THE SECOND DEMOGRAPHIC TRANSITION IN EUROPE

EuroConference on Family and Fertility Change in Modern European Societies Explorations and Explanations of Recent Developments Poster Session: S1

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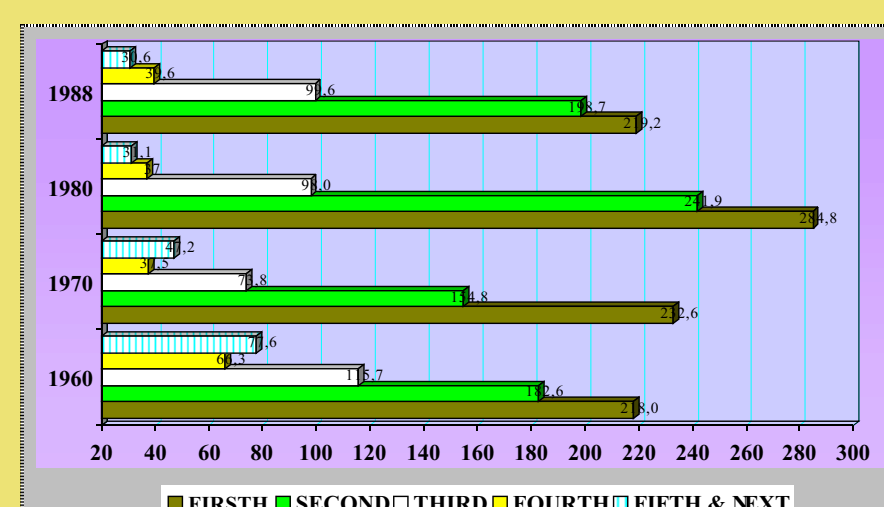## "FERTILITY AND FAMILY LIFE CYCLE CHANGES IN POLAND AND THE SECOND DEMOGRAPHIC TRANSITION"

(Changes-interpretation-evaluation-challenges for the new surveys and research)

Number of children per 100 women

Fertility Changes, 1950-1988
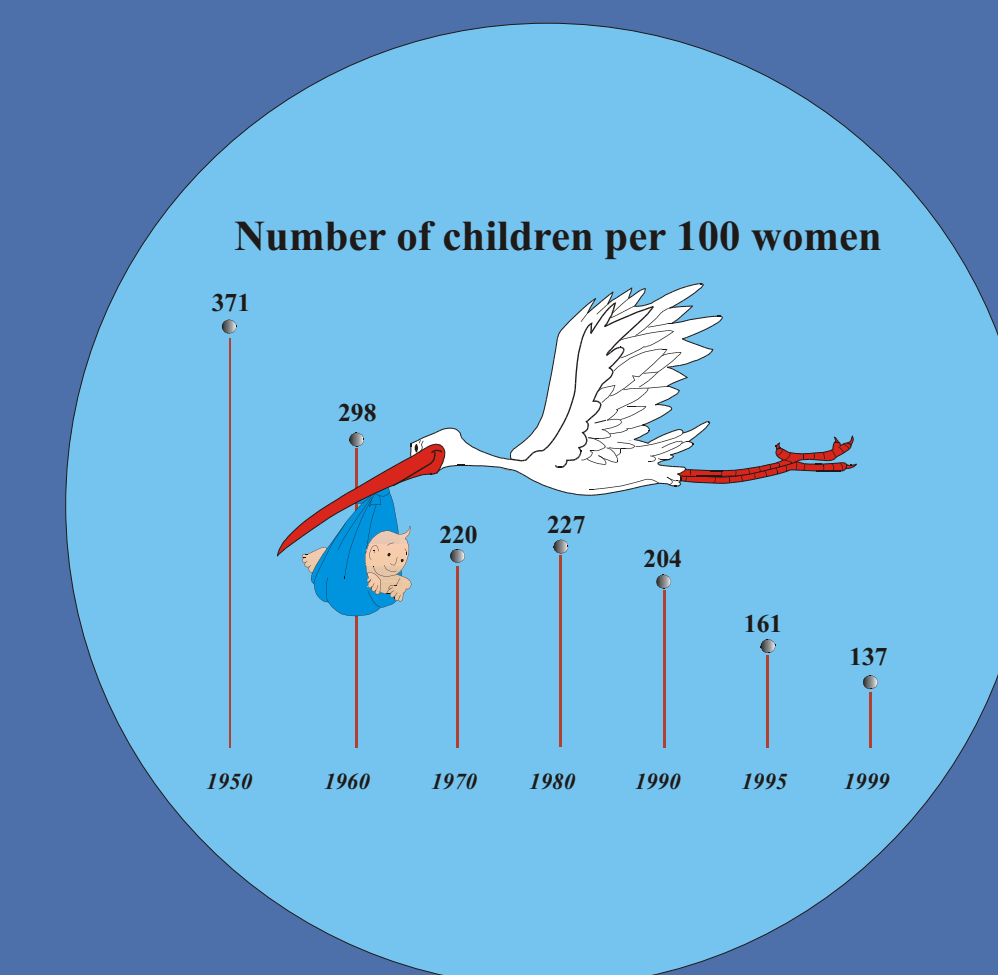
LIVE BIRTHS PER 1000 POPULATION, 1950-1988.
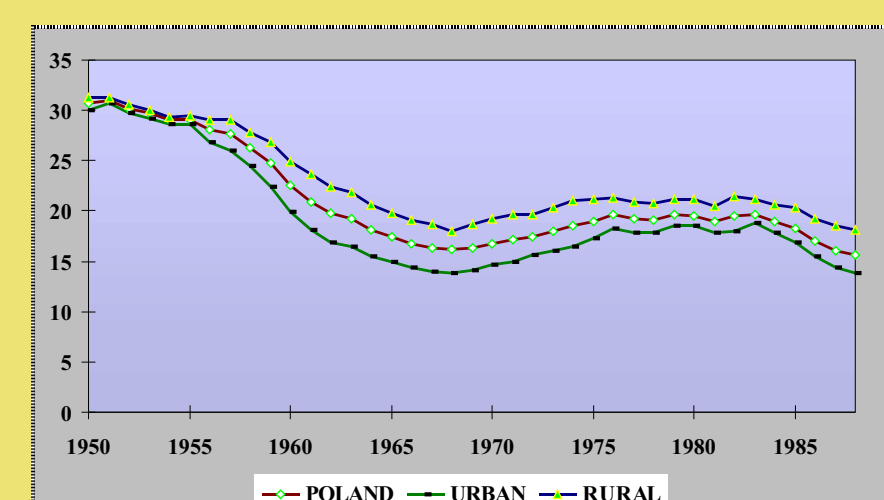
LIVE BIRTHS BY BIRTH ORDER, 1950-1988.

Early post-war years and the subsequent tens of years up till the systemic transformation in Poland were a period of many-directional changes in the number and intensity of births and fertility in Poland.

Birth rates fell in the period 1950-1968, and then they showed some insignificant growth in years 1982 and 1983. Constant decrease has been observed since 1983.

Temporal increase in births in the late 1970s and the early 1980s was mainly connected with the growth in number of first- and second-order births. This contributed to changes in birth structure by order: share of births of lower orders in the total birth structure grew, proportion of higher-order births fell down.

TOTAL FERTILITY RATES IN YEARS 1950-1988
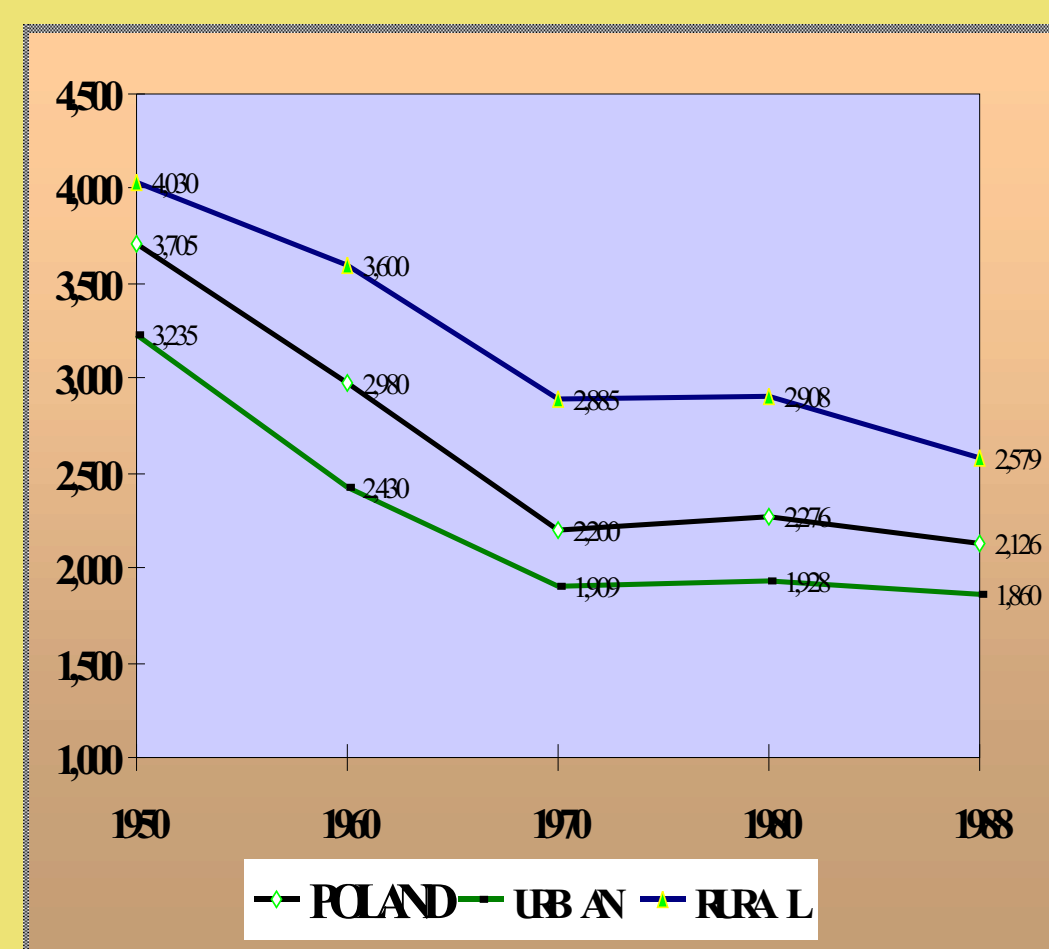
Beginning with the late 1950s, total fertility rate reported a persistent decrease from 3.5 in 1956 (3.2 in town, 4.0 in the village) to 2.2 in years 1969 and 1970 (1.7 in town and 2.9 in the village, respectively).

Total fertility rate in urban areas dropped below 2 in 1964.

COMPLETED FERTILITY OF FEMALE BIRTH COHORTS

Female birth cohort	CFR	Female birth cohort	CFR
1943	2,310	1955	2,184
1944	2,300	1956	2,172
1945	2,270	1957	2,179
1946	2,340	1958	2,182
1947	2,270	1959	2,185
1948	2,220	1960	2,170
1949	2,220	1961	2,146
1950	2,230	1962	2,127
1951	2,204	1963	2,088
1952	2,198	1964	2,064
1953	2,218	1965	2,082
1954	2,188	1966	.....

Studies on changes in fertility by cohorts show that fertility level by cohorts did not change to a significant extent.

For the cohorts of women born before 1960, reported fertility rates ensure the simple generation replacement, while in generations born after 1960 the situation is different.

Changes in fertility pattern of both, birth and nuptial cohorts can be regarded as evolutionary ones, which can be observed in a slow but sustainable decrease in total fertility rate.

Fertility Changes, 1989-1999

LIVE BIRTHS PER 1000 POPULATION IN YEARS 1989-1999

Annual birth numbers directly affect the present population size and determine the birth rate.

Statistical data show that birth number systematically decreases over the whole transition period. In 1999 382.000 live births were reported in Poland, which is 32% decrease compared with 1989. The decreasing birth number makes birth rates systematically go down. Decreases in birth number and intensity can be regarded as linear in both, urban and rural areas.

The most common demographic determinants affecting number of births include: changes in fertility level, changes in the structure of reproductive age of women, migration and changes in fertility calend

FEMALE FERTILITY RATES IN YEARS 1989 AND 1999, POLAND (LIVE BIRTHS PER 1000 WOMEN)

Changes in TFR are direct results of changes, which occurred in partial fertility rate distributions by age.

At the end of the eighties and in the beginning of the nineties age group 20-24 was the one with the highest fertility level, followed by those aged 25-29, while age group 30-34 took the third position.

This situation occurred in both urban and rural areas. In the nineties decrease in fertility was observed in all groups, but the dynamics of decrease was differentiated depending on age. The most dramatic decrease of fertility occurred among those aged 20-24 (by 45%), then among those aged 15-19, next came age groups 25-29.

LIVE BIRTHS (IN THOUSANDS) BY BIRTH ORDER IN YEARS 1989-1999

The most essential changes in distribution structure occurred in births of first, second and third orders. Generally decline in fertility level was accompanied by percentage increase of births of lower orders (mostly first and second) and decrease in births of higher orders.

Births of higher orders reported no significant changes. Pattern of having large-size families has not changed in Poland during the transition period.

Median age at childbearing increased from 26.1 in 1989 to 27.1 in 1999.

MEDIAN AGES AT BIRTH AND FIRST BIRTH

Year	Child	First child	Year	Child	First child
1989	26.1	23.0	1995	26.9	22.8
1990	26.0	23.0	1996	26.9	22.9
1991	25.9	22.9	1997	26.9	22.9
1992	26.4	22.9	1998	27.0	23.2
1993	26.6	22.6	1999	27.1	23.4
1994	26.8	22.7			

TOTAL FERTILITY RATES IN YEARS 1989-1999
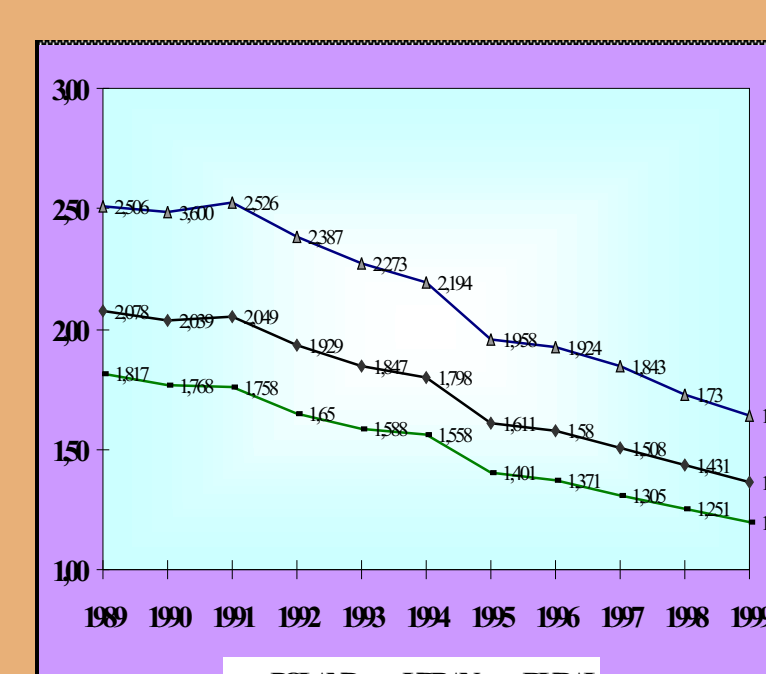
Detailed evaluation of changes during the transition period is based on presentation of changes in the range of total fertility rates, distribution of age-specific fertility rates, mean age of women at childbearing, number and intensity of births and birth order. Total fertility rate is a synthetic measure of fertility. Changes in its value present changes in level of fertility. In the years 1989-1999 value of this rate systematically decreased from 2.08 in 1989 to 1.36 in 1999 which is decrease by 34%. In urban areas total fertility rate in that period falls from 1.82 to 1.20.

FEMALE FERTILITY RATES IN 1989 URBAN-RURAL AREAS (LIVE BIRTHS PER 1000 WOMEN)
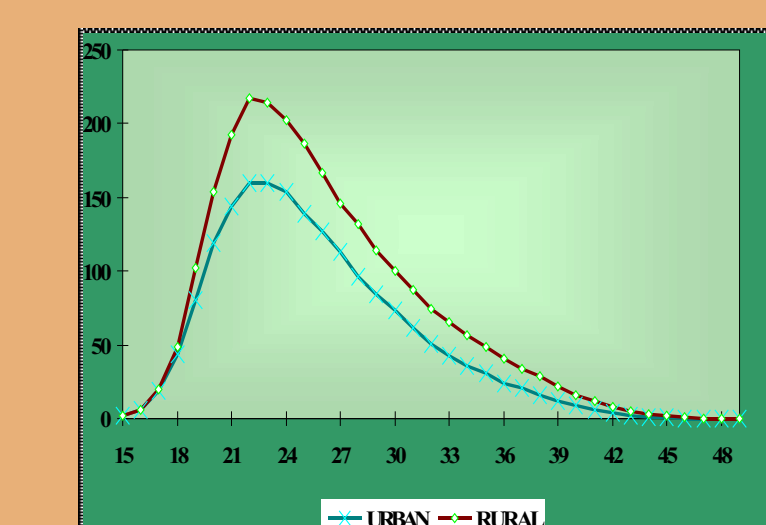
FEMALE FERTILITY RATES IN 1999 URBAN-RURAL AREAS (LIVE BIRTHS PER 1000 WOMEN)
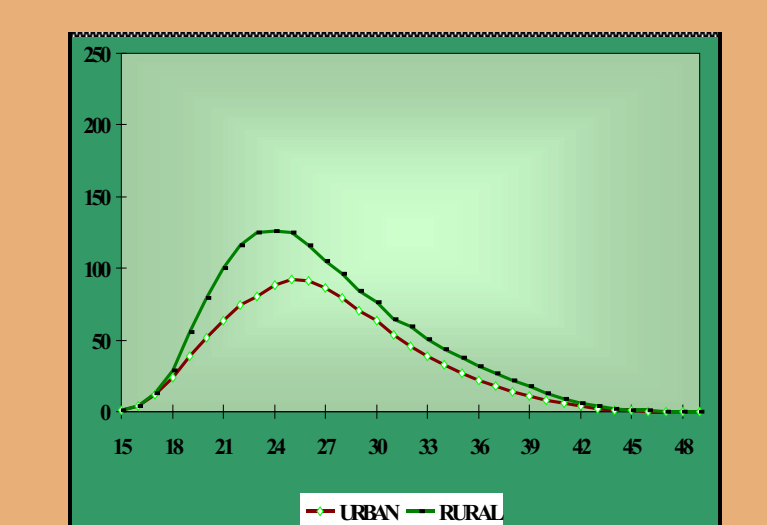
TFR-OBSERVED AND TFR-ADJUSTED FOR ALL BIRTHS IN POLAND 1988-1998*

ALL BIRTHS
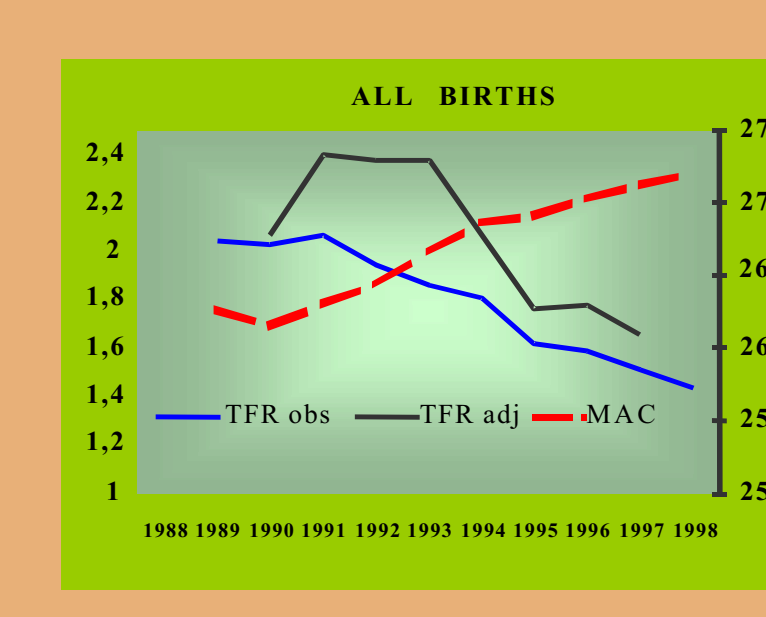
* The Bongaarts-Feeney Formula - application for Poland

Mean Age at Childbearing is systematically increasing.

TFR observed was stabilized in years 1988-1991, and since 1992 (1,95) it has been dropping. In 1998 it amounted 1,42.

TFR adjusted was increasing in years 1990-1991, in years 1991-1993, it stabilized at the level 2,4 and since 1994 has been dropping.

Difference between TFR- observed and TFR-adjusted was the biggest in 1993 -28%, and for the last three years (from 1995-to 1997) this difference was about 10%.

Family Life Cycle Changes 1988/89 and 1994/95

FAMILY STATUS LIFE TABLE MODEL

Family status life table model as a macro-simulation model is a tool enabling measuring the influence of demographic determinants (fertility, nuptiality, mortality) on changes in size and structure of family (its dynamics).
Program FAMY was used for estimation of tables.
Data for the years 1988/1989, 1994/1995 (coming from general national censuses, micro census and Central Statistical Office) were used as source data for estimation of Polish family status life table model.
Obtained results of estimation of family status life tables model are results referring to synthetic cohort (unreal) giving answer to the question:
"What would a family life history have looked like for members of synthetic cohorts if the demographic conditions in 1988/1989 and 1994/1995 had persisted through their lives?"
Synthetic results are present in Figures.

EXPECTED LENGTH OF TIME SPENT IN DIFFERENT MARITAL STATUSES (after 15th birthday).
Results of Estimation Family Status Life Table Model, Poland 1988/89, 1994/95
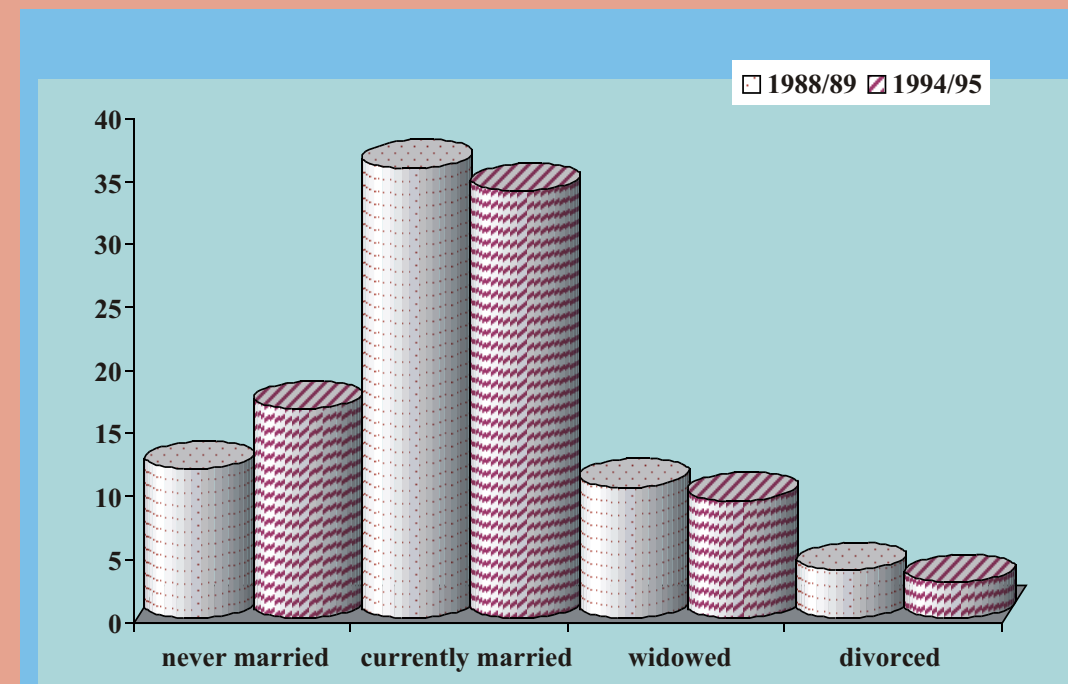
Figure synthetically shows the range of changes in marital status of people aged above 15.
Time of remaining single increased. Time of remaining in all other marital statuses for people aged above 15 declined in 1994/95 compared with 1988/89.

PERCENT DISTRIBUTION OF WOMEN AT AGE 50 BY PARITY.
Results of Estimation Family Status Life Table Model, Poland 1988/89, 1994/95
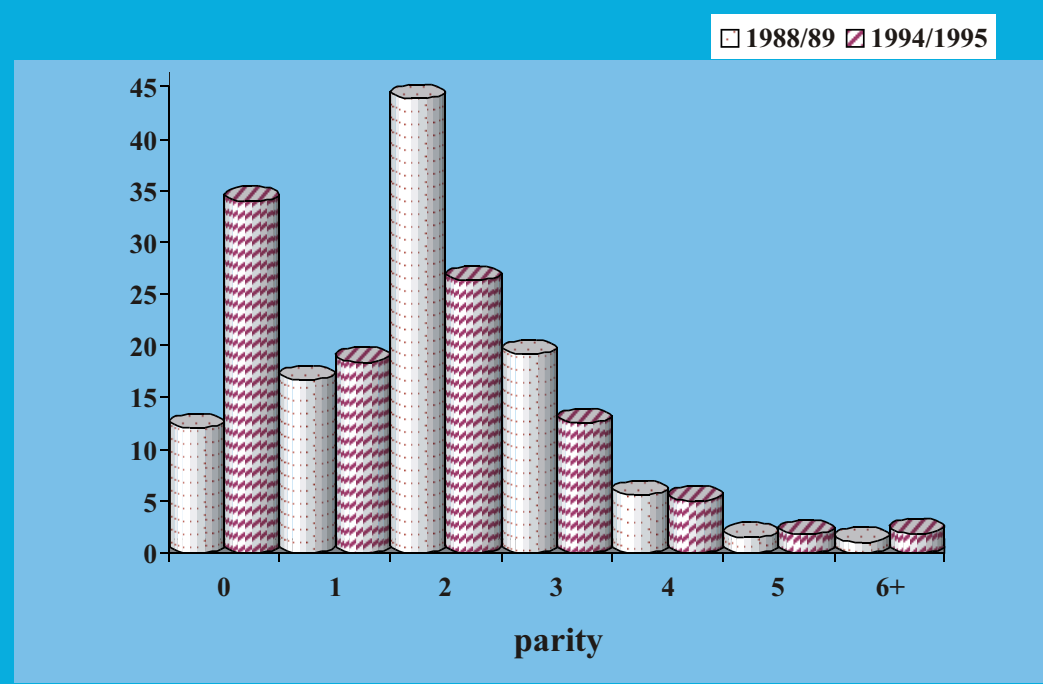
Quite interesting changes can be observed in distributions of women aged 50 by number of children.
In distribution for 1988/1989 which is one modal distribution two children prevailed.
The distribution for 1994/95 is not one modal. It has two dominating centres at number of children 0 and 2. For period 1994/95 share of women with 0 children is 36%.

Challenges for the new surveys and research, 2000-2002

"THE EVALUATION OF CHANGES IN ATTITUDES AND BEHAVIOURS YOUNG AND MIDDLE AGE GENERATIONS IN POLAND AND THEIR INFLUENCE ON PROCESS OF FAMILY, UNION AND HOUSEHOLD FORMATION AND DISSOLUTION."

Research Project, sponsored partly by The State Committee for Scientific Research

Place: Institute of Statistics and Demography, Warsaw School of Economics, WARSAW

Duration: July 2000 June 2002

The basic objective of the research project is: studying the evolution of changes in attitudes and behaviours of the young and middle-aged generations and projecting on - these grounds future processes of family, union and household formation and dissolution.

This aim needs, predominantly a survey based on a random sample of ca 5.000 people aged 15-54 using questionnaire. Survey is planned to be conducted in co-operation with the Central Statistical Office in 2001.
Another aim of the project is estimation of a macro-simulation family/household model for Poland with application of the new method, using Pro-Famy program. Results from the survey will create a base for estimation of this model.
The important goal of the project will consist in finding if the present demographic changes proceeding in Poland belong to the second demographic transitions or not. If it is so, the next stage of studies will try to answer the following questions:
1. How does the second demographic transition in Poland differ from the patterns of transition in the West Europe?
2. What may be the future consequences of the demographic transition in Poland?

STRUCTURE OF THE QUESTIONNAIRE

PART I. Family and household questionnaire

Section 1. Household members.
Section 2. Events in the period of 01.07.00 30.06.01.
Section 3. Source of maintenance, economic activity of household members aged 15 and over.

PART II. Family, Occupational and Migratory Biography, Social Network

Section 1. Information concerning the respondent, his(her) spouse (partner) and their parents.
Section 2. Union history.
Section 3. Information concerning children.
Section 4. Course of education.
Section 5. Employment history.
Section 6. Change of factual place of residence (migrations).
Section 7. Social network and social support-selected aspects.

PART III. Values, Norms, Attitudes and Behaviours. Society and Social Capital

Section 1. Religion values and norms.
Section 2. Marriage-cohabitation-divorce - separation.
Section 3. Child-parents.
Section 4. Occupational career-family- gender role.
Section 5. Family-contraception-procreation.
Section 6. Society, social capital.

General Conclusions:

Under impact of modernization process, promoted by the mass media through presentation of the new, independent style of living: new life style, family ideals and having children became values of minor importance.

Act of the Conditions for Abortion Admittance, which enabled inducing abortion free of charge under state health system, was one of the 'family planning methods'.

Decline in birth number and total fertility became a subject to interest of the state authorities, which resulted in introduction in 1967 of unpaid upbringing leaves, which women could use after maternity leave.
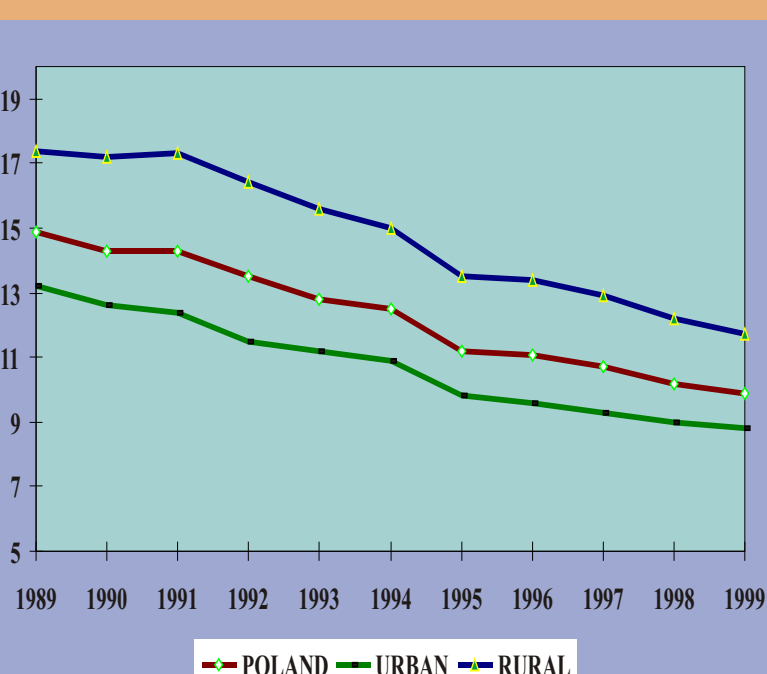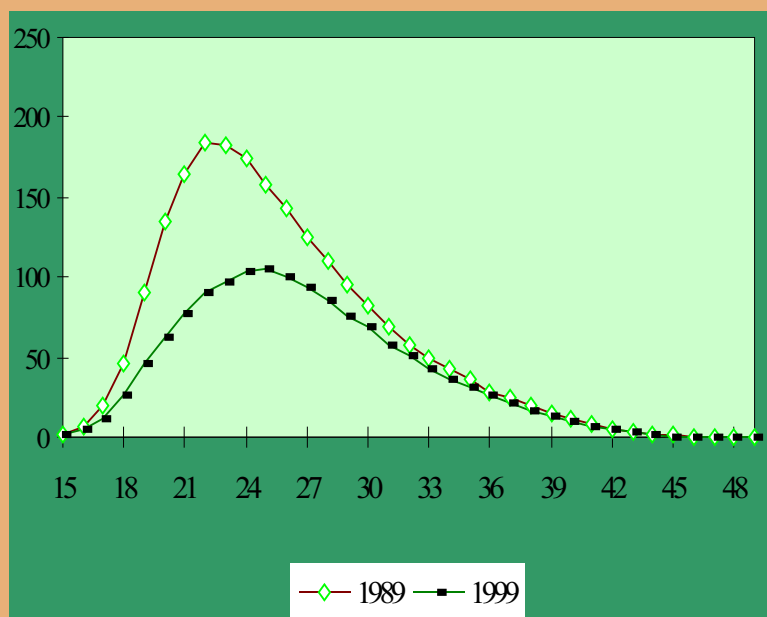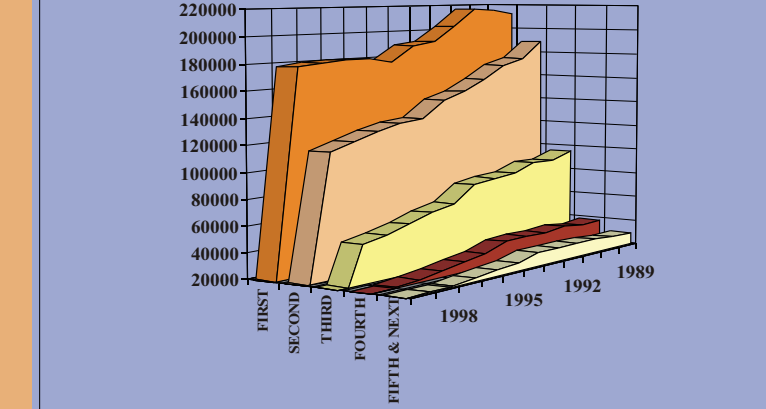
Another move was encouragement of the family pattern '2+3' (parents and three children). Propaganda was accompanied by making the upbringing leaves three years long (1972) and introducing upbringing benefit in 1981.

It should be noted, that day child-care system (nunneries and kindergartens) was well-developed. These decisions helped to reverse in the 1970s the unfavourable trend in fertility and total fertility observed before 1960.

CHANGES IN FERTILITY AND TOTAL FERTILITY IN POLAND UNDER TRANSFORMATION WERE CHARACTERISTIC OF:

1. Decrease of fertility, being mainly a result of sweeping changes in fertility pattern, reflected by:
   a) decrease of birth intensity in all age groups,
   b) differentiated dynamics of fertility decline in individual age groups.
   c) equalisation of fertility rates in age groups of the highest fertility (20-24 and 25-29),
   d) Percentage increase of age groups 25-29 and 30-34 in TFR;
2. Decline in TFR;
3. Decrease in birth number and intensity;
4. Increase in the average age of women at birth;
5. Decrease in differences in distribution of partial rates between urban and rural areas;
6. Steady and systematic increase in extra-marital births;
7. Changes in cohort fertility, indicating the advancing, evolutionary process of fertility and cohort total fertility decline.
8. Steady, still strong connections between fertility and marriage;
9. Moreover, marked changes in nuptial behaviours have occurred in Poland over the transformation period, which has been reflected by:
   a) declining trend in marriage contracts among persons in the age groups of the highest marriage intensity
   b) lower intensity of second marriage formation
   c) higher age median at first marriage
   d) slow increase in extramarital cohabitation

Interpretation in the Context of the Second Demographic Transition

THEORIES:

Economic:

*new home economics

*relative deprivation

Cultural:

*social capital theory

*human investment theory

*Social interaction theory

1. In Poland the transition to the market economy established a new relation between the state and an individual, family, household.
2. The range and scale of responsibilities imposed on an individual, family, household increased in many aspects of life.
3. Structural changes of the labour market, bleak prospects for future careers causes by structural unemployment in many regions, also influenced family and fertility decisions.
4. The education achievement varied chances on the labour market and diversified opportunities to cope with the growing alternative costs of parenthood.
5. Economic causes include escalation of direct costs of children, which is connected with decline in incomes. People perceive their financial status as too low to afford children.
6. Shortage in cheap dwelling quarters for young people has always promoted small-size families. Lower income of people does not let them buy a house and indicates the impact on fertility.
7. Boost in education standards evokes postponement and lower level of fertility. The structural change on the labour market and the increased demand of highly qualified professionals is tend to keep fertility low for some time in the future.
8. Social anomie is described as a state of deinstitutionalization and normative deregulation. This situation is characterised by uncertainty, anxiety and fears which have an impact on breaks in traditions, norms and values.
9. Uncertainty causes postponement of births and fall in fertility.
10. Cultural factors, like contesting traditional values, rejecting Christian moral imperatives, growing women's independence occurred in excess under communism and accelerated the process of secularisation.
11. Wide possibility to use mass culture stimulates occurrence of patterns of behaviour, which have been hardly known to Polish culture and tradition.
12. More liberal attitudes and behaviours encourage young people to reject their parents' authority as quickly as possible and use unlimited freedom.