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INTERNATIONAL WORKSHOP ON

SOCIAL SECURITY REFORM

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Editors



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Chapter 3:
**The Outline of the Polish
Case**

Demographic background for the social security reform

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1. Expected changes in the age-sex structure of the Polish population till 2020

The demographic background for the SSR is formed by the existing age-sex structure of the population and the expected course of demographic processes. Population projections based on the age-sex structure existing at the starting point of the period under consideration describe relatively precisely the most important changes in the size of different age groups and relations between them. According to the recent population projections of the Central Statistical Office (see e.g., Marciniak, 1996; *Prognoza...*, 1997) the following basic trends would be expected:

- the number of children in primary education age (7-14 years) has already reached its peak in 1992 with 5.2 million pupils and will decline year by year till 2007 to the level of 3.7 million, and afterwards it will start to grow slowly;
- the number of youth in the secondary education age (15-18) will grow till 2002, and of those in the university education age – till 2004, and so the pressure on the secondary schools and universities will be very high in the years to come;
- the growing size of the age group 20-29 is especially relevant from different points of view; these cohorts are expected to be highly enrolled in education and to enter the labour market; they will contribute remarkably to demographic change due to their intensity of marriage and birth; the possibility of forming

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families and households is, however, strongly limited, mostly by a tremendous shortage of relatively cheap housing facilities;

- population in labour force age will grow seriously till 2005, by approximately one million within the period 1995-2000 and by another one within the period 2000-2005, afterwards there will be a slight increase in the next 5 years period and later a decrease in this age group;
- the number of population in the age group 60 and over for females and 65 and over for males will grow rapidly after 2010, the year in which cohorts of 1950 baby boom will start to cross the lower boundary of this age group. The number of population in the discussed age group amounted to 5.3 million in 1995 and will reach 6.1 million in 2010 and then 7.9 million in 2020; in the projection referred to no radical changes in the mortality patterns are assumed; therefore, an improvement in the average life expectancy would lead to even higher figures for the aged population.
- it is predicted that a serious increase of population aged 70-79 (by 44% over the period 1995-2020) and population aged 80 and over (by 65% over the period 1995-2020) will take place;
- women will be in majority, moreover, excess of women within the old age cohorts will grow according to age; however, a higher speed of mortality decline among males than among females is assumed and - therefore - discrepancies between sexes will diminish in the future as compared to the current relations;
- single persons and especially single women, very often living alone, will be in majority among persons aged 60 and over, due to the continued trend of declining family size and a relatively high level of economic activity of women (daughters) in working age;
- one may expect a growing proportion of disabled persons among old ones, who will need special care; this should encourage to create a supportive atmosphere for intergenerational responsibility to provide care but the social security system has also to take into consideration all these factors;
- finally, it is worth emphasising that in the coming future the population aged 60 and over will be representing much higher level of education than the current old age population; this factor needs also a special attention when discussing new forms of the social security system.
- the relation between the old age persons (males 65 and over, females 60 and over) and population in productive age (females 18-59 and males 18-64) which was at the level of 23.4 old persons per 100 of those in productive age in 1995 will reach 24.6 in 2010, 29.2 in 2015 and 34.1 in 2020. This relation should be

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corrected by the information on the unemployment level and also on the economic activity rates. In general, these relations show definitely that the existing pension system, if not changed, would be disastrous in the future if maintained on the *pay-as-you-go* basis. Current decisions on the new system have to be introduced in practice immediately since the segment of the system based on the capital basis has to be introduced ahead of the time of its full operation. We have only a bit more than 10 years left before we reach this critical period.

2. Basic factors contributing to changes in the age-sex structures

Three processes may influence future changes in the age-sex distribution: fertility, mortality and migrations.

If fertility stabilises at a relatively low level i.e. below replacement - which is highly probable for the next 10-15 years - the ageing process will be more advanced than predicted. However, it will have no direct influence on the age-sex distribution of population aged 15 years and over till 2012, contrary to the impact on the structure of families and households.

The existing low level of fertility evokes the question of how far the population policy (if an active population policy is called upon in Poland) should focus on creating supportive conditions for families to have children. Our opinion is that pro-family policy should be based on the demographic assumption that the favourite family type is the family with two children. All solutions concerning pro-family policy, including social security aspects, should be based on this assumption. Independently of the periods of baby booms or busts in the number of births, to take place in the future, the pro-family policy should be constantly based on the above assumption. The fluctuation of the yearly number of births will anyway appear in the future due to existing irregularities in the age-sex structure of the Polish population.

Next, we should take into consideration an optimistic assumption that health conditions will be permanently improving and, therefore, the expected numbers of survivors at older ages will be higher than predicted. The previously given numbers should therefore be treated as a lower limit of the expected numbers of old persons. This assumption is important when discussing the social security system, in spite of the existing opinions that there are some prerequisites for expecting the pessimistic variant of growing mortality.

International migrations may influence - first of all - the population in working age groups. It is not clear for us whether the emigration flows will be higher than the immigration or *vice versa*. However, constructing a future vision of the demographic background for the social security reform appropriate scenarios should be created.

3. Future fertility and nuptiality changes

One of the crucial projection assumptions is the one concerning fertility changes strictly related to nuptiality. It is worth discussing them within the framework of the so-called *second demographic transition* (see, e.g., van de Kaa, 1987, 1994; Lesthaeghe, 1991; Kotowska, 1994). This notion is used for the stage of demographic changes observed in developed countries since the mid-sixties, characterised mostly by radical changes in fertility and nuptiality behaviours. There are no doubts that Poland is just undergoing the second demographic transition. The most important relevant changes in fertility and marriage patterns could be briefly described as follows:

- a decline in fertility below the replacement level and changes in fertility pattern manifested by postponement of birth, a growing proportion of children born out of wedlock (cohabiting couples, single mothers) and a growing proportion of childless couples;

So, in Poland as well one may observe a significant decline in fertility in all age groups and, especially, among women aged 20-24 (the highest fertility level in previous years). Moreover, declining disparity of fertility levels between age groups 20-24 and 25-29 is noticed. One may expect that the new peak of fertility may appear in the age group 25-29, since the new cohorts extend their period of education and moreover seem to prefer getting an economic stability before taking the decision to marry and to have a child. The social aspects of this phenomenon imply the need of changes in the system of stipends for students, housing credits, the health care system, etc.

- the contraceptive practices become more and more widely spread among all social groups of the society and become widely used by couples to limit family size according to their wishes; moreover, having children out of wedlock is getting an increasing social acceptance; this should be treated as a definite challenge comparing to previous periods, calling for further programmes of sex education, especially among young cohorts; a growing proportion of children born out of wedlock is observed recently also in Poland.

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- a decline in marriage propensity, postponement of marriage, cohabitation, and increasing divorce rates are the main signs of changes in marriage patterns;

The age at marriage will probably be very soon growing among young cohorts in Poland. Currently, one may observe a declining yearly number of marriages in spite of the growing number of persons in marriageable age. Simultaneously, one may expect a growing number of persons cohabiting without setting an official marriage. Cohabitation may, in general, postpone a decision to marry.

- one may observe a growing number of single parents in the society.

This factor requires a special attention in the new social security system.

4. Changes in living arrangements

An additional demographic component which needs to be taken into account in the debate on different solutions of the social security system are changes in living arrangements. A decline in fertility and shifts in its pattern, changes in marriage pattern (a decline in marriage propensity, postponement of marriage, cohabitation, increasing divorce rates), observed under the second demographic transition, form the basic demographic determinants of changes in the number of households and their structures. Moreover, a decline in mortality, sex differentials in mortality as well as the growing residential and economic independence of adult children, which results in the changed pattern of leaving the parental home, contribute to household trends. Main socio-economic factors responsible for these changes are as follows: changes in individual preferences, in cultural and social norms, housing supply, shifts in labour sharing within households linked with growing women's participation in the labour market, household welfare, and the labour market situation.

The recent developments in the household number and structures in the developed countries may be briefly characterised by the following trends:

- the number of households increased quicker than the population, along with the growing number of childless couples and families with one or two children; this affected the household composition by size and led to a decline in the average size of a household,
- the number of one-person households rose significantly and a majority of them are headed by women; looking at their composition by marital status one can find that among men single persons dominate and are followed by widowers while among women widows followed by single prevail; distortions in the age structure according to sexes are also observed,

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- a decline in cohabitation of 2 or 3 generations in the same dwelling contributed to a rise in the number of nuclear families and a decline in a number of complex households,
- increasing number of one-parent households,
- an increase in a number of consensual unions.

Household developments in Poland followed, in general, some of these trends. However, due to existing differences in the pace of fertility, nuptiality and mortality changes as well as the differences in the influence of socio-economic factors they have not been so advanced as in the developed countries. The average size of households is still higher - 3.06 persons per household in 1995, while in most of the developed countries this indicator did not exceed 2.7 in 1990. The rising number and proportion of one-person households resulted in 19.7% of such households in 1995 (22.0% in urban areas and 15.1% in rural ones) while this indicator amounted to 25%-20% in West European countries around 1990. Difficulties with starting of an independent household are manifested, in particular, in the increase in the proportion of multi-family households, mostly of the two-family ones (from 3.9% in 1978 to 4.9% in 1988 and then to 5.1% in 1995), contrary to changes observed in developed countries. One-parent families constituted 16.8% of family households in 1995 versus 15.4% in 1988. An acceleration of fertility and nuptiality changes in the 1990s along with improvements in mortality, as well as a possible impact of the socio-economic factors similar to that found in the Western Europe allow for making of assumptions on the future course of household changes in Poland, based on the developments observed in that part of Europe (see Bolesławski, 1997). According to recent household projections the average size of household will decline by 2020 to 2.4 and 2.8 persons in the urban and rural areas, respectively. The share of one-person households will increase to 27% in 2020.

The shifts in living arrangements should be related not only to different solutions of the social security system (family allowances, pensions). They are also important for studying household behaviours in the financial markets, especially the saving propensity.

References:

- Bolesławski L. (1997) *Prognoza gospodarstw domowych 1996-2020* (The forecast of the households 1996-2020's in Polish), Departament Badań Demograficznych, GUS, Warszawa.
- van de Kaa D. (1987) Europe's Second Demographic Transition, *Population Bulletin*, 42, 1, Population Reference Bureau, Washington.

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- van de Kaa D. (1994), The Second Demographic Transition Revisited: Theories and Expectations, 1993. In: *Population and Family in the Low Countries 1993. Late Fertility and Other Current Issues*, NIDI-CBGS Publications, Swets & Zeitlinger B.V., Lisse.
- Kotowska I.E. (1994) Prognozowanie gospodarstw domowych. Problemy i metody. (Forecasting of the households. Problems and methods). *Monografie i Opracowania*, 396, Szkoła Główna Handlowa, Warszawa.
- Lesthaeghe R. (1991) The Second Demographic Transition in Western Countries: an Interpretation, *IPD-Working Paper* 1991-2, Brussels.
- Marciniak G. (1996) Prognoza ludności Polski do roku 2020 - wybrane wyniki (Population projection for Poland till 2020, selected results). *Studia Demograficzne*, 4/126.
- Prognoza ludności Polski według województw na lata 1996-2020 (1997) (Population projection of Poland by voivodships, 1996-2020), *Informacje i opracowania statystyczne (Information and statistical papers)*, GUS, Warszawa.

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