

RAHVASTIKU-UURINGUD POPULATION STUDIES

FEMALE LABOUR FORCE PARTICIPATION
IN ESTONIA

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During the past decades a rapid increase in the number of employed women has occurred in the developed countries. As the rise in women's work activity had often been accompanied by changes in the demographic processes, first of all, the decline of fertility, the problems of female labour force participation (FLFP) present a matter of interest for demographers.

The present paper gives an overview of the FLFP development in Estonia during the 20th century. In the paper available data sources, trends in activity rates and in the length of working-life, the evolution of woman's working role, the place of work in female life-cycle, and the connections between FLFP and fertility are examined. The principal attention is focused on trends, the analysis of differences in working-patterns between various subgroups of the population is limited. Due to the application of more adequate methods, the figures presented here may in some points slightly differ from those in earlier publications.

Data sources

The present study of the Estonian FLFP development is based on censuses, vital statistics and 2 surveys.

The census data were used to study the trends in the FLFP on the basis of crude and age-specific activity rates, and to calculate working-life tables of the population /Puur, 1990/. Not taking into account the 1871 and the 1881 local censuses the census data concerning FLFP is available since 1897 in Estonia. As the classification systems have been repeatedly changed, the data from different censuses are not directly comparable.

Probably the biggest discontinuities concern the category of non-paid family workers. At the 1897 census non-paid family workers were considered economically passive and no data was collected about them /Первая..., 1905/. At the 1922 and 1934 censuses the classification system was improved and the mentioned population category was drawn out, which enables to elucidate the LFP both together and without non-paid family workers /1922.a. Üldrahvalugemise..., 1924; II rahvaloendus..., 1935/. Postwar censuses lack the concept of non-paid family workers for the corresponding category of population was practically liquidated in the course of socialist transformations in the 1940-s and 1950-s /Занятое..., 1974; Занятое..., 1982/.

In order to get a more precise picture of actual work participation some correction of census data was considered necessary. In the prewar censuses we excluded from the number of the population counted as economically active (the original criterion was the existence of an independent source of livelihood) those persons who did not get their

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living through individual work but from other sources e.g. capital interests, subsidies provided by public organizations or relatives, pensions etc. In addition to the mentioned categories from economically active population were also excluded prisoners, military personnel and people in hospitals. All necessary data for described correction was available from census materials /1922.a. *üldrahvvalgemise...*, 1924; II *rahvaloendus...*, 1935; *Первая...*, 1905/.

In the postwar censuses there were no above-mentioned disadvantages, but nevertheless economically active population included categories that cannot be regarded as actually working - servicemen in the armed forces and women at maternity leave. In the process of data correction both these categories were excluded from the economically active population. As the postwar censuses, unlike earlier, did not give an exact basis for the correction, and some indirect estimations were used, both official and corrected data are presented.

The census data is complemented with the results of 2 surveys, carried out by the Tallinn Institute for Urban Research in 1987/1988. The survey "Women at Work and in the Family" was performed on an 500 female respondents sample, the survey "Tallinn '88" had 1522 respondents (57.8 % females, 42.2 % males). Both surveys were designed to apply the life course approach, and included a recording of

reproductive, relational, educational, occupational and residential histories of the respondents together with a wide range of information on a current living situation (detailed description of these surveys is available from /Puur, 1990b/). Survey-data enabled to calculate a set of indicators not available from vital statistics and censuses.

Vital statistics was used to study changes in the female demographic life-cycle.

Female Labour Force Participation Dynamics

The present level of FLFP is the result of a long-time development. In Estonia available data permit to follow the participation of females in the labour force from the beginning of the 20th century. In our view this period can be divided into three parts.

The first subperiod includes years from the beginning of the 20th century to the end of World War II. During that time the FLFP remained relatively stable in Estonia (Table 1). The gross length of working-life increased 3.6 years for 1897-1934, the crude activity rate grew 3.2 percent at the same time. A characteristic feature of the pre-war period is the discreet proportion of women working outside home. The majority of females were economically passive or considered non-paid family workers.

It must be noted that the results of comparison of pre-war and later situations depend to a great extent on whether the

comparison encloses the non-paid family workers or not. It is hard to tell which of these two methods gives more reliable results. On the one hand, non-paid family workers cannot be regarded as economically passive, but on the other hand, work in one's own household differs significantly from paid work outside home and therefore treating the whole active population in equal terms is not fully correct.

It is fairly reasonable that the prewar FLFP situation in Estonia can to a large extent be explained with the economic structure of the society in which agriculture with prevailingly family forms of production (farmsteads) had been a dominating sector.

The second period in the dynamics of FLFP includes late 1940s and 1950s. A characteristic feature of this short period is a rapid increase of the number of women employed outside home. Between the 1934 and 1959 censuses the crude activity rate and the length of working-life almost doubled. The fast growth is to be associated with socialist transformations in the course of which practically all family forms of production were abolished. As a result, a large number of women lost their former source of livelihood and in order to get means of subsistence, they were forced to start work for pay. Thus, difficulties of comparison are connected with profound changes in economic structures.

The third period in the dynamics of FLFP in Estonia began in the early 1960s. At that time growth rates started to slow

down according to the exhaustion of free labour resources. The slow down becomes apparent by eliminating women at maternity leave from labour force. corrected net expectation of working-life increased 3.9 years in the 1960s, 0.7 years in the 1970s, and 0.6 years in the 1980s (Table 1).

Age-specific activity rates reveal that the major part of the growth in the FLFP during the postwar period has occurred in working age. work activity in the youngest and oldest age groups has decreased (Table 2). In the 1980s the situation has changed: the long-term increase in activity rates within working age, more precisely in age group 25-44, has stopped and is replaced by the downward trend. Evidently, the reversal of the earlier trend was caused by the increase in the duration of the maternity leave. Recorded growth in the summary indicators during 1980-s can be explained with increased work activity in older ages. in youngest age groups the last decade was characterized by the continuation of former tendencies.

Age-specific activity rates show that the curve of LFP has also been changed. Two peaks could be observed at the 1934 and 1959 censuses, the first of which lay between the ages 25-30, the second between the ages 40-44 (Figure 1). Evidently, marriage and childbirth were the reasons why a certain number of women left labour force for some period. By the growth of their children a part of them returned to

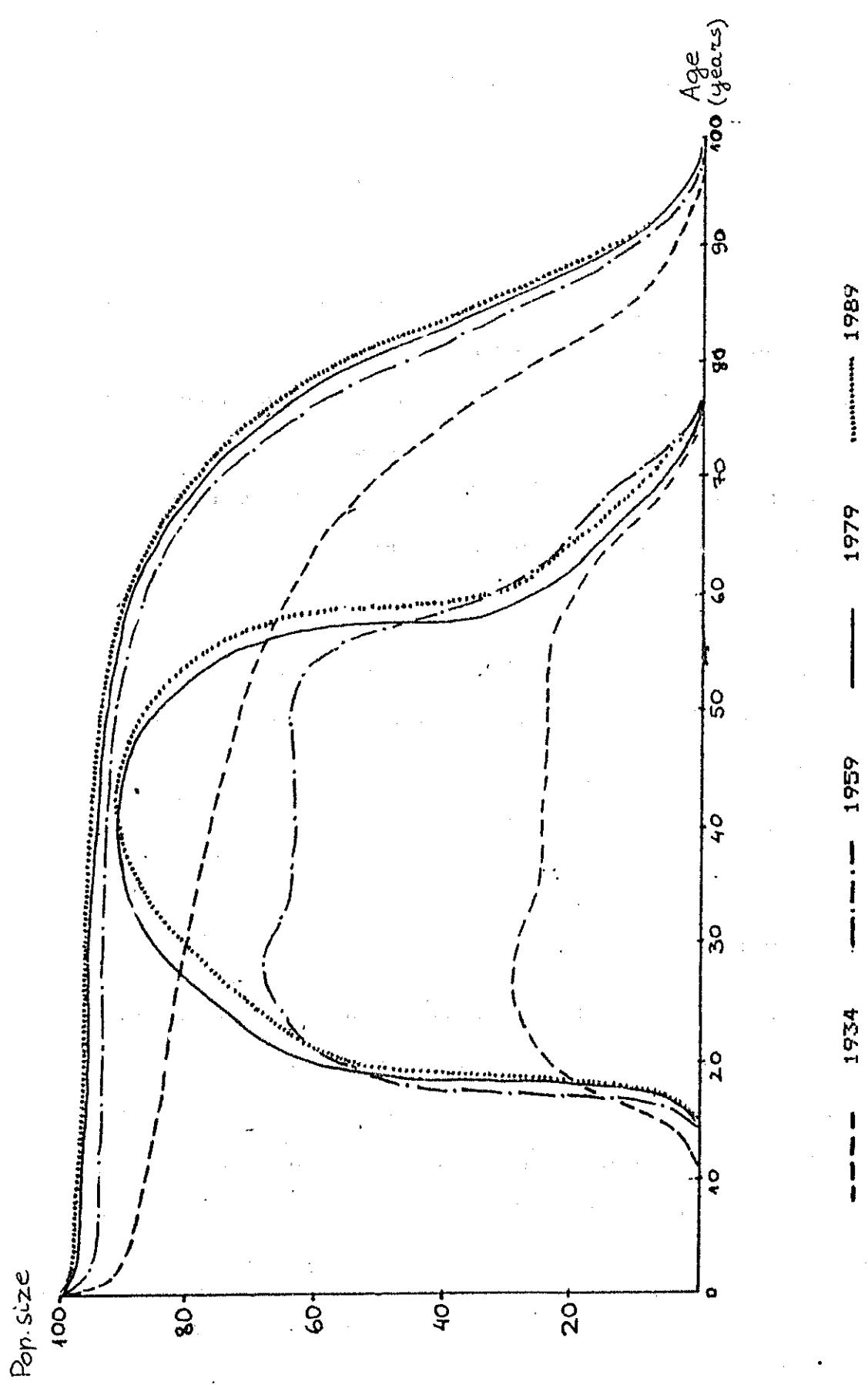


FIGURE 1. ECONOMICALLY ACTIVE STATIONARY FEMALE POPULATION IN ESTONIA, 1934-1989

work. By the year 1970 only the second peak maintained. We suppose that the disappearance of the first peak should be related to the increase in activity rates, prolonged educational career and decrease in the age at marriage and childbirth.

Despite some decrease in activity rates in working ages during the last decade, the achieved level of the FLFP in Estonia is considered very high. In the late 1980s the net length of working-life for females was only 1.9 years shorter than for males (Table 3). At the same time there was no other developed country having FLFP of that height (Table 7).

In the paper there are also presented data concerning FLFP in urban and rural areas (Tables 5 and 6), their detailed analysis is available from earlier publications (Puur, 1987).

Woman's Work Role and the Length of Working-Time

Changes in age-specific activity rates mean the unification of females work-relationship. In the first half of the 20th century there were women who had to work outside home from their youth to their old age on the one hand, and on the other hand, there were women who never worked outside home or did that occasionally. In post-war period going to work has become a natural element of life of almost all Estonian women in working age.

The working role is well accepted by Estonian women. According to survey-data only a small number of women prefer staying entirely at home taking care of their children. Only 1.4 percent of the respondents who had been addressed to a questionnaire preferred the mentioned possibility. The results do not permit to make a statistically reliable conclusion but we suppose that among women preferring to stay at home dominate those of low educational level and low professional skills. Upon these results we may expect that even in the case of weakening of the importance of material stimulus only an insignificant number of women would give up working entirely.

At the same time nearly 90 per cent of the interviewed desired part-time work as an opportunity to combine their work and family roles. The most unanimous opinion in this respect is revealed by women with higher education (93.8 per cent), only 65 per cent of women with less than secondary education showed the same opinion. Orientations towards shorter working hours are stronger among married women and have positive correlation with the number of children. Young unmarried women were most willing to have working-time equal to men. The desired length of working-time of those who preferred part-time work is presented at Table 9. The average length of desired working-time was about 70 per cent of full working-time. There were no remarkable deviations in respect of educational level, social status, number of children and family status.

The contradiction is that the overwhelming majority of Estonian women are full-time workers. According to official labour statistics only less than 10 per cent of women had a shortened working day /Численность..., 1987/. Part-time work is more common among workers in education and health care. The latest available time-budget survey showed that on the average Estonian women had only 5 per cent shorter working day than males, and additionally, the division of home-work in Estonia is far more traditional than in many Western countries (Table 8). In Estonia not the struggle of women for equality but the official labour force policy has played a leading part in changing women's working role.

Thus, when thinking about high FLFP level in Estonia and the need for decreasing it, one should consider not so much the reduction of activity rates as the reduction in the length of total working-time to create more favourable conditions for associating women's different roles.

The introduction of shortened working-time would among other consequences cause the reduction of family income. In case of the women observed in our surveys, the average reduction would make 12.6 per cent of the family income. Therefore the individual possibilities to shorten wife's working-time are not equal and depend on family's welfare level. On the other hand, the large-scale introduction of part-time employment would be a serious challenge to Estonian economy. For to compensate the losses of labour force caused by the

reduction of FLFP until the desired level, the labour productivity should be increased for 14 per cent /Katus, Puur, Vikat, 1989/.

Work and Woman's Life-Cycle

Woman's working-life can be regarded as a sequence of work periods and interruptions in working-life. The duration and timing of these periods and interruptions depend on the labour force participation on one hand, and on demographic events on the other hand. Due to demographic life-cycle working periods alternate with interruptions of working-life, on the other hand, circumstances associated with education and professional career modify women's demographic life-cycle. Limited database allows us to study the work-patterns of Estonian women from the life-cycle perspective only during the past few decades.

Since 1959 the average length of education and the age at entry into the labour force have increased (Table 10). In 1959 Estonian women started their professional career at the age of 17.7 years, in 1989 they started 1.5 years later, during the same period the mean duration of education has extended from 10.1 to 12.4 school years. Typically, the start of professional career is soon followed by marriage, the contrary sequence of events occurs remarkably seldom. In the pre-war Estonia the European marriage pattern with its relatively high age at first marriage dominated /Vikat,

1987/, in post-war years this domination came to an end. According to vital statistics the age at first marriage fell for 1.8 years since 1959 reaching 21.3 years in 1989 (Table 11), in the last decade the age at first marriage seems to have stabilized.

Marriage does not evoke direct changes in the Estonian FLFP, but it predicts changes in future for marriage is generally, earlier or later, followed by childbirth. As for marriage, fertility is also characterized by rejuvenation during the past few decades. Compared to the year 1959, the age at first birth has fallen for 2.1 years extending to 22.1 years of age in 1989. This decline together with the later entry into the labour force, and the decrease in the duration of protogenetic intervals /Puur, Vikat, 1990/ has brought along the shortening of the working periods before marriage as well as childbirth in women's life-cycle for two and a half years since 1960s.

In most cases childbirth means an interruption of working-life. Since 1960s there has been a steady increase in the duration of these interruptions (Table 12). The median length of the intervals rose from 7 months in the 1960s to 12.4 months in 1970s and to 16.7 years in the next 'decade'. Aside the prolongation of intervals they have been evened to some extent. When in the 1960s a part of women had had very short interruptions and a part of them gave up working for more than two years, then by 1980s there are less extreme groups as nearly 80 per cent of maternity leaves

duration from one to two years.

Comparing the duration of interruptions in work between the first and second child we noticed that mothers are inclined to stay at home longer with the second child. Among the other factors differentiating the length of interruptions wife's share in creation of family income should be mentioned. In the first half of the 1980s women making less than a half of the family income stopped working for 17.3 months but those making 50 percent or more could allow themselves only 13-months leave. Shorter interruptions were accompanied by discontent with the family's material status. In case grandparents were of help in taking care of children regularly women returned to work 2.5 months earlier than those having no permanent help. Educational level, professional status and other factors did not remarkably differentiate the length of the intervals.

Despite the prolongation of maternity leave Estonian women still desire to interrupt working for longer periods (Table 13). It occurs that after re-entry to the labour force women would like to start working with partial working time. They would prefer to return to work 3 years after childbirth as an average, transfer to full working-time would take place 1.5 years later. In May 1989 Estonian women got a right to stay at home up to three years after childbirth that can well bring along further prolongation of maternity leave.

After maternity leave women return to work until the birth

of the next child. The increase in duration of maternity leave together with the decrease in the length of intergenetic intervals has led to shortening of the duration of interbirth-working periods from 50 months in the 1960s to 30 months in the 1980s (Table 14). As a result, the sequence of events in the female-life cycle has approached the pattern "education-children-work".

Survey data indicate that most clearly the pattern "education-children-work" can be observed among women with higher education (Table 15). The interruptions in working-life connected with childbirth bring along the retardation of professional career among women, they have slower increase in incomes, and they reach the maximum earnings later than males. Detailed analysis of mentioned differences are available from earlier publications /Puur; Vikat, 1990/.

Female Labour Force Participation and Fertility

Women's different social functions do not exist isolatedly from each other. Interrelationship between FLFP and fertility caught the attention of demographers for during the period of demographic transition the more or less parallel decline in fertility and growth in women's work activity has been observed. As there has been no former comparison between mentioned phenomena in Estonia through a longer period, studying of this relationship would present a matter of interest. We chose total fertility rate and gross

length of working life for the basis of comparison as these indicators are independent from the influence of age structure (Table 16).

The data reveal that Estonia belongs to the number of countries where low fertility preceded the growth in women's work activity. The rapid increase in activity rates did not bring along the decline in fertility. At the end of the 1960s there has been even a simultaneous rise in FLFP and fertility. Then fertility exceeded the pre-war level and has kept to the replacement level without greater fluctuation up to now. Estonian case, thus, confirms the thesis about independent dynamics of fertility and FLFP in the post-transitional phase of demographic development.

Observing the relationship between fertility and FLFP we notice that participating in labour force has no significant differentiating effect on the number of children in Estonia for practically all women in working age are economically active (except years they spend in maternity leave). In these circumstances it seems to be more correct to study the relationship between FLFP and fertility on the basis of educational and professional status. The data of 1979 census show that there exists a reverse relationship between the educational and occupational status of women and the number of ever born children in all birth cohorts that have passed the reproductive age (Table 17). Differences between status groups were biggest in the oldest cohorts, in younger groups

the variation grew smaller. The decrease in the differences has occurred both due to the increase of the number of children among women with higher educational level, as well as the decline of fertility among those with lower status. Since corresponding data from the latest census is not available at yet, we cannot confirm the continuation of the mentioned trend in 1980s.

Conclusions

Available data permit to trace the participation of females in labour force in Estonia during the past 90 years. From the beginning of the 20th century to the end of world War II women's work activity was relatively stable, the majority of working females were economically active as non-paid family workers. In late 1940s and 1950s a rapid increase in activity rates took place. Since then the pace of growth has gradually decreased according to exhausting of free female labour resources. In the 1980s the long-term growth in activity rates in ages 25-44 stopped and was replaced by a slow decline. Despite mentioned decline the achieved level of work activity should be considered very high in comparison with developed countries and other Soviet republics.

The working role is well accepted by Estonian women, only a small number of women prefer staying entirely at home. At the same time nearly 90 per cent of them desired part-time work as an opportunity to combine work and family roles. The

contradiction lies in the fact that an overwhelming majority of women in Estonia are full-time workers.

During the past three decades the decline in the age at marriage and childbirth together with the later entry into the labour force has led to shortening of working period before childbirth. The increase in the duration of the maternity leave has caused the reduction of working periods between births of different order. As a result, female life-cycle has approached the pattern "education-children-work".

In Estonia the decline of fertility and low birth rates preceded the growth in women's work activity outside home. The Estonian case deserves attention for it gives an example of the possibility of co-existing high female labour force participation and replacement level fertility.

B I B L I O E R A P H Y

1. Bäke L., Brumane I., 1988. Rahvastiku tööpotentsiaali seisund Balti liiduvabariikides // Majanduse ja rahvastiku taastootmine. Noorte majandusteadlaste X teadusseminar. - Tallinn.
2. Keiam A., 1984. Naise eludilemma. - Tallinn.
3. Katus K., Puur A., Vikat A., 1989. Naise demograafiline käitumine. Ankeedi "Naine - tööl ja perekonnas" analüüs. - Tallinn.
4. Mustonen H., 1986. Lasten syntymat ja työssäkäynti naisen elamankulussa // Väestötutkimuslaitoksen julkaisuja. Series D No 17. - Helsinki.
5. Puur A., 1990. Eesti rahvastiku 1959., 1970., 1979. ja 1989.a. tööhõivetabelid. - Tallinn.
6. Puur A., 1990. Ankeetuurimuste "Naine - tööl ja perekonnas" ja "Tallinn '88" kirjeldus. - Tallinn.
7. Puur A., Vikat A., 1990. Elutsüklilised erisused Tallinna perekondade demograafiiises - koosseisus ja ainelises kindlustatuses (ankeedi "Tallinn '88") andmetel). - Tallinn.
8. 1922. a. didrahvalugemise andmed, 1924. Tööharud ja leibkonnad. Vihk III. - Tallinn.
9. II rahvaioendus Eestis, 1935. Tööharud ja leibkonnad. Vihk III. - Tallinn.
10. Willekens F., 1978. The Demography of Female Labour Force Participation. - IIASA, Laxenburg.
11. Woydanoff P. (Ed.), 1984. Work and Family. Changing Roles of Men and Women. - Palo Alto.
12. Викат А., 1987. О брачности населения Эстонской ССР// Город и регион: воспроизводственные процессы. С. 95-103. - Таллинн.
13. Занятое население Эстонской ССР (по данным Всесоюзного переписи населения 1970. года). Статистический сборник. - Таллинн.
14. Занятое население Эстонской ССР (по данным Всесоюзного переписи населения 1979. года). Статистический сборник. - Таллинн.
15. Катус К., 1987. Анализ рождаемости населения Эстонской ССР. - Таллинн.

16. Кунгурова Н.И., 1985. Женщина в общественном производстве при социализме. - Москва.
17. Молнар Л., 1980. Тили жизненного цикла и их связь с воспроизводством населения // Социальные проблемы рационального соотношения профессиональных и семейно-брачных функций женщины. С. 125-131. - Москва.
18. Первая всеобщая перепись населения Российской Империи 1897. г. Том XLIX. Эстляндская губерния. - Спб.
19. Пуур А., 1987. Анализ занятости населения Эстонской ССР. - Таллинн.
20. Сергеева Г.П., 1987. Профессиональная занятость женщин: проблемы и перспективы. - Москва.
21. Сюллерот Э., 1968. История и социология женского труда. - Москва.

T A B L E S

Table 1. Summary indicators of female labour force participation, Estonia, 1897-1989.

Table 2. Age-specific rates of female labour force participation, Estonia, 1934-1989.

Table 3. Summary indicators of male and female labour force participation, Estonia, 1959-1989.

Table 4. Age-specific rates of male and female labour force participation, rates, Estonia, 1959-1989.

Table 5. Summary indicators of female labour force participation, Estonia, urban and rural areas, 1959-1989.

Table 6. Age-specific rates of female labour force participation, Estonia, urban and rural areas, 1959-1989.

Table 7. Summary indicators of female labour force participation, Estonia and selected countries, late 1970-s.

Table 8. Working hours and time spent in home-work, Estonia 1985.

Table 9. Distribution of women by desired length of working-time, Tallinn, 1987.

Table 10. Median age at entry into the labour force and at separation from the labour force in Estonia, 1959-1989.

Table 11. Median age at first marriage and at childbirth, Estonia, 1959-1989.

Table 12. Distribution of interruptions in working-life connected with childbirth by length, Tallinn, 1960-1980-s.

Table 13. Distribution of women by desired length of interruptions in working-life, Tallinn, 1987.

Table 14. Median protogenetic, intergenetic and interbirth-working intervals, Tallinn, 1960-1980-s.

Table 15. Female life-cycle by education, Tallinn, 1987.

Table 16. Female working-life expectancy and total fertility rate, Estonia, 1922-1989.

Table 17. Number of ever born children by educational status and age of woman, Estonia, 1979.

Table 1

SUMMARY INDICATORS OF FEMALE LABOUR FORCE PARTICIPATION, ESTONIA,
1897-1989 (*)

Year	Crude activity rate (per cent)	Gross expectation of working-life at birth (years)	Net expectation of working-life at birth (years)
1897	19.0 /.../	14.3 /.../	.../.../
1922	21.4 /30.0/	17.5 /38.4/	.../.../
1934	22.3 /50.6/	17.9 /38.3/	13.4 /28.7/
1959	43.9 (45.0)	32.9 (33.6)	29.6 (30.3)
1970	46.9 (49.1)	35.8 (37.4)	33.7 (35.2)
1979	48.8 (50.9)	37.1 (38.6)	34.4 (35.9)
1989	47.5 (50.8)	37.4 (39.8)	35.0 (37.4)

(*) Figures in // brackets include non-paid family workers, figures in () brackets reflect LFP according to official statistics i. e. including women at maternity leave.

SOURCES: /Eesti arvudes, 1935; 1922.a. uidrahvalugemise..., 1924; II Rahvaloendus..., 1935; Первая..., 1905; Занятое..., 1974; Занятое..., 1982; Archives of the Estonian Central Statistical Office/

Table 2

AGE-SPECIFIC RATES OF FEMALE LABOUR FORCE PARTICIPATION, ESTONIA,
1934-1989, per cent (*)

Age group	1934	1959	1970	1979	1989
10-14	3.6/18.6/	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)
15-19	24.2/59.3/	35.2(35.6)	34.2(35.3)	27.0(28.0)	24.3(25.8)
20-24	35.2/67.4/	64.8(69.2)	71.1(82.8)	70.3(83.0)	57.5(77.1)
25-29		72.3(76.9)	81.7(92.0)	84.5(94.3)	74.6(96.2)
30-34	31.2/69.8/	68.2(70.8)	87.7(93.7)	91.7(96.0)	85.4(93.7)
35-39		69.3(70.9)	91.4(93.8)	94.4(96.4)	92.1(95.5)
40-44	33.6/70.7/	73.7(74.2)	92.1(92.7)	95.5(96.0)	94.6(95.4)
45-49		71.7(71.7)	89.6(89.6)	93.5(93.5)	94.1(94.1)
50-54	37.8/72.6/	68.9(68.9)	82.5(82.5)	86.7(86.7)	88.1(88.1)
55-59		50.7(50.7)	40.6(40.6)	44.1(44.1)	54.1(54.1)
60-64	22.9/51.8/	41.9(41.9)	22.2(22.2)	25.6(25.6)	37.7(37.7)
65-69		24.0(24.0)	12.7(12.7)	15.6(15.6)	25.2(25.2)
70+	9.2/21.9/	7.4(7.4)	3.9(3.9)	4.9(4.9)	7.7(7.7)

(*) Figures in // brackets include non-paid family workers, figures in () brackets reflect LFP according to official statistics i.e. including women at maternity leave.

SOURCES: /II Rahvaloendus..., 1935; Занятое..., 1974; Занятое..., 1982; Archives of the Estonian Central Statistical Office/

SUMMARY INDICATORS OF MALE AND FEMALE LABOUR FORCE PARTICIPATION,
ESTONIA, 1959-1989 (*)

Year	Crude activity rate (per cent)	Gross expectation of working-life at birth (years)	Net expectation of working-life at birth (years)
MALES			
1959	54.2(59.6)	45.1(47.9)	36.5(39.1)
1970	55.3(58.3)	42.2(43.9)	35.0(37.7)
1979	55.6(58.7)	41.6(43.4)	34.4(36.5)
1989	56.1(58.5)	42.9(44.3)	36.9(38.3)
FEMALES			
1959	43.9(45.0)	32.9(33.6)	29.6(30.3)
1970	46.9(49.1)	35.8(37.4)	33.7(35.2)
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1989	47.5(50.8)	37.4(39.8)	35.0(37.4)

(*) Figures in brackets reflect LFP according to official statistics i.e.
including women at maternity leave and servicemen in armed forces.

SOURCES: /Занятое..., 1974; Занятое..., 1982; Archives of the Estonian
Central Statistical Office/

Table 4

AGE-SPECIFIC RATES OF MALE AND FEMALE LABOUR FORCE PARTICIPATION, ESTONIA,
1959-1989, per cent

Age group	1959		1970		1979		1989	
	Males	Females	Males	Females	Males	Females	Males	Females
15-19	15.7	35.2	15.9	34.2	7.1	27.0	11.2	24.3
20-24	59.3	64.8	79.1	71.1	79.2	70.3	72.6	57.5
25-29	94.6	72.3	96.6	81.7	97.2	84.5	96.4	74.6
30-34	95.1	68.2	98.2	87.7	98.2	91.7	97.8	85.4
35-39	94.6	69.3	97.9	91.4	98.0	94.4	97.6	92.1
40-44	94.2	73.3	97.2	92.1	97.3	95.5	97.0	94.6
45-49	92.4	71.7	95.2	89.6	95.7	93.5	95.3	94.1
50-54	90.4	68.9	92.5	82.5	91.1	86.7	92.2	88.1
55-59	87.2	58.7	86.0	40.6	83.4	44.1	83.4	54.1
60-64	86.1	41.9	41.6	22.2	42.1	25.6	52.1	37.7
65-69	52.8	24.0	25.6	12.7	25.1	15.6	35.6	25.2
70+	20.7	7.4	9.4	3.9	9.3	4.9	13.4	7.7

SOURCES: /Занятое..., 1974; Занятое..., 1982; Archives of the Estonian
Central Statistical Office/

Table 5

SUMMARY INDICATORS OF FEMALE LABOUR FORCE PARTICIPATION, ESTONIA, URBAN AND RURAL AREAS, 1959-1989

Year	Crude activity rate (per cent)	Gross expectation of working-life at birth (years)	Net expectation of working-life at birth (years)
URBAN			
1959	45.6(46.6)	30.2(30.8)	27.6(28.2)
1970	52.1(54.4)	37.7(39.1)	35.2(36.8)
1979	53.2(55.4)	38.8(40.2)	36.5(37.9)
1989	50.8(54.1)	38.7(41.1)	36.4(38.7)
RURAL			
1959	44.6(45.5)	35.3(36.1)	31.1(31.9)
1970	37.4(39.4)	32.9(34.8)	30.8(32.6)
1979	38.6(40.6)	33.6(35.6)	31.4(33.4)
1989	39.1(42.4)	33.9(36.6)	31.6(34.2)

SOURCES: /Занятое..., 1974; Занятое..., 1982; Archives of the Estonian Central Statistical Office/

Table 6

AGE-SPECIFIC FEMALE LABOUR FORCE PARTICIPATION RATES, ESTONIA, URBAN AND RURAL AREAS, 1959-1989, per cent

Age group	1959		1970		1979		1989	
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
15-19	32.8	35.8	35.4	31.2	27.5	25.8	25.8	25.8
20-24	65.1	65.1	72.1	70.9	69.7	70.3	75.8	80.6
25-29	74.4	67.3	83.6	77.3	85.4	81.3	90.9	88.3
30-34	68.6	67.1	89.6	82.6	92.0	87.4	94.4	91.3
35-39	70.1	68.1	93.9	86.8	95.7	90.5	96.2	93.1
40-44	70.2	78.0	94.5	86.5	97.0	91.5	96.5	91.9
45-49	68.6	75.6	92.4	84.0	95.2	89.0	95.7	89.4
50-54	64.1	73.7	85.7	77.5	89.1	80.4	90.1	81.8
55-59	38.8	61.9	46.4	33.1	51.2	29.8	58.4	42.2
60-64	24.0	57.7	27.8	15.3	32.6	14.0	42.6	24.5
65-69	15.0	32.8	17.4	7.2	21.4	7.0	30.6	13.8
70+	5.0	9.7	5.8	1.9	7.3	1.8	10.3	3.2

SOURCES: /Занятое..., 1974; Занятое..., 1982; Archives of the Estonian Central Statistical Office/

Table 7

SUMMARY INDICATORS OF FEMALE LABOUR FORCE PARTICIPATION, ESTONIA AND SELECTED COUNTRIES, LATE 1970-s

Country	Crude activity rate (per cent)	Gross expectation of working-life at birth (years)
Estonia	50.9	37.1
Czechoslovakia	44.2	32.3
Bulgaria	45.9	32.3
Denmark	44.9	30.9
Norway	42.3	30.4
Finland	39.6	29.4
Hungary	40.7	28.3
Poland	48.6	28.6
USA	30.6	22.9
FRG	31.7	22.3
Austria	27.3	21.6
Japan	29.6	21.2
Italy	20.3	18.6
Netherlands	19.3	15.8
Spain	14.1	13.1

SOURCE: /Compendium of Social Statistics, 1980/

Table 8

WORKING HOURS AND TIME SPENT IN HOME-WORK, ESTONIA, 1985

	Working hours (per working day, hrs, min)	Time spent in home-work (per working day, hrs, min)
Industrial workers		
Males	8-15	1-18
Females	7-48	3-12
Farm workers		
Males	7-46	1-87
Females	7-21	3-33

SOURCE: /Бюджет времени населения СССР, 1989/

Table 9

DISTRIBUTION OF WOMEN BY DESIRED LENGTH OF WORKING TIME, TALLINN, 1987

Desired length of working time (hours per day)	Distribution of women (per cent)	Desired length (days per week)	Distribution of women (per cent)
1	-	1	-
2	-	2	3.0
3	0.8	3	27.5
4	13.1	4	59.4
5	14.8	5	11.1
6	52.0		
7	8.1		
8+	11.2		

SOURCE: Survey "Women at Work and in the Family".

Table 10

MEDIAN AGE AT ENTRY INTO THE LABOUR FORCE AND AT SEPARATION FROM
THE LABOUR FORCE, ESTONIA, 1959-1989 (*)

	1959		1970		1979		1989	
	Males	Females	Males	Females	Males	Females	Males	Females
AGE AT ENTRY INTO THE LABOUR FORCE (years)								
Total	21.6	17.7	20.6	18.1	20.6	18.8	20.9	19.2
Urban	21.7	17.8	20.6	18.1	20.7	18.8	20.9	19.2
Rural	16.8	17.2	20.5	18.3	20.5	18.6	20.8	18.9
AGE AT SEPARATION FROM THE LABOUR FORCE (years)								
Total	65.1	61.5	60.2	56.9	59.4	57.3	60.7	59.1
Urban	61.4	58.0	60.5	57.7	60.2	58.2	61.4	59.8
Rural	70.2	64.4	59.6	56.5	57.9	55.6	58.9	57.4

(*) Indicators are computed on the basis of working-life tables, age at entry into the labour force does not include the impact of mortality.

SOURCES: /Занятое..., 1974; Занятое..., 1982; Archives of the Estonian Central Statistical Office/

Table 11

MEDIAN AGE AT FIRST MARRIAGE AND AT CHILDBIRTH IN ESTONIA, 1959-1989

Year	Age at first marriage (years)	Age at childbirth (years)		
		First	Second	Third
TOTAL				
1959	23.1	24.2	28.7	31.4
1965	23.1	23.9	28.1	31.0
1970	22.7	23.3	27.9	29.7
1975	22.5	23.0	27.2	30.0
1980	21.5	22.3	26.3	29.7
1985	21.5	22.3	26.6	29.5
1989	21.3	22.1	26.0	29.3
URBAN				
1959	23.0	24.4	29.1	32.1
1965	23.1	24.2	28.7	31.9
1970	22.7	23.6	28.5	31.1
1975	22.5	23.2	27.7	30.8
1980	21.5	22.5	27.0	30.8
1985	21.5	22.6	26.8	30.4
1989	21.3	22.4	26.6	30.0
RURAL				
1959	23.3	24.0	27.9	30.6
1965	23.4	23.6	26.7	29.5
1970	22.8	23.0	26.6	29.7
1975	22.8	22.6	26.0	29.2
1980	21.4	21.5	24.8	28.5
1985	21.4	21.4	24.8	28.6
1989	21.3	21.4	24.6	28.7

SOURCE: Archives of the Estonian Central Statistical Office.

Table 12

DISTRIBUTION OF INTERRUPTIONS IN WORKING-LIFE CONNECTED WITH
CHILDBIRTH BY LENGTH, TALLINN, 1960-1980-s

Period	Distribution of interruptions in working-life (per cent)						Median length (months)	
	1-3 months	4-6 months	7-9 months	10-12 months	13-15 months	16-18 months		
1960-s	17.7	32.3	11.1	21.1	5.6	2.2	10.0	7.0
1970-s	2.8	10.3	5.4	39.8	27.4	5.4	8.9	12.4
1980-s	5.4	5.4	6.8	13.5	13.5	22.9	32.5	16.7

SOURCE: Survey "Women at Work and in the Family".

Table 13

DISTRIBUTION OF WOMEN BY DESIRED LENGTH OF INTERRUPTIONS IN WORKING-LIFE,
TALLINN, 1987,

Distribution of women (per cent)					
	6 months to 1 year	1 to 1,5 years	1,5 to 3 years	3 to 6 years	over 6 years
WHEN RETURNING TO:					
Part-time work	9.1	12.9	26.2	38.6	13.1
Full-time work	0.2	3.3	17.8	51.2	27.5

SOURCE: Survey "Women at Work and in the Family".

Table 14

MEDIAN PROTOGENETIC, INTERGENETIC AND INTERBIRTH-WORKING INTERVALS,
TALLINN, 1950-1980-s, (*)

	Protozoetic interval (months)	I-st intergenetic interval (months)	I-st interbirth- working interval (months)
1950-s	17.6	55.0	52.5
1960-s	14.1	53.2	50.6
1970-s	12.6	48.0	31.5
1980-s	11.2	44.9	30.2

(*) Intervals are calculated on the basis of the direct method.

SOURCE: Survey "Tallinn '88".

Table 15

FEMALE LIFE-CYCLE BY EDUCATION, TALLINN, 1960-1980-s

	Secondary education	Technical secondary education	Higher education
Age at entry into the labour force (years)	18.4	19.6	23.2
Age at first marriage (years)	21.3	23.0	24.0
Age at first birth (years)	22.8	24.8	26.4
Age at second birth (years)	27.1	28.4	28.7

SOURCE: Survey "Women at Work and in the Family".

Table 16

FEMALE WORKING-LIFE EXPECTANCY AND TOTAL FERTILITY RATE, ESTONIA,
1922-1989 (*)

Year	Gross expectation of working-life at birth (years)	Total fertility rate
1922	17.5 (38.4)	2.48
1934	17.9 (38.3)	1.88
1959	33.4	1.95
1970	36.1	2.14
1979	37.1	2.01
1989	37.4	2.21

(*) Figures in brackets include non-paid family workers.

SOURCE: /Kartu, 1987/

Table 17

NUMBER OF EVER BORN CHILDREN BY EDUCATIONAL STATUS AND AGE OF WOMAN,
ESTONIA, 1979

Age group	Number of ever born children per 1000 women				
	All women	Higher educat.	Technical sec. educ.	Secondary education	Primary education
15-19	41	0	84	60	40
20-24	585	396	559	512	1023
25-29	1229	903	1188	1210	1681
30-34	1581	1269	1529	1548	1848
35-39	1732	1446	1649	1629	2046
40-44	1757	1443	1666	1571	2051
45-49	1763	1404	1627	1548	1832
50-54	1777	1403	1562	1532	1970
55-59	1844	1230	1544	1565	2036
60-64	1983	1503	1528	1522	2127
65-69	2038	1355	1468	1436	2091
70+	2249	1162	1587	1389	2189

SOURCE: /Население..., 1982/