

STATISTICS IN TRANSITION-new series, July 2010
Vol. 11, No. 1, pp. 161—175

THE ECONOMIC ASPECTS OF CONTRADICTION BETWEEN GENERATIONS IN POLAND

Izabella Kudrycka¹, Małgorzata Radziukiewicz²

1. Introduction

The conflicts between generations exist in every time and in every country, and concern many domains of human existence. The main reasons for conflicts may be determined as the differences in psychological and behavioral characteristics of each generation. These differences have important influence on the principles, preferences, choices and culture of the particular generation. For example, the generation of flowers – children (“hippies”) was quite different from the next generation – generation of “yuppies”. For hippies the happiness, lazy life with friends in commune, and narcotics were the crucial targets, while the economical success and individual carrier at job were the most important for “yuppies”, however for that two generations the conflict among them and older generations was common.

The conflicts between generations are very interested matter from the point of view of psychology, sociology and culture, but our study is devoted to the economic aspects of that phenomenon.

The paper consists of five main parts and conclusions. The first one is devoted to the presentation of general topics of the paper, that is the identification of contradiction areas, while next four contain the analysis of the particular contents.

2. The areas of contradictions between generations

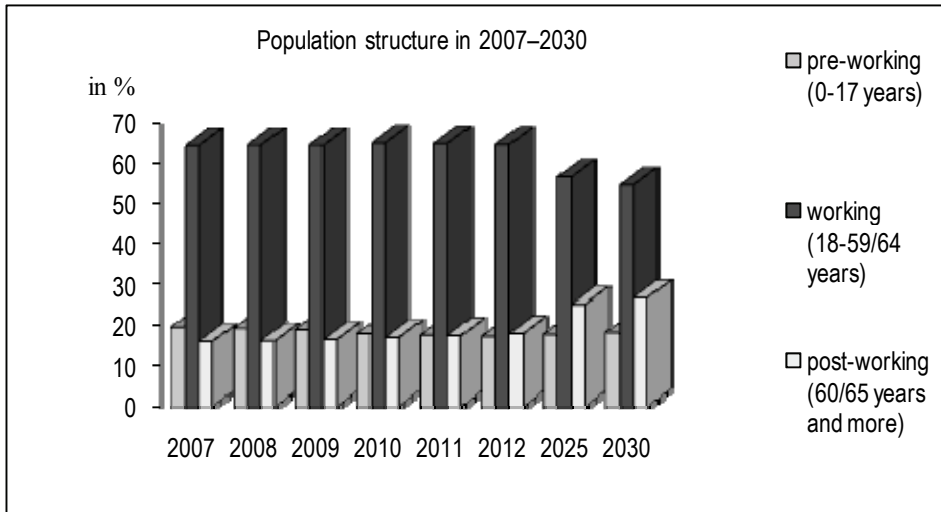
First, it is necessary to determine what the term “generation” means. In our opinion, generation is the group of people, or households living in that same finite period of time, and sharing the time with some part of previous generations. Each generation can be divided by separate three groups: people belonging to the educational period, people active on the labour market and retired people. The distribution by age of any particular generation and law determining the minimum level of education, together with regulations concerning the minimum age for retirement, have influence on the structure of generation. The impact of economy

¹ University of Finance and Management in Warsaw.

² Institute of Market, Consumption and Business Cycle Research in Warsaw.

takes also meaningful part in this partition, although the demographic structure in previous time periods has the conclusive role. Using the age limits 0–17 for pre-working time, 18–59/64 for working and post-working, the structure of mentioned above three groups in Poland, in last and future years is presented on Figure 1.

Figure 1. Population structure in last 4 years and projection on 2010–2030 (in percentage)



Source: on the basis: "Rocznik Demograficzny Polski", GUS, Warszawa, 2008.

Such dynamic changes of structure – steady growing share of post-working population and diminishing shares of people in working activity age – must be the reason of the contradiction between generations due to some of the economical aspects. The indices of population growth of the third group in 2015, related to number for 2007 is 121.3% and 152.7% in 2030. The appropriate indices for the first group are equal to 92.4 % and 83.5%, what means the reduction of the population in pre-working period, what will provide to the diminishing of the birth rate in future, and diminishing the total number of population in Poland.

For the purpose of our consideration we divided the economical aspects of contradiction between generations on the following parts:

- Social Security System,
- Credit and Debts on macroeconomic level,
- Welfare, Income, Consumption and taxation,
- Revenue and Expenditure of the State Budget.

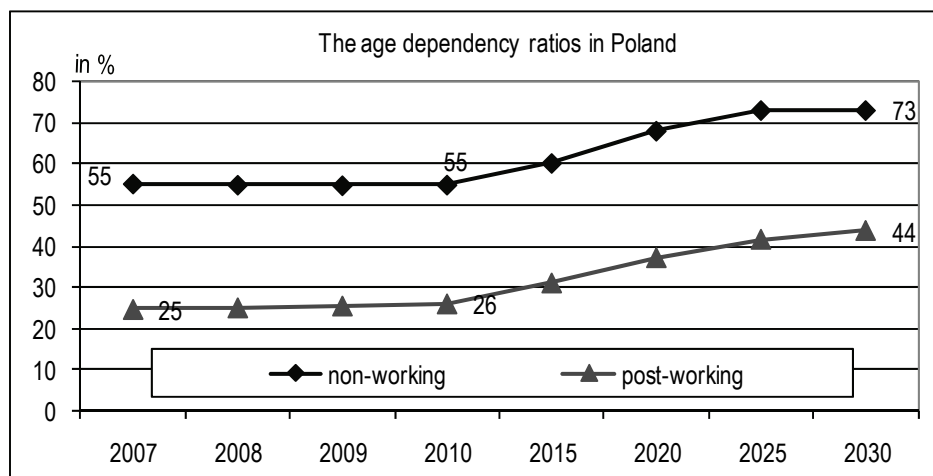
All above areas of contradictions between generations will be presented in detail in the next parts of the paper, and illustrated by the statistical data.

3. Social Security System

In Poland, and also in almost all European countries social security system is so called “pay as you go”, what means that pensions of the retired persons are funded from the contributions of working group of each generation. When the social security system does not own any capital, the benefits received by the third group of generation are equal to the contributions of the second generation group. So, now it is obvious that such demographic structure of generations as we can observed in Poland, must be the reason of contradiction between generations. Additionally, the life expectancy for women in age 60 was in 2008 – 23.1 (more 1.6 years than in 2000), and for man in age 65 was in 2008 – 17.9 (more than 1.2 in 2000), and will be increasing in future.

The age dependency ratios are growing in Poland in last 3 years and will be growing in future (see Figure 2).

Figure 2. The age dependency ratios in Poland, 2007–2025



Source: on the basis: “Rocznik Demograficzny Polski”, GUS, Warszawa, 2008.

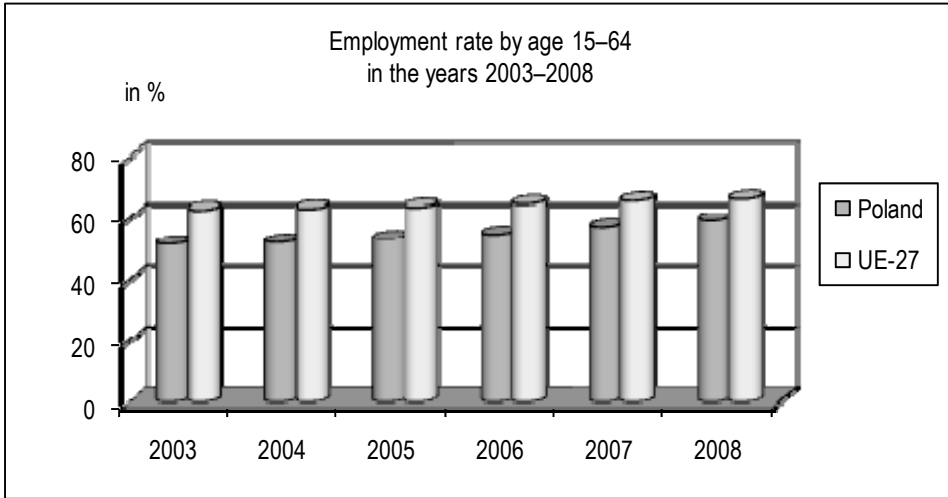
As we can observe, for 100 working persons the number of post-working is growing from 25 in 2007 and 2008 to 42 in 2025. Adding the number of non-working persons we obtain 73 persons dependent on 100 persons in working age in 2025. In comparison with average dependency ratios for the European Union, which was and is predicted for future 2030, it is 36 (for 100 working persons the number of post-working).

Such growth of age dependency ratios means that young generation must pay too much to the social security system, what leads to intergenerational reallocation of resources and may be the source of conflict between generations.

The age dependency ratios may be worsening if we take into account the real number of working persons and also the form of employment. The real number of

working persons depends on the situation on labor market and also on balance of migration for persons in working age. In the last year we can observe increasing unemployment rate, and in 2004–2008 increasing emigration of young people to old European countries, what means the reduction of payments to the social security system in Poland.

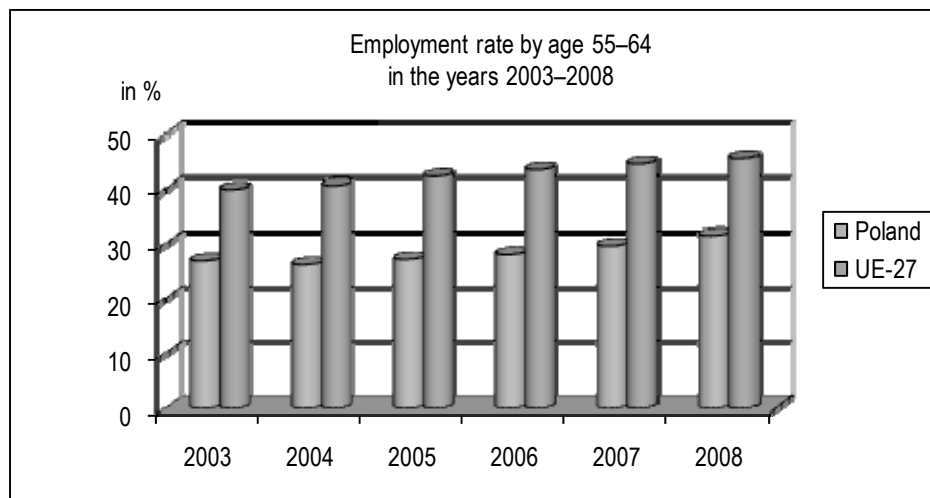
Figure 3. Ratio of employment in Poland and in the EU



Source: on the basis: "Pracujący w gospodarce narodowej", GUS, Warszawa, 2009.

We also observed the special forms of unemployment which enable to avoid payments to the social security system. Share of employees in total number of working is about 74%¹. Generally, the ratio of employment in Poland is lower than in the EU (see Figure 3 and Figure 4) and has negative impact on the inflow of funds to social security system.

¹ It means that 26% people are working on part time or without payments to social security system.

Figure 4. Ratio of employment in Poland and in the EU

Source: on the basis: "Pracujący w gospodarce narodowej", GUS, Warszawa, 2009.

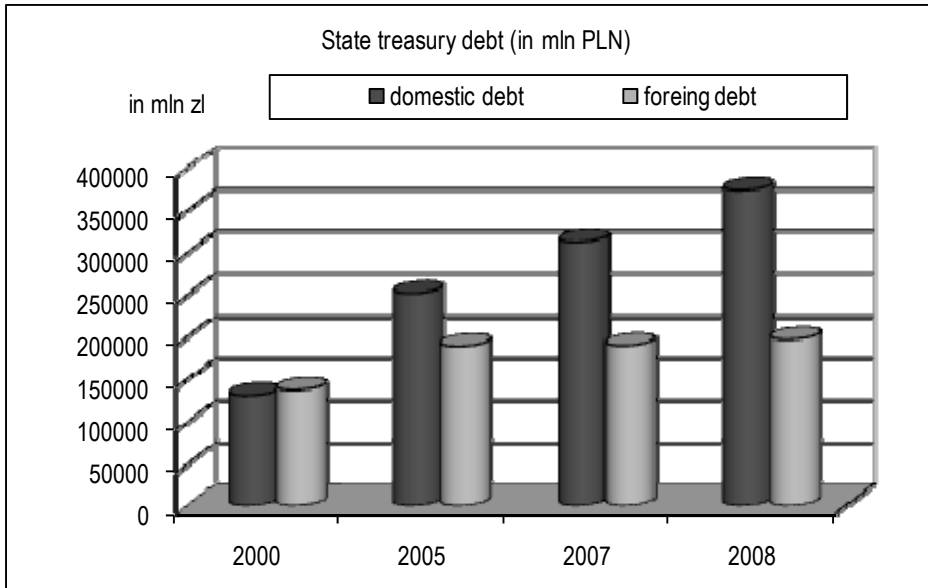
The reasons of such low employment rate in Poland are: the large number of disabled people among the population at activity age, the law regulations, which establish the relatively early age for retirement (60 for women and 65 for men) and high unemployment rate, especially in some regions of Poland.

4. Credits and Debts on Macroeconomic Level

The debts are also a source of contradiction between generations, because the credits which were taken by one generation become the debts of the next generations. For example, the last rate of credits which were taken in the 70's (so called the Gierek's debts) was paid in 2009. So, enlargement of welfare of one generations is the reason of "tightening belt" for the next generations.

It is necessary to recognize the differences between the sources of credits and allocation of the credit funds. The extremely worse is such situation, when credits are provided only for consumption¹ and there will not be any profits from it in future. Better, if the investment will be the destinations of credits and there are positive expectations concerning the future profits. It takes place when the investments are allocated in high technologies or in infrastructure, which has impact on economic growth.

¹ However growth of consumption has positive influence on economy but only in short time horizon.

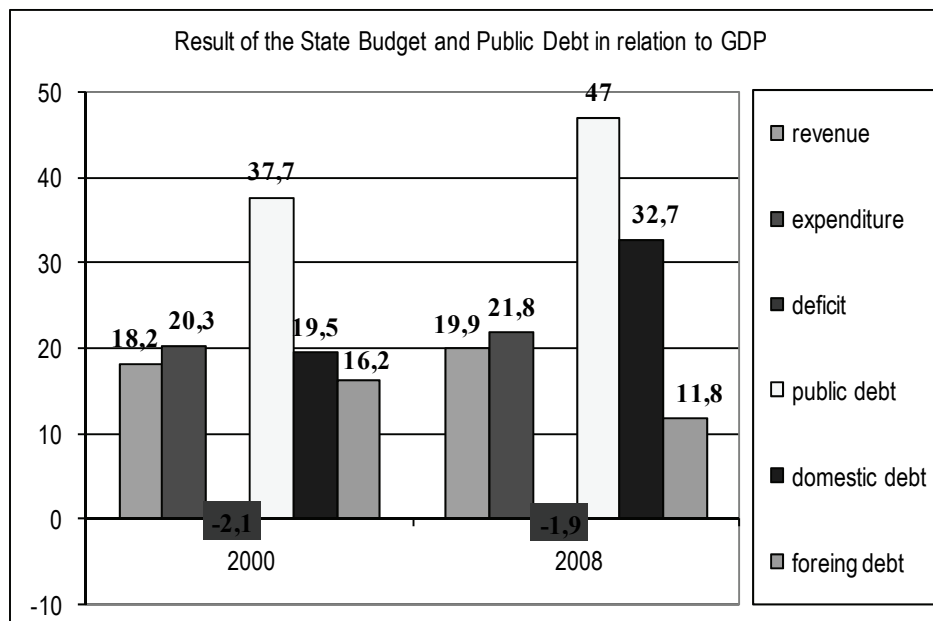
Figure 5. Credits and cumulated debts in Poland on macroeconomic level

Source: on the basis: “Statistical Yearbook of the Republic of Poland 2009”, GUS, Warszawa, 2010.

We can observe the growth of debts, and also their shares in GDP, especially the domestic debt. In 2008 the share of total debt was greater than in 2000 about percentage points.

The negative impact of previous generation debts can be neutralized by enlarging the taxation or intergenerational altruism, if old generations take care about the welfare of descendant generations, and be able to gather some welfare and transfer it for their descendants. It concerns not only government, but also households.

The sources of credits may be internal and external. The internal credits depend on the possibility of economy to generate savings, and such source of credits allows to neglect the exchange rate of foreign currencies in case of Poland not belonging to common currency – Euro, and also the changes of interest rates in countries borrowing the money. But on the another hand, the foreign credits may mainly enlarged the investment, and be additional source of growth in the future, with positive influence on welfare of descendant generations.

Figure 6. The Shares of debts in GDP

Source: on the basis: "Statistical Yearbook of the Republic of Poland 2009", GUS, Warszawa, 2010.

The debt situation in Poland is not satisfying, because of increasing debts of the government budget and low economic growth, expected in few next years. It means that next generations will be debit with that debts, and the balance of intergenerational justice may be weakened.

5. Welfare, Income, Consumption and Taxation

The comparison of incomes of old and young generations is rather complicated because of lack of the appropriate information. Some knowledge may be based on the income per head, or better equivalent income in households of retirees & pensioners, and employees' households. The average monthly per head available income in 2003–2008, achieving by those households is presented in the Table 1.

Table 1. Average monthly available and equivalent income in households

Households	2003		2007		2008	
	income (in PLN)					
	available	equivalent	available	equivalent	available	equivalent
Total	712,0	969,7	937,4	1294,6	1045,5	1460,3
Employees	760,6	1059,3	916,6	1313,0	1049,8	1507,7
Retirees	852,0	1046,1	999,9	1240,8	1096,9	1351,3
Pensioners	608,1	750,8	758,4	950,8	802,4	1006,6

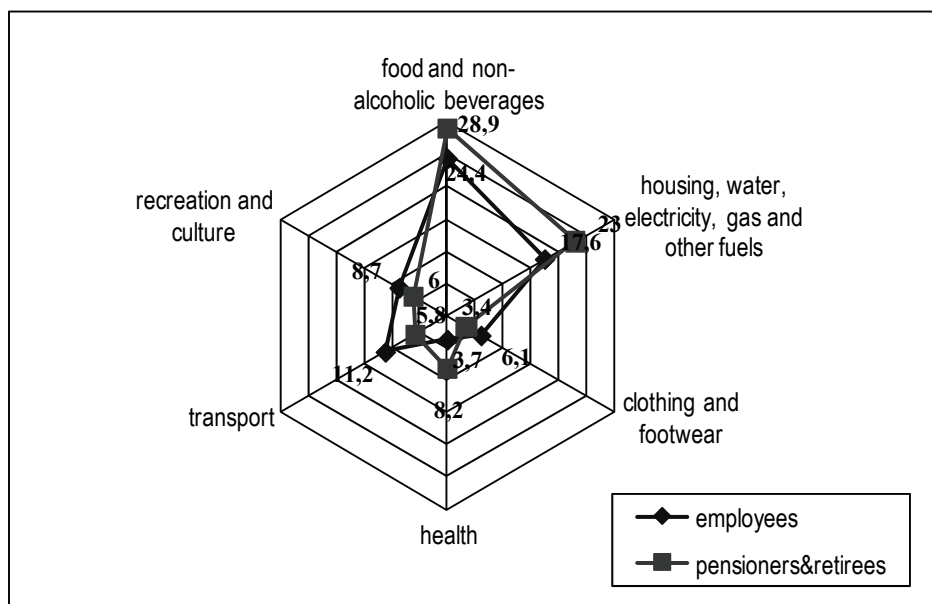
Source: own calculation on the Household Budgets, GUS, Warszawa, 2009.

As we can observe in the period 2005–2008, per head incomes were slightly lower in employees households than in retirees & pensioners households. In 2008 per head income of employees was significantly higher than income of retirees & pensioners.

The equivalent income takes into account the number of consumer units instead of number of persons in households, and it is a better indicator of available income. In 2008 the average monthly equivalent income for all households was 1460.3 zł, while in households of retirees was about 7.5 % and of pensioners about 31% lower (in 2007 was lower about 4.2 % and 26.6%). In the case of non-manual employees households, equivalent income was higher than average – about 1.4 % in 2007 and 3.2% in 2008.

Such crucial differences between per head and equivalent incomes are induced by differences in number of persons in households of employees and in households of retirees & pensioners, in which generally one or two persons live in one household. That characteristic and also different consumer preferences of young and old are the reasons of great differences in structure of consumer expenditures. The position of some chosen expenditures of young and old are presented on Figure 7

Figure 7. The shares of chosen expenditure groups in employees' households and households of retirees & pensioners in 2008



Source: on the basis of the Household Budgets, GUS, Warszawa, 2009.p

The differences in the expenditure structure are meaningful. The expenditure shares on food, housing (including gas, water, electricity and another fuels), and health are lower in employees households than these shares in households of retirees & pensioners. For the rest expenditures, the shares of employees' households are significantly higher than appropriate shares of households of retirees & pensioners, especially in case of transportation.

The stocks of all durables are significantly higher in the employees' households than in households of retirees & pensioners. The differences between equipment level are usually greater than 20 percentage points as it takes place in case of DVD, a digital camera, a personal computer, a mobile telephone and a car. Excluding cars and PC's, the rest of durables exist on the consumer market for a relatively short time, and it may be partly the reason of such low stocks in the households of old people, who are less interested in new technology gadgets. However, the most important reason is the lack of money.

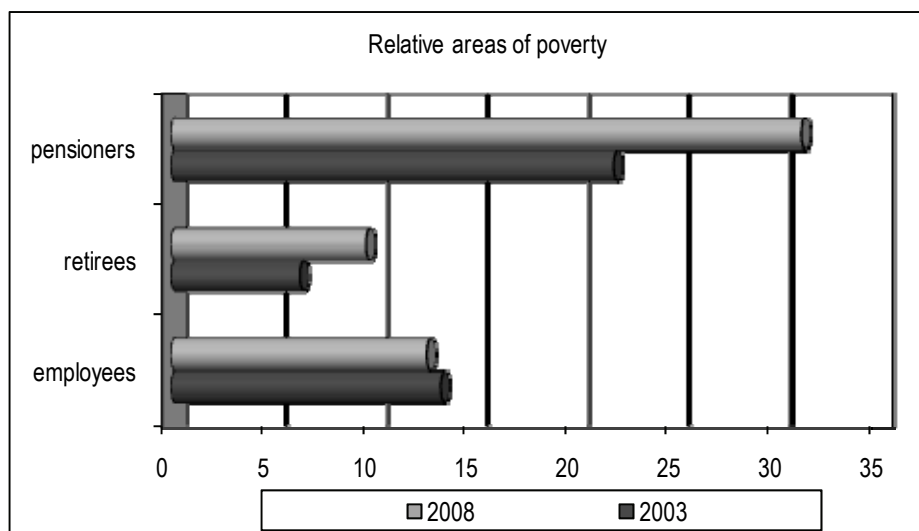
The welfare of two types of households may be presented by equipment of some durables see Table 2.

Table 2. Households furnished with selected durable goods

Specification	Households (in % of given group of households)					
	employees		retirees		pensioners	
	2005	2008	2005	2008	2005	2008
Satellite or cable television equipment	57.0	63.6	43.7	48.5	34.9	41.9
DVD player	34.7	61.6	8.9	26.0	8.5	25.3
Hi-fi stereo music system	62.0	57.2	20.5	20.9	22.6	21.5
Video camera	8.7	11.7	2.7	3.5	1.4	2.5
Mobile phone	86.1	97.7	36.5	59.8	40.3	60.5
Home theatre system	–	21.6	–	5.2	–	4.4
Personal computer	57.0	76.0	14.9	23.4	15.4	24.5
of which with access to the Internet	33.7	62.5	8.9	18.4	7.3	17.2
Car	60.1	67.4	31.9	33.0	22.1	22.5

Source: on the basis: "Konsumpcja w Polsce. Raport roczny.", IBRKiK, Warszawa, 2010.

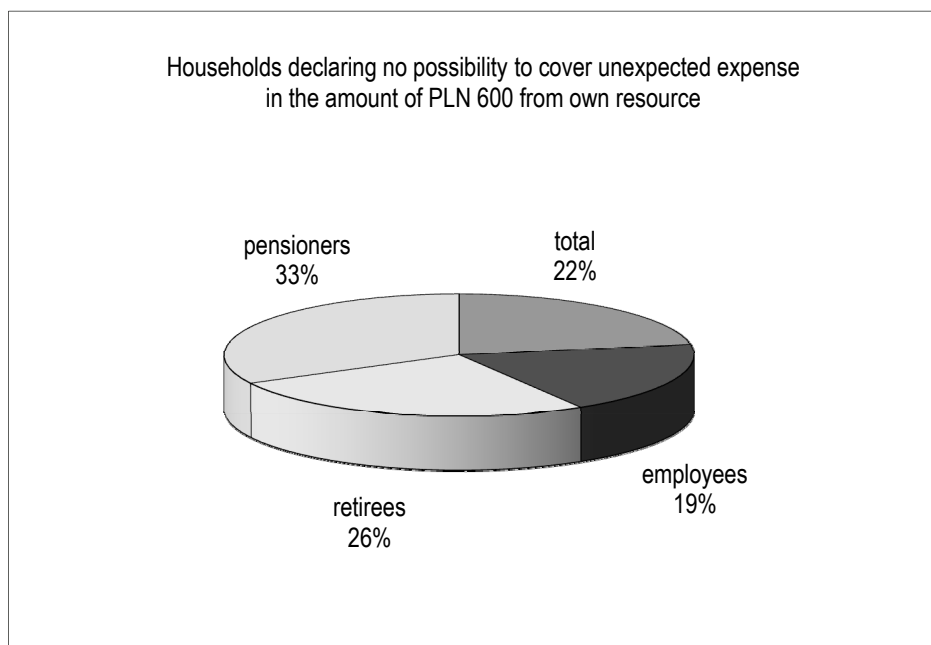
The proof of such reason is the subjective area of poverty determined by the households of retirees, households of pensioners and employees' households in 2007 (see Figure 8).

Figure 8. The relative area of poverty in 2003–2008 (percent of households)

Source: own calculation on the basis of the Household Budgets, GUS, Warszawa, 2009.

It is worth to stress the significant difference between relative and subjective areas of poverty, because the first one is based on the per head incomes and in the case of households of retirees & pensioners it does not fit the real poverty area.

Figure 9. The subjective area of poverty in 2008 (percent of households)



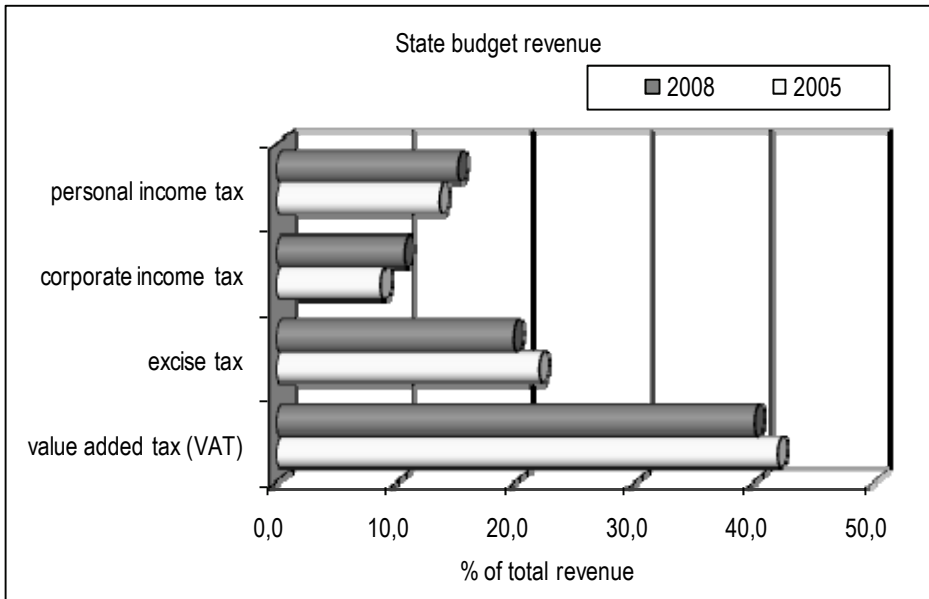
Source: on the basis of the Household Budgets, GUS, Warszawa, 2009.

Concluding, there exists a great gap between welfare of employees' households and households of retirees & pensioners, on the gain of the first, and it may be also the reason of contradiction between old and young generations.

6. Revenue and Expenditure of The State Budget

Budget revenue

It is not easy to determine what is the participation of generations in revenue of state budget. We can only generally recognize what is the impact of young and old generation on the main sources of state budget revenues. Looking at the structure of the state budget revenues (see Figure 10) we can suppose that participation of young generations in VAT and excise tax is greater than old generations in this more important source of revenue.

Figure 10. Structure of The State Budget Revenue in 2005 and 2008

Source: on the basis: “Statistical Yearbook of the Republic of Poland 2009”, GUS, Warszawa, 2010.

Young people are characterized by greater propensity to consumption and take the greater part in demand for durables, especially new modern goods, which have the higher VAT rates than food. Food with low VAT rates is more important for elderly (most households of retirees & pensioners spend their low incomes for food and housing).

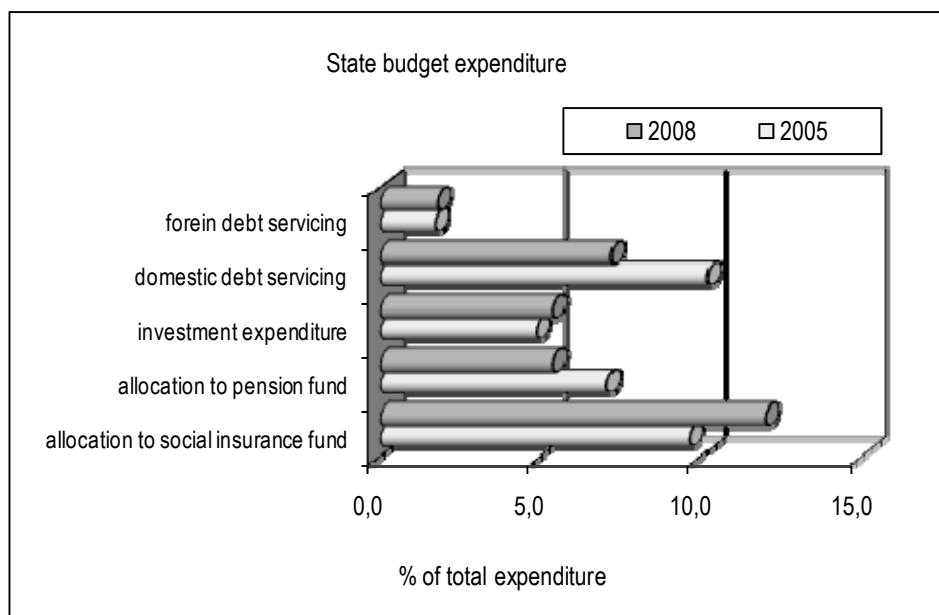
Another important source of revenue is income tax including personal and corporate income taxes. In this case we also can suppose that generations 30+ have the greatest part in generating income personal taxes, and also corporate income taxes. Old generations consist mostly of retirees persons who are not the owners of firms, and receiving low incomes from Pension Funds.

Budget expenditure

This part of paper is devoted to the directions of spending funds from The State Budget, especially how structure of the expenditure affects the well-being of the generations in present time, and in the future. It is obvious that there is the strong competition between the purposes of financing the current targets – usually connected with public consumption, and future targets, which have investment character. The young generations are more interested in such expenditures which will be fruitful in the future, however the current public consumption is also important for them – for example outlays on pre-school education, all level of

school and university education, environment and infrastructure investment, and partly healthcare.

Figure 11. The Structure of State Budget Expenditures in 2005 and 2008 (in per cent)

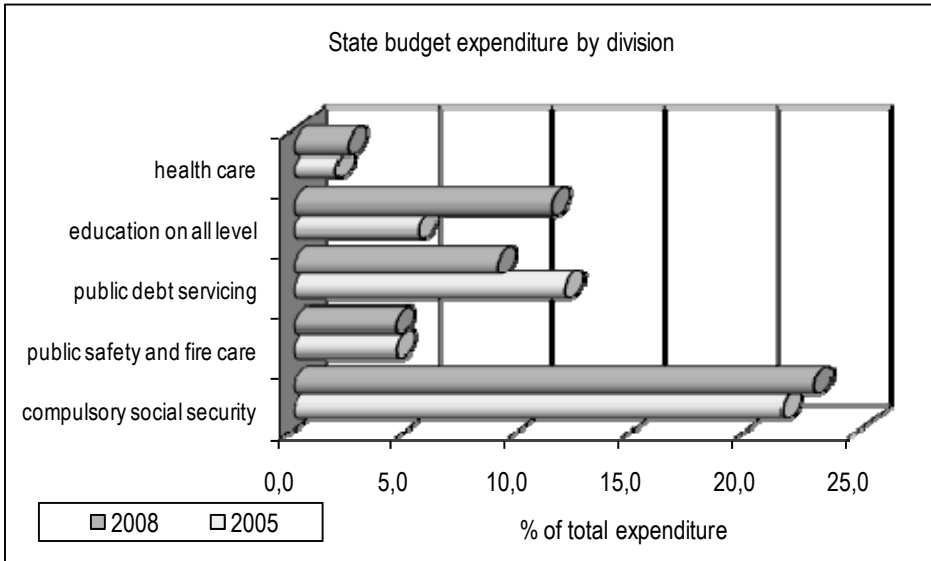


Source: on the basis: "Statistical Yearbook of the Republic of Poland 2009", GUS, Warszawa, 2010.

For the old generations the most important is the stability of Social Insurance Fund, specialized healthcare, and sufficient number of places in homes and facilities for elderly. As we could see before the share of expenditure for health is significantly large in households of retirees & pensioners, containing mostly money for medicine, so also the support for that expenses is important. It is also obvious that old generations are not so much interested in allocation of expenses for long-term investment.

Taking under consideration some kind of the state budget expenditure we can divide it into three main groups: I – expenditure mainly connected with young generations, especially expenditure on education on all levels; II – expenditure mainly connected with old generations – subsidies to the Pension Fund; III – neutral – for example expenditure on Justice or National Defense, and IV – Public Debt Servicing.

Figure 12. The Structure of State Budget Expenditures by the group of Expenditure in 2005 and 2008 (percentage of total expenditure)



Source: on the basis: "Statistical Yearbook of the Republic of Poland 2009", GUS, Warszawa, 2010.

7. Conclusions

*The main aspects of economical contradictions between young and old generations concerns:

- Social Security System,
- Credit and Debt on macroeconomic level,
- Welfare, Income, Consumption and Taxation,
- Revenue and Expenditure of the State Budget.

** The demographical structure of Polish society, worsening meaningfully in future, and actual social security system (especially retired and pensions system) are the reasons for excessive intergenerational reallocation of resources. The reformation of the social security system is necessary to avoid such negative consequences of the above.

***Actual debts and necessity of further credit contracts induce the growth of public debts, and costs of servicing those debts in future. The consequence of that is very high share of cumulative debt in GDP (in 2009 – 47%), what may be the restriction of economy growth, and intergenerational reallocation of resources. The negative impact of previous generation debts may be (in some part) neutralized by enlarging the tax and intergenerational altruism.

****The equivalent income is lower in households of pensioners & retirees than in households of employees in the last three years, what means that the situation of old generation is worse than the young's one, especially when analyzing the structure of consumption in that two types of households (in retirees & pensioners the share of necessity expenditure – housing and food – is meaningfully higher than in employees households). The equipment of young households is also significantly better than the one of old households. It is obvious that also subjective poverty area is greater in old households than in young ones.

*****Analysis of the state budget revenue and expenditure leads to the conclusion, that the current input of young generations to the budget revenues is greater than the input of the old ones (but old generations were young in past) , while shares of budget expenditures connected with transfers to the old generations are greater than transfers to the young.

