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HOURS OF WORK
AND TIME USE OF
EMPLOYED PEOPLE
IN ESTONIA AND
FINLAND

Elmar Aedna
Antti Romppanen

Elmar Aedna is senior researcher at the Institute of Economics of the Estonian Academy of Sciences in Tallinn. Antti Romppanen is research chief at the Government Institute for Economic Research in Helsinki.

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ABSTRACT: Before World War II standard annual working time was of equal length in Estonia and Finland. In both these countries there was a 48 hour working week and the annual leave was 1-2 weeks. Now the standard annual working time is about 200 hours or 10% shorter in Finland. The difference originates from various sources: the standard working week is 41 hours in Estonia and 40 in Finland; annual leave is longer in Finland; during the late 80s annual working time was reduced by 100 hours (or 12.5 days) in Finland. The incidence of part-time working is small in both countries and even less so in Estonia. Finland has more overtime working while Estonia has more shift-work. The comparison of time-use is difficult because of different classifications, but the total work-load of employed people seems to be heavier in Estonia, especially among women. Domestic work, travelling and shopping take up more time in Estonia. The economic problems during recent years have also increased tendency towards second jobs.

KEY WORDS: working time, annual leaves, time use

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TIIVISTELMÄ: Normaali vuosityöaika oli ennen toista maailmansotaa samanpituisen Suomessa ja Virossa. Molemmissa maissa oli käytössä 48 tunnin työviikko ja vuosilomien pituus oli 1-2 viikkoa. Nykyisin vuosityöaika on Suomessa noin 200 tuntia eli 10 prosenttia lyhyempi. Normaali työviikko on Suomessa 40 tuntia, Virossa 41 tuntia. Vuosiloma on Suomessa pitempi ja 1980-luvun lopulla vuosityöaikaa lyhennettiin Suomessa 100 tunnilla. Osa-aikatyön osuus on pieni molemmissa maissa, mutta erityisesti Virossa. Ylitöiden osuus on suurempi Suomessa, mutta vuorotyö yleisempää Virossa. Väestön ajankäytön vertailua vaikeuttavat erilaiset määritelmät. Kuitenkin on ilmeistä, että kokonaistyöraja on suurempi Virossa erityisesti työssäkäyvillä naisilla. Kotityöt, työmatkat ja asiointi vievät Virossa enemmän aikaa. Viimeaikaiset taloudelliset vaikeudet näyttävät siellä lisännen sivutöihin ja kotityöhön käytettyä aikaa.

AVAINSANAT: työaika, vuosilomat, ajankäyttö

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1. INTRODUCTION

An analysis of the working time and time-use patterns in different countries constitutes an important aspect of inter-country socio-economic comparisons. This report is part of a comprehensive socio-economic comparative study of Estonia and Finland.

The comparisons presented in this study are naturally influenced by the availability of current and historic statistical data. Working time patterns have been examined on the basis of the actual total hours worked annually, normal working time and deviations attributable to part-time (or shorter hours) working, multi-shift work and other similar work arrangements, overtime working, holding of second jobs, and annual holidays. The comparisons include the changing trends during the post-war period and, where possible, references have been made to the pre-1940 period. The analysis of time-use patterns by employed persons is limited to the comparative trends during the 80s.

The comparability of inter-country data is further limited by the differences in classifications and data collection methods in Estonia and Finland.

The Finnish work time data is mainly based on the Labour Force Statistics published by the Central Statistical Office. The Labour Force Statistics are based on monthly telephonic interviews of a 12,000 random sample of the national working-age population. The time use studies conducted by the Central Statistical Office are based on diaries filled by respondents. Respondents represent a random sample of Finnish population in the 10-64 age group. The size of sample was over 7,000 in 1979 and almost 10,000 in 1987.

The Estonian data has been supplied by the Estonian Academy of Sciences and is largely based on registers of the Department of Statistics. In many cases the labour statistics report the status only at a particular date such as June 1 or August 1 in each year. Thus, unlike the Finnish data, the Estonian data cannot be extrapolated to derive annual averages or to determine seasonal variances.

2. NORMAL WORKING TIME

A 10-12 hour working day, in European countries, was not an unusual phenomenon at the turn of the century. There were no annual holidays and the only free days were Sundays and some specified public holidays. During 1910 the Finnish labour force averaged 3000 working hours per annum but, by 1990, this had reduced by over 40% to 1716 hours (Annex. 1). In Estonia there was a slightly less reduction to 1927 hours by 1990.

According to 1990 international comparisons within industrialised countries standard annual working time in Finland is among the shortest, while that in Estonia is one of the longest. In Estonia the annual working time, during 1990, was about equal to that in the United States but less than that in Japan. Among the Western European countries only Portugal had a longer annual working time than Estonia (Annex. 2).

2.1. Normal weekly hours

The reduction in the length of the working week during 1918-1990, in Finland and Estonia, as shown in Table 1 reflects the working conditions in manufacturing and other manual urban occupations. During the first half of this century the majority of the labour force was

employed in agriculture and forestry and their working conditions are not reflected in this table. As late as in 1934, the agrarian sector employment represented 63% of total employment in Estonia and over 50% in Finland¹. The agrarian sector was based largely on family farming and working time regulations did not have the impact as for employment in urban industries.

By the late 80s agricultural and forestry employment, as a percentage of total employment, had rapidly decreased to 13% in Estonia and to under 10% in Finland. In Estonia the agrarian labour force is employed mainly as wage-earners in collective farming while in Finland wage-earners comprise only 15% of the agrarian labour force. The remaining 85% of Finnish farmers are self-employed entrepreneurs and their family members.

In Estonia a six-day working week with an eight-hour working day (or 48 hours a week) became the norm in 1923. This standard continued till 1956 when normal hours on the eve of holidays, and other off-days, were shortened by 2 hours (i.e. a 6-hour working day was enacted for these days, reducing the working week to 46 hours). In 1960 the maximum length of the working day was reduced to 7 hours (six days a week) for all wage and salary earners except for people working underground for whom the working day was limited to 6 hours. In 1967 a five-day working week was adopted but the length of the normal working week was retained at 41 hours. A 6-day working week (41 hours per week), with one day off, continued to be permissible if the need was justified on the basis of production process or work condition requirements.

In Finland the 48-hour working week was introduced in 1918 and reduced to 47 hours in 1946 and to 45 hours in 1958. The 5 day working week (with 40 hours per week) was gradually introduced in Finland in the late sixties. Annual working time was further reduced by 12.5 days or 100 hours during the late 80s under a special scheme. If this last reduction is included in the definition of weekly hours then in 1990 the normal weekly hours amounted to 37.8.

Table 1: Normal weekly hours in Finland and Estonia

Year	Finland	Estonia
1918	48	
1923		48
1946	47	
1956		46
1958	45	
1960		41
1966-69	40	
1990	37.8	

¹ Measured in man-years, Hjerpppe 1988.

In Estonia, the normal weekly working time has not been reduced since 1960. The shift from a six to a five day working week in 1967 was, as a rule, realised by increasing daily hours while weekly hours remained at 41. The Central Union of Estonian Trade unions and the Government of the Republic of Estonia signed the first general agreement on social guaranties in 1991 which allows a shift to a 40-hour, or shorter, working week, if possible.

2.2. Working time by industries

The standard working week (e.g. 40 hours) applies to most workers but this can vary as a result of legal enactments or other agreements between employers and employees. These variations arise by reference to factors such as age, occupation, industry etc.

Another way of regulating work hours is periodical work, where the number of daily and weekly hours can vary but the total number of hours over a longer period does not exceed limits prescribed by law or by agreement. In Estonia the length of this longer period is fixed by law only for specified occupational groupings.

In Estonia extra work is work done within normal hours established in the contract as a result of more strenuous work. About 6-10% of employees did this kind of extra work in 1989. The extensive use of extra work was caused by centralised wage regulation which did not allow flexible differentiation of basic wages and salaries in harmony with the strenuousness of the work. Since the transition to the wage regulation of the Republic of Estonia in 1990 the share of extra work has decreased considerably.

Finnish technical and administrative employees, in manufacturing industries, and employees in service industries were already enjoying a shorter working week (37.5 to 39 hours) than the standard 40 hours even before 1990. A shorter working week was also practised in shift working. After the 1986-1990 reduction to a 37.8 hour week, the variations in the length of the working time between different job categories have become smaller. However shift workers still have a shorter working week (36 hours) as do civil servants following "office hours" (representing 15% of public sector employment) who have a 35-35.5 hour working week.

In Estonia public sector employees usually work for the normal hours per week. A shorter working week applies to certain professions such as teachers, physicians and paramedics. Additionally, 16-18 year olds have a 36 hour working week; child workers (under 16) have a 24 hour working week; work in environments hazardous to health is limited to 36 hours per week.

Table 2: Normal weekly hours by industry in 1987²

Industry	Estonia	Finland
Total	40.1	37.7
Agriculture and forestry	40.9	38.9
Agriculture	40.9	40.0
Forestry	41.0	37.8
Manufacturing	40.8	38.7
Construction	40.9	39.5
Transport and communication	41.0	38.4
Transport	41.0	39.7
Communications	40.7	36.0
Trade, restaurants and hotels	40.9	36.9
Wholesale trade	40.8	38.9
Retail trade	41.0	35.9
Restaurants and hotels	41.0	37.3
Services	..	36.7
Education	32.8	{ 34.8
Science	40.7	
Medical care, social welfare	38.8	38.5

Apart from the shorter working week in education jobs, there is no correlation between industry and the length of the working week (Table 2). In Estonia the shortest working week is found also in health care and social welfare jobs.

In Finland the shorter working week is practised in retail trade and the communications industry; it is these industries which also employ the largest concentration of part-time workers. In Estonia, however, these industries practice a standard 41 hour week.

² Source: Finland, Labour Force Statistics 1987. Normal hours of wage-earners in main work.

Estonia, (data as at June 1, 1987). Tšislennost' rabotših i sluzjaščih po polu i vozrastu...Statistitseski sbornik. Tallinn 1988.

3. PART-TIME WORK

Part-time working has not been a common practice in either Finland or Estonia. The proportion of the labour force employed for less than 30 hours per week has been under 8% in Finland and under 3% in Estonia (Table 3).

Table 3:³ Employees by the normal weekly hours (%)

Finland			Estonia		
Hours	1984	1989	Hours	1983	1987
41+	5.4	4.7	41	91.3	91.2
40	58.9	11.9			
35-39	24.4	70.6	35-40	6.1	5.6
30-34	3.7	5.5	30-34	0.4	0.6
under 30	7.6	7.3	under 30	2.2	2.6
Total	100	100	Total	100	100

The main categories of part-time workers in Estonia are mothers of young children, invalids and old-age pensioners. At present part-time employment is also used at the employer's initiative because of shortage of work. In Finland part-time workers are mainly women and students. Involuntary part-time working is now on the increase also in Finland because of the economic recession.

Although the working time differences between the various occupational groups have narrowed in Finland the variance is still greater than in Estonia where over 90% of employees have a 41 hours week. This analysis excludes self-employed workers and entrepreneurs (farmers etc.) who represent about 15% of total Finnish employment. Their working hours are not regulated by the norms applicable to employees and in 1989 the average working week of entrepreneurs was over 45 hours in Finland.

4. WORKING-TIME ARRANGEMENTS

Working outside the standard day shift is far less common in Finland than in Estonia (Table 4) and this is despite different occupational groups showing a greater variance in the length of the working week (supra). Three quarters of Finnish employees are engaged in regular day work and this share has not changed during the eighties. About 17 percent of employees work 2 or 3 shift arrangements and their share has increased marginally during 1985-89. In Estonia regular day work accounted for 56% of 1985 employment (an increase from 52% in 1979) while 2 or 3 shift working accounting for 40% and regular night work for 3%.

³ Source: Finland, Labour Survey 1984 and 1989 (autumn of each year).

Estonia, June 1 of each year - cf Table 2.

Table 4:⁴ Employees by working time arrangement (%)

Arrangement	Finland		Estonia	
	1984	1989	1979	1985
Regular day work	74.0	74.0	51.8	55.9
Regular evening, night or morning work	3.8	3.5	3.6	3.6 (night shift)
2-shift work	9.5	10.9	26.3	22.3
3-shift work	5.6	5.9	18.3	17.9
Other	5.5	5.4	-	0.3
Unknown	1.6	0.4	-	-
Total	100	100	100	100

In Finland shift working is used mainly in processing industries and in some services such as hospitals. In Estonia shift work is used in these sectors and also in the transport sector. Other work time arrangements used include weekend working and irregular periodical work etc. - these are used in Finland by under 6% of employees employed mainly in transport and other service industries.

5. OVERTIME WORK AND SECOND JOBS

Estonian labour codes define overtime work as work done in addition to the hours prescribed by law but the Statistical Office do not record overtime work in all industries. In 1989 the proportion of employees who had worked overtime in different industries was: motor transport 10%, construction 2.5% and manufacturing 0.9%. Overtime working in 1989 was much more extensive in Finland and affected nearly 10% of all employees. Finnish overtime usage was highest in manufacturing (12%), transport (10.9%), construction (9.9%) and trade (8.9%).

The lower recorded usage of overtime in Estonia can be partly attributed to inadequate accounting but the main reason is superfluous employment (or over employment). The high usage in Finland was due to over heating of the economy and the consequent shortage of labour in many occupations and regions.

⁴ Source: Finland, Labour Force Statistics 1984 and 1989.

Estonia, Tsislennost' rabot'six po professijam... v ESSR. Statistitsjeski sbornik. Tallinn 1986. Estonian data refer to August 1 of each year.

Table 5: Overtime working and second jobs (% of employees affected - 1989)

Industry	Overtime		Second job	
	Estonia	Finland	Estonia	Finland
Total	..	9.0	7.4	6.6
Agriculture	..	2.0	0.3	10.1
Forestry	..	4.4	0.1	10.8
Manufacturing	0.9	12.0	5.8	5.2
Construction	2.5	9.9	3.8	5.7
Motor transport	10.0		..	
Railway transport	..	{ 10.9	4.5	{ 6.0
Communication	..		10.3	
Trade	..	8.9	13.6	4.8
Restaurants, hotels	..	7.5	5.1	4.3
Education, science	..	6.1	16.7	11.5
Medical care and social welfare	..	7.2	9.6	5.8

In Estonia holding a second job (usually with another employer) is practised by over 10% of employees in the trade, education and communications sectors and only to a lesser extent in other sectors. In Finland holding a second job is practised more by agriculture, forestry and education employees than in other sectors.

It is probable that holding second jobs has increased in Estonia since 1989. The liberalisation of prices meant that the real wages were reduced. Holding second jobs has increased also in Finland during the eighties (Antila, 1990). This may be explained by the shortening of normal working time, the high demand of labour and the rise in housing prices.

6. ANNUAL LEAVE

In Finland the 1922 legislation on working conditions determined a worker's annual leave entitlement at 4-7 days. In 1939 separate legislation was introduced to determine questions concerning annual leave and the entitlement was increased to 5-12 days. This was increased to 3 weeks in 1946, to 4 weeks in 1960, and to 5 weeks around 1980. Under present legislation the leave is computed as 2.5 days per month of employment (during the current year) and an employee who has worked for a year or more for the same employer is entitled to leave of 5 weeks or 30 days, including Saturdays (for purposes of leave calculation one week is equated to 6 days even though the working week is only 5 days). This leave is generally availed as a 4 week summer holiday and a 1 week winter holiday. Some employers, including the public sector, allow the basic leave entitlement to be increased after 10 or 15 years of continuous service. The annual leave entitlement is not reduced by the extra 12.5 days availed as off-days as a consequence of the 1986-1990 working time reduction.

Estonian legislation on annual leave was first enacted in 1934 and provided for 7 days of paid leave for employees who had worked for at least one year for the same employer. In 1940 this was changed to 1 week for those who had worked for at least one year and 2 weeks for those who had worked for at least 3 years. Estonian SSR legislation accorded to each employee the right to the basic leave which, till 1968, was fixed at 12 working days when it was increased to 15 working days.

Table 6:⁵ Annual leave in Finland and Estonia, calendar working days (inc. Saturdays)

Year	Finland	Estonia	
		industry	all employees
1922	4-7		
1934		7	
1939	5-12		
1940		6-12	
1946	12-18		
1958		16.9	17.8
1960	18-24		
1968		19.5	20.5
1973	24-26		
1977		20.5	21.1
1981	30		
1987		20.7	21.9
1990		20.9	22.5

The average actual leave increased from 17-18 days in the late 50s to about 20 days in the late 60s and to 21.9 by 1987. However, in the late 80s, this varied from 20.7 days in industry to 33.5 days in education (see Annex 3A).

Apart from the basic annual leave, Estonian legislation and practices provided for longer leave entitlement for a number of specified groups such as minors, invalids, workers in scientific, educational and cultural institutions, and for some specified jobs in the forest industry. This additional annual leave entitlement applies also to work under hazardous conditions, for unregulated work hours (executives, specialists, salaried workers) and for long term employees who have been with the same enterprise for a number of years. In 1987 about one-third of workers were entitled to additional leave for work under hazardous working conditions. In road transport the share was 64% (see Annex 3B). The maximum additional leave for specialists and salary earners is 12 days, while that for wage earners is even longer.

⁵ Source: Finland, Romppanen, Antti. Työaika ja työllisyys. TASKU 1980.

Estonia, Trud v ESSR. Statistitšeski sbornik. Tallinn 1962, 1977 and 1982. Tööajabüdzeti ühekordne valikuurimus märtsis 1990. NSV Liidu Statistikaakomitee. Moskva 1991. 1934 and 1940 leave data is for wage earners only, other workers are included in the later years. From 1958 the annual leave describes the average length of leave when additional leave is included.

The Estonian basic leave was legislated at 18 days in 1991 while the additional annual leave is determined by collective bargaining agreements between the employers and employee trade unions.

The lengthening of annual leave in Finland and Estonia had followed a similar pattern until the 70s. The leave entitlement in Finland is now about one week more than in Estonia and this is attributed to the concept of winter holidays, or skiing holidays, that started in the early 80s.

7. ACTUAL ANNUAL WORKING TIME

A comparison of actual annual working time needs to look at the normal working time, annual leave, public holidays, other absenteeism and overtime working.

In 1990 Finland had 9 public holidays, Estonia had 8 while most industrialised countries had more (Annex 2).

Normal annual working time in Finland is 20 work days less than in Estonia which is explained by the longer Finnish annual leave and the 12.5 days reduction in normal working time during 1986 - 90.

Absenteeism due to sickness/maternity leave accounts for another 5 days of the difference while other factors reduce the difference by 1 day (Table 7). However overtime working was nearly 5 days longer in Finland. The net effect of all these factors is 200 hours shorter actual annual working time in Finland in 1990.

Labour force statistics from the year 1989 report much smaller differences in actual working time between the two countries. This can be explained partly because in Finland all employees do not necessarily avail their leave entitlements, as has been assumed in Table 7. The comparison based on labour force statistics concerns the year 1989 when the working time in Finland was 36 hours longer than in 1990. This is due to the difference in the number of public holidays and the reduction of working time by 20 hours in 1990.

Table 7:⁶ Annual working time in regular day work in 1990 in Finland and Estonia (manufacturing)

	Finland		Estonia	
	Days	Hrs	Days	Hrs
Total	365		365	
Weekends (Sat/Sun)	- 104		104	
Public holidays	- 9		8	
Available working time	= 252	2016	253	2075
1986-90 reduction	- 12.5	100		
Annual leave	- 25	200	18	148
Normal working time	= 214.5	1716	235	1927
Sickness/Maternity leave	- 17.4	139	12.7	104
Other absenteeism	- 4.2	34	5.2	43
Net normal hours	= 192.9	1543	217.1	1780
Overtime work	+ 6.9	55	2.1	17
Actual work time	= 199.8	1598	219.2	1797

In 1989 the average Finnish manufacturing employee worked 28 hours less than the Estonian (Table 8). If overtime working is excluded the difference however grows to 78 hours. Overtime working also results in the Finnish manufacturing employee having a longer working day than his Estonian counterpart.

Table 8:⁷ Time spent at work by employed persons: manufacturing industries (1989)

	Finland	Estonia
Employed persons (000s)	561	140
Days worked (000s)	121176	31048
Hours worked (000s)	986717	249302
Days per employed person	216	222
Hours per employed person	1758	1786
Hours per employed excl. overtime	1692	1770
Length of working day	8.14	8.05
Length of working day excl. overtime	7.83	7.98

⁶ Source: Finland, Central Federation of Finnish Employers.

Estonia, Academy of Science, Institute of Economics. Eesti NSV Statistikaomitee. Statistika aruande vorm C-9. Tallinn 1990. The Estonian calculation assumes a 41 hour working week. Working time is estimated for average annual leave (21 calendar days = 18 working days).

⁷ Source: Finland, Labour Force Statistics 1989.

Estonia, Academy of Sciences, Institute of Economics. Eesti Riiklik Statistikaomitee. Statistika aruande vorm C-9. 1990.

The data on work attendance in manufacturing industries (Table 9) shows also that the difference in the actual working time is not so pronounced as might be expected from the institutional features of working time.

In Finland average work attendance was a little higher with 12.6% of employees were absent every working day, as against 14.1% in Estonia. The difference is due to sickness leave.

Table 9:⁸ Attendance in manufacturing industries - 1989 (% of total employment)

	Finland	Estonia
Total	100	100
At work	87.4	85.9
On vacation	8.4	8.0
On sickness leave	3.0	4.6
Absent for other reason	1.2	1.0
Absent for personal reasons/no inf.	0.2	0.3

Comparisons of annual working time between Estonia and Finland produce confusing results depending on the data used. Institutional working time schedules show that average annual working time is much shorter in Finland. When actual working time is examined the differences are smaller. In Finland overtime working is more common and the differences in total absenteeism seem to be less significant than the difference in annual leave and other days off.

8. TIME USE OF EMPLOYED PEOPLE

There are some difficulties originating from different methods and definitions in the comparison of time use in Finland and Estonia. For example, lunch breaks are treated as work-related time in Estonia but as physiological needs in Finland; the time spent on shopping, social work etc varies according to the treatment of the travel time related to these activities. The timing of the interviews can also effect the results; the Finnish interviews were made in autumn while the Estonian ones were conducted in March.

The subsequent analysis looks at diurnal budget of employed people in Finland during 1979 and 1987 and in Estonia during 1980 and 1985 separately for men and women. Estonian data for the year 1990 is also available but this is not fully comparable with the previous years because of changes in classifications (this 1990 data is summarised in Annexure 4).

The proportion of work time among men was almost the same in Finland and Estonia. The share had decreased in Estonia but had increased slightly in Finland. There had been no major changes in official daily working hours and therefor the difference in trends can be attributed to other factors such as changes in part-time working, overtime work or second jobs and from structural changes in employment. It is noteworthy that the proportion of work

⁸ Source: cf Table 8

time is the same in both countries despite Estonia having a longer normal working day and this is probably because of the higher incidence of overtime working in Finland (see table 8).

Table 10:⁹ Diurnal budget of employed men (in %)

	during working days				during holidays			
	Finland		Estonia		Finland		Estonia	
	1979	1987	1980	1985	1979	1987	1980	1985
Working time	33.0	34.3	34.9	34.5				
Work related time	2.5	2.7	5.1	5.0				
Shopping etc	1.1	1.8	3.5	3.3	1.8	2.8	4.2	4.3
Studying and social work	1.0	0.8	1.0	0.5	1.3	1.5	-	-
Domestic work	6.2	4.3	4.1	5.1	11.2	9.3	10.6	9.7
Physiological needs	40.8	39.9	36.0	36.3	49.0	47.9	43.1	45.0
Other uses	15.4	16.2	15.4	15.3	36.7	38.5	42.1	41.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Work related time in Estonia is double that in Finland but this is due to lunch breaks being classified as physiological needs in Finland. Reclassification of this time would eliminate the differences in work related time and would also reduce the differences in time spent on physiological needs (a half hour lunch break equates to 2% of the daily time budget).

Time spent on shopping in Estonia is also double that in Finland and a probable cause for this is the longer time spent on queues. Finnish men have however increased their time on shopping, especially during holidays, and the difference has narrowed.

There are also differences in the share of time used for recreation (other time use), which is smaller in Estonia in a working day but bigger in a holiday. In Estonia the share has declined when it has grown in Finland. By 1990 the Estonian share of other time use during holidays had dropped from 41% to 30% probably because of a decline in public entertainment facilities (theatres, cinemas, pubs) in Estonia. This drop, which did not affect the working day, corresponds to an increase in the time spent on domestic work (Annex 4).

The share of domestic work among men during a working day increased from 4.1% to 5.1% in Estonia while it has decreased from 6.2% to 4.3% in Finland. During a holiday the Estonian and Finnish men participated in domestic work to an equal extent during the mid-80s. The participation had however decreased in Finland more rapidly. By 1990 the share of domestic work among men in Estonia had increased from under 10% to over 22%

⁹ Source: Estonia, Tööajabüdzeti ühekordne valikuurimus märtsis 1980 ja märtsis 1985. NSV Liidu Statistikaakomitee. Moskva 1980, 1985. Data compiled by E. Aedna.

Finland, Suomalaisten ajankäyttö, TK 1979, Ajankäytön muutokset 1980-luvulla, TK 1989. Data on time use during holidays relates only to the urban population.

and though there are classification differences (in the 1990 data domestic work includes shopping) the increase reflects the deterioration in the Estonian economic situation. Estonian men spend much more time working at their summer cottages and garden plots.

Differences in women's time use in Estonia and Finland (Table 11) are much more marked than for men. Like in the case of men, some of the difference is related to the classification of lunch breaks. Estonian women use much more of their time on shopping and domestic work and have less time for recreation and other purposes than in Finland. This difference remains also during holidays when shopping and domestic work seem to be done at expense of physiological needs. Share of other time use (recreation etc) is the same in both countries. The major change between 1980 and 1985 in time use of women during a holiday has, in Estonia, been the growth of other use and the corresponding decrease in shopping and domestic work. In Finland the shopping time has increased its share almost twofold.

Table 11:¹⁰ Diurnal budget of employed women (per cent)

	during working days				during holidays			
	Finland		Estonia		Finland		Estonia	
	1979	1987	1980	1985	1979	1987	1980	1985
Working time	28.4	30.5	33.2	32.7				
Work related time	2.4	2.6	4.6	4.5				
Shopping etc.	1.7	2.3	5.9	5.2	2.0	3.9	7.6	5.8
Studying and social work	1.0	0.9	0.4	0.5	1.3	1.3	0.8	0.2
Domestic work	12.9	9.2	11.3	10.8	19.7	17.4	24.3	22.0
Physiological needs	40.6	39.5	35.4	36.2	48.0	47.1	41.4	42.0
Other use	13.0	15.0	9.2	10.1	29.0	30.3	25.9	30.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

The share of working time has increased in Finland among men and women but has decreased in Estonia. In Finland this may be explained by the fact that men have more second jobs than before. One explanation to this development for women is also the fact that share of part-timers has decreased and those who do part-time work have lengthened their daily hours (Niemi, Pääkkönen. 1989).

Without prejudice to the reservations concerning differences in the definitions of time use, the studies do show that the total work load (paid work, work related time, domestic work and shopping etc.) in Estonia is heavier than in Finland, especially in case of women. This view, which is reinforced by the Estonian 1990 data, can be linked to a lower labour productivity and an increasing cost of living that compels people to hold second jobs. These same reasons would also account for the hesitance to reduce normal working hours and would suggest that actual working time is not being used rationally.

The higher time cost of travelling time and domestic work in Estonia can be related to the shortage of household appliances and a lower level of development of the services sector. Most of building and repair work is done by owner himself and domestic work is not mechanized. Urban inhabitants living in large dwelling districts spend much time on travel to work and to service establishments. Public transport system is underdeveloped and expensive in terms of time cost. The number of private cars is smaller than in Finland. In Estonia people spend much more time at their garden plots and summer cottages which increases their travel time. This can also explain the increasing participation of men in domestic work.

The differences in the distribution of time use between Finland on one hand and Latvia, Lithuania and Russia on the other seem to be similar to those between Finland and Estonia. The comparative study carried out during the late 80s showed that the total workload especially among women was heavier in these former Soviet Republics than in Finland (Niemi, Eglite ... 1991).

9. CONCLUSIONS

Before the second world war the work time differences between Finland and Estonia were small. Both countries had introduced a 48-hours week (Finland in 1918, Estonia in 1923) and annual leave ranged from one to two weeks according to the employment tenure.

The shift from a six to a five day week was made in both countries during the late 60s. The working week was then reduced in Finland from 45 to 40 hours. In Estonia it has remained at 41 hours since 1960. After that the standard working week has remained unchanged. The annual working time in Finland was, however, reduced by 100 hours in the late eighties. If this reduction is included in the normal working week it now amounts to 37.8 hours.

By international standards, the share of part-time work is small in both countries. In Finland it is about 7% and in Estonia it is only 2-3%. Overtime working is more common in Finland but holding second jobs is in Estonia at least as usual as in Finland. In Estonia holding second jobs is more common in urban industries while it in Finland is more usual in agriculture and forestry.

Although the length of working time varies less between industries in Estonia there is more of a variance in working time arrangements. Shift-working is more common in Estonia than in Finland where three quarters of employees are engaged in regular day work. The difference has however decreased during the recent years.

The Finns have a longer annual leave especially after winter holidays were introduced during the early 80s. On the other hand many employees in Estonia are entitled to extra leave due to hazardous working conditions or for other reasons.

When the institutional features of work time are used as basis the annual working time seems to be about 10% shorter in Finland. The Finnish annual working time is among the shortest within the industrialised countries while the Estonian working time is longer than in any other western european country with the exception of Portugal. According to the labour force statistics the actual difference seems, however, to be much smaller. This may be due to the fact that not all workers are entitled to maximum leaves and other days off in Finland and

that in Estonia many workers get extra leaves. The greater incidence of overtime working in Finland also reduces differences in actual working time.

Although the picture about actual working time differences is a little confusing the total workload seems to be bigger in Estonia. This is especially so in the case of Estonian women who use more time in domestic work, travelling and in shopping. Time use differences originate from differences in household appliances, in private car ownership, in location of dwelling areas and in the development of the services sector.

References

- Antila, Jorma. Palkansaajien työaikojen kehittyminen. Työväen taloudellinen tutkimuslaitos, tutkimuksia 25. Helsinki 1990.
- Hjerpe, Riitta. Suomen talous 1860-1985. Kasvu ja rakennemuutos. Helsinki 1988.
- Neifer-Dichman, Elisabeth. Working time reductions in the former Federal Republic of Germany: A dead end for employment policy. *International Labour Review*, Vol. 130, 1991, N:o 4. Geneva.
- Niemi, Iiris - Kiiski, Salme - Liikkanen, Mirja. Suomalaisten ajankäyttö 1979. Tilastokeskus, tutkimuksia 65. Helsinki 1981.
- Niemi, Iiris - Pääkkönen, Hannu. Ajankäytön muutokset 1980-luvulla. Tilastokeskus, tutkimuksia 153. Helsinki 1989.
- Niemi, Iiris - Pääkkönen, Hannu - Rajaniemi, Veli - Laaksonen, Seppo - Lauri, Jarmo. Vuotuinen ajankäyttö. Ajankäyttötutkimuksen 1987-88 taulukot. Tilastokeskus, tutkimuksia 183B. Helsinki 1991.
- Niemi, Iiris - Eglite, Parsla - Mitrikan, Algimantas - Patrushev, V.D. - Pääkkönen, Hannu. Time use in Finland, Latvia, Lithuania and Russia. Tilastokeskus, tutkimuksia 182. Helsinki 1991.
- Romppanen, Antti. Työaika ja työllisyys. Taloudellinen suunnittelukeskus. Helsinki 1980.
- Työaikakomitea 1980 mietintö. Komiteanmietintö 1983:69. Helsinki 1983.

Annexure 1: Hours of work in Finland in 1910-1990.

Year	Weekly hours	Leave(days)	Annual hours
1910	58-60		3010
1917	48		2424
1922		4-7	2380
1939		9-12	2330
1946	47	12-18	2240
1958	45		2130
1960		18-24	2080
1970	40		1840
1973		24-26	1808
1981		-30	1800
1990		-30+12.5	1716

Annual hours vary from year to year depending on the timing of Christmas and other public days. Leave includes Saturdays. During 1986-90 annual hours were reduced by 100 hours (12.5 days) if the working week was 40 hours or over. Those who had shorter working week got a smaller reduction. The method of implementation of this reduction was left to union negotiation.

Annexure 2:¹¹ Standard annual working time for workers in manufacturing industry
(October 1, 1990)

Country	Weekly hours	Annual leave	Working days off Additional time off	Public holidays	Annual hours
Germany F.R.	37.7	30		12.5	1648
Denmark	37	25		8	1687
Austria	38.6	26.5		12.5	1714
Finland	40	25	12.5	9	1716
Norway	37.5	21		10	1725
Netherlands	39	24	8	7	1732
Belgium	38	20		11	1748
France	39	25		11	1755
United Kingdom	38.8	25		8	1769
Italy	40	26	5	8	1776
Luxembourg	40	27		10	1792
Spain	40	22		14	1800
Sweden	40	25		11	1800
Ireland	39	20	1	8	1810
Greece	40	22		9	1840
Switzerland	40.8	23.5		8	1873
United States	40	12		11	1904
Estonia	41	18		8	1927
Portugal	43/44	22		14	1935/1980
Japan	-	7.9		14	2143

¹¹ Source: Estonia see table 7. Other countries, Elisabeth Neifer-Dichman, Working time reductions in the former Federal Republic of Germany: A dead end for employment policy; International Labour Review 1991/4, ILO, Geneva.

Annexure 3A:¹² Estonia: Average annual paid leave for adult workers (in calendar working days)

Date	Industries	Manufacturing	Agriculture	Construction	Transport	Health	Education
1934		7					
1940		6-12					
01.4.1958	17.8	16.9	14.0	15.1	17.6	17.8	36.5
30.4.1968	20.5	19.5	17.2	18.3	20.3	22.2	35.1
01.6.1977	21.1	20.5	18.8	19.9	21.6	22.8	34.1
01.6.1983	21.5	20.7	19.8	20.3	22.1	22.7	33.3
01.6.1987	21.9	20.7	21.0	21.0	22.5	22.7	33.5

Annexure 3B:¹³ Estonia: Percentage of workers who get additional leave for working in hazardous conditions (1977 and 1987).

Sector	1977	1987
Agriculture	15.8	28.6
Industry	41.1	38.7
Transport	49.7	48.7
motor transport	69.8	64.0
Construction	20.8	38.4
All Industries	31.5	31.5

¹² 1934 and 1940 figures are for the minimum annual leave for industrial workers.

Source: Trud v Estonskoi SSR. Statistitseskisbornik, Tallinn 1962, 1977, 1982. Tsislennost' rabotsih sluzhashtih po polu i vozrastu...Statistitseski sbornik Tallinn 1988.

¹³ Source: cf Annex 3A

Annexure 4:¹⁴ Diurnal budget of employed persons in Estonia in 1990 (%).

	during working days		during holidays	
	male	female	male	female
Working time	34.6	33.8		0.2
Work related time	5.4	5.8		
Studying, social work	1.8	1.9	3.7	2.7
Domestic work	5.0	13.6	22.8	25.0
Physiological needs	37.9	36.6	42.9	43.8
Other use	15.3	8.3	30.6	28.3
Total	100.0	100.0	100.0	100.0

¹⁴ Source: Tööajabüdzeti ühekordne valikuurimus märtsis 1990. NSV Liidu Statistika Komitee. Moskva 1990. Data compiled by E. Aedna.