

IS POLAND THREATENED BY ENERGY POVERTY?

Leszek JURDZIAK

Wroclaw Univ. of Technology, Faculty of Geoengineering, Mining and Geology, ul. Na Grobli 15, 50-421 Wroclaw
leszek.jurdziak@pwr.wroc.pl

(1) Overview

In reference to the historical idea of providing cheap energy to countries of the European Coal and Steel Community the negative effects for the households of the current EU policy to combat "global warming" has been presented. The definition of income poverty based on a relative threshold of 60% of the households' disposable income median has been discussed with the social exclusion indicator adopted by Eurostat. The Poland's place in the poverty hierarchy has been presented and compared to other EU countries. The attention to the drastic differences in poverty thresholds (in euro and in purchasing power standard PPS) between old and new EU members has been focused. The scale of increasing poverty and income inequalities in Poland (documented by the ratio of the 5th and 1st households income quintile and the Gini index) on the background of EU data has been shown. Comparison of households in Poland and the EU has been made. Attention was paid to the share of energy and fuels in their spending. The history of rising energy prices given in the euro was introduced. The attention was drawn to the exceptionally high level of energy prices increase after Poland has joined EU (Fig.1) and their current level in PPS (Fig.2).

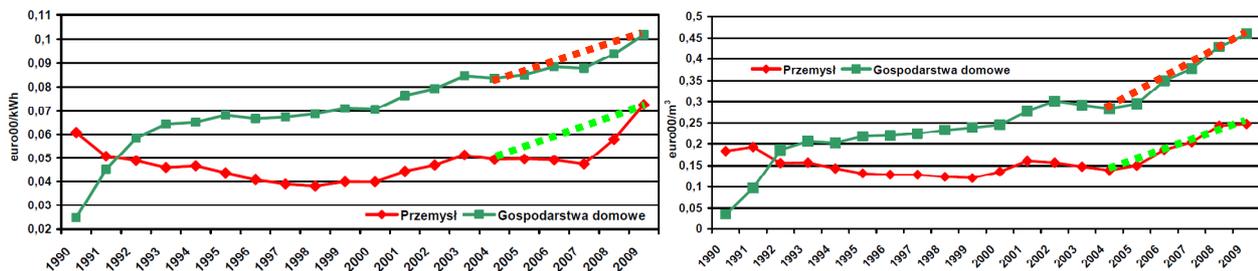


Fig. 1: Households (green) and industry (red) prices of electric energy (left) and gas (right) with their annual rate of increase (electricity - 5% and gas - 12.3%) since 2005 (source: GUS).

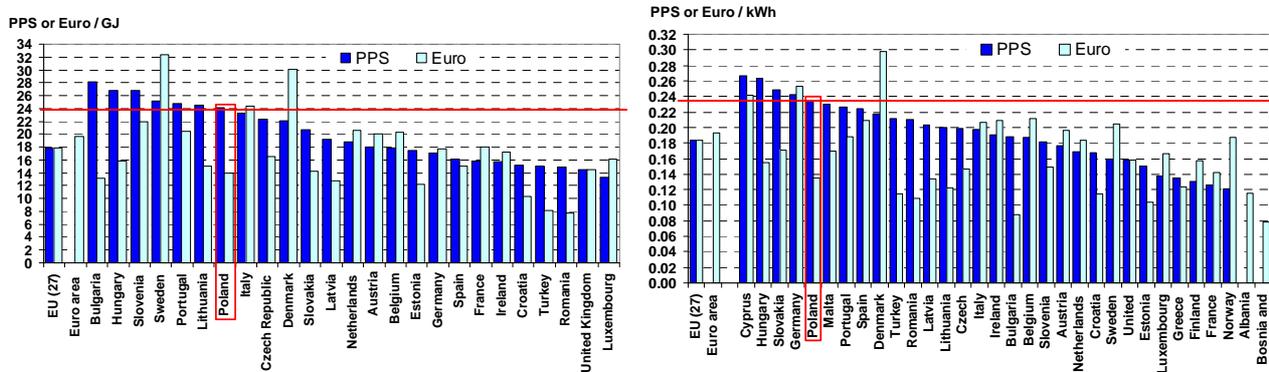


Fig. 2: Relative prices of gas (left) and electric energy (right) in different EU countries (source: Eurostat).

(2) Methods

The concept of fuel poverty has been discussed and forecasts of growth of the share of energy and fuels in the budgets of households expenditure has been presented in the light of further increases in energy prices due to the implementation of energy-climate package. The use of relative income poverty and energy poverty thresholds has been criticized. In return it has been proposed to use the absolute indicators based on a minimum basket of goods necessary for household survival and the minimum amount of energy needed to ensure an accepted standard of housing warming and normal operation.

(3) Results

The use of relative thresholds for the distribution of social transfers means that EU citizens are not treated equally - the purchasing power of poor household incomes in Germany (determined by the relative threshold - 60% of the median disposable income) can be 2.3 times higher than the poverty line in Poland. This just means that it can afford to spend 2.3 times more on everything, including the electric energy, because the cost of buying it in Germany (in PPS) is only slightly higher than in Poland. As far as gas is considered a poor household in Germany (in relative standards) can afford on 3.3 time greater its purchase due to gas is 30% less expensive in Germany than in Poland.

Assistance from the common EU budget should therefore be directed to all households not reaching common and absolute standards, and possible assistance from the budget of the local country for households not reaching relative thresholds set locally. This method of determining the extent of income poverty and fuel poverty is fair because it is based on the actual purchasing power. If, in this way, poverty thresholds were determined, the number of people at risk of poverty would change dramatically in relation to the current situation, and above all, the geographical distribution of income poverty and energy poverty will change (Fig. 3).

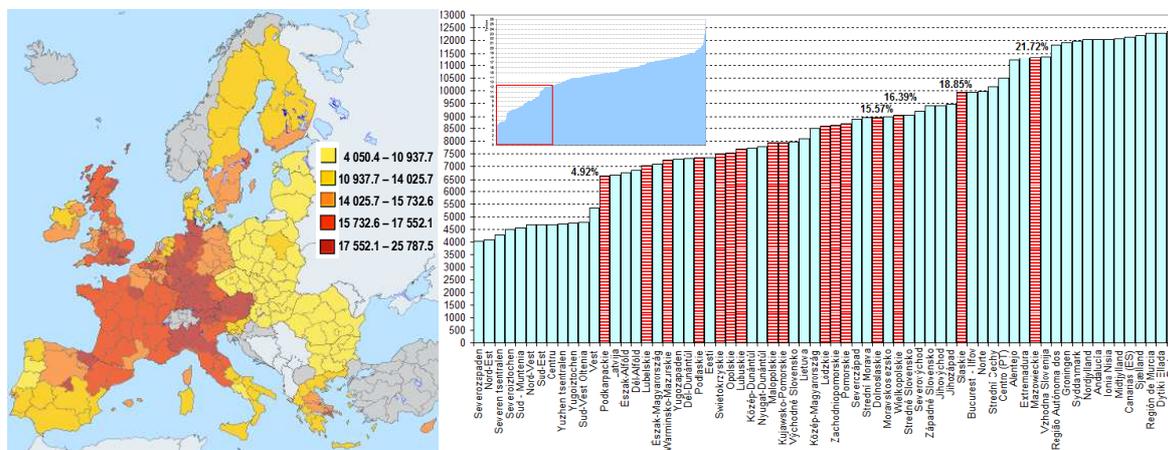


Fig. 3: Disposable income (di) of private households per inhabitant (in PPS) by regions (left) in area of the 1st quintile - white-red bars represents households di in different regions in Poland (right) (source: Eurostat)

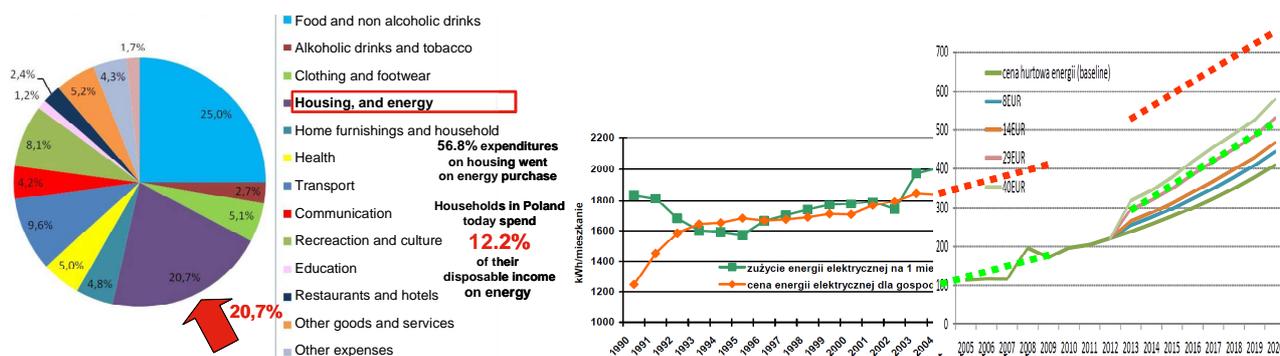


Fig. 4: Share of energy in households expenditures 12.2% (left). Electricity prices for households with forecasts to 2020 based on future wholesale prices for different CO₂ prices prepared by NBP (Polish National Bank) (source: GUS, NBP)

(4) Conclusions

Any EU action affecting the level of prices and taxes on the entire area should be analyzed in terms of the effects they cause in different social groups and regions. According to the magnitude of these effects should be designed social transfers from the EU budget to compensate for the negative impact of Community policies and these activities should be discontinued if the scale of negative effects is too high and the benefits are small, or are doubtful.

To the sphere of Community decisions that have a significant negative impact on expenditure of the poorest households belong the EU policy against "global warming". The introduction of the universal trading of CO₂ emission permits and the drastic reduction of permissible levels, of the total emissions in the EU and individual countries have to lead to higher prices for CO₂ emission permits and contribute to rising energy prices. Similar effect of increased end prices of electric energy now has introduction of green certificates which were introduced to increase share of renewables in energy mix what is also required by EU policy 3x20.

In Poland, due to the dependence of power industry on coal transfer rate of CO₂ prices on the price of energy will be the highest in the EU, which will increase the share of energy and fuels in households expenses. The rigidity of the household price demand for energy (-0.2) will lead to stability of energy purchasing level, despite the increase in the energy prices due to households will only slightly reduce its purchases saving on other expenses. Households in Poland already spend 12.2% (Fig.4) of their disposable income on energy and that share could rise up to 18.6% in 2020. All this happens when cheap energy sources are at Polish citizens feet in form of huge lignite and shale gas deposits. The ecological EU objective will not be attained due to Poles will burn everything what the can in their home furnaces creating uncontrolled emission of toxic gases on the more dangerous scale than emission from controlled sources.

(4) References

Eurostat Books 2010 – Combating poverty and social exclusion. A statistical portrait of the EU, ISSN 1830-7906.