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THE DEMOGRAPHIC STRUCTURE OF SOCIETY AND INDIVIDUAL FARMERS' SOCIAL INSURANCE

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ABSTRACT. Farmers' social insurance system is financed by the state budget to a considerable degree. It results from low premium paid by insured, as well as the lack of its resistance towards changes in demographic potential. In the face of that, considering both economic and demographic factors the farmers' social insurance system reform should be introduced.

Key words: old-age pension system, demographic structure, incomes and expenditures of ODPF

Introduction

The year 1999 was crucial for Poland, as four reforms were introduced, comprising regional governments, education, medical service and social contributions. The reform of the insurance system deserves a special attention, as against all appearances, it does not concern the whole society. Farmers, who constitute 15% of total amount of labour force, were not subjects to that reform. The act regulating individual farmers' social insurance, legally binding since 1 January 1991, was only subject to slight amendments. The discussion over individual farmers' social insurance reform has been initiated a number of times, but then postponed for a variety of reasons. At the same time, the problem remains of key importance for the whole society, as the system of insurance is, to a large degree, financed by the state budget (93% of Pension Fund incomes). This, in turn, is caused by both relatively low level of contributions paid by the insured and lack of its ability to overcome social threats resulting from society's aging (coefficient of demographic dependence is on the level of 24%) and low population growth. It also needs to be underlined that the functioning of pension schemes significantly influences the economic situation of a country, including the level of unemployment and the rate of economic growth (**Góra** 2003).

The paper aims at analysing demographic factors influencing the system of individual farmers' social insurance.

Demographic structure

Similarly to other countries, Poland is facing the problem of society's aging. It is caused by, first of all, a low rate of births and an increase of average life expectancy. Simultaneously the process of population reproduction is affected by age structure of society, which influences size of fertility, births and deaths (**Holzer** 2003).

These phenomena can be noticed mainly in urban areas. However, they also concern rural areas and significantly influence farmers' social insurance system, as they result in prolonged payments of long-term social benefits and an unfavourable relation of the number of insured people to the number of beneficiaries. Apart from that, they influence the financial situation of KRUS (Polish Agricultural Social Insurance Fund), especially the Pension Fund. It should be mentioned, that it manages finances independently. Finance base of insurance and the KRUS activity are the following funds: Farmers' Insurance Premium Fund, Pension Fund, Administrative Fund as well as Prevention and Rehabilitation Fund. Pension Fund consists of premiums, financial resources of Social Insurance Fund and state budget subsidies. The resources of Pension Fund are assigned for pension insurance benefits, pensions from other social insurance, health insurance, as well as refund of defined costs of Social Insurance Fund.

Analysing population growth (the difference between the number of live-births and the number of deaths), one may notice the phenomenon of society's aging in Poland between 1990 and 2004 (Fig. 1). In the analysed period, population growth showed a declining tendency. Between 1990 and 2001, live-births outnumbered the number of deaths. Since 2002, however, an opposite relation has taken place. Rural areas show positive population growth, while as regards towns and cities, the number of deaths has outnumbered the number of live-births since 1998. The average birth-rate in urban areas amounts to 11 400 and in rural areas 38 400. Simultaneously in rural areas the number of live-births surpassed the number of deaths nearly by 30 000 in 1991-1992, 1997-2000, whereas in 1990, 1993-1996 and 2001-2005 by 20 000.
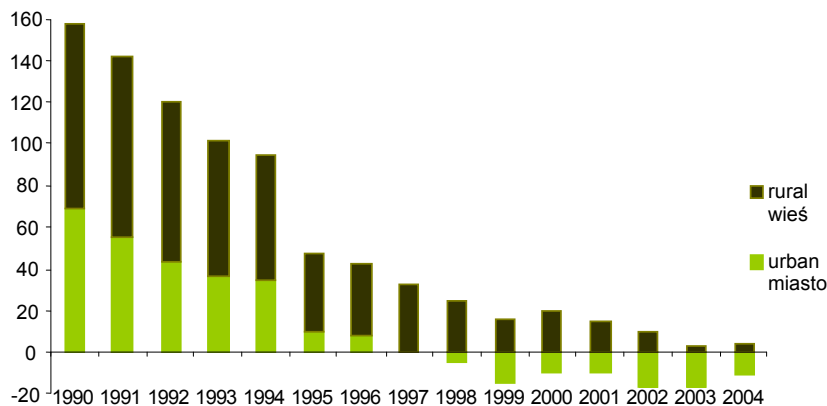

Fig. 1. Population growth in Poland in 1990-2004 (thous.)
Source: authors' own elaboration on the basis of CSO data.
Ryc. 1. Przyrost naturalny w Polsce w latach 1990-2004 (tys.)
Źródło: opracowanie własne na podstawie danych GUS.

The declining tendency in population growth is significantly influenced by the decline of the female fertility index (the number of live-births per 1000 women aged 15-49) (Fig. 2).
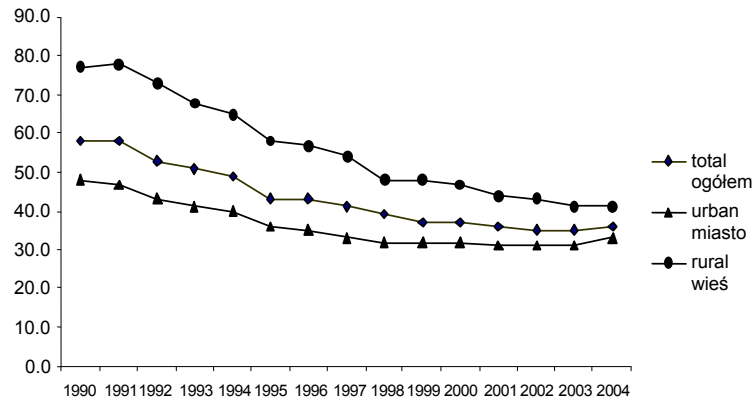

Fig. 2. Fertility index in 1990-2004
Source: authors' own elaboration on the basis of CSO data.
Ryc. 2. Płodność kobiet w latach 1990-2004
Źródło: opracowanie własne na podstawie danych GUS.

Between 1990 and 2003, the fertility index showed a declining tendency, remaining periodically constant between 1990 and 1991, 1995 and 1996, 1999 and 2000 and 2002 and 2003). The number of live-births per 1000 women decreased in 1995 and increased slightly in 2004. Also, the fertility index was lower in towns and cities and the average number of births per 1000 women amounted to about 36. At the same time, rural areas, despite a decreasing tendency in the number of births, showed a higher average number of births, i.e. about 56. In years 1990-2004 women's fertility in rural areas was by 24--70% higher than in urban areas (adequately in 2004 and 1992). Shifting the age of the greatest fertility from the age group of 20-24 to the group of 25-29 affected the fertility coefficient significantly. That shifting is related to both increment of people education level and the marital status. Comparing the data the National Census conducted in 1998 and 2002 one can observe that the number of people with higher education grew by 74% and by 118% with vocational education after secondary school, whereas the number with primary education only fell by 12% (Rocznik... 2005). Simultaneously the number of maids was growing and the number of married women as well as in common-law marriages. In 1988 maidens constituted about 19% of all women, while in 2002-by 24%. Moreover, the number of maidens was twice higher in urban areas than in rural areas (urban-733 000, rural -333 000). The number of married women and in common-law marriages fell by 2% in 2002 comparing to 1988, while in urban areas by 2%and in rural areas by 3%. It is worth mentioning that similar situation concerns men. The bachelors' number grew by 32% in the same period. Moreover, the increment of bachelors' number in urban areas was twice higher than in rural areas (urban-812 000, rural-374 000). The number of married men and in partner relationships was characterised by falling tendency (by 2%). Comparing 1988 to 2002 that number fell by 1%, whereas in rural areas by 3% (Rocznik... 2005).

Another factor determining society's aging is an increase in average life expectancy, which can be analysed basing on the changing percentage of people aged 65 and more (Fig. 3). Between 1990 and 2004 the share of elder people increased (by 5 pp.), while in 1997 comparing to 1996 the decrease of that age group amounted 13% (6.9 m.). The share of older people in overall population rose between 1990 and 2004. Between 1990 and 2004, the increases of the value were regular and the average number of people aged 65 and more amounted to 4.5 m. Between 1993-1996 one can observe intensity of ageing process and the average number of older people totalled 5.08 m. Simultaneously the highest increment of people of age of 65 and more was in 1993 comparing to 1992. In 1992 the number of older people constituted 4.0 m, while in the following year – 4.9 m. In the investigated period the average population growth of people of age of 65 and more in urban areas totalled almost 3% and in rural areas – 1%.
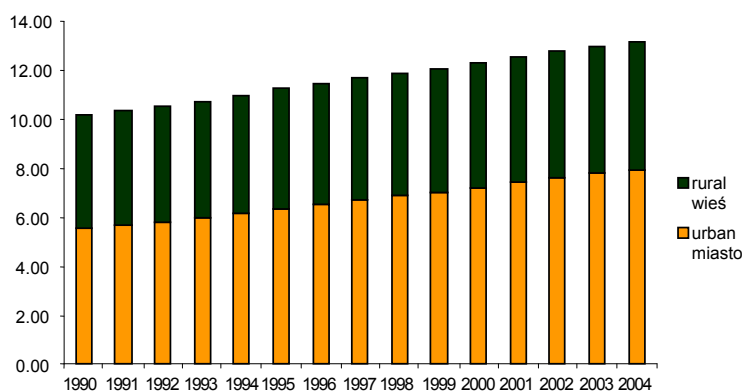

Fig. 3. The share of older people in 1990-2004 (%)
Source: authors' own elaboration on the basis of CSO data
Ryc. 3. Odsetek osób starszych w Polsce w latach 1990-2004 (%)
Źródło: opracowanie własne na podstawie danych GUS.

Rural areas showed a slower increase in the number of older people or even a decrease in the number in 2002, compared with 2001. Moreover, the predicted average life expectancy for a 60-year-old man was 17 years (17.5 for towns and cities and 17.2 for rural areas) and exceeded the value from 1995 by over 1.5 years. As regards women, the predicted value in 2004 amounted to over 22 years (22.5 for towns and cities and 22.6 for rural areas) and exceeded the value for 1995 by 2 years (Rocznik... 2005). It seems crucial that, according to the prediction, the number of people in non-working age for every 100 people in working is expected to increase (2005-56, 2010-54, 2015-58, 2020-65, 2025-70, 2030-72).

Society's ageing results from a number of new factors, first of all - social factors including high level of unemployment, unfavourable pro-family policy and the development of a new family model. The new political system imposes a change in the hierarchy of values, as the meaning of education and career is constantly increasing and it happens that these two become more important than family life. It is also connected with the development of medicine (i.e. using contraceptive medicaments) and changes in the number of marriages. It needs to be noticed that the number of marriages

(191 824 in 2004) is lower than the number of broken relationships (divorce or death of one of spouses) (217 938 in 2004). However, the number of broken marriages only slightly outnumbers the number of new marriages in rural areas (by 73 marriages in 2004) and the difference is higher in cities – it amounted to 25 951 in 2004 (11 759 in 1995). It is worth mentioning here that the number of new marriages in 1990 (255 369) outnumbered the number of broken marriages (226 363). The changes of marital status lead to family creation and disintegration. Family is a basic society unit, in which pro-creation takes place. Facing that fact productiveness is related both to relationship types and demographic features of partners (**Okólski** 2004).

At the same time, the demographic dependency ratio, DDR), showing the relation of pensioners to people in working age, reached alarming levels (**Liberda** 2007) (Fig. 4).
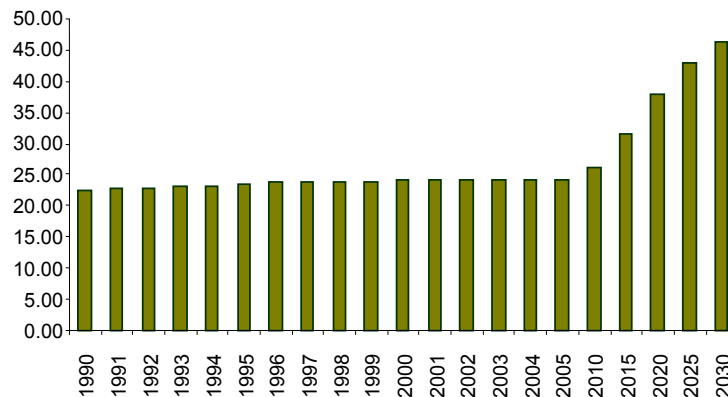

Fig. 4. Demographic dependency ratio (%). In 2005-2030 the ratio value
was set on the basis of population in productive and unproductive
age forecast
Source: authors' own elaboration on the basis of CSO data.
Ryc. 4. Współczynnik zależności demograficznej (%).W latach 2005-
-2030 wartość wskaźnika jest wyznaczona na podstawie prognozy
ludności w wieku produkcyjnym i poprodukcyjnym
Źródło: opracowanie własne na podstawie danych GUS.

Between 1990 and 2030, the demographic dependency ratio shows an increase from the level of 22.38% to 46.20% (in 2001 a slight decrease of 0.2% was observed in com-parison to 2000). The changes were regular until 2005, not exceeding 1%, but between 2006 and 2030, a dramatic increase of the ratio can take place (by over 22%), which is caused by a great number of people born in the after-war population explosion period joining the group of pensioners. Moreover, the value of the ratio is influenced by exter-nal and internal migrations. About 20 thousand people emigrate from Poland each year, 70% of whom in productive age. At the same time, temporary emigration, aimed at increasing people's financial welfare, has recently become more popular.

Apart from that, internal migrations of people have intensified whereas towns and cities show negative net migration balance. At the same time, rural areas have shown positive net migration balance since 2000 and in 2004 the influx exceeded the reflux by about 41 000, of which 70% was constituted by people in productive age. This relation has been taken into account in demographic predictions, as the number of people in

productive age in rural areas is expected to be greater than the number of people in retirement age. An opposite relation could be observed between 1990 and 2005, i.e. the number of people in retirement age continued to increase and the number of people in productive age continued to decrease.

A change in the demographic structure is represented in the values of the system dependency ratio – SDR) (Fig. 5), which has been calculated by dividing the number of beneficiaries by the number of individual farmers subject to social insurance.
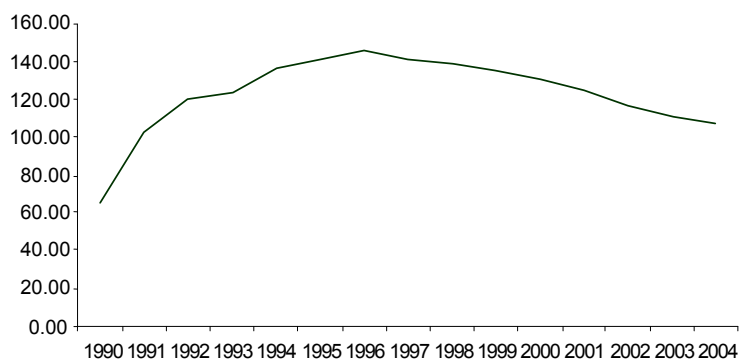

Fig. 5. System dependency ratio in KRUS (%)
Source: authors' own elaboration on the basis of KRUS data.
Ryc. 5. Współczynnik zależności systemowej w KRUS (%)
Źródło: opracowanie własne na podstawie danych KRUS.

Between 1990 and 1996 the system dependency ratio showed an increasing tendency and since 1997 it began to decrease gradually. The number of paid benefits increased substantially along with the share of disability pensions (from 29.28% in 1990 to 41.06% in 2004) and a decrease in the share of old-age pensions (from 69.80% in 1990 to 56.27% in 2004). Such high values of the ratio reflect the fact that more and more people become beneficiaries whereas the number of contributors is declining. It is connected with an extended period of acquiring education by young people, a shift in time as regards their entering the labour market and paying social insurance contributions. At the same time, in spite of a continual declining tendency, the death ratio (per 1000 people) reached high values (10.2% in 1995, 9.5% in 2004). The tendency is more evident in rural areas where the ratio ranges between 11.2% and 9.9%, ranging at the same time between 10.2% and 9.3% in towns and cities. Moreover, there is a high death ratio between men in productive age, which results in an increase of child benefits and maintenance payments. The number of insured people and the number of beneficiaries influence the amount of incomes from social contributions as well as the amount of expenditure of individual farmers' social insurance system and the Old-age and Disability Pension Fund. It needs to be underlined that in the initial period, the number of KRUS beneficiaries increased, reaching a level of 2.04 m. in 1995, but showing a declining tendency in 1996. At the same time, the number of insured people declined between 1990 and 1996, increased from 1999 and reached a level of 1.58 m. in 2004 (except for 1998 when the number decreased slightly in comparison with 1997). In spite of an increasing tendency in the number of insured people, constant during a six-year period, incomes from the Old-age and Disability Pension Fund are not sufficient to

cover the expenses resulting from paying old-age and disability pensions (Fig. 6). Therefore, the Old-age and Disability Pension fund is financed by the state budget in over 90%, which is an essential argument for restructuring its reshaping.
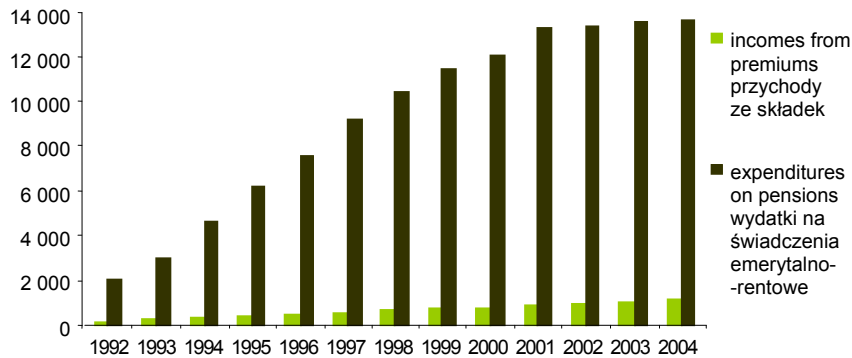

Fig. 6. Incomes and expenditures of Old-age and Disability Pension Fund in 1992--2004 (mln)
Source: authors' own elaboration on the basis of CSO data.
Ryc. 6. Przychody i wydatki Funduszu Emerytalno-Rentowego w latach 1992-2004 (mln)
Źródło: opracowanie własne na podstawie danych GUS.

According to the Act of individual farmers' insurance of 20 December 1990, the Fund receives donations from the state budget and old-age and disability pension contributions and its expenses include first of all payments of old-age and disability pension benefits. If the incomes of the Old-age and Disability Pension Fund reach a value equal to its expenses, there is financial equilibrium. Increasing the level of contributions may therefore result in decreasing the level of budgetary donation.

The current quarterly old-age and disability pension contribution amounts to 30% of basic old-age pension while the rate of a monthly contribution, which could result in the financial equilibrium, ranges around 130% of basic old-age pension. However, should the rate be increased, the economic situation of both individual farmers and the whole society should be taken into account. Imposing an excessive level of contributions may result in excessive tax burden, which may further lead to increased unemployment and stifled economic growth.

Conclusion

The levels of incomes and expenditures individual farmers' pension system result from the level of contributions paid of insured people and the amount of paid benefits. However, it is also influenced by demographic changes in a society. The analysed data shows that the number of people reaching retirement age, benefiting from pensions, is on the increase. This tendency is going to last, due to society's ageing. Hence, taking into account demographic and economic factors, a reform of individual farmers' pension system should be introduced, which would change the sources of donations, the subjec-

tive and objective scope and also the nature of the benefits. At present, the changes in the demographic structure of society are of greater meaning for social policy than the dynamics of population growth

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STRUKTURA DEMOGRAFICZNA SPOŁECZEŃSTWA A UBEZPIECZENIE SPOŁECZNE ROLNIKÓW INDYWIDUALNYCH

S t r e s z c z e n i e

System ubezpieczenia społecznego rolników indywidualnych w znacznym stopniu jest finansowany z budżetu państwa. Wynika to zarówno z niskiej wysokości składki uiszczanej przez ubezpieczonych, jak i braku odporności tego systemu na zmiany zachodzące w potencjale demograficznym. Zagrożenia demograficzne są spowodowane zmniejszającą się liczbą urodzeń oraz wydłużeniem średniego czasu trwania życia. Ma to istotny związek ze wzrostem współczynnika zależności demograficznej. Jednocześnie nie wpływa to na wielkość współczynnika zależności systemowej, który ulega stopniowemu spadkowi. Jest to spowodowane zachowaną od 1999 roku tendencją wzrostową – dotyczącą liczby ubezpieczonych, natomiast spadkową – dotyczącą liczby świadczeniobiorców. Pomimo tak korzystnej relacji, przychody FER, pochodzące ze składek, nie wystarczają na pokrycie wydatków związanych z wypłatą świadczeń. Wobec tego uwzględniając zarówno czynniki ekonomiczne, jak i demograficzne należałoby przeprowadzić reformę systemu ubezpieczeń społecznych rolników indywidualnych.