenges related to the ageing population, as a result of which pension expenditure and the cost of health and medical care will grow. Most of these challenges still lie ahead and the costs are expected to peak around 2030. In terms of managing the sustainability gap in central government finances, the retirement age is of crucial

importance because the whole pension system is based on working and earned income.

For example, one of the reasons for Finland's high credit rating is that the pension system rests on a solid foundation. The State Pension Fund contributes, for its part, to the efforts to improve the sustainability of the Finnish economy. Pre-funding of pensions, high yield on investments, and using the fund assets to balance the pension expenditure during 2020–2040 offer help in alleviating the problems associated with the sustainability gap in the state budget.

The idea with accumulating funds for future pensions is to prepare for the ageing of the population. Using the pension fund assets, it is possible to spread out the cost burden for baby-boomer pensions during the years when the expenditure reaches its peak. The State Pension Fund was created to budget for pension expenditure over the next few decades and distribute the cost pressures over a longer period of time.



Annex: VER in brief

VER'S TARGET FUNDING RATIO

Target funding ratio

According to the State Pension Act (VaEL), VER's target funding ratio is 25 per cent of the state's pension liabilities. The fund is to grow until the level equivalent to this target is achieved. At the end of 2013, the market capitalisation of the fund was EUR 16.3 billion (EUR 15.4 billion in 2012) and its funding ratio 17 (17) per cent.

VER as a buffer fund

State pensions are paid out of the appropriations allocated for this purpose in the government budget. Instead of paying out pensions, VER transfers an amount equivalent to 40 per cent of the state's annual pension expenditure to the government budget. The rest of the assets are left in the fund. As a 'buffer fund', VER – unlike the TyEL private pension insurance companies governed by the Employee Pension Act – does not incur any direct pension liabilities itself. As a result, VER is not subject to solvency regulations.

VER'S TARGET RETURN AND FINANCIAL PERFORMANCE OBJECTIVES

Target return and financial performance objectives as defined in the Ministry of Finance Guidelines for the State Pension Fund

1. Long-term target return

VER's investment activities must give a higher rate of return than an alternative investment considered risk-free from the state's point of view. Here 'risk-free alternative investment' means the cost of the state's net debt, including the cost of the derivative contracts made for debt management purposes. Net debt refers to the difference between the state's on-budget debt and cash assets.

2. Operational target return

VER's risk-adjusted return on investments must

outperform the benchmark specified in the fund's investment plan.

Risk limits and strategic allocation

Risk limits specified in the Guidelines for the State Pension Fund issued by the Ministry of Finance on 18 June 2014:

- fixed-income instruments must account for a minimum of 35 per cent;
- equities must not exceed 55 per cent; and
- other investments must not exceed 12 per cent of the total value of the investment portfolio.

Strategic allocation is specified in the annual investment plan. It stakes out the long-term investment policy at the risk level determined by the Board of Directors in order to achieve maximum return. The strategic allocation is continuously monitored and may be adjusted by the Board in response to market changes within the specified risk limits.

Anticipated rates of return and risk levels are determined for the various asset classes and the entire portfolio using a scenario analysis with due regard to market rates and changes in risk premiums and correlations over time in each asset class. The portfolio's long-term expected return based on the strategic allocation is 5.2 per cent.

STATE'S PENSION LIABILITIES

State pension scheme as part of the Finnish employment pension system

In 2013, over 150,000 people were covered by the State Pension Act (VaEL), of whom around 81,000 were state employees. The state's total pension expenditure was EUR 4.2 billion accounting for slightly over 18 per cent of all employment pensions. All in all, state pensions are paid to some 360,000 retirees, who represent slightly more than 25 per cent of all employment pension recipients.

State responsible for payment of pensions

As of the beginning of 2011, pension security for individual state employees has been provided by the Local Government Pension Institution Keva. In 2013, Keva also assumed responsibility for employer duties and actuarial services.

State pensions are paid out of the appropriations allocated for this purpose in the government budget. At the same time, the state is required to ensure that the accrued pensions can be paid out.

VER helps balancing pension expenditure

Through VER, the state provides for the pensions payable in the future and, in particular, helps balance the major increase in pension expenditure due to the baby-boom generation. Each year, VER transfers part of its assets into the state budget because all state pensions are paid out of budget appropriations. Consequently, some of the fund's assets are used for actual pension payments.

Oversight by the Ministry of Finance

VER's operations are overseen by the Financial Markets Department of the Finnish Ministry of Finance. The investment activities are directed by the Board of Directors appointed by the Ministry of Finland. The Board includes both employer and employee representatives. VER manages the assets entrusted to it and makes all investment decisions in accordance with the investment plans adopted by the Board of Directors within the framework of VER's investment limits and authorisations.

The state's extensive pension liability

Pension liability refers to the sum of money (including future investment returns) sufficient at any given time to cover the future cost of pensions accrued by the date when such determination is made. This liability also includes all paid-up pensions (pensions accrued under expired state

employment contracts) payable to former state employees who have taken employment in local government or the private sector, or who have ceased to be state employees as a result of the incorporation of state entities.

Pension liability is always based on an assumption of future returns on investments. The state's pension liability indicates the total cost of the pensions promised by the State to its current and previous employees at the time of calculation.

Aside from expected returns, the liability calculation includes other assumptions such as assumptions regarding changes in life expectancy and retirement age and the number of people anticipated to retire on a disability pension in the future. When pension liability is determined, it is essential to know the exact aggregate of pensions accrued by the date when such determination is made. In reality, pension liability varies from year to year: those employed earn more pension day by day, people retire on an on-going basis and some of the pensioners die. At the end of 2013, the state's pension liability under the state pension system was EUR 94 billion (EUR 92.6 billion). In real terms, the state's pension liability is expected to remain at the current level until 2020. After that, the pension liability will start decreasing up to the 2040s. This decrease is due to the fact that the share of accrued pensions is reduced as a result of the increase of the wage bill. Additionally, the current pension liability will be reduced by the amount of pensions paid out as baby-boomers retire.

VER's history

1990

The State Pension Fund is established under the auspices of the State Treasury. By founding VER, the state prepares to cover the cost of future pensions and balance the deficit in pension expenditure.

The target funding ratio is the state wage bill multiplied by 1.5. The target was to be attained by 2010.

2005

The target funding ratio is set at 25 per cent of the state's pension liability, which is expected to be achieved by 2020.

The amount of annual transfers from VER to the government budget is revised up to 40 per cent of annual pension expenditure until the target funding ratio is achieved. After this, the amount of the transfer is determined annually in the government budget.

2000

The target funding ratio is defined in more detail: the state wage bill in 2010 multiplied by 1.5 with the target linked to a minimum of 20 per cent of pension liability.

Staff is hired for VER. Investment activities are extended to include equities.

2006

The Ministry of Finance's role as VER's supervisor is defined in greater detail. The Ministry of Finance is authorised to issue general guidelines for the organisation of VER's management, financial administration and the investment of its assets.

VER's assets are increased and transfers to the government budget reduced during 2006–2007.

VER's investment assets exceed EUR 10 billion.

2011

Responsibility for the administration of state pension security is transferred from the State Treasury to the Local Government Pension Institution Keva.

2012

VER's investment assets exceed EUR 15 billion.

A decision is made to transfer the employer services related to state pension security to Keva as of 2013.

2013

VER's transfers to the government budgets exceed its pension insurance premium income for the first time. At the same time, VER sets to work to pursue its other goal of levelling out annual fluctuations in state pension expenditure.

