

# Neighbours look at each other:

Estonian and Finnish Pension Systems

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Countries from east and west were paired by the organiser. For each pair the task was to prepare a report including an introduction and evaluation of the existing pension system and recent reforms. Estonia and Finland formed a pair. Mr. Lauri Leppik, Andviser to the Ministry of Social Affairs, from Estonia Wrote the report on the Finnish pension system and Ms. Christina Lindell, head of the Actuarial Department at the Central Pension Security Institute, from Finland wrote the report on the Estonian pension system.

The World Bank will set up a website (<u>www.worldbank.org</u>) by the end of June which will include all partner assessments.

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# The Finnish pension system

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#### 1 INTRODUCTION

### 1.1 General overview of the pension system

The Finnish pension system is divided into statutory and voluntary pension schemes. In the overall picture the statutory schemes play the primary role. Voluntary pensions, which in principle could be employer-based, industry-wide supplementary pensions or individual pension plans, are of minor importance only.

The statutory pension system comprises of 2 tiers:

- national pension scheme, which is residence-based;
- earnings-related pension schemes, which cover the economically active population.

The earnings-related scheme is the dominant pension arrangement, while the national pension scheme has a subsidiary role.

Both pension systems cover 4 risks:

- old age;
- disability;
- · death of the family earner;
- long-term unemployment of older workers;

The latter type of pension can be considered as one of the peculiarities of the Finnish pension system.

The social-political objective of the national pension is to guarantee a minimum income in cases where the person has no earnings-related pension or the earnings-related pension is very small, thus giving security to persons who are outside the active working life.

The aim of the earnings-related pension is seen as to provide replacement income, which is sufficient for consumption comparable both to that of the person's own working years and to the current workers' consumption. Thus the scheme aims to achieve simultaneously redistribution over the individual life-span as well as intergenerational equity.

#### 1.2 Benefits

#### 1.2.1 National pension

The qualifying age for the national old age pension is 65, which is equal for men and women. However, early retirement is possible from the age of 60.

The amount of the national pension depends on a number of variables:

- other pension income of the beneficiary;
- marital status;
- place of residence;
- length of residence in Finland.

A full national pension<sup>1</sup> of 446 Euro for a single person and 391 Euro for a married person (in 2000) is paid out, if the beneficiaries other pension income is below a certain limit (43 Euro in 2000). If the other pension income exceeds this limit, the national pension is reduced by half of the difference between the earnings and the limit. If the other pension income exceeds 914 Euro for a single person and 804 Euro for a married person (in 2000), the national pension is not paid at all.

National pension can be topped-up with a housing allowance (up to 85% of the share of the housing costs exceeding the amount of self-responsibility).

<sup>1</sup> Local municipalities are divided into 2 groups depending on the cost of living. This is the amount, if the person resides in the group of local municipality with higher living costs. In the other group, the amounts of the full national pension are respectively 427 and 375 Euros.

#### 1.2.2 Earnings-related pension<sup>2</sup>

The *old-age pension* is granted to a person:

- who is in pension age (in general 65), and
- whose employment relationship has terminated.

*Early retirement* is possible from 60 to 64 with 0.4 % reduction in the amount of pension for each month. From the other side, the old age pension may also be *deferred* beyond the age of 65, with subsequent pension increase of 0.6 % for each month.

Part-time pension may be granted to a person aged 58-64<sup>3</sup> who reduce their working hours and take up part-time work (with at least 16, but no more than 28 weekly working hours).

Unemployment pension may be granted to a person aged 60 or over, who has received unemployment allowance for the maximum period (500 days with certain extensions).

Disability pension can be granted if the work capacity of the person has been reduced for at least 1 year.

*Survivors' pension* is paid in case of the death of the family earner to the children and the surviving spouse.

Pensions are calculated according to the formula:

#### Pension = accrual rate x insurance period x reference wage

The accrual rate is 1.5 % between ages 23-59 and 2.5 % between 60-65.

The pensionable wage (reference wage) is aggregated over the last 10 years of the employment contract.

There is no fixed minimum nor ceiling on pensions. There, however is a maximum replacement rate, which is 60% of the pensionable wage.

<sup>2</sup> The benefit rules are described for the TEL (employees) scheme. For other schemes, some of the rules could be different, e.g. in the TaEL (artists) scheme it is not required to stop working to get pension.

<sup>3</sup> The age limit for part-time pension has been temporarily lowered to 56 until the end of 2002.

Pension rights and benefits are index-linked. More precisely there are 2 indexes: one used during working years depends 50-50 on wages and consumer prices, after the age of 65 the weights are respectively 20-80.

#### 1.3 Administration of the pension schemes

The national pension scheme is administrated by the Social Insurance Institution (KELA).

The earnings-related pension system is comprised of 9 subschemes, covering separately private and public sector employers and different occupational groups. The sub-schemes are titled according to the relevant legal acts.

Table 1. Different sub-schemes of the Finnish earnings-related pension system.

	••••••
Legal acts regulation the earnings-related pension schemes	Commonly used abbreviation
Private sector	
The Employees' Pensions Act	TEL
The Temporary Employees' Pension Act	LEL
The Pension Act for Performing Artists and Certain Other Employee Groups	TaEL
The Seamen's Pension Act	MEL
The Self-Employed Persons' Pensions Act	YEL
The Farmers' Pension Act	MYEL
Public sector	
The State Employees' Pensions Act	VEL
The Local Government Employees' Pension Act	KVTEL
The Evangelist Lutheran Church Pensions Act	KiEL
-	

The administration of the earnings-related pension system is decentralized. The private sector employers, in principle, are able to choose which pension institution they want to use, either a private insurance company (Varma-Sampo, Pension-Fennia, Ilmarinen, Pensions-Alandia, Eläke-Tapiola, Verdandi), a company pension fund (37 different funds in 1999) or an industry-wide pension fund (8 different funds). For some of the smaller schemes (temporary employees, farmers, artists) separate pension funds are established.

Earnings-related pension schemes for the public sector are handled by public institutions: the Local Government Pension Institution, the State Treasury and the National Ecclesiastical Board.

Despite the decentralized organization, the scheme is co-ordinated on the central level. The co-ordination task lies with the Central Pension Security Institute, which handles the following common matters:

- maintains central registers;
- settles expenditures between the pension institutions;
- provides instructions on application of the legislation;
- has certain decision-making powers concerning the applicable legislation.

#### 1.4 Financing and contributions

National pensions are financed on pay-as-you-go basis, revenues coming from 2 sources:

- an ear-marked tax-like contributions, which are paid by employers (45% of the total revenues) and
- general taxation (55% of the total revenues).

The system of earnings-related pensions is financed from insurance contributions, paid by employers and employees. The contribution rate is determined annually on the basis of pre-set rules.

The system is based on the principle of partial funding, combining funded elements and pay-as-you-go financing. It should be stressed however that the funding is not discretionary. It is clearly predefined which components of the system are funded and which are financed PAYG.

The following elements are financed with the pay-as-you-go mechanism (a pooled component in the contribution rate):

- the index adjustments;
- survivors' pensions;
- part-time pensions;
- non-funded parts of the old-age pension;
- non-funded part of the disability and unemployment pension.

#### The funding rules of the system are:

- 1. Old age pensions: funding takes place between ages 23 -54, when one third (i.e. 0.5% of wage) of the annual accrual rate of 1.5% is funded:
- 2. Disability and unemployment pensions: up to 80% of the pension is funded in the year of contingency.

It shall be noted that the funding affects only the calculation and the size of contributions. The funds are collective (not individual accounts) and the yield of funds does not influence the size of the individual pension.

The contribution rate for the earnings-related pension varies quite substantially between the different sub-schemes - from 10.4 % in the farmers' scheme up to 31.5% in the church scheme.

Table 2. The contribution rates for the earnings-related pension scheme in 2001.

Earnings-related pension scheme	The contribution rate	Earnings limit (floor)	
Private sector			
Employees (TEL)	21.8% if less than 50 employees; 15.7-27.7% if 50 or more employees, the rate depends on the age and sex of employees 21.1% (average, including the average contribution rebate 0.8% of wages	1256 FIM (211 Euro) per month	
Temporary	21.8%		
employees (LEL)			
Artists (TaEL)	17.0%		
Seamen (MEL)	20.0% (divided between the		
0.14	insured and the employer)	004045114/5005	
Self-employed (YEL)	21.0% (base).	30134 FIM (5065	
- (10/51)	18.7% (average)	Euro) per year	
Farmers (MYEL)	21.0% (base)	15067 FIM (2532	
	10.4% (average)	Euro) per year	
Public sector			
State employees (VEL)	22.6%(average)		
Local Government Employees (KVTEL)	26.7% (average)		
Church (KiEL)	31.5%		
Source: The Central Pension Security Institute			
Source. The Central Pe	nsion security institute		

In the main, private sector employees' (TEL) scheme the total average contribution rate is currently 21.1 per cent, the employee's share being 4.5 percentage points of the wage. Except seamen, in all other schemes the employee's share is the same as in the TEL scheme.

The Government subsidizes to a small extent the schemes for self-employed persons and seamen. Farmers' pensions are however financed by the Government up to 80 per cent.

#### 1.5 Assets of pension institutions

Assets of the pension institutions are invested in:

- debt securities (bonds);
- real estate;
- shares;
- loans.

The assets should be invested safely and productively. In order to diversify investments and thus minimize the investment risks the legislation of the insurance companies and the insurance funds includes percentage limits for the investments. In addition the Ministry of Social Affairs and Health approves annually a minimum yield that the pension institutions must obtain on their investments. The minimum rate of return is currently 5.75%. If the actual yield exceeds this minimum, the pension institutions may to a certain extent choose to strengthen their solvency or to refund a part of the collected contributions to their clients (employers and

a part of the collected contributions to their clients (employers and employees). In 2000, the average contribution rebate was 0.6% of wages. The rebate is shared between the employers and the employees. All employees get half of the average rebate but the rebate of the employer is individual, being proportional to each client's pension reserves in the mana@ine proportional to each client's pension reserves in the mana@ine proportional to each client's pension reserves in the diversification of investments. From the other side, the better is the solvency of the institution, the freer it is to choose the investment objects. Investment activities are supervised by the Insurance Supervision Authority.

A private-sector employer is allowed to borrow back the part of the pension contribution that is not immediately needed to finance current pensions. The interest of the loan depends on the duration of the loan, the securities and the market interest rate.

Assets of pension institutions accounted for 67 billion Euros or 55 % of GDP in 1999 (Lassila, Valkonen 2000).

#### 1.6 Guarantees

Accrued rights are protected against insolvency of the pension institution. There is a statutory joint liability of pension institutions. However, there is no pre-funded guarantee mechanism. In case of insolvency of the pension institution, necessary finances to cover the pension liabilities are collected from a specific increase in the contribution rate.

# 2 EVALUATION OF THE EXISTING SYSTEM

#### 2.1 Are pensions adequate?

Finland is well known over the world for its equal distribution of incomes. While 3.8% of the total population live in relative poverty (defined as 50% of the median income), the poverty affects only 1.8% of persons over 65<sup>4</sup>.

The share of pensioner households among the poor has stayed very low<sup>5</sup>. The income available to pensioner households averages 85% of the income of other households.

As to the subjective perception of personal well-being, 8.5% of the total population perceived themselves as poor, whereas only 1.8% of persons over 65 considered themselves poor in 1995<sup>6</sup>. However slight changes in this respect have occurred over the last 5 years. In 2000 the respective figures were 6% (of total population) and 3.7% (of persons over 65).

There is no legally pre-established minimum level neither for the national nor for the earnings-related pension. The defined objective of the national pension is to provide a minimum guarantee for the old-age, disability and death of the breadwinner, but it is to be noted that this guarantee is proportional to the years lived in Finland.

<sup>4</sup> Data of Statistics Finland.

 $<sup>5\</sup> www.un.org/esa/agenda 21/nat linfo/countr/finland/social.htm.$ 

<sup>6</sup> Data presented by Veli-Matti Ritakallio from Turku University.

#### 2.2 Is the coverage sufficient?

The Finnish pension schemes are characterized by a broad coverage.

The scope of the national pension scheme is universal, as the right to national pension accrues on the basis of residence. All persons aged over 16 and living permanently in Finland are insured on the basis of residence.

All economically active persons (employees and self-employed) are covered by the earnings-related pension scheme on a mandatory basis. The obligation to take out insurance lies with the employer. The coverage extends to all employees and civil servants regardless of the length of the employment contract or the amount of the salary.

The self-employed persons have to take out insurance for the earnings-related pension when the self-employment has continued for four months and when the income earned from self-employment exceeds an established minimum (5065 Euro annually in 2001).

Table 3. Persons affiliated to different sub-schemes of the earnings-related pension system (1998).

Earnings-related	Number of affiliates	Share from the total number of affiliates	
pension scheme	annates	bei of affiliates	
Private sector			
Employees (TEL)	1100000	51.7 %	
Temporary	80000	3.8 %	
employees (LEL)			
Artists (TaEL)	25000	1.2 %	
Seamen (MEL)	7000	0.3 %	
Self-employed (YEL)	155000	7.3 %	
Farmers (MYEL)	115000	5.4 %	
Public sector			
State employees (VEL)	185000	8.7 %	
Local Government	445000	20.9 %	
Employees (KVTEL)			
Church (KiEL)	15000	0.7 %	
Total	2127000	100.0 %	
Source: The Central Pension Security Institute			

While the economically active population (employed and unemployed aged 16-64) in 1997 was 2420000 persons, about 88% were affiliated to the earnings-related pension scheme. From the total number of affiliates, 95% were active contributors (Lehmus, Pietiläinen, Pellinen 2000).

The neglect of payment of contributions has been attributed to certain fields of business, like construction, catering and taxi-driving. However, no systematic avoidance of liabilities is observed.

#### 2.3 Are pensions generous?

The total pension expenditures (national pensions and earnings-related pensions together) were 12.6% of GDP, which is about the EU average<sup>7</sup>. Expenditures on earnings-related pensions accounted for 9.7% of GDP in 1997. When comparing these figures with Estonian pension expenditures, attention shall be drawn to the fact that in Finland gross expenditures on pensions do not directly convert into the net disposable income for pensioners. In Finland pensions (except national pensions) are subject to an income tax and pensioners are further liable to pay health insurance contributions.

The average total pension was 5440 FIM in 1999, while the average earnings were 11625 FIM. From this, the average gross replacement rate is 46.8 % and the average net replacement rate 56.6%<sup>8</sup>.

According to the pension formula, the target replacement rate in the earning-related pension scheme is 60% of wages. Unfortunately, data were not available to show the actual replacement rates (the amount of granted pension to the reference wage) of persons who are currently retiring<sup>9</sup>.

<sup>7</sup> Data of the Central Pension Security Institute.

<sup>8</sup> Data presented by Marjukka Hietaniemi (the Central Pension Security Institute).

<sup>9</sup> As the earnings-related pension was established in 1962, the system is only approaching its maturation.

The earnings-related pension and the national pension together offer a rather high income for the majority of pensioners. The combined net replacement rate exceeds 100% for persons earning less than 5000 FIM (840 Euro) per month (Tuomisto 1999).

#### 2.4 Is the system efficient?

The earnings-related pension scheme is divided into a number of sub-schemes (see above), each with certain particularities both in respect of benefit rules as well as the rate of contributions. This makes the overall picture complex and fragmented. However, portability of rights acquired under different sub-schemes is not a problem.

#### 2.5 Is the system well-targeted?

The number of pensioners in 1998 was 1166200, which is 22.6% of the total population. The share of persons over 64 years in the total population at the same time was 14.6% (the EU15 average 16%). Considering that the national pensions system secures universal coverage for everybody from the age of 65, it can be seen that pension recipients under the age of 65 form around 8% of the total population.

Table 4. The old age dependency ratio in Finland compared to the EU average.

Old age dependency ratio

Finland 0.25
EU 0.27

Source: The Central Pension Security Institute, Eurostat

The old age dependency ratio (number of persons aged 65 or more divided by the number of persons aged 20-64) in Finland is below the EU average, mostly explained by the fact that different from the other Nordic countries, life expectancy in Finland is below the EU average.

The average actual retirement age<sup>10</sup> in 1997 was 57.6 (57.2 for men, 58.2 for women) while the median age was 60,1. This was considerably lower than the statutory pension age of 65, in particular on the account of early retirement pensions and unemployment pensions.

The life expectancy at the age of 65 is currently about 17.3 years (Lindell 1999).

More than a third (40.2% males) of the population aged 55-64 receive disability pensions. 8.3% of the same cohort are recipients of unemployment pensions.

The different types of early retirement pensions, providing possibilities for early exists from the labor market, is one characteristic feature of the Finnish pension system. These pensions have been used as a way to adjust to the abrupt changes in the economy (Pietiläinen 1999). The long-term sustainability of these policies is clearly under the question mark.

There seems to be a wide consensus that people should not retire as early as they currently do. It shall be acknowledged that the Finnish

<sup>10</sup> Calculations of Mikko Pellinen and Jari Kannisto (the Central Pension Security Institute) and Timo Korpela (Merita Life-Insurance)

Government has adopted a National Program on Ageing Workers (for the years 1998-2002) aiming to help older workers to stay in work. More concretely, the Government aims to increase the average age of exiting from the labor market by 2-3 years in the longer term.

#### 2.6 Is the system equitable?

The majority of pensioners receive both national pension and the earnings-related pension. 112 000 pensioners (9.6%) receive only the earnings-related pension<sup>11</sup>. From the other side, 150 000 persons (12.9%) receive only national pension.

Table 5. The number of pensioners (1998).

Type of pension	The number of pensioners	The share from the total number	
National pension only	150 000	12.9 %	
National pension and	904 200	77.5 %	
earnings-related pension  Earnings-related pension only	112 000	9.6 %	
Earnings related pension only	112 000	3.0 70	
Total	1 166 200	100.0%	
Source: The Social Insurance Institution.			

<sup>11</sup> All pensioners received a basic amount (about 400 FIM/month) of the national pension until 1995. Pensioners who had been granted a national pension continue to receive this pension, but the basic amount is decreasing for every year and should be abolished in 2001.

Finns have continuously monitored the public opinion towards the pension system. A survey conducted in 1999 revealed that 53% of respondents considered the present pension system fair, as a whole. 85% of the population considered it justified that the pension is determined according to the earnings from the former work, while the supporters of a flat-rate pension system form a minority (Lehmus, Pietiläinen, Pellinen 2000).

#### 2.7 Is the system sustainable?

The pension expenditure is expected to increase from the current level of about 12% of GDP to about 16% of GDP by 2050 according to simulations conducted by the EU Ecofin working group (Economic Policy Committee 2000). The peak level would actually be reached already around 2040.

Simulations by a research group from the Research Institute of the Finnish Economy (ETLA) show that with the base scenario of 3% real yield on accumulated funds, the total contribution rate to finance pension expenditures would have to increase to the level of about 32% by 2050 (see Chart in the Annex). However, the increase in contributions would be very slow until 2010. Higher fund yield would ease the pressure on contributions. With 4% real yield, the total contribution would rise to 29% by 2050. The greatest impact in this respect would have an increase in the effective retirement age by 3 years (Klaavo, Salonen, Tenkula, Vanne 1999).

It is difficult to forecast the political sustainability of increasing contributions. According to recent opinion polls, about 75% of Finns are prepared to pay higher contributions for their earnings-related pensions, if the benefits remain at the present level. However, 58% of the respondents believe that there will be a reduction in the benefits in the future (Lehmus, Pietiläinen, Pellinen 2000).

## 2.8 Does the private sector play a role in pensions provision?

The Finnish earnings-related pension system presents a particular public-private mix. Although it is largely considered as a public system, the direct

administration of the scheme both in the accumulation stage and in the pay-out stage lies with private insurance companies and pension funds.

It shall be noted however, that the margin of competition between the different pension providers is limited as the product is legally defined. The pension providers compete on administrative costs and try to attract customers (employers) through contribution rate rebate if their yield on investments is higher than the minimum established by the Ministry of Social Affairs and Health.

It is possible to top-up the statutory earnings-related pension by a supplementary pension based on collective agreement. These supplementary arrangements are mostly employer-specific and take the form of a group life insurance. In the private sector about 20% of the employees are covered by the employer-arranged supplementary pensions.

About 5% of all employed persons have taken up individual voluntary supplementary pension insurance policies (Lehmus, Pietiläinen, Pellinen 2000). The low figure can be explained by the fact, that there is no absolute ceiling on benefits in the statutory earnings-related pension system. From the other side, the lack of ceiling can be seen as a measure to increase cohesion in the statutory pension scheme.

#### 2.9 Is the system distortive?

The contribution rate to finance the earnings-related pension scheme has increased from 13% in 1980 to above 20% over the 20 year time period (see Chart in the Annex), clearly adding to the labor costs.

In 1993 employees' contribution was introduced<sup>12</sup>, with the declared aim *inter alia* to strengthen the employees' sense of economic responsibility towards the pension system.

The current total average contribution rate in the main TEL (employee) scheme is 21.1%, but further increases are expected in the

12 initially the rate was 3%.

future. It is stipulated in the law that any future increases in the contribution rate have to be shared 50-50 between employers and employees.

Considering the pension formula, the incentives to contribute to the pension system can still be described as strong due to the fact that the earnings-related pension is directly linked to the pensionable wage.

The age-specific accrual rate provides incentives to stay in the labor market for persons in pre-retirement ages 60-65 years, as the annual accrual rate is 2.5% compared to 1.5% at younger ages. However, this measure would not affect persons with a long work history because of the 60% ceiling on the replacement rate. Also, the pension is not accruing after the age of 65.

The minimum pension guarantee through the way of calculation of the national pension integrates the system of national pensions with the earnings-related pension scheme and ensures that there are incentives to contribute to the system also for the low-income earners.

From the other side, generous unemployment-related pensions (compared to the OECD average) are believed to have contributed to lower the average participation rates amongst older workers of about 3.6% (Blöndal, Scarpetta 1998).

### 2.10 Is the system administratively effective?

The administration of the earnings-related pension system is decentralized, but this is not a problem for the pension applicant. The applicant has to submit just one pension application, which is handled by the pension institution were the person was last insured. The institution then has to obtain the necessary information from the central register of the Central Pension Security Institute on other employment contracts and periods of self-employment, where the person concerned has accrued pension rights. The pension rights, which the person has acquired from different employment contracts are combined into one single pension, which is paid out by the last insurer. The same pension application is also forwarded to the Social Insurance Institute, which grants and pays out the national pension.

The average handling time for pension claims is 55 days.

Administrative costs of the Social Insurance Institution have been around 3%, while the administrative costs of the earnings-related pension scheme around 4%.

### 3 EVALUATION OF RECENT CHANGES AND REFORMS IN THE PENSION SYSTEM

#### 3.1 Reforms undertaken in 1990s

The Finnish pension system has been relatively stable over the last 2 decades as no major structural changes have been made. However, the severe recession in 1990s forced to cut labor costs and outlined the underlying problems of long-term sustainability of the pension system. A number of parametric changes have been implemented in 1990s (see Table 6), most importantly:

- 1) the pension age increased from 63 to 65 (public sector);
- 2) the target replacement rate reduced from 66% to 60% (public sector);
- 3) the annual accrual rate reduced from 2.2% to 1.5% (public sector);
- 4) access to early retirement inhibited by increasing the age limit from 55 to 58;
- 5) the indexation rules changed (bent index);
- 6) the time period for calculation of the reference wage was increased from 4 to 10 years.

These modifications have been commonly perceived as a "flexibility" of the system and as a feature showing the ability of the system to adapt to the changing circumstances (Lassila, Valkonen 2000).

From the other side, these parametric reforms have had quite substantial cost containing effect (see Table 7). Without these reforms, the contribution rate would have had to increase by 8 percentage points over the next 30 years.

Table 6. The main policy changes in 1990-2000<sup>13</sup>.

Year imple-	Measure		
mented 1990	Eligibility rules for surviving spouse's pension were tightened and equal treatment of men and women implemented.		
1993	Employee's pension contribution was introduced.  The public sector pension scheme was curtailed in line with the rules of the private sector scheme:  - the retirement age was raised from 63 to 65 years.  - the yearly accrual rate of pensions was lowered from 2.2 % to 1.5 %.  - for new employees the target replacement rate falls from 66 to 60 %.		
1994	The index adjustment (1.3 %) in pensions was not implemented.  Agreement to divide equally the future increases in the contribution rate between employers and employees.  The employee's pension contribution is deducted from the pensionable wage.  The lower age limit for individual early retirement pensions was raised from 55 to 58 years.  The age limit was lowered for part-time pensions from 60 to 58 years.  The accrual rate for employees aged 60-64 raised from 1.5 % to 2.5 %.		
1996	Pensionable earnings are calculated on the basis wages of the last 10 years in every employment contract are used instead of 4 years.  The implementation is gradual. The transition period ends in 2005.  The accrual rate for the post-contingency period in early retirement pensions was lowered from 1.5 % to 1.2 % in age bracket 50-60 years and to 0.8 % in the age bracket 60-65.  A two-index system was introduced. During working age an index consisting of an average of consumer prices and wages (half-way index) is used, as earlier, but in the index of paid pensions the weight of wages was reduced from 0.5 to 0.2 and the weight of consumer prices was raised from 0.5 to 0.8 (bent index).  Means-testing for eligibility to the national pension was extended.		
1997	The rules of pension funding were changed. The link between current contributions and the current yield of pension funds was cut, enabling an increase in risky investments without changing the forward-looking funding principle.		
1998	The lower age limit for part-time pension was lowered temporarily from 58 to 56 years.		
2000	The unemployment pension was cut.  The pre-funding of unemployment pensions was increased and the pre-funding of the disability pensions was reduced in order to equalize the costs for the employer of using these alternative channels to reduce its labor force.  The lower age limit for individual early retirement pensions was raised from 58 to 60 years.		

13 Adopted from Lassila, Valkonen 2000.

Table 7. The expenditure impacts of the main pension policy measures in 1990's<sup>14</sup>.

Measure	Year of imple- mentation	Change in expenditures, % of total wage bill in 2030
Surviving spouse' pension Public sector pensions Eligibility ages Pensionable wage Accrual rate for the post- contingency period Bent index Means-testing of national pen- sion Total	1990 1993 1994 1996 1996	- 0.8 - 2.7 - 0.7 - 0.4 - 1.5 - 1.5 - 0.8

An important change in respect of the solvency rules was made in 1997, allowing for pension institutions to develop additional reserves and direct more investments to riskier instruments, such as domestic and foreign shares. Earlier a significant part of assets were directed to Government bonds and loans to the client firms, with relatively modest yields. The share of domestic and foreign stocks in the private sector pension institutions portfolios has increased from 11.9 % in 1997 to 27.7 % in 1999.

Since 1999 buffer funds have been developed in the earningsrelated pension system in order to control sudden disturbances caused by recession. This measure is linked to the Finland's participation in the European Economic and Monetary Union, as during a recession the EMU requirements would otherwise be difficult to meet. The development of

<sup>14</sup> Adopted from Lassila, Valkonen 2000.

buffer funds would entail that in the period of strong economic growth the contribution rate could be raised somewhat and during recession lowered.

### 3.2 Overall assessment of the current Finnish pension system

From my perspective, the main strengths of the Finnish pension system could be summarized as follows:

- 1) The system provides high level social protection combined with broad coverage and a proper structure of incentives. The earnings-related pension system includes strong link between benefits and contributions, while the integrated minimum guarantees of the national and earnings-related pension schemes ensures incentives also for the lowincome earners.
- 2) The system enjoys large public support and acceptance.
- 3) The financial position of the system is relatively good in the European comparison due to partial funding with private fund management and the high rate of return on the accumulated funds over the last years.
- 4) The administration of the pension system is efficient (which makes up its fragmentation).

As weaknesses of the system, I see the following:

- Fragmentation of the earnings-related pension scheme into 9 subschemes each with certain particularities both in respect of the benefit rules as well as contribution rates, while the differences can not be always justified on rational bases.
- 2) The system is too much employer-focused. The individual, while paying his/her share of contributions, has no choice over the pension institution for managing his contributions, neither does the higher yield from investments increase his pension. The main choices available in the scheme are made by the employer. From the other side, the employer is the principal risk-taker, who is either to win or to loose from the choices made.
- 3) The system includes too many options for an early exit from the labor market, although it is clear that it is not only the parameters of the pension system, which influence the demand and supply for the older workforce.

4) Increasing contribution rates - a typical problem in the defined-benefit pension scheme.

#### 3.3 Future developments

A number of ideas on how to improve the current Finnish pension system and how to secure it against adverse demographic and economic developments have been suggested both by academic researchers and by people working in the pension administration.

The list of suggested reform ideas includes the following:

- 1) General simplification of the earnings-related pension system by merging the different laws into a single one and increasing transparency of the system.
- 2) Introduction of the Swedish-type life expectancy coefficient for adjusting the accrued pension (Lindell 1999).
- 3) Indexation of pensions with the total wage bill index.
- 4) Changing the accrual rules to take into account the fragmentation of working life and fixed-term work contracts.
- 5) Linking the pre-funded amount of pension to current births rates, based on the observation that from the perspectives of pension expenditures, uncertainty about the future birth rates are more important than the uncertainty about longevity (Lassila, Valkonen 2000).

It seems very likely that the future reforms will concentrate on modifications of the current system rather than on a complete overhaul.

Currently two expert groups work on different reform proposals.

The Government has established a Committee on Social Protection Expenditure and its Financing. The Committee is called to investigate the likely development of expenditure for social protection and to find ways of sustaining the financing in the long run. Although the committee's tasks are not limited to pensions matters only, pensions receive a large attention. The Committee consists of representatives from the Ministry of Social Affairs and Health, the Ministry of Finance, the Ministry of Labor, organizations related to social insurance, regional authorities and labor market organizations

The second group is initiated by the labor market organizations and develops policy initiative in particular on the earnings-related pension system.

The Finns are known for their good analytical capacities and problem-solving attitudes, which leaves confidence that the challenges of the pension system will be properly tackled.

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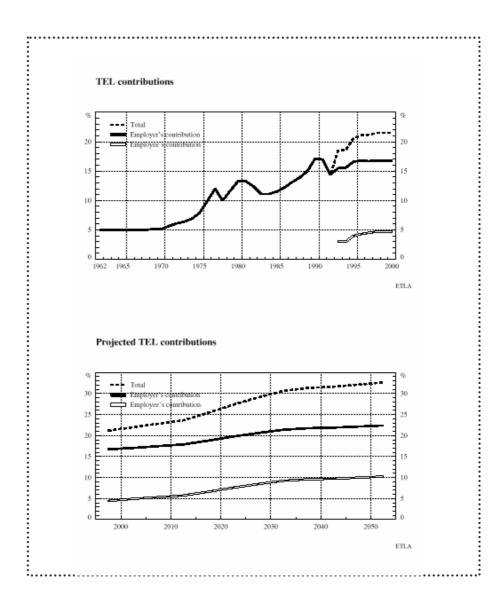
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#### **Annex**





# The Estonian pension system

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### 1 INTRODUCTION

The reform of the pension system in Estonia can be divided in the following main steps:

1990-92 the first attempt to introduce a national pension system and

the establishment of the Social Fund financed by social tax.

This step resulted in flat rate benefits

1993 gradual increase of the retirement age and the introduction of

a new pension formula stipulated by the State Allowance Act

(with several amendments)

1997 elaboration and approval of the "Concept Paper of the

Pension Reform"

Since 1997, the Estonian Government has been reforming its pension system, based on this concept paper elaborated by the Social Security Reform Commission. The paper suggested the introduction of a three-pillar pension scheme, where the pillars have the following meaning: I pillar - compulsory state managed pension scheme financed on a pay-as-you go basis.

II pillar - compulsory privately managed funded pension scheme III pillar- voluntary private pension schemes.

The reform of the first pillar was initiated with the adoption of the new Law on Social Tax, which entered into force on January 1 1999 followed by the Law on State Pension Insurance which took effect on April 1 2000. The second pillar is envisaged for 2002, but deviating from the original plan this scheme is suggested to be mandatory only for those currently under the age of 18 and voluntary for all other employees. The legal framework for the third pillar, i.e. voluntary private pensions has been established by the Law on Pension Funds, which came into force on August 1, 1998.

The Estonian pension scheme is composed of two schemes but a third one is under way. The two existing schemes are the State pension Scheme and the Voluntary Private Pensions Scheme, which is supported by the Government through tax deductions. A more detailed description of the Estonian pension scheme follows in Appendix 1.

# 2 EVALUATION OF THE EXISTING SYSTEM

The existing Estonian pension scheme today is in practice equal to the State Pension Scheme. The evaluation of the existing scheme therefore concerns only this scheme.

### 2.1 Are pensions adequate?

A survey<sup>1)</sup> comprising poverty in Estonia has been carried out recently. Internationally, in most poverty research the *relative poverty line* is considered to be *50%* of the median of incomes and expenditures. In Estonia this indicator in 1997 was 834 and 873 kroons respectively. Using the relative poverty criteria, Estonia had quite a good position amongst other countries since the share of poor households was on average only 7–10% — comparable to EU countries.

The situation is similar in other transition societies as well. In these societies, for a large part of the population the incomes are low (varying relatively little from the income median), and therefore the relative poverty line is abnormally low with few households falling below it. However, this is not really a true reflection of the actual situation, because in a poor society, an income related to the income median may not meet the needs of the household. Keeping in mind the social development of society it is, according to the survey, better to take the *absolute poverty* line as the basis for socio-political regulations as regards the Estonian conditions, since this has been calculated in relation to the socio-economic situation of the country and it is adjusted at least once a year. According to calculations, as of 1997, the absolute poverty line resulting from Estonia's

<sup>1)</sup> Kutsar, D and Trumm, A. (ed.)(1999) he aggregated data in 1997 from the Household Income and Expenditure Study by the Statistical Office of Estonia is used in the survey.

socio-economic situation, was 1,250 kroons per household member (equivalence scales 1; 0.8; 0.8). The poverty line is a dynamic indicator which is adjusted annually, according to the change in cost of living. In 1998, it would have been 1,330 kroons and as of February 1999 1,350 kroons.

The following results in table 1 reflect the situation of households in general and pensioner households in special in 1997.

Table 1. Layered structure of household poverty (%).

	The poor and those living in poverty risk (% of population)						
, , ,	Below	Below poverty line, less than 1250 kr					
	All	In direct poverty, less than 1000 kr	In poverty endangering coping, 1001– 1250 kr	In area of poverty risk 1251–1500 kr			
All house- holds	36.2%	18.1%	18.1%	16.6%	47.2%		
Pensioner household	46.6%	11.9%	34.7%	30.5%	23.0%		

Almost one fifth of the households lived in direct poverty, one third lived below the poverty line, and half of the households lived either in poverty or in danger of poverty. For pensioner households the corresponding figures are as follows: one tenth live in direct poverty, almost half below the poverty line and more than three fourths of the pensioner households live either in poverty or in danger of poverty.

As a first conclusion of the results of the study the pension scheme reduces households living in direct poverty. This conclusion is supported by the fact that the national pension (minimum pension), which equals 800 kroons a month, is received only by 1.5% of the pensioners.

A second result of the household survey is that compared to all households one and a half time as many pensioner households live in poverty or in danger of poverty. Most frequently pensions vary from EEK 1,000 to EEK 2,000. This is due to the fact that pensions until 1999 were

flat rated. Pensions depended only on years of pensionable service. In 1999 the average years of pensionable service was 43 years including service periods credited as 2-3 times the actual service period. The actual years were around 39. The pension for an average working career is around EEK 1,500.

Another study concerning subjective assessment of pensioners' economic situation has been made by the Ministry of Social Affairs, Statistical Office of Estonia, University of Tartu, Institute of Applied Social Research Fafo (Norway) in the survey "Living Conditions Study in Estonia. Baseline Report. NORBALT II" Tartu 2000. The economic self-assessment was divided into five categories. According to the study, of the pensioners in one person households two in ten felt that they were poor, three in ten felt that they were "not poor, but on the verge of poverty" and almost five of ten that they were "neither rich nor poor" and the rest, i.e. less than one in ten felt that they belonged to the two highest categories. Compared to actual income quintiles the greatest difference was in the lowest quintile because less than one in ten belonged to the lowest category.

With the introduction of the accumulation part of the pension formula in 1999, the benefits are moving from a flat rate benefit towards an earnings- and contribution-related benefit. This change is in due time going to increase the range of the pension amount. The expected result in the future is an increasing number of pension households living out of poverty risk, but also an increasing number of households is expected to live in direct poverty (cf. Chart 1).

Table 2. Average monthly state pensions in 1995-99 and in the first half of the year 2000.

EEK /month	1995	1996	1997	1998	1999	I/2000
Old-age pension Superannuated pension Disability pension Survivors' pension National pension	670 501 536 447 375	953 689 706 559 462	1,110 757 797 613 542	1,247 827 902 692 630	1,545 986 1102 840 784	1,543 1,007 1,091 841 800
TOTAL Source: Ministry of Social	637 Affairs	889	1,027	1,152	1,426	1,427

The sufficiency of pensions may also be measured by comparing the replacement levels i.e. the average net pensions with average net earnings. According to recommendations of ILO, Council of Europe and European Social Charter, the replacement rate should not be less than 40%. There has been an ongoing public discussion in Estonia concerning the replacement rate. According to the Ministry of Social Affairs the net replacement rate for the average old age pension in 1997 and 1998 was around 40% and in 1999 45%, for the average disability pension respectively a bit less than 30% and a bit over 30% and for the average national pension 20% respectively a bit over 20%. Tables 2 and 3 show that the increase in the replacement rate from 1998 to 1999 is explained by the great increase in pensions from 1998 to 1999, which in turn is largely due to the elections in 1999. The rate decreased in the year 2000 because the pensions were not adjusted at all while wages increased. In fact the budget for the year 2000 was reduced from the year 1999 due to the abolition of corporate income tax. Even if the results for the old age pension are not bad on an average level, the individual rates vary considerably. They are good for low-income earners but not sufficient for high-income earners because of the lack of connection between wages and pension. A closer description is given in Chapter 2.3.

Table 3. Average monthly gross wages 1993-99.

	1993	1995	1998	1999		
EEK/montl	h 1,066	2,375	4,125	4,440		
Source: Ministry of Social Affairs(2000)						

# 2.2 Is the coverage sufficient?

There is no income ceiling of the contributions and the accumulation part of the benefits, with the exception that for self-employed persons the contribution and benefit are based on an income ceiling, which is 15 times the minimum salary. The contribution is compulsory and pension accrues for all gainful employment. The minimum contribution for full-time work is based on the minimum salary, which is EEK 1,600 a month. For part-time employment and for self-employed persons the minimum contribution is based on minimum earnings equal to EEK 700 a month.

State pensions are almost universally provided: national pensions to economically non-active and the employment-related pensions to economically active persons. The take-up ratio and coverage is almost 100%.

There are no comprehensive studies concerning the share of the grey market. Some rough estimates and speculations have been made resulting in 12-25%. According to data from the records of the Central Sickness Fund, in most cases a self-employed person contributes just on the minimum wage. In 1996, the number of self-employed persons was approximately 1.8% of the total number of the insured, while self-employed persons paid only 0.4% of the total social tax revenue - reflecting either that the income level of the self-employed is lower than the average, or that there has been evasion.

### 2.3 Are pensions generous?

A large share of PAYGO pensions in GDP is often considered as an indicator of generosity of a country's pension system. On the other hand, a higher level of development seems to be a precondition for a country to sustain a larger share of GDP for the financing of pensions. Poorer countries simply cannot afford high pension/GDP ratios. In Estonia the ratio has increased since 1992 with 60% from 5.3% to 8.6% in 1999. Table 4 shows that in 1997 the ratio was 7.3%, whereas the average ratio in 15 EU countries was almost the double. The ratio in two EU countries was less than in Estonia. The difference in the pension expenditure may partially be explained by differences in the age structure of the country.

Table 4. Pension expenditure and GDP in Estonia and 15 EU countries.

	Estonia	15	13 EU candidate countries			
1997		Average	Minimum	Maximum	Average	
Pension expenditure as % of GDP	7.3	13	4.5	16.8		
GDP per head at current price in PPS	7,100	19,400	12,800	33,700	7,000	
Source: Statistics in Focus Theme 2-5/2001. Theme 3-6/2000, and the						

**Source:** Statistics in Focus Theme 2-5/2001, Theme 3-6/2000, and the Ministry of Social Affairs in Estonia

In 1997 the GDP per head at current price in PPS was in Estonia 7,100, the average in 15 EU countries was nearly three times the Estonian, and the lowest in the EU countries was 12,800. Compared to the average of 13 EU *candidate* countries the GDP per head in Estonia was a bit higher in 1997 and in 1999 still higher.

Generally speaking, the pension expenditure in GDP in Estonia was much lower than in the EU countries on average, but on an average level compared to other EU candidate countries. On the other hand also countries with much higher GDP per head than Estonia had lower pension expenditure. In Estonia the pension expenditure as % of GDP has increased since 1995 with the increase in GDP per head. The pension scheme in Estonia is not generous, but seen in relation to the resources of the country it cannot be considered as bad.

Chart 1 shows the situation before the pension reform (the flat rate benefit) and the situation after some decades when the accumulation part is fully in force (the accumulation benefit). The two charts differ from each other only by the range of wage used. In 1999 three-fourth of employees earned less than 5,000 kroons a month. The left-hand-side chart shows how the state pension changes when the earnings level is 5,000 kroons or less. The right-hand-side chart includes the changes also for high-income earners.

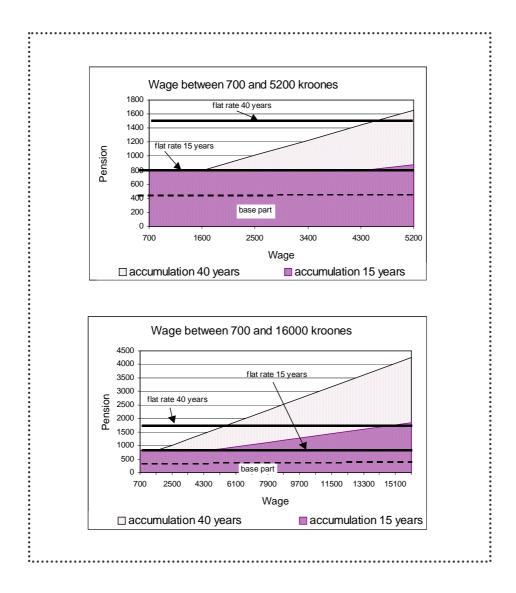


Chart 1. The old employment- and new earnings-related pension for different wage levels with 15 or 40 years of service.

The old scheme is generous to low income earners. With 40 years of service and an income level equal to the average wage or less (EEK 4,400 /month), the pension from the old scheme is EEK 1,460 while the pension in the new scheme is increasing with earnings from the minimum level of EEK 800 to EEK 1,460. The chart also shows that in the new scheme with earnings equal to the minimum wage or less, the earnings related pension does not depend at all on earnings. The pension is the flat

rate minimum. Also with 15 years of service and an income level equal to the *average* wage or less the pension is the flat rate minimum pension.

On the other hand for high-income earners the replacement rate today is not good, which is shown in Chart 1 and Table 5. E.g. if the pensionable service is 40 years and the income level is twice the average wage the replacement rate for today's flat rate pension is around 25% net (18% gross) and with the accumulation part around 40% net (30% gross). If the income level is four times the average level, the replacement rate today is about 10% but in the future with the accumulation part around 36% net (25% gross).

Table 5. Replacement rates based on 40 years of service.

Earnings EEK/month	Accumulatio	n formula	Flat-rate fo	ormula
	Gross,%	Net,%	Gross,%	Net,%
1,600	50	68	91	123
2,000	45	60	73	99
4,000	34	46	36	49
6,000	31	42	24	33
8,000	29	39	18	25
10,000	28	38	15	20
12,000	27	37	12	16
14,000	27	36	10	14
16,000	27	36	12	9

The target level of the state pension is 40-45% of net earnings. When comparing the target level and individual replacement rates, table 5 shows that for earnings equal to twice the average wage or less the individual net replacement rates are 40% or more. With earnings according to the average and 40 years of accumulation, the replacement rate in 1999 figures would be 46% of which one fourth results from the base amount and almost three fourths of the accumulation part. With earnings according to twice the average, the net replacement rate is 39% of which one fifth equals the base amount and four fifths results of the accumulation part. If the pensions in the future only are adjusted by the half-way index, the target level of the pension depends on how average earnings increase in relation to the half-way index.

### 2.4 Is the system efficient?

For the time being there are two main schemes in Estonia, the State Pension Scheme and the Voluntary Private Pensions Scheme, which is supported by the Government by tax deductions. But there are also sub schemes, e.g. for privileged pensions. A third, partially voluntary, main scheme is under way. This second pillar is envisaged for 2002, and the scheme is suggested to be mandatory only for people currently under the age of 18.

Characteristic for the State Pension Scheme is that there have been frequent amendments to the scheme. The new Law on State Pension Insurance passed by Parliament in 1998 but entered into force on 1 April 2000. Several amendments have been made since the law was passed, the latest on 13 December 2000. During the transition from the old State Allowances Act to the State Pension Insurance Act a lot of exceptions and special rules for certain years and certain groups have been made. The scheme is still looking for a balance in benefits for different groups and between the payers (employers) and the beneficiaries (employees).

The *new* State Pension Scheme is transparent in the sense that contributions are paid and pension rights are acquired for everybody in gainful employment or self-employment including certain leaves.

As all former Soviet countries Estonia has inherited certain privileged pensions. Despite a new pension law, privileged pensions are still in use. E.g. old-age pensions on favourable terms are granted to persons who have worked under unhealthy or hard working conditions, 5-10 years before normal retirement age. Superannuated pensions are granted to prescribed professional groups whose professional abilities have declined before the normal pension age. These pensions are regulated by the Law on Superannuated Pensions and the Law on Old-age Pensions on Favourable Conditions. These special pensions are not consistent, and according to the basic plan of the Government, these special conditions in the general scheme should be abolished.

Also during the independence new privileged pensions have been introduced. Certain occupational groups have privileged pensions: 1) the President and the Members of Parliament (75% of the former salary based on 9 years of service), 2) State Audit officials and 3) judges. E.g. the high pensions (EEK 20,000 a month without tax deduction) for the members of Parliament has been recently debated. There are also special pension supplements for civil servants. As late as in June 2000, special pensions for military service were introduced, with a minimum level of 30% based

on 25 years of service and 2.5% for each additional year. There are also plans to introduce special pensions for policemen.

### 2.5 Is the system well-targeted?

When making comparisons, several different dependency ratios are available. Estonia is compared with other countries using the following dependency ratios. *The total dependency ratio* is used to describe the cost, which the young and the elderly cause for the active population. The ratio is calculated as the number of persons aged less than 20 or aged more than 64 in proportion to those aged 20-64. *The old age dependency ratio* is used to describe the cost of old-age pensions for the active population. The ratio is calculated as the number of persons aged 65 or more divided by the number of persons aged 20-64.

In EU only 36.3% of those aged 55-64 were working. Therefore, a third ratio is presented: the number of elderly (aged 55-64) in proportio to the active population (aged 20-64).

Table 6. Dependency ratios in Estonia, Finland and EU.

	Old age depend- ency ratio	Elderly in proportion to active population
0.67	0.24	0.19
0.65 0.64	0.25 0.27	0.18 0.18
	0.65	0.67 0.24 0.65 0.25

Source: The social situation in European Union 2000, Eurostat 2000 and The Statistical Office in Estonia

The table shows that when calculating the dependency ratios of the population the figures from Estonia do not deviate much from figures from the EU or Finland. The total dependency ratio is a bit higher, but on the other hand the old age dependency ratio is a bit lower. The proportion of

elderly people in the population aged 20-64 is almost the same as in Finland and EU. These ratios show that today the age structure of the population in Estonia does not deviate much from the average age structure of the EU. On the other hand, the age structure seems to change in the future. The total fertility rate has in Estonia dropped from 2.2 in 1989 to 1.2 in 1999. The average in EU countries is 1.5 and in Finland 1.7. If this trend continues it means that the active population in proportion to the old age population is decreasing faster than in the EU on average. On the contrary life expectancy has not increased in Estonia as rapidly as in EU countries in general.

The ratio of pensioners to the insured in Estonia is also available being 0.64 in 1999. This ratio is almost as high as the total dependency ratio, which includes also young persons aged less than 20. The factors contributing to this high dependency ratio are the low retirement age, the low number of insured to the active population (69%) and the high number of pensioners in proportion to people aged 65 or more (181%). The distribution of the pension expenditure in Estonia and in EU countries according to type of pension is shown in Chart 2. The share of old age pension expenditure is remarkably high in Estonia, but it is not as shown in Table 6 explained by a high proportion of elderly to the active population.

In 2001 the retirement age is 63 years for men and 58 for women. Women's retirement age is gradually rising till 63 years by 2016. The ratio of old-age pensioners to the insured is 0.48. This is 2-3 times as high as the old age dependency ratio in Table 6. The number of old age pensioners nearly equals the number of people aged 60 or more. With the rising retirement age the number of old-age pensioner is decreasing. Statistics on actual retirement ages are not available, but from the above statistics one may assume that it is about 60 years.

The following chart shows the distribution of pensioners according to the type of pension.

Table 7. The distribution of pensioners according to the type of pension.

	1990	2000	2001
Old age pensioners	79.7%	76.6%	81.1%
Superannuated pensioners	0.5%	0.9%	0.9%
Disability pensioners	10.8%	18.0%	11.8%
Survivors' pensioners	4.8%	4.1%	4.3%
National pensioners	*) 3.7%	0.4%	1.9%
All pensioners	100%	100%	100%
Number of all pensioners	360511	371354	366654

<sup>\*)</sup> includes persons receiving monthly benefit and personal pensioners national pensions did not exist in 1990

Source: The Statistical Office in Estonia

Table 7 shows that the number of persons receiving a disability pension has nearly doubled from 1990 to 2000. The increase from 1990 to 2000 in the number of disability pensions is explained by

- the increase in the retirement age
- changed age profile during 1990's
- increased absolute number of young people receiving disability pensions and at the same time increased life expectancy for disabled persons
- increased unemployment.

The new Law on State Pensions entered into force on 1 April 2000. The new law changed the statistics and especially the number of disability pensions. The three main reasons for that are

- 1) children who previously received an invalidity pension were transferred to receivers of the disabled child benefit
- 2) persons beyond retirement age, who previously received invalidity pension were transferred to old age pensioners
- 3) persons without a qualification period were transferred to receivers of the national pension.

Chart 2 shows the distribution of the pension expenditure in Estonia and 15 EU countries in 1997. In Estonia the expenditure in disability pensions and survivors' pensions were relatively small while the expenditure in old age pensions was high. The high share of old-age pensions may be explained by the low retirement age and the wide range of special pensions, but not by the age structure (cf. Table 6).

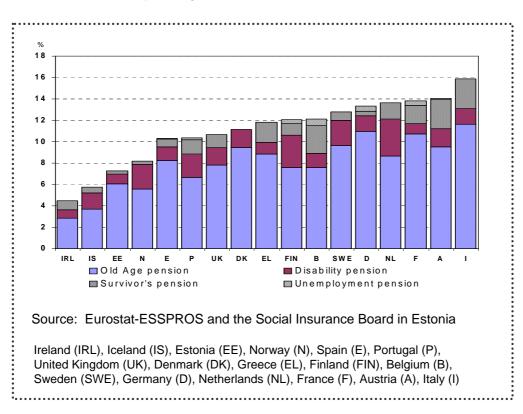


Chart 2. The pension expenditure in 1997 according to type of pension as % of GDP in Estonia and 15 EU countries.

# 2.6 Is the system equitable?

With the introduction of the accumulation part of the pension formula the benefits are moving from a flat rate benefit depending only on the years of pensionable service to an earnings- and contribution related scheme. Still the accumulation part cannot be expressed as a replacement rate of

wages. The reason is that the pension accrues according to the individual salary in proportion to the average salary, but the value of the pension depends on the value of a pension insurance coefficient, which will be adjusted yearly by the half-way index. The final benefit depends on how the value of the pension insurance coefficient changes compared to the average salary. If the proportion remains constant also in the future the accumulation part will correspond to an accrual rate of 0.6% of wages (0.8% of net wages).

For decades on, the changes from a flat rate pension to an earningsrelated pension result in differences in the different cohorts' average pensions. The fact that salaries are highest in the age bracket 25-40 and declines after that contributes to the differences.

According to the Statistical Office of Estonia men's pensions are in average only 5-6% higher than those of women. As the pensions until now only have depended on the time of service, the somewhat lower pensions of women are explained by the fact that women in general have a shorter time of service due to a lower retirement age.

# 2.7 Is the system sustainable?

#### Financial sustainability

The pension contribution is intended to remain on the level of 20%. The level is not based on actual calculations, it is just taken to be acceptable. As long as the pensions are adjusted depending on financial constraints, one may consider the scheme as financially sustainable. Another question is whether the level of the pension is adequate.

The increase in retirement age contributes to the sustainability, provided that the increased retirement age does not essentially increase the number of disability pensions. From the year 2002 on, the pensions will be adjusted by a half-way index following the growth of CPI and the revenue of social tax. The increase of the revenue of social tax is very well tied to the economic growth but inflation may be high when the economic growth is low, which may cause problems in the financing of pensions. On the other hand, during high economic growth, inflation may be low resulting in low pensions compared to wages. Considering the country as

a whole, adjusting pensions by an inflation part smoothens the economic fluctuations.

By adjusting pensions with a pre-determined index the pension expenditure and contributions are not very closely tied to each other anymore. In this situation adverse demographics may in the long-term result in problems in financing the state pensions. Decreasing mortality means that people live longer and that pension expenditure increases. Low birth rates and high emigration of young people means that the workforce is decreasing compared to the old-age population, resulting in financing problems of the state pension scheme or reduced pension benefit.

The State Pension Scheme does not include a buffer fund covering situations of declining contributions due to economic fluctuation. Without a proper buffer fund there may be yearly problems in paying the pensions out of the pension contributions (C.f. also Chapter 3.2.4). For the time being a stabilisation fund connected to the state budget may be used. In the future at least three possible choices are available:

- raising the level of contribution
- introducing a buffer fund for economic and demographic risks
- cutting pension benefits.

#### Political sustainability

The Government has been reforming the pension scheme since 1997 and the Law on State Pensions was adopted in 1998. Since then, several amendments to the law have been made.

The process could be described as an ongoing search for a satisfactory balance between pension expenditure/benefit and pension contributions and in benefits between different groups.

# 2.8 Does the private sector play a role in pensions provision?

For the time being the private sector plays an almost non-existent role in pension provision. The state pensions are administrated by the public sector.

The second pillar scheme with privately managed pension funds is envisaged for 2002.

Legal framework for voluntary private pensions (so called third pillar) was established by the Law on Pension Funds, which is in force from August 1, 1998.

Participation in supplementary voluntary pension schemes can take two forms:

- pension insurance policies offered by licensed private insurance companies;
- units of pension funds managed by private fund managers.

By the end of 2000 ca. 4% of all employed persons had concluded a private pension contract with a life insurance company.

# 2.9 Is the system distortive?

The level of payroll taxation is quite moderate but the level of pension is not very good either. With the reform the accumulation part was in 1999 added to the pension benefit formula, the level of the pension compared to other insured is directly depending on paid contributions: the higher the contributions, the higher the pension. For low-income earners or persons with short periods of qualifying service there is no incentive to contribute to the pension scheme. The result is in all cases the minimum pension as is shown in Chart 1. There would be a possibility to increase the incentive also for low-income earners by introducing a gradually decreasing minimum pension towards increasing earnings-related pension as shown in Chart 3. E.g. in Finland and partially in Sweden such an incentive is used.

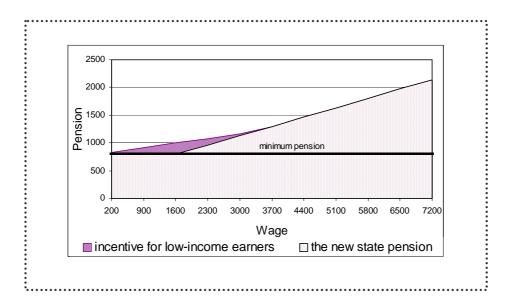


Chart 3. The new state pension benefit and a possible alternative benefit increasing the incentive for low-income earners.

As regards the average and high-income earners the accumulation part would be a good incentive for the employees to contribute to the pension scheme, but actually only the employers contribute to the pension scheme. A still better incentive would be a closer relation between earnings and pension. This is possible to achieve by decreasing or abolishing the base amount and replacing it by a higher pension insurance coefficient. The accumulation part is recorded individually, and it is in the interest of employees that the supervision of the employer's contributions is effective. An employee has also the possibility to verify that contributions have been paid for him or her. Even if the pension is not deferred after retirement age according to the State Pension Law, the possibility to accumulate pension from earnings also in retirement is an incentive to work after retirement age.

There is nowadays a link between the wages or more precisely between the contribution and the pension through the accumulation part, provided that the pension exceeds the minimum pension. For the future accrual one may say that the pension is directly proportional to the contributions paid but the amount of EEK payable is not determined from the individual contribution. The actual amount depends on the value of the pension insurance coefficient and its relation to the average wage.

# 2.10 Is the system administratively effective?

The regional offices (16 offices and 550 employees) proceed state pension applications, grant pensions and arrange the payment of pensions through banks and post offices. The voluntary private pension scheme was introduced a couple of years ago. Therefore there are hardly no pensions paid from this scheme. Considering the situation in the future with two or three different schemes, the insured has to make different pension applications in order to receive all pensions from the different schemes. If there is no collaboration between the different schemes the insured may also have difficulties to obtain information on his/her total pension.

Information concerning the pension scheme is quite easy to obtain from the Internet (<a href="www.sm.ee">www.sm.ee</a> and www.ensib.ee). The constraint is probably that the use of the Internet is not yet widely spread. On the other hand the target in Estonia is that the proportion of the Internet users in a few years is the highest in the world (Source: radio news in March 2001).

# 3 EVALUATION OF RECENT CHANGES AND REFORMS IN THE PENSION SYSTEM

# 3.1 The overall assessment of the State Pension Scheme

The main principles of the State Pension Insurance Act are:

- equalisation of the same pensionable age of men and women by 2016 at 63 years of age;
- provision for early retirement (pension shall be reduced by 0.4% for each relevant month);
- implementation of a standard basis for the calculation of old-age, incapacity and survivors' pensions;
- division of the pension formula into three units: basic unit, length of service unit and insurance unit;
- calculation of pensionable length of service on the basis of calculated or paid social tax;
- establishment of pension eligibility and length of pension insurance requirement for incapacity pensions and survivors' pensions;
- setting up a pension insurance register
- the possibility to accumulate pension from earnings also when retired
- no ceiling for neither contributions nor benefits

#### The State Pension Scheme could still be improved by

- increasing the link between contributions and benefits by abolishing the base amount and replacing it by a higher insurance amount
- increasing the incentive for low income earners and self-employed persons to contribute to the scheme by introducing a gradually decreasing guarantee amount towards increasing earnings-related pension (c.f. Chart 3)
- introducing a buffer fund against economic and demographic risks

- continuing to raise the retirement age or introducing a life-expectancycomponent. The life expectancy for elderly people is probably going to continue to increase
- removing special conditions and privileged pensions from the general pension scheme.

Until now the state pension has been generous to low income earners, because the pension has not been depending on the earnings. In addition to a base amount, the pension accrues in the future only in proportion to each individual's earnings. A minimum pension is still guaranteed, but otherwise the state pension will not in general be generous to anyone. The target level of the state pension is 40 % of one's net earnings. There is therefore a need for either an increased level of the state pensions or additional pension schemes. By developing additional pension schemes the risk of the scheme is dispersed. On the other hand there may arise co-ordination problems with several schemes, like the feasibility of the minimum pension pointed out in Chapter 3.2 (page 26). The proposed additional second pillar scheme is voluntary except for people currently aged less than 18 years. This voluntariness usually means that those better off join the schemes but low-income insured do not, resulting in poverty among pensioner households.

# 3.2 The evaluation of the second pillar scheme

The new system is proposed to be compulsory for new entrants but voluntary for others. The reform may improve labour market incentives because only active labour market participation accumulates the pension. According to a poll (Koskinen, E. (2000)), when the scheme earlier was proposed to be voluntary for everyone, 40% expressed willingness to join the scheme. Employees, both men and women may join the scheme but the self-employed may not. Instead they have the possibility to complete their state pension by a voluntary private pension in the third pillar scheme.

The proposed second pillar covers only old age pensions. The scheme does not at all cover the social risks of unemployment and disability and only partially the death of a breadwinner. Hence the

replacement level for the disability pension will remain small and so will the old age pension for disabled and unemployed persons. On the other hand, the State Pension is in case of disability or death of breadwinner calculated as if a contribution equal to 20% had been paid to the State Pension Scheme all the time.

The proposed second pillar scheme is a fully funded, defined contribution scheme. Funded pensions are protected as vested rights but tax-privileges may change. Adverse demographics affects the scheme but indirectly and less than in a PAYG defined benefit scheme:

- in a situation where the active population declines (low birth rate or high emigration) compared to pensioners the value of the funded assets may decrease, especially if greater amounts of the funded assets need to be realised during a short period
- if mortality especially for elderly is declining, it means that life expectancy is increasing. Increased life expectancy means lower pensions in a defined contribution scheme.

The new system is transparent in the sense that the benefit is calculated on the basis of actually paid contributions and returns from the invested contributions. When looking at the state pension scheme and the second pillar scheme together it seems to be favourable for low-income earners. According to statistics from the Ministry of Social Affairs, one fourth of full time employees earn less than 2,000 kroons a month. In the new system these employees will receive from the state scheme a minimum pension, which is higher than the actually earned pension, and an additional pension from the second pillar scheme. Should e.g. the minimum pension be shared by the two systems? In Sweden there is a shared guarantee (minimum) pension for the statutory PAYG-system and the statutory fully funded system. The benefit from the fully funded system is calculated theoretically as if the return from savings equals the index in the PAYG-system.

If the proposed scheme was immediately compulsory for everyone, approximately 1,000 million kroons (1.3 % of GDP) would be funded yearly and when the scheme at the end of this century is fully in force approximately an amount equal to 40-50 % of GDP is funded in the second pillar scheme. On the other hand the introduction of the second pillar scheme will cause deficit in financing the pensions. Of the contribution (20 %) to the state pension scheme an amount equal to 4 % of the wages is transferred to the new scheme. As the state pensions are financed on a PAYG basis the revenue to the state scheme will not be

enough during the next 50 years. The deficit is further increased by the fact that insured joining the new scheme retain their right to receive a disability and survivors' pension from the state pension scheme according to a contribution corresponding to 20%.

According to a discussion paper (The Second Pillar Pension Scheme(2000)) the implicit pension debt in 1998 is estimated to 121,000 million kroons, which equals 168% of GDP. If everyone would join the new scheme the deficit during the next 50 years due to transferring out 4% from the state pension scheme is approximately 24,200 million kroons or in proportion to GDP 33.6%. The yearly deficit is thus nearly 1% of GDP and if e.g. 50% of the insured are joining the new scheme the yearly deficit thus nearly 0.5% of GDP. According to the discussion paper possible measures to finance the deficit are:

- measures to supplement the contribution
- finance certain pension benefits out of the state budget
- create a reserve fund for the state pension insurance budget
- use the stabilisation fund which is connected to the state budget and other additional means
- issue foreign or domestic state bonds.

Considering the risks related to PAYG-financed and fully funded schemes the new system diversifies the risk by offering a fully funded scheme which completes the PAYG-financed state pension scheme.

In the new scheme the choice of pension fund is determined by the individual. The individual may in the beginning of each year choose the pension fund for new savings and change pension fund for already invested savings. Thus the system offers a possibility to diversify investment risks and it is the choice of the participant to decide whether yearly contributions should be invested in the same or different pension funds

### 3.3 The organisation of the reform process

The proposed new system has been publicly debated from the beginning and the lack of political consistency and consensus has delayed the reform.

The Reform Commission originally had 5 members and it was an expert commission chaired by an economic advisor of the Prime Minister, the members were from the National Social Insurance Board, the Ministry of Finance, the Health Insurance Fund and one politician, the former chairman of the social commission of Parliament.

Currently, the Commission has 6 members: It is chaired by the Minister of Social Affairs, and its members are the Minister of Finance and experts from the Ministry of Finance, Ministry of Social Affairs and the Social Insurance Board.

Representatives of the labour market organisations have not been members of the commission but obviously the social partners have got a due hearing in the commission.

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### APPFNDIX 1

### The Estonian Pension System

### 1 General overview of the pension system

The Estonian pension scheme is composed of two schemes but a third one is under way. The two existing schemes are the State pension Scheme and the Voluntary Private Pensions Scheme, which is supported by the Government through tax deductions.

The "Concept paper of the Pension Reform" was approved in 1997. The Estonian Government has been reforming its pension system since that. The paper suggested the introduction of a three-pillar pension scheme, where the pillars have the following meaning:

I pillar - compulsory state managed pension scheme financed on a pay-as-you go basis.

II pillar - compulsory privately managed funded pension scheme III pillar - voluntary private pension schemes.

The reform of the first pillar was initiated with the adoption of the new Law on Social Tax, which entered into force on January 1, 1999 followed by the Law on State Pension Insurance which took effect on April 1, 2000. The second pillar is envisaged for 2002, but deviating from the original plan this scheme is suggested to be mandatory only for those currently under the age of 18 and voluntary for all other employees. The legal framework for the third pillar, i.e. voluntary private pensions has been established by the Law on Pension Funds, which came into force on August 1, 1998.

#### 2 The First Pillar: State Pension benefits

The State Pension benefits can be divided into two groups: employment-related and national pensions. The state pension benefits cover social risks related to old age, invalidity and death of the family earner. From the year 1999 on, the employment-related benefits are gradually moving from a benefit related to the pensionable length of service, to an earnings-and contribution-related benefit. The employment-related benefits are the Old-Age pension, the Pension for Incapacity for Work and Survivors' pensions. The purpose of the social or national pension is to guarantee a minimum income for persons who are not entitled to an employment-related benefit.

#### 2.1 Organisation, financing and taxation

The National Social Insurance Board including 60 employees is a state institution in the area of government of the Ministry of Social Affairs. This Board administrates the state pension scheme. As a structural unit of the National Social Insurance Board, a State Pension Insurance Register has been established. The Register keeps individual data on the insured persons, including the amount of social tax paid on their behalf. The 16 regional pension offices with a total of 550 employees are subordinated to the National Social Insurance Board. The regional offices proceed pension applications, grant pensions and arrange the payment of pensions through banks and post offices.

The State Pension benefits are financed on a pay-as-you-go basis. The main part of the scheme is financed by employers' contributions but a minor part of the scheme is financed by general taxation.

#### a) Social tax:

A contribution of 33% of the tax base (consists mainly of gross wages) is paid by the employers and the self-employed. 20 percentage points are used for the national pension and for the employment/contribution-related pensions: Old-Age, Incapacity for work and Survivors' pensions. There is no income ceiling of contributions and benefits, with the exception that for self-employed persons the income ceiling is 15 times the minimum salary. The contribution is compulsory for all gainful employment. The state pays social tax on a fixed amount (currently EEK 700 a month) on behalf of the following groups

- one of the parents on parental leave with an up to 3-year-old child or one of the non-working parent raising an up to 3 year-old child
- non-working spouse of a diplomat working at a foreign representation
- conscript of the defence forces
- disabled person working in special production establishment for the disabled
- persons receiving unemployment allowances

The employers and self-employed persons pay the total rate of social tax to the account of the Tax Office, declaring the amount of social tax paid on behalf of each insured person separately. The Tax Office further transfers 20 percentage points of the social tax into the state pension insurance budget. The state pension insurance budget is adopted annually by the Parliament as a separate part of the general state budget.

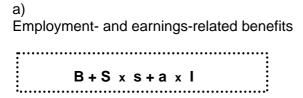
#### b) General taxation:

Expenditures not related to the insurance principle are financed out of the general taxes. In particular this concerns

- pension supplements for civil servants, politically repressed persons and war veterans (old-age and survivors)
- administrative costs of pension offices

State pensions do not constitute taxable income, but there is a discussion around this subject. As late as in December 2000 the Parliament decided to reject the proposal of the Government to start taxation of pensions exceeding EEK 4000.

#### 2.2 The General Benefit Formulas



In the formula "B" is the base amount, "S" is the value of one year of pensionable length of service and "I" is the value of the pension insurance coefficient. The value of "B" is determined by the Parliament, whereas the values of "S" and "I" are set by the Government.

The value of "B" is EEK 410 /month and the values of "S" and "I" are set as EEK 27.40 /month (from April 1, 2001). However there is no amendment where it is explicitly stated that the values should be equal. The reason for using different letters in the formula is that during the preparation of the law some decision makers thought that "I" should have a higher value than "S".

"s" is the years of insurance until December 31, 1998. When summing up the periods of pensionable service the result is rounded to full years. The pensionable service includes the following periods:

- working as a family member of a self-employed person
- military service
- studies at the institutions of higher education or professional schools
- caring for a severely disabled adult family member or a disabled child
- caring for a child during the first two years
- periods of registered unemployment
- membership of liberal arts associations or professional societies
- serving a congregation or a registered religious organisation
- 2 years are added for each child raised to one of the parents insurance record
- periods of unlawful repression count threefold

"a" is the sum of pension insurance coefficients from January 1, 1999. A pension insurance coefficient for a certain year is calculated as the quotient of social tax registered for an individual and the average social tax registered for the year in question. For a part-time employee the minimum social tax is based on at least EEK 700 a month even if the

salary actually paid is less and for a full-time employee at least based on the minimum wage (EEK 1,600 /month). For employees there is no ceiling of the social tax but for self-employed persons the ceiling is 15 times the minimum wage. The minimum contribution for self-employed persons is based on EEK 700 a month.

With the introduction of the accumulation part of the formula the benefits are moving from a flat rate benefit depending only on the years of pensionable service to an earnings- and contribution related scheme. Still the accumulation part can't be expressed as a replacement rate of wages. This is because the pension is earned in proportion to the average salary and the final benefit depends on what the value of the pension insurance coefficient is compared to the average salary. If the proportion would remain constant also in the future the accumulation part corresponds to an accrual rate of 0.6% of wages.

b)

**National Pensions** 

All national pension benefits are related to the national pension rate which is set to EEK 800 /month (years 2000 and 2001).

#### 2.3 Adjustment

Both the base amount and the national pension rates are set by the Parliament when adopting the annual state budget. There has been no automatic adjustment. Pensions are recalculated once a year on 1 April. The increase depends on the financial constraints of the pension insurance budget. One could say that the accumulating rights increase at the rate of increase in the total revenue of social tax in proportion to the increase of pension expenditure.

On December 13, 2000 the Parliament adopted the amendments to the State Pension Insurance Act, which included index adjustment rules. From April 1, 2002, both national and employment related pensions will be adjusted by an index. The index is determined as the average of the increase in CPI and the increase in total revenues of social tax.

With the introduction of an index-adjustment of pensions the State Pension Benefits are moving back from a kind of collective contribution defined scheme towards a benefit defined scheme.

#### 2.4 Employment- and earnings-related pension

#### 2.4.1 Old-age pension

#### Eligibility

Old-age pensions are available for permanent residents of Estonia and aliens with temporary residents permits. The minimum period of membership is 15 years of pensionable service or accumulation period in Estonia.

#### Benefit

The benefit is calculated according to the general benefit formula. Years of pensionable service were until the end of 1998 determined according to years of insurance noted as "s" in the general benefit formula. From 1999 on as insured for the whole year are considered persons for whom at least a contribution corresponding to the minimum yearly salary is paid. If the contribution is less, then only a part of the year is credited as insurance period. The part is the proportion of the contribution paid, and the contribution corresponding to the minimum salary. If the pension calculated is smaller than the National Pension, the amount corresponding to the National Pension is awarded

#### Retirement age

In 2001 the retirement age is 63 years for men and 58 for women. Women's retirement age is gradually rising till 63 years by 2016.

#### Special pensions

- Old age pension on favourable conditions: persons who have worked under unhealthy or hard working conditions, 5-10 years before normal retirement age
- superannuated pensions: prescribed professional groups whose professional abilities have declined before the normal pension age

These pensions are regulated by the Law on Old-age Pensions on Favourable Conditions and the Law on Superannuated Pensions. These special pensions are not consistent, and according to the basic plan of the Government, one should get rid of the special conditions in the general scheme.

#### Early retirement

- up to 3 years before retirement age
- the amount of pension is reduced by 0.4 per cent for each month of early retirement

#### Deferment

no provision

#### Accumulation with earnings

- full accumulation with earnings

#### Working

Working pensioners are entitled to a full pension regardless of their work income with the exception that early retirement pensions and special pensions are not paid to working persons. The amount of pension earned during retirement is automatically added to the pension on 1 April of the following year.

#### 2.4.2 Work Incapacity Pension

#### **Definitions**

- Invalidity is certified by a medical commission and expressed in percentages.
- Work incapacity pension is granted if permanent incapacity is at least 40 per cent.

#### Field of application

Permanent residents of Estonia and temporary residents during the validity of their residence permit

#### Conditions

- 1) Minimum level of incapacity for work: incapacity of 40%
- 2) Period for which cover is given From the date when the state of invalidity is certified by the medical commission:
  - up to April 1, 2000: no age limit
  - from April 1, 2000: from 16 years up to the statutory retirement age
- 3) From April 1, 2000 the minimum qualification period giving entitlement to benefits is depending on the age, ranging from 1 year for persons aged 21 to 23 years to 14 years for persons aged 60 to 62 years.

#### Renefits

For calculation of the amount of pension, firstly the following 2 amounts are compared:

- pension calculated on the basis of the existing pensionable length of service and insurance coefficient of the applicant using the general pension formula
- pension calculated on the basis of 30 years of pensionable length of service

The higher of these two is then multiplied with the percentage, corresponding to the degree of incapacity of the person (from 40% to 100%). However, it is further stipulated that the amount of the work incapacity pension may not be less than the amount of the National Pension.

#### Working

Working pensioners are entitled to a pension regardless of their work income, but working, of course, may affect the degree of work incapacity.

#### 2 4.3 Survivors' pension

For eligibility to the survivors' pension, the same qualification period as for work incapacity pensions (depending on the age of the breadwinner) is applied.

Survivors' pensions are paid in the case of the loss of breadwinner to:

- 1) children, brothers, sisters or grandchildren under 18 years of age (24 if studying)
- 2) widow, if the marriage has lasted for 5 years or parent who is in retirement age or permanently disabled

- divorced spouse who has reached the retirement age or became permanently disabled within 3 years from divorce, if the marriage has lasted at least 25 years
- 4) one of the parents, widow or guardian, who is non-working and raises an under 14-years old child of the deceased breadwinner

If the breadwinner received a pension, the benefit rate equals this pension. Otherwise the benefit rate is calculated in the same way as for work incapacity pensions with the exception that there is no minimum amount. The survivors' benefit is

- 1) 100 % of the benefit rate for 3 or more family members
- 2) 70 % of the benefit rate for two family members
- 3) 40 % of the benefit rate for one family member

Working pensioners are not entitled to a pension

#### 2.4.4 Pension supplements

To old-age pensions, work incapacity pensions are the following pension supplement added to persons who's work incapacity is at least 40%:

- 1) 25 % of the national pension rate due to injury or illness related to military service
- 2) 10% of the national pension rate due to nuclear disaster, -test or accident
- 3) 20 % of the national pension rate due to participation in the Second World War
- 4) 100% of the national pension rate due to participation in the Estonian War of independence 1918-19.

The pension supplements are also added to survivors' pensions granted to families of the above listed persons. The pension supplements are financed out of the State Budget.

#### 2.5 National pension

The national pension is regarded as a minimum pension guarantee. Entitled are residents of Estonia

- at the age of 63 (both men and women), who have lived in Estonia for at least five years prior to the claiming of a pension, who lack the qualification period of 15 years required for the old age pension and who do not receive pension from any other state
- persons with permanent incapacity for work at least 40 percent lacking required qualification period
- 3) survivors whose breadwinner lacked the qualification period required for survivors' pension.

National pensions are not granted if the person receives pension from any other state and national pensions are not paid to working persons Benefits

- 100% of National pension rate for individuals eligible under point 1
- the National pension rate is multiplied by the percentage of work incapacity under point 2
- under point 3 the benefit is:
  - a) 100 % of the national pension rate for 3 or more family members
  - b) 70 % of the national pension rate for two family members
  - c) 40 % of the national pension rate for one family member

# 3 The Second Pillar: Privately managed funded pensions

The second pillar is envisaged for 2002. The concept paper of the pension reform was elaborated by the Social Insurance Reform Committee and adopted in 1997. Differing from the one originally proposed, the scheme is now proposed to be mandatory only for those currently under the age of 18, and voluntary for all other employees. The draft law has past the first reading of the Parliament in May 2001, but the second reading of the draft law in June 2001 was interrupted. The reading will be continued in Septerber 2001.

The proposed second pillar pension scheme includes only old age pensions. This scheme does not cover the social risks related to disability and only partially death of the family earner. These risks are covered only by the first pillar scheme.

According to the proposal employees who pay an additional 2% of their gross wage on their individual account in a pillar 2 pension fund are granted an amount of 4 percentage points of the social tax paid by the employer. At the same time the contribution-related component of the pillar 1 benefit formula is reduced proportionally. Contributions paid by the employer into the first pillar on behalf of employees who do not choose the second pillar, will remain at 20%. Their pension benefits will only depend on the State Pension Scheme.

Further the proposal includes that applications for joining the second pillar should be submitted at least 2 months preceding every new financial year (by 1 November at the latest). People are not allowed to switch back from the second pillar. Collection of the contributions to the second pillar starts from January 1st, 2002.

Second pillar contributions are collected together with the social tax by the Tax Board. The employer withholds 2% of the individual contribution. Contributions are registered on individual accounts by Central Register for Securities (CRS). The money is transferred to the pension fund chosen by the individual.

When retiring, pension benefits are paid by life insurance companies as lifelong annuities. If the accumulated funds of the individual exceed a preset amount, the individual may choose to take additional sums out as a programmed withdrawal from the management company of the pension fund (not necessary life-long). However, assets can not be paid immediately as a lump sum. If the insured dies before the retirement age 63, the units of the fund are inherited. After retirement age possible left assets from programmed withdrawals is inherited, whereas possible assets left from life-long annuities are not (unless a guarantee period is agreed at the time of purchasing the annuity).

A guarantee system and a Guarantee Fund is attached to the scheme. The Financial Surveillance Authority (after uniting the present three separate authorities) will carry out the supervision of the scheme.

By nature and institutional framework the second and third pillar pension funds are similar, with the following exemptions:

- 4) Management companies must apply for a special license;
- 5) Additional requirements regarding management and financial position for the management company:
- 6) Additional requirements for the depository bank;
- 7) Compulsory participation on the pension fund for the management company depends on volumes of the fund, functions as a reserve;
- 8) Compulsory payments to the Guarantee Fund for the management company;

- 9) Limits to management fee, depository fee and other expenses on behalf of the pension fund;
- 10) Limitations to marketing costs and activities;

Additional limitations on investments by instruments. Amounts on investments to the EU are not limited, but they have to follow the structure of limits on different instruments.

#### **Taxation**

The current proposal is that only the amount (I and II pillar together) exceeding 3 times the non-taxable threshold (from 2001 the non-taxable threshold is EEK 1,000 a month) is subject to income tax (26%).

# 4 The Third Pillar: Voluntary private pensions

The legal framework of the third pillar was enacted by the Pension Funds Act (from 10 June 1998, entered into force 1 August 1998). This law also simultaneously made substantial amendments to the Insurance Act and the Income Tax Act.

Participation in supplementary voluntary pension schemes can take two forms:

- pension insurance policies offered by licensed private insurance companies;
- units of pension funds managed by private fund managers.

The third pillar is centred on the individual. Government policy concerning the voluntary supplementary pension arrangements has been in favour of individual-centred solutions over the occupational schemes to avoid obstacles to labour mobility given the small size of the Estonian labour force.

In fact, there is a basic legal framework (the Wage Act and Collective Agreements Act), which allows employers to establish schemes providing supplementary benefits of social security nature to their employees. However, as these benefits do not enjoy favourable tax treatment (i.e. contributions are taxable with income tax and social tax, benefits

are taxable with the income tax), the occupational schemes are not developed by employers.

#### Tax incentives

To encourage participation in the voluntary private pension schemes, the following tax incentives have been introduced:

- contributions (premiums paid on the bases of pension insurance policy or sums paid for purchasing the units of a private pension fund) are deductible from the income taxable with the income tax up to the limit of 15 % of the annual income;
- benefits paid on the bases of a private pension insurance policy or from redemption of the units of a pension fund are taxable at a lower rate (10%) of income tax, instead of the normal rate of 26%;
- benefits paid regularly lifelong on the bases of defined-benefit type pension insurance policy in equal or increasing amounts are not taxable.

When participating in the voluntary schemes, the pension age is a matter of contract between the person and the insurance company, except that the minimum contractual age, in which case the tax exceptions apply, is 55 years.

In conclusion, the III pillar is characterised by the following features :

- voluntary participation;
- individual-centred;
- private management;
- pre-funding financing principle;
- free choice between the insurance and the fund instrument :
- free choice between the defined-benefit and the defined-contribution type schemes;
- strong tax incentives provided by the state.

There are currently 6 life insurance companies in Estonia, 5 of them have a license to sell pension insurance policies under favourable tax treatment. In March 1999, the first fund manager (Hansa Asset Management) obtained a license to run a private pension fund (Hansa Pension Fund). In November 2000, the second pension fund (Pension Fund of the Estonian Union Bank) was licensed.

By the end of 2000, ca 25,000 persons (ca. 4% of all employed persons) had concluded a private pension contract with a life insurance

company. In 2000, the premiums collected by insurance companies under pension insurance policies accounted for EEK 117 million. By the end of 2000, the assets of the Hansa Pension Fund reached EEK 12 million and the number of participants was ca. 400. The assets of the Pension Fund of the Estonian Union Bank were EEK 5 million .

# Appendix 2

# Key figures

Population (1.1.2000) 1,439,000	
-aged 0-19 366,508 (25%)	
-aged 20-59 780,584 (54%)	
-aged 60-64 83,531 ( 6%)	
-aged 65+ 208,574 ( 15%)	
Employed persons 610,000 (58.5% of the Wo	ork
Force)	
Unemployed 86,200 (12.4% of the Wo	ork
Force)	
Insured persons 596,500	
Number of pensioners 371,354	
- Old-age 284,327	
- Disability 66,814	
- Widow's pension 15,318	
Life expectancy at age 60 males females	
1989 15.3 19.7	
1999 15.3 20.8	
Total fertility rate	
1989 2.2	
1999 1.2	

Exchange rate Dec. 2000 1 Euro = EEK 15.6466

Purchasing Power Parity (international dollars) 1998: 5.5