## Labor market participation, income and health in Hungary

Since 1989 the economic activity rate has significantly dropped in Hungary. In 2001 72,5 % of the male and 67,8 % of the female population aged 30–54 was employed compared to 90,5 % and 80,3 % in 1990, respectively. Activity rates have fallen in each age group but the drop was particularly steep in the higher ages. In Hungary, the major form of withdrawal from the labor market was not so much unemployment–like in other transition economies–but disability pension. The large and growing number of disability pensioners allows us to assume that in this period voluntary or forced exits from the labor market were, even more than usual, health selective.

The large number of disability pensioners and their living conditions significantly modify the general pattern of ill health. The relative importance of structural determinants of ill health in Hungary in 2001 was analyzed on the data of a panel survey ('Turning points of life', first wave). The sample represented the Hungarian population aged 18-75. Education, income, occupation, deprivation level of the household and economic activity were included as important structural determinants of health status. Health status was measured by self-reported disability and self-rated health. We used logistic regression for our analysis. Inequality indicators, such as index of dissimilarity, were also calculated to evaluate the relative importance of the structural indicators mentioned above.

Considering all middle aged together, the most significant health inequality was found, as expected, between the active and inactive groups. Health inequalities were less salient but still explicit, and more or less of equal size, among the groups by education, income, occupation and the deprivation level of the household. The multivariate analysis revealed strong relationship between the dependent variables and all structural variables included. Nevertheless, only education, income and deprivation remained in the equation as independent variables shaping the chances of ill-health. The role of occupation was outweighed by other structural variables.

When the middle aged are examined without disability pensioners, the relative importance of structural variables will change considerably. In this case the effect of deprivation remains almost unchanged, the effect of education is much weaker and the effect of income disappears. This pattern is rather unusual and suggests that the relationship between economic activity and income from the point of view of health needs further investigations.

Disability pensioners are usually considered as "selected" on the basis of their ill health. Based on (1) the fact that they are not only sick but also a poor segment of the population and on (2) the results by which their presence significantly modify the pattern of ill health, it is rather likely, that their income is not only the result of their health status but also acts as a causal factor. Our further analysis will therefore focus on the importance of income conditions influencing health status by groups of economic activity. Health status changes among the inactive will profoundly influence the magnitude of country-level health inequalities.

For this complementary analysis, the results of the second wave of our panel survey will be used which will be available by November 2005. We will compare the 2001 and 2004 health statuses of those middle aged, who were disability pensioners in 2001 and who were not. It is hoped that this study would clarify the role of income in worsening or improving health. Multinomial logistic regression is planned to be used for the analysis.

We are also going to tackle labor market exits in the period of 2001–2004 to measure the effect of health selection. It is a common assumption that leaving the labor market via disability pension has been and is largely driven by labor market forces, therefore more common among those with low education. But according to our hypothesis this process has been and is basically health selective. Therefore it is worthwhile to compare the impact of health selection to the impact of selection by education. Although the results would not be conclusive for the period 1989–2001, but will help to formulate hypotheses to be tested on appropriate data sets in the future.