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## Uncertainty and the Demand for Redistribution

GYÖRGY MOLNÁR - ZSUZSA KAPITÁNY

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Uncertainty and the Demand for Redistribution

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#### **Uncertainty and the Demand for Redistribution**

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#### Abstract

In this paper we focus on the connection between perception of the competitive pressure situation (unemployment, uncertainty, rising income and wealth inequalities, decreasing mobility) and demand for redistribution. Our context is Hungary, between 2000 and 2002. We identify some basic variables that have important effect on the individuals' preferences for redistribution, namely, uncertainty in actual and future income, and unemployment. Uncertainty raises the demand for redistribution even among the upwardly mobile people, and labour market status is also a major element of dissatisfaction and demand for redistribution. The most frustrated and indecisive people are those who have no clear knowledge about the immediate and the distant future. Indecisive people favour redistribution more than those with negative expectations. Past personal experience and the expectation for future income have a very strong effect on the formation of thinking about income redistribution. Even those who are currently mobile in income tend to support redistribution if they are expecting a decline in their future income and welfare. According to the POUM hypothesis, we also found a negative correlation between expected intergenerational mobility and individual support for redistribution. People perceive their relative income position, their relative mobility and inequality in different ways and their demand for redistribution substantially depends on the subjective and not on the objective income position. Concerning perception of changes in inequality, we found that the more people feel that inequalities are increasing, the more they favour redistribution policies.

#### JEL: D31, D63, D80, J62, I31, H50

#### Keywords:

Mobility, Subjective Mobility, POUM, Subjective Well-being, Redistribution

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## Bizonytalanság és a jövedelmek újraelosztása iránti igény Magyarországon

Molnár György - Kapitány Zsuzsa

#### Összefoglaló

A jövedelmek újraelosztása iránti igényt meghatározó tényezők között fontos szerepet játszik a jövedelmi mobilitás. A háztartások és az egyes emberek jövedelmi pozícióik változását általában nem tényleges jövedelmi szintjük, hanem relatív helyzetük változása alapján ítélik meg. Tanulmányunkban ezért – számos egyéb mutató mellett – elsősorban a relatív jövedelmi mobilitás objektív és szubjektív mutatóinak az újraelosztás iránti igényre gyakorolt hatását elemezzük a 2000-2002-es időintervallumban, mely időszakban rendkívül magas volt a reáljövedelmek növekedési üteme. Tapasztalataink szerint az újraelosztáshoz való viszonyt nem annyira a tényleges anyagi helyzet, hanem az anyagi ranglétrán elfoglalt pozíció szubjektív megítélése befolyásolja. 2002-ben a magyar társadalom jelentős többsége a középnél lejjebb pozícionálta magát, ami a redisztribúció magas támogatottságának egyik magyarázata lehet. Várakozásainkkal ellentétben a nagy mértékű felfelé irányuló mobilitást érzékelők hívei a szegények irányába történő redisztribúciónak. Viszont hipotézisünknek megfelelően az életükkel elégedetlenek az átlagnál sokkal inkább újraelosztás pártiak. Egyértelműen megállapíthatjuk, hogy minél inkább tart valaki munkájának elvesztésétől, annál inkább pártolja a redisztribúciót, a bizonytalansággal kapcsolatos negatív attitűd elsősorban a munkanélküliségtől való félelemben nyilvánul meg. A jelennel és a jövővel kapcsolatban leginkább bizonytalanok a leginkább frusztráltak, egyben a gazdagokkal szembeni ellenérzések is náluk a legerősebbek, és szintén ők azok, akik gyermekeik sorsának jobbrafordulását elsősorban az államtól várják. Gazdaságpolitikai következtetésünk, hogy az újraelosztás iránti igény csökkentése elsősorban a munkaerőpiaci bizonytalanság csökkentésével és nem a jövedelmek közvetlen emelésével érhető el.

JEL: D31, D63, D80, J62, I31, H50

#### Tárgyszavak:

Mobilitás, szubjektív mobilitás, mobilitási várakozások, elégedettség, újraelosztás

#### INTRODUCTION<sup>1</sup>

Little is known in Hungary concerning the way in which the people perceive the existing distribution of economic resources and related policies. In this paper we focus on the connection between perception of the competitive pressure situation (unemployment, uncertainty, rising income and wealth inequalities, decreasing mobility) and demand for redistribution. We argue that the demand for redistribution by households in Hungary is strongly dependent on the determinants of the competitive pressure situation.

We know that different beliefs about the fairness of social competition strongly influence the attitude toward redistribution, and determine the form of redistribution. (See Alesina and Angeletos (2005).) If a society believes that luck, birth, connections, and corruption determine wealth, it will choose high redistribution and high taxes. Preferences for redistribution differ significantly across countries. In Alesina and Fuchs-Schundeln (2005) the feedback process of the economic regime on individual preferences was investigated comparing the preferences of East and West Germans. East Germans who had become used to the extensive redistribution and heavy state intervention are more in favour of redistribution than West Germans, this being the case even after controlling for economic incentives. This effect is especially strong for the older cohorts, who lived under Communism over a longer time period.

In the West-European countries, the results of some interesting papers relying on the European Social Survey (see Rehm (2005) and Cusack, Iversen and Rehm(2005)) show that skill specificity and occupational unemployment are important determinants of individual preferences over redistribution, while structural change and exposure to international competition are not.

We may think that both the poor and the older generations of Hungary unanimously favour income redistribution policies, and the rich – the winners of transition – and the younger generation oppose it. However, this view is too simple. We have found that the variable of redistribution for the poor has no significant relationship with either income nor expenditure. People with higher expenditures (not income!) are really less favour on restricting the income of the rich than the others. People's preferences for greater income redistribution vary not only with their current household expenditures, but also with their future income expectations, their social status and economic positions, and the dynamics of these variables.

<sup>&</sup>lt;sup>1</sup> Our study is part of the FP5 project of the European Commission *Competitive pressure and its social consequences in EU member states and in associated countries* (COMPPRESS HPSE-CT-2002-00149) research programme, Work-package 4: "The Effect of Competitive Pressure on Income Distribution and Social Policy, Public Perception, Attitudes and Norms", Institute of Economics HAS, Budapest. In preparing of our panel data this research has also benefited from the support of funds of OTKA (T 34709), at the Institute of Economics HAS, Budapest.

Clark et al (2004) strongly rejects the hypothesis that individuals transform income into well-being in the same way. Analogously, we reject the hypothesis that people's attitude toward redistribution depends on income or age. However, we will show that the *perceived* (subjective and not objective) relative income position strongly correlates with the demand for redistribution. People perceive economic and social inequality and mobility processes in different ways, and their demand for redistribution depends on this perception. Investigating the determinants of preferences for income redistribution we hold the similar basic hypothesis to Rehm (2005) who argues that there are two basic sources of preference formation after controlling for income and age: *people are either in favour of income redistribution because they feel they are being disadvantaged, or they favour redistribution as a means to avoid risk and insure against income shocks and uncertainty.* 

We will show that uncertainty – especially uncertainty on the labour market – raises the demand for redistribution, and *labour market status is a major element of dissatisfaction and demand for redistribution*. The most frustrated and indecisive people are those who have no clear knowledge about their immediate and the distant future.

The impact of mobility on attitudes towards redistribution is affected by individual perceptions of the "up and down" processes, and deeply depend on the extent and the dynamics of income and social mobility. On the other hand, *people who have the everyday experience that Hungarian society is immobile, and think that fairness in mobility is a questionable concept these days, do not see mobility as an alternative tool for redistribution, and prefer more direct and speedy distributive policies. (See Alesina and Angeletos (2005) and Fong (2005).) Furthermore, support for redistribution policies is negatively affected by expected future income that may separate the winners of transition. (See Ravallion and Lokshin (2000) and Alesina and La Ferrara (2001), (2005).)* 

Utilizing the panel-character of our household data we can investigate the effect of short term mobility. We will show that only the relative and not the absolute mobility matters in this respect. At the same time, both factual relative mobility *and* subjective mobility has significant and partly independent impact on the demand for redistribution.

According to the POUM (Prospect Of Upward Mobility) hypothesis of Benabou and Ok (2001) *individuals who are currently poor may oppose redistribution because they hope to become rich in the future. And as a counterpoint, the rich may not necessarily oppose redistribution if they expect their income and wealth to fall in the future.* 

This effect is also strong in the case of transition, but we have found that indecisive people favour redistribution more than those with negative expectations.

The structure of our study is the following. First we introduce our data and make some methodological remarks. Then, in the descriptive statistics part, we investigate both sides of the demand for redistribution: *restricting the income of the rich* and *allocating more income to the poor*, showing the differences between the two approaches. In the next paragraph we

summarise the main variables applied in the literature explaining preferences for redistribution. Afterwards we define absolute, relative and subjective mobility and compare their values during the period 2000-2002 in Hungary. In the next two paragraphs we present our ordered logit models, analysing both kinds of demand for redistribution. In the first model-pair we use only objective explanatory variables, while the second model-pair contains both objective and subjective variables. In this section we model also the difference of the factual relative and the subjective income mobility, called *mobility perception difference*. The study is closed with the summary of our major findings. The tables of basic distributions of our subjective measures based on questions and data of a supplementary interview attached to the Household Budget Survey in 2002 are available in the Appendix.

The same data set was used in Molnár and Kapitány (2006), which presents the analysis of subjective well-being. To avoid the too expansive and frequent references, the presentation of the different types of mobility and the Appendix are taken from there.

#### DATA AND METHODOLOGY

The Hungarian Household Budget Surveys (HBS) are undertaken by the Hungarian Central Statistical Office (HCSO). One third of households in the survey sample rotate annually, thus theoretically one third of households spend 3 years in the survey. This makes it possible to extract 3 years long rotation panels from the samples. Because of the sample deterioration, the real size of the panels is one quarter/sixth of the original sample. In this study we use the Rotation Panel of years 2000-2002.

We attached a supplementary survey for measuring subjective variables to the 2002 yearly interview of the HBS (asked in March 2003). In our supplementary survey the adult members of households taking part in HBS between 2000 and 2002 were asked. Our subjective questions and the raw distributions of the answers are presented in the Appendix. We have answers from 3540 members of 1903 households.

In the HBS samples (and consequently in the rotation panel sub-samples) the population of the larger cities, the active population and the highly qualified people are underrepresented. Weighting was applied to restore representativity. However, no weighting can solve an important sampling problem of the HBS after the transition. The poorest (e.g. homeless, functional illiterate persons) whom the interviewers could not create contact are missing from the sample. The most affluent, who often live in separation from the society, are also missing, and refuse to disclose information to the survey.

Beside usual kinds of income, household income used in this study contains the value of consumption from own production. It also contains the balance of agricultural incomes and expenditures. Direct taxes and social security contributions are not included. In order to allow comparison of households of different size and composition, household income was equalised using the OECD equivalence scale: the first adult in the household was assigned a weight of 1, all other adults 0.7 and each child (below age 15) was assigned weight 0.5. Household income divided by the number of equivalent adults is household equivalent income.

#### **DESCRIPTIVE STATISTICS**

In our supplementary interview we have two questions concerning the demand for redistribution (see Tables A14 and A15 in the Appendix for raw distributions):

- 1. Do you agree that the government should restrict the income of the rich?
- 2. Do you agree that the government should allocate more income to the poor?

In both cases the respondents had four choices (assigned values in brackets): essentially disagree (1), more inclined to disagree than agree (2), more inclined to agree than disagree (3), essentially agree (4). The cross-tabulation of the valid answers can be seen in Table 1. In the further analysis we sometimes draw together these four categories into two and summarise only the people who agree or disagree on these questions.

When we consider the possible answers of the respondents we have to make it clear that the first question is not strictly a 'redistribution' question. Furthermore, this question does not remind respondents that reduction of differences in income levels results in higher taxes. This mixed information can provide more than one stimulus, and may generate different effects in the different segments of the population. (See the same problem in Rehm (2005), p. 7.) Agreeing to restrict the income of the rich does not necessarily mean the redistribution of their income at the same time, and does not even imply the redistribution of their income to the poor. (Later on we will turn back to this problem.)

Table 1

	Allocate more income to the poor				
	Essentially	More disagree	More agree	Essentially	
Restrict the income of the rich	disagree	than agree	than disagree	agree	Total
Essentially disagree	2	1	1	3	6
More disagree than agree	1	3	6	4	14
More agree than disagree	1	3	16	11	31
Essentially agree	1	1	6	42	50
Total	4	7	29	60	100
	Disagree		Agree		
Disagree	6		14		20
Agree	4		76		80
Total	10		90		100

Distribution of the answers to the redistribution questions (%, N=3186)

Calculating only the valid responses of both questions, more than three-quarters (76 per cent) of the respondents agreed in both cases (see the second part of Table 1). These people can be considered as – more or less – believers of redistribution.

More than 6 per cent of the respondents disagreed in both cases; we can consider them opponents of redistribution. Comparing our data with the data of West-European countries in the European Social Survey, we found it quite interesting that – after seventeen years of living in a western style democracy – the share of redistribution believers in Hungary is surprisingly high, and the share of people who are strong opponents of redistribution is quite low (see Rehm (2005) p. 6.).

14 per cent of respondents agreed that the government should allocate more income to the poor, while the same people disagreed that the government should restrict the income of the rich. We assume that these people would like to increase the income of the poor via other tools or economic implements, or just do not think that a more progressive taxation system can also be interpreted as the restriction of the income of the rich. In the case of these people we may also assume that they show solidarity with the poor, or they are poor themselves, but that they would like to increase the income of the poor with the aid of society as a whole, and not only at the expense of the rich. Their support for redistribution may be due to a sense of altruism.

11 per cent of respondents – who agree that the government should allocate more income to the poor but are only more inclined to agree than disagree that the government should restrict the income of the rich (see the first part of Table 1) – can also be ranked among these people. The share of these people is independent of income.

The smallest group (4 per cent) is the group of respondents who agree to restricting the income of the rich, but disagree with the redistribution to the poor. One of the explanations of this result is that these people think that the destination of redistribution should be the middle income group, and not the poor. The second explanation could be that the real motivation of this group in limiting the income of the rich is the antipathy towards rich and a sense of envy. The general view of Hungarian and East-European societies adopts the conventional assumption that people who are really mobile in income and wealth have used unfair tools as a stepping stone to get becoming rich during transition.

The fairness concern may be a very important determinant of the demand for redistribution in the case of other respondent groups, too. (See Alesina and Angeletos (2005) and Fong (2005).) The group of respondents who answer 'yes' to both questions may also have this motivation. 6 per cent of the respondents answering a definite 'yes' to the question of restricting the income of the rich, but answer 'yes' in a smaller share to the question concerning the allocation of more income for the poor. The people who are in agreement with government intervention in distributive matters are partly those who believe that the social 'rat race' is not fair - that people do not have the same opportunities to move up in life, even during or following transition. These individuals feel that the lower the social mobility, the more the government should redistribute, and social mobility is not a substitute for government intervention.

The same attitude could be seen in our satisfaction modeling (see Molnár and Kapitány (2006)). The more people agree that the government should restrict the income of the rich, the more likely it is that these people are dissatisfied with their life and their material situation. The same correlation between the variable of the second redistribution question and the satisfaction variable does not exist.

We try to link the perception of inequality and demand for redistribution. In the case of both redistribution questions we found positive and significant relationships: the more people think that income and wealth differences are increasing, the more likely it is that these people are believers of redistribution. The correlation is stronger in the case of "restrict income of the rich", than in the case of "allocate more income for the poor". (The value of Cramer's rank correlation is 0.17, and 0.11 respectively.) *The different behaviour of the two redistribution variables leads us to modelling separately the two redistribution variables.* 

In the next paragraph – using the referenced literature – we make a list of basic and possible determinants of demand for redistribution. All variables listed below are accurately tested in our empirical analysis. Most of our variables correspond to these variables, but some of them are surprisingly discordant.

# BASIC EXPLANATORY VARIABLES OF PREFERENCES FOR REDISTRIBUTION IN THE LITERATURE<sup>2</sup>

*Current income and expenditure.* In fact, very few longitudinal surveys in developed countries provide detailed information on both households' income and expenditure. Apart from the American Consumer Expenditure Survey for the US, it is mostly countries in transition from a planned to a market economy who hold reliable longitudinal data sets on income and expenditure. (See e.g. the Russian Longitudinal Monitoring Survey.) We know from our previous research (Kapitány and Molnár (2004)) that a certain part of the total household expenditure is continuously covered by non-reported/unofficial income, that is, a certain portion of the total income is not reported in the survey. This unofficial share of income partly appears in the reported expenditure.

We will show that in our case expenditure is a better proxy for current income than the reported income itself. Furthermore, it appears reasonable to think that the permanent income position is what really affects demand for redistribution. In this context, we may consider that current consumption is a more accurate indicator of the long-term household income position than current income.

*Expected income and social mobility.* Alesina and La Ferrara (2001, 2005) first constructed an index of income mobility for testing the POUM hypothesis. They found a negative correlation between regional mobility and individual support for redistribution. Ravallion and Lokshin (2000) showed that even those who are currently rich tend to support redistribution if they are expecting a decline in their future welfare. In our investigation we do not have expected income variable, it is substituted by the expected mobility variables.

*Objective and subjective upward or downward mobility.* Alesina and La Ferrara (2001, 2005) and Ravallion and Lokshin (2000) first found dynamics of mobility to be very important in the formation of attitude towards income redistribution.

In what follows we investigate the effect of both types of mobilities: objective and subjective. The time period of years 2000-2002 is especially suitable for such an analysis, because of the heavy income and expenditure changes in Hungary. Real income and expenditure of the households significantly dropped between 1989 and 1997. The growth of household incomes started after 1997 and it was extremely fast between 2000 and 2002, its real value was a little bit more than 20%. (See also Molnár and Kapitány (2006).)

<sup>&</sup>lt;sup>2</sup> This chapter draws heavily on Ohtake and Tomioka (2004), Alesina and La Ferrara (2001), and Alesina, di Tella and MacGullock (2001).

*Income inequality.* Alesina, di Tella and MacGullock (2001, 2004) show that a person's subjective well-being may be negatively affected by greater income inequality, because people perceive increasing inequality as increase to income risk and that is why they support more redistribution to avoid this increasing uncertainty. Ohtake and Tomoika (2004) show that many respondents think that economic inequalities of one kind or another have increased in the past few years, and argue that it could be that people interpret greater inequality as a rise in income risk, and hence desire more redistribution to prepare for this kind of increased uncertainty.

In our previous studies (see for example Kapitány and Molnár (2004)) we showed in details that the increase in inequalities in Hungary was moderate at the end of the 1990s, or at least, was at an average level compared with both the growth of inequality during the other periods of transition, and with the growth of inequality in the other East-European countries during the same period. In spite of this fact, the majority of respondents feel that income and wealth inequalities have considerably increased in Hungary from the middle of the 1990s.

**Risk aversion (self-employment, unemployment, inequality aversion).** Unfortunately, neither the HHBS, nor our supplementary interview contain any question that would allow us to directly measure risk aversion. We use proxies for that purpose. (See Alesina and La Ferrara (2001, 2005).) The proxies we consider are: self-employment, unemployment, concern about job loss, and expectations regarding the future financial situation.

*Age.* Similarly to other findings in the literature, the results of Ohtake and Tomioka (2004) imply that the effect of age on support for greater redistribution is positive and greater among those people who are the relatively poor and retired elderly, who have no prospect of again entering the labour market, and therefore have no possibility of experiencing upward mobility.

*Gender.* According to Ohtake and Tomioka (2004), females favour redistribution less than do males. This finding that women oppose redistribution contrasts with findings in Alesina and La Ferrara (2001, 2005) for the US, and also contrasts with Ravallion and Lokshin (2000) for Russia. Alesina and La Ferrara argue that women tend to support more redistribution, possibly because they perceive a lack of equal opportunities for all in America.

#### **ABSOLUTE, RELATIVE AND SUBJECTIVE MOBILITY3**

Volatility in income flows may have negative effects on satisfaction and individual support for redistribution. Respondents with upward mobility may give less positive assessments of their past economic progress than respondents having the same income for a longer while. Even their households that saw their real income to rise failed to perceive that they benefited over time: they are scared about future and have great fear of future economic progresses. We have to calculate with this possibility in the case of great uncertainty, namely, in the case of competitive pressure situation, when the respondents with increasing income are pessimistic about their future income trends. (See Ravallion and Lokshin (2000), Graham and Pettinato (2002a,b).)

For measuring different types of mobility, first we define *subjective mobility*. The question behind this variable was the following: *How has the financial situation of your family changed during the last three years*, and the possible answers were: considerably declined, slightly declined, did not change, slightly improved, considerably improved. (Distribution of the answers is shown in Table A18 in the Appendix.)

In measuring *absolute mobility*, the 2002 real income was compared to the average income of the years 2000 and 2001, and these income changes were classified into five categories. In Table 2 '<0.8' means that the average real equalised income of the given person in the years 2000 and 2001 is less than the 80% of his/her real income in 2002; '0.8 < 0.9' means that this average is between the 80% and 90% of the income in 2002, etc. The bounds of these categories are not chosen by chance, we use that values (rounded and symmetrical around 1) which lead the maximum rank-correlation between the categories of the absolute and subjective mobility.

To generate the *relative mobility* variable we order the people in the sample according to their equalised income, and normalise the sequence between 0 and 100 per cent. We name this parameter the *relative income position* of the persons, what is a simple generalisation of the decile or percentile structure. The *difference of relative income positions* between two time periods can be used to measure relative mobility. Taking this measure as a starting point we can introduce further mobility variables. We can classify the differences putting them into categories according to the extent of downward and upward changes of the relative income positions at 10 and 20 per cent level. For example, we regard a person mobile at the 10 per cent range, if his/her relative income position difference is ten per cent, at least. In the simplest case we do not take into account the extent of the changes and consider only their direction.

<sup>&</sup>lt;sup>3</sup> This chapter is based on the corresponding chapter of Molnár and Kapitány (2006).

We chose the 10 and 20 per cent range in mobility measure because these values lead to the maximum rank-correlation between the categories of the relative and subjective mobility. Furthermore, the comparability of the relative and the subjective mobilities facilitated a departure from the usual transition matrix approach, in which mobility is measured by examining quintile-to-quintile (decile-to-decile) transition rates. That is beneficial, because the procedure based on transition matrix has several and well-known characteristic deficiencies: considerable and very different changes in position are considered the same. Moreover, in some cases relatively big changes are not regarded, while in other cases very small changes in position are regarded as real shifts. E.g. no change is measured when someone moves from the bottom to the top of a quintile, while that shift is considered mobility when someone moves from the top of the first quintile to the bottom of the second one. Investigating changes related to the starting position seems to be more natural in this application.

Comparing the absolute and subjective mobilities we can see (Table 2) that only 17 per cent of the respondents are in the same category in both distributions, 12 per cent are in the lower and 71 per cent are in the upper triangle of the table. That is, more than 70 per cent of the respondents perceive smaller improvement (or bigger deterioration) in their material situation than it is observable in their absolute real income changes. Naturally, the cause of the deviation may be that we describe and take into account the real processes in an inaccurate way. However, *the great size of asymmetry shows that the majority of people do not perceive their factual upward income mobility.* 

Table 2

#### Distribution of subjective and absolute income mobility between 2000 and 2002

			Absolute	e mobility		
Subjective mobility	< 0.8	0.8< <0.9	0.9 < < 1.1	1.1< <1 .2	1.2 <	Total
Considerably declined	1	2	4	3	5	14
Slightly declined	2	2	7	6	11	27
Did not change	3	2	11	8	18	42
Slightly improved	1	1	3	3	8	16
Considerably improved	0	0	0	0	1	1
Total	7	6	25	20	43	100

number of observations = 100%

*Note:* < 0.8 means that the real equalised income of year 2002 is less than the 80% of the average income of 2000 and 2001; 0.8 < < 0.9 means that the real income of year 2002 is between the 80 and 90% of the average income of 2000 and 2001, etc.

#### Table 3

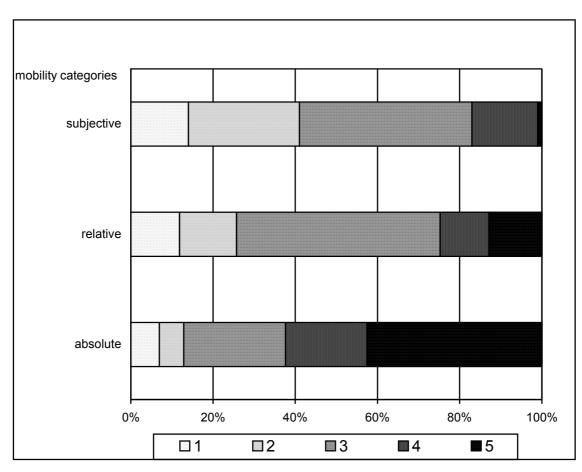
#### Distribution of subjective and relative income mobility between 2000 and 2002

				number	51 005 <b>0</b> 1 vali	5113 10070
			Relative	mobility		
Subjective mobility	< -20%	-20<<-10	-10<<10	10<<20	20% <	Total
Considerably declined	1	3	7	1	1	14
Slightly declined	3	4	14	3	3	27
Did not change	6	5	21	6	5	42
Slightly improved	1	2	8	2	3	16
Considerably improved	0	0	1	0	0	1
Total	12	14	50	12	13	100

number of observations = 100%

*Note:* Relative mobility is measured by the difference of relative income position in 2002 and the average of relative income positions in 2000 and 2001. < -20% means that this difference is less than -20, on a 100 degree scale, -20 < <-10 means that it is between -20 and -10%, etc.

Figure 1



#### Distribution of subjective, relative and absolute income mobility

*Note:* See Table 2 and 3 for the definition of the categories of relative and absolute mobilities.

Comparing relative and subjective mobilities (Table 3) we can see a somewhat more symmetric matrix, the 28 per cent of the respondents are in the main diagonal, 26 per cent of them are in the lower triangle and 46 per cent in the upper one. *This unambiguously shows that the subjective mobility is much closer to the relative mobility than to the absolute one*. (This fact is illustrated also in Figure 1.) *It means that the change in relative position has strong influence on the perception of change in material situation, rather than the factual income level itself: people value the changes in their material situations according to the changes in their relative positions, rather than the changes in their absolute income levels*. The investigated time period is quite suitable for introducing this phenomenon. Between 2000 and 2002 the growth rate of the real equalised income was extraordinary high, almost 24 per cent, and this is the reason why we got considerable deviations between the changes in absolute and relative positions.

#### **OBJECTIVE DETERMINANTS OF THE DEMAND FOR REDISTRIBUTION**

First the basic objective measures of the two types of redistribution questions were tested. The two columns of Table 4 show the results of the two logistic regressions. The positive sign notes that the given respondent group – compared with the reference group – supports more redistribution, and a negative sign shows the opposite, respectively.

According to our hypothesis, the variable of redistribution for the poor (second redistribution question) has no significant relationship with either income or expenditure. The followers of this type of redistribution can be found in every strata of the population, distributed uniformly. As we mentioned before when summing up the two groups of respondents who agreed that the government should allocate more income to the poor, the share of these people is independent of income.

In the case of the first redistribution question - identifying respondents who answer 'yes' to restrict the income of the rich - *expenditure has a negative and significant coefficient. Greater household expenditure is negatively correlated with support for redistribution, wealthier individuals look less favorably on redistribution.* The disapproval of more redistribution is stronger in higher expenditure groups. This is intuitively very reasonable, but surprisingly the same correlation between the first question and the reported income does not exist. As we already mentioned, a certain portion of the total household expenditure is continuously covered by non-reported/unofficial income, that is, a certain element of the total income is not reported in the survey. This unofficial share of income appears in the reported expenditure. *It may mean that in some cases expenditure is a better proxy for current income than the reported income itself. Furthermore, it appears reasonable to think that the permanent income position is what really affects demand for redistribution. In this context, we may consider that current consumption is a more accurate indicator of the long-term household income position than current income. Households are able to smooth their consumption while current income flows are fluctuating.* 

Education has a significant effect. The lower the education level of the person, the more the support for redistribution is. Those with the lowest education have the highest demand for redistribution. People educated only in primary school (maximum 8 classes) prefer redistribution – exclusively for the poor – more than the educated in vocational schools, and the latter group has more demand for redistribution than does the group of secondary and highly educated. (We would get an analogous result between people with secondary and high education holding less educated people as reference group.)

	(1)	(2)
Log of equalised household expenditures	-0.41 (0.16)*	
Highest qualification $\leq$ elementary school (8 classes)	0.50 (0.13)**	0.61 (0.14)**
Highest qualification: vocational school	0.49 (0.14)**	0.33 (0.13)*
Self-employed	-0.68 (0.26)**	
Employment position: leader, manager	-0.59 (0.19)**	
Living on subsidies	1.64 (0.72)*	
Marginal activity groups together		$0.31 (0.15)^*$
Family contains permanently sick person	0.40 (0.14)**	0.35 (0.16)*
Lives in Budapest		-0.45 (0.21)*
Hh contains child(ren) between age 7-24 years, not under 7	-0.34 (0.13)**	
Relative income position: up-up <sup>a</sup>	0.44 (0.16)**	
Rel. inc. pos.: up-up & in the lower 5 deciles in year 2000 <sup>b</sup>		$0.72 \ (0.25)^{**}$
Relative income position: down-down <sup>c</sup>	$0.32 (0.14)^{*}$	$0.29 \ (0.15)^{*}$
Expenditures on cultural activities and recreation	$-4.5 * 10^{-6} (1.4 * 10^{-6})^{**}$	$-3.9 * 10^{-6} (1.7 * 10^{-6})^*$
Passenger car		-0.30 (0.14)*
Flat's/house's value between median and 90 perc. (dummy)	-0.38 (0.12)**	-0.39 (0.13)**
Household has debts	$0.60  (0.26)^*$	
Log pseudolikelihood at step 0	-3597	-3010
Log pseudolikelihood at last step	-3364	-2844
Pseudo R <sup>2</sup>	0.0648	0.0550

#### Demand for redistribution in 2002, Hungary Ordered logit estimates with objective variables (N=3122)

Notes: Robust standard errors adjusted for clustering on households in parentheses.

\* significant at 5% level, \*\* significant at 1% level.

Dependent variable of model (1): *Do you agree that the government should restrict the income of the rich?* Dependent variable of model (2): *Do you agree that the government should allocate more income to the poor?* Possible answers: essentially disagree (1), more disagree than agree (2), more agree than disagree (3), essentially agree (4).

<sup>a</sup> Up-up: relative income position of the household increased both from 2000 to 2001, and from 2001 to 2002

<sup>b</sup> Relative income position increased from 2000 to 2001 and from 2001 to 2002, and in 2000 the household was in the lower 5 equalised income deciles.

<sup>c</sup> Down-down: relative income position decreased both from 2000 to 2001, and from 2001 to 2002.

With respect to competitive pressure the most important block of variables, the block of activity variables is connected to the labour market participation. Entrepreneurs and people in managerial/leader positions – independently on their expenditure level – less agree with the idea that the government should restrict the income of the rich. However, they hold an average view concerning the allocation of more income for the poor. These results show that those activity groups whose position improved in the 1990s and who were called the absolute winners of the competitive pressure situation try to preserve their previous positions.

People living on the border of activity and inactivity – unemployed, disability pensioners, casual workers, people living on subsidies – referred to together as *marginal activity groups* 

report the opposite view. They strongly prefer redistribution for the poor, but their demand for the restriction of the income of the rich is similar to average. The absolute losers of the competitive pressure situation do not feel special antipathy towards the rich and they hold an expectation that the government will improve their positions.

As we have already shown bad health is negatively correlated with overall life satisfaction. In a similar fashion here, *where permanently sick persons are in the family we find these people supportive for redistribution in both cases.* 

If we examine the effect of settlement type we find a significant relationship only in the second model. People living in Budapest tend to be less favourable to the allocation of more income to the poor than the others. Budapest is a collecting station for the unemployed provincial poor, mostly Gypsies, who escape from the rural area to the capital to seek out better living conditions. People who are irritated by the crowded capital, the grim sight of homeless people and believe that the less well off have not made enough effort to move up tend to oppose governmental redistribution programs. (See also Alesina and Angeletos (2005) and Fong (2005).)

Analysing the family structure of the households, where there are children aged between 7 and 24, and no younger kids in the family, we find adult members of these family *less supportive for the restriction of the income of the rich than the others*. It is very important to note that the majority of people (60 per cent) who have brought up or who are bringing up youngsters are very optimistic about the future of their children, and only ten per cent hold the opinion that their children in comparison with them will be worse or not better off. *According to the POUM hypothesis we found a negative correlation between expected intergenerational mobility and individual support for redistribution*.

We do not find the same effect in the case of families with small children. In our previous studies we have already shown that the relative position of the families with younger children is getting permanently worse and worse in Hungary. It may mean that, for these people, the expectations concerning the future prospects of children do not impact strongly on the demand for redistribution. On the other hand, we have to mention that these people are in more favour of income redistribution for the poor than the average.

One of the most exciting parts of our work is the analysis of the effect of income and mobility on demand for redistribution. We defined relative mobility in the previous chapter. The continuous variable of the change in relative income positions between 2000 and 2002 was used in modelling satisfaction. (See Molnár and Kapitány (2006).) We use income instead of expenditure for the description of the short term dynamics of mobility. In modelling redistribution we apply dummy variables stemming from relative mobility. The "up-up" dummy variable indicates that the relative income position of people identified by this variable improved both between 2000 and 2001, and between 2001 and 2002. The "down-down" dummy variable indicates that the relative income position of people identified by this variable deteriorated in both cases. 17 per cent of the population belongs to the "upup" and 22 per cent to the "down-down" group.

It is not surprising that people belonging to the "down-down" group are more in favour of income redistribution than the average. However, it is very surprising that the "up-up" group also favours redistribution.

People who are upwardly mobile support redistribution for the poor only if they belong to the lower five income deciles in 2000 (they number 60 per cent of the "up-up" group). We do not find the same difference in the case of our first redistribution variable, the restriction of income of the rich. It means that upwardly mobile people belonging to the higher income part of society do not favour supporting the poor, however, they favour restriction of income of the rich. We can explain this phenomenon as an antipathy against the rich by the ambitious middle class, and as an opinion that the government should help the middle class instead of the poor. Comparing these results with the results analysed previously at the activity variables, it seems that members of the ambitious middle class are more frustrated by the rich than the losers of the competitive pressure situation.

Comparing the different mobility categories, the upwardly mobile people belonging to the lower five income deciles in the starting year favour redistribution for the poor to a greater extent than the others. Analysing the composition of the "up-up" group by profession, the share of the civil servants, public health workers, and their family members are higher than average in this group. As we mentioned earlier the growth of household incomes started only after 1997, and in terms of real income only reached its 1993 level in 2001. Therefore we have to keep in mind that the real income in 2001 was only the same as in 1993. Between 2000 and 2002 the income growth rate was extremely fast and abnormal, connected to the wage increases in the pre-election year in 2001, and the huge wage increases of the civil servants and public health workers in 2002, after the election. In 2001, before the parliamentary elections in May 2002, the vacating government created a pre-election budget with considerable extra household income outflow. The new government - keeping its election promises – increased the wages of public servants by 50 per cent and made a considerable supplementary pension pay-off. Even the incomes of these groups are mobile in the years investigated, they feel a large and consistent gap between objective trends and the subjective assessment of their mobility. Despite the fact that individuals in Hungary have surprisingly perfect knowledge about the objective probability of upward or downward mobility, past personal experience and the expectation for future income have a very strong effect on the formation of thinking about income redistribution. Even those who are currently mobile in income tend to support redistribution if they are expecting a decline in their future income and welfare.

*Expenditure on culture, entertainment and vacation (including expenditure on related durable goods) is negatively correlated with the support of redistribution.* Those people who

have the highest absolute expenditure on recreation in a broad sense can fight effectively against the negative impact of competitive pressure. People who are on the other end of the scale have no expenditure on culture, entertainment, and recreation at all, favour much more redistribution than the others.

Beside flow type variables we also try to use asset variables in our models. As a good proxy for wealth we used private car and flat/house property ownership of the households. *Wealthier individuals look less favourably towards redistribution*. People who have a private car support redistribution less than the others. However, the effect of flat/house property ownership is not unambiguous. It was found that both people who own a flat with relatively small reported value and people who have expensive flat favour redistribution, and they are much more inclined to favour it than the others. The lower threshold of the flat values is about at the median, the upper one is at about the 90 percentile. We can see the dummy variable of the group of people who have a flat with value in this given interval. These people who own flats with a middle value are more averse to redistribution than the rest. People who have taken up a bank loan for the purchase of a flat or private car are more favourable to the idea of restricting the income of the rich.

The estimated coefficient on our gender dummy is small and statistically not significant.

Under the POUM hypothesis discussed above, older people should be more supportive of redistribution than younger people. Furthermore, older people with a low income should be in favour of redistribution because they enjoy a net current income gain from redistribution. Surprisingly, *age does not significantly affect the preferences for redistribution* and does not have a direct influence. On the other hand, the variables (e.g. presence of children, flat value, recreation expenditures) depending on age have a significant relationship with demand for redistribution.

#### SUBJECTIVE VARIABLES EXPLAINING THE DEMAND FOR REDISTRIBUTION

Besides the objective explanatory variables, the models presented in Table 5 include also subjective correlates of the demand for redistribution. Introducing subjective variables significantly improves our model estimations.

We can categorise our subjective variables in two ways. According to the first approach we can differentiate our subjective variables as they refer to the past, the present, or the future. Using another approach we can categorise our variables whether they relate to processes of the outside world which are independent of the respondent, or as they relate to the judgement of her/his own situation.

Mainly, in the case of questions related to the future, and to the outside world the share of "do not know" responses is very high. The large-sized non-response problem – not independent of satisfaction and demand for redistribution – creates difficulties during our analysis. If we left out these respondents from the panel population the number of observations would be unacceptably low and would distort the results. That is why we identify and collect together these responses in separate categories.

The subjective variables displace some of our previous objective variables: log of equalised household expenditure, people living on subsidies, Budapest dummy, families having permanently sick person, respondents owning passenger car, debt owners, and variable of household structure (i.e. households having children between age 7-24, but no younger children).

The other objective variables kept their significance and play a similar role in this model than in the previous one. These objective variables are: qualification, employment status (selfemployed and leader/manager status in Model 1 and marginal activity groups in Model 2), mobility variables ("up-up", "down-down"), expenditure on cultural activities, and value of flat/house.

One of the most important variables related to past and subjectively perceived processes is the variable of the question concerning perception of changes in inequality (see Table A13 in Appendix). These perceptions directly related to preferences over income redistribution. Changes in the inequality and wealth variable have a very strong relationship with a support for redistribution. *The more people feel that inequalities are increasing, the more they favour redistribution policies*.

	(1)	
	(1)	(2)
Highest qualification $\leq$ elementary school (8 classes)	0.35 (0.14)*	0.62 (0.14)**
Highest qualification: vocational school	$0.40 (0.14)^{**}$	$0.33 (0.14)^*$
Self-employed	-0.81 (0.26)**	
Employment position: leader, manager	-0.61 (0.19)**	
Marginal activity groups together		$0.28  \left( 0.14  ight)^{*}$
Relative income position: up-up <sup>a</sup>	$0.37 (0.17)^*$	
Rel. inc. pos.: up-up, in the lower 5 deciles in year 2000 <sup>a</sup>		$0.60  (0.25)^*$
Relative income position: down-down <sup>a</sup>	$0.32 (0.14)^{*}$	$0.34 (0.15)^*$
Expenditures on cultural activities and recreation	$-5.1 \times 10^{-6} (1.4 \times 10^{-6})^{**}$	$-3.4 * 10^{-6} (1.6 * 10^{-6})^*$
Flat's/house's value between median and 90 percentile	-0.27 (0.12)*	-0.35 (0.13)**
Opinion: inequalities increased	-0.78 (0.12)**	-0.54 (0.12)**
Opinion: inequalities slightly increased	-0.76 (0.21)**	-0.61 (0.25)*
Opinion: no significant change in inequalities	-1.33 (0.28)**	-0.99 (0.32)**
Subjective position in 2002: level 2 or 3	-0.93 (0.26)**	-1.64 (0.40)**
Subjective position in 2002: level 4 or 5	-1.07 (0.27)**	-1.66 (0.40)**
Subjective position in 2002: level 6, 7, or 8	-1.50 (0.32)**	-2.15 (0.43)**
Subj. mobility: considerably improved material situation		$1.50 (0.52)^{**}$
General satisfaction: very dissatisfied		$0.37 (0.17)^*$
General satisfaction: very or fairly dissatisfied	$0.29 (0.12)^{*}$	
Concerned about job loss: fairly concerned	-0.36 (0.13)**	-0.32 (0.16)*
Concerned about job loss: doesn't know		-0.48 (0.18)**
Concerned about job loss: a little bit	-0.44 (0.14)**	-0.69 (0.17)**
Concerned about job loss: not at all	-0.95 (0.22)**	-0.77 (0.22)**
Effect of EU on the chance of empl.: doesn't know	0.23 (0.12)*	
Future prospects: work, children & belongs to inc. quint. 1, 2 <sup>b</sup>	-0.43 (0.15)**	-0.51 (0.18)**
Expectations on fin. Sit. of the hh: considerably declines	$0.62 (0.24)^{**}$	
Expectations on fin. Sit. of the hh: considerably improves	0.65 (0.301*	
Expectations on children's future: doesn't know or much	$0.47  \left( 0.20  ight)^{*}$	0.68 (0.25)**
worse	0.47 (0.20)	0.08 (0.23)
Log pseudolikelihood at step 0	-3597	-3010
Log pseudolikelihood at last step	-3202	-2717
Pseudo R <sup>2</sup>	0.1098	0.0974

Demand for redistribution in 2002, Hungary Ordered logit estimates with objective and subjective variables (N=3122)

Notes: Robust standard errors adjusted for clustering on households in parentheses.

\* significant at 5% level, \*\* significant at 1% level.

Dependent variable of model (1): *Do you agree that the government should restrict the income of the rich?* Dependent variable of model (2): *Do you agree that the government should allocate more income to the poor?* Possible answers: essentially disagree (1), more disagree than agree (2), more agree than disagree (3), essentially agree (4).

<sup>a</sup> See notes to previous Table.

<sup>b</sup> This dummy variable signs that the answer to the question "*Do you see any chance for your household to obtain a better financial position*?" was work prospects, children's future prospects, or other prospects (see Table A6 in Appendix) **and** the person belonged to the 1<sup>st</sup> or 2<sup>nd</sup> income quintile in 2000.

Attitudes toward redistribution are basically affected by inequality growth perceived by respondents. In our previous studies (see for example Kapitány and Molnár (2004)) we showed in detail that the increase in inequality in Hungary was moderate at the end of the 1990s, or at least, was at an average level compared with both the growth of inequality during the other periods of transition, and with the growth of inequality in the other East-European countries during the same period. In spite of this fact, the majority of respondents feel that income and wealth inequalities have considerably increased in Hungary from the middle of the 1990s. *The people who perceive increasing inequality interpret greater inequality as a risk to income, and they demand more redistribution in order to avoid this increased uncertainty*.

Valuation of the current material situation of households – opposite to the calculated material situation by reported data – is a dominant variable on both of our models. Respondents could position their household at 9 steps on the income/wealth ladder, but nobody chose the highest step (see Table A4). *Individuals thinking themselves to be wealthier look less favourably on redistribution*. People who view themselves the poorest are the most supportive of redistribution policies, they are the reference group in the model. There is no difference between the next four steps and the wealthiest 14 per cent of the population are the most averse to both of the redistribution types. Attitude toward redistribution of non-responders is the same as that of the poorest respondents. The variable of the perceived material situation pushed out the continuous variable of expenditure and the variable of debt owners from the model. It seems to be straightforward that people having debts feel their material situation worse than it is.

In sum, we can say that the attitude toward redistribution is basically determined by the rough valuation of the wealth position. The results show that as people rank their position on the economic scale, the majority of the sample (80 per cent of the population) places themselves in the middle categories, under the median, even if they are slightly above or under this position according to their real wealth status. This fact, that the majority of people rank themselves lower than the middle, may explain the huge support for redistribution.

Despite introducing subjective variables, the factual relative mobility variable kept its significance and plays a very similar role in this model like in the model with only objective variables. What we have already found concerning the favour of income redistribution of people belonging to the "down-down" and "up-up" groups is still valid. At the same time, subjective mobility plays also a role: people who perceive that their material situation considerably improved in the past three years are much more believers of redistribution for the poor than the others. Surprisingly, both the factual and the subjective mobility – partly independently and significantly – have effect on the demand for redistribution. For explaining this phenomenon, we have seen already that the factual and subjective mobility are

not identical. Now, it is a good reason for identifying the objective variables what systematically affects the perception of relative mobility.

What are the main determinants of the difference of subjective and objective (relative) mobility<sup>4</sup> (see Table 6)? Modelling the difference between the subjective and objective mobility, we number the categories of both the subjective and the relative mobility from 1 to 5, and subtract these values from each others. The difference called *mobility perception difference* was explained also in an ordered logit model on household level. Naturally, this mobility perception difference essentially depends on the categories of the relative mobility. For example, if one of the households belongs to the highest relative mobility category, this subjective mobility gap cannot be positive. For filtering out this effect we apply relative mobility also as an explanatory variable in the model.

Summarising our main findings:

The mobility perception difference has a positive and significant relationship with the level of income. The lower the income category of a household is in the final year, the smaller this household perceives its income mobility compared to its factual relative mobility.

Expenditure on culture, entertainment and travel is positively correlated with the mobility perception difference. Those households who have the highest share of expenditure on recreation look more overestimating their past mobility, and households who are on the other end of the scale are underestimating it. After controlling for the income level, the bigger the share of expenditure on recreation in total household expenditure is, the more these households perceive their income mobility higher than their factual relative mobility.

Analysing the relationship between the mobility perception difference and the family structure of the households we find that households containing couples are likely to judge their past mobility more positively than the rest of the households.

We find an opposite effect in the case of households with member belonging to marginal activity groups. They underestimate their past relative income mobility compared with that of the others.

When examining the effect of settlement type we find that households living in Budapest and in larger cities are more likely to underestimate their past mobility compared with that of the others.

Not surprisingly, age has the very well-known U-shaped quality, where we get the minimum value at about sixty. Those aged about sixty underestimated their past income mobility compared with both the elder and the younger. The youngest households are the most positive in judging of dynamics of their relative mobility. (The age of household was measured by the average age of household members over eighteen.)

<sup>&</sup>lt;sup>4</sup> We have to underline again that only households were asked when questioning subjective mobility and not the members of the households.

The consistent gap between relative and subjective mobility explains the fact that both mobility variables have significant effect in explaining the demand for redistribution. This consistent difference between the subjective assessment and the objective value of mobility may be caused by the uncertainty of the competitive pressure situation. This uncertainty characterizes most the marginal activity groups, the middle aged households and households before retirement. It is also very obvious that living in a household containing couple is likely to be more secure than living in a mutilated family, and this extra security explains the more positive valuation of past mobility compared with that of the others.

The reference groups, what people choose and aspire to be in, also play a very important role in subjective mobility formation. The influence of these subjectively chosen reference groups may also lead to the underestimation of the real size of changes in financial positions. This phenomenon can be illustrated with the example of households living in big cities, and also explained by the special effect of income level in modelling of mobility perception difference.

Table 6

# Ordered logit estimation of mobility perception difference in 2002, Hungary (N=1895, household level)

Household belongs to the 2 <sup>nd</sup> , 3 <sup>rd</sup> or 4 <sup>th</sup> quintile of equalised income	0.96 (0.18)**
Household belongs to the 9 <sup>th</sup> decile of equalised income	$1.39(0.25)^{**}$
Household belongs to the 10 <sup>th</sup> decile of equalised income	$2.35(0.27)^{**}$
Household contains member belonging to marginal activity groups <sup>a</sup>	-1.04 (0.16)**
Household contains couple (married or life-partners)	0.49 (0.12)**
Age of the household (continuous variable) <sup>b</sup>	-0.0605 (0.0250) *
Age of the household squared	$0.0005\ (0.0002)\ ^*$
Household lives in big city (Budapest or county seat)	-0.56 (0.13)**
Share of expenditures on culture and recreation (continuous)	4.28 (1.36)**
Pseudo R <sup>2</sup>	0.284

Notes: Robust standard errors adjusted for clustering on households in parentheses.

\* significant at 5% level, \*\* significant at 1% level.

Dependent variable of the model: serial number of the subjective mobility category minus serial number of the relative income mobility category of the household. For the categories see **Hiba!** A hivatkozási forrás nem található.

The estimates of the income level dummies are omitted from the table.

<sup>a</sup> Marginal activity groups: casual workers, unemployed, disability pensioners, people living on subsidies.

<sup>b</sup> The average age of household members over eighteen.

Turning back to the other subjective correlates of the demand for redistribution, according to our hypothesis the frustration of people discontented with their life affects their opinion concerning the restriction of income of the rich. Analysing the nature of the link between satisfaction and demand for redistribution, we find that *dissatisfied respondents are* 

*more favourably inclined to redistribution than the average.* In the case of the first redistribution question the very or fairly dissatisfied people hold the same opinion, so we get a significant result only when we draw these two categories together. However, in the case of the second redistribution question we have quite a difference between the opinion of the very dissatisfied people and of the rest.

People's tolerance of uncertainty and income risk is mainly determined by the assumed cost of losing their job and the extent of their concern regarding it. Our question was the following (see Table A9): "To what extent are you concerned about the idea that you or somebody else in your family loses her/his job?" The question was quite broad enough with respect to family members, that is why even 60 per cent of the retired people gave a valid answer to this question. The share of respondents identified by the answer "Non specific, doesn't know" was almost 20 per cent in all, and 6 per cent of the families having active wage-earners.

In the case of both of the redistribution questions we can establish that *the more people are concerned about losing their job, the more they have a strong tendency to support redistribution.* Having experienced unemployment or being concerned about the idea of losing their job increases risk aversion and deeply affects people's view of redistribution policies. There is a difference between the two types of redistribution only in the case of responses "non-specific, doesn't know". In the first model this group has significantly the same opinion as that held by the "very concerned" group, that is why these two groups make up the reference group of the first model. In the second model the reference group consists of the "very concerned" respondents. Respondents identified by the answer "non-specific, doesn't know" are significantly less favourably inclined to redistribution than the "fairly concerned" group.

Almost 30 per cent of respondents (see Table A11) answered "do not know" to the question "What kind of effect will have Hungary joining the EU on the chances of the Hungarian employees?" Our hypothesis was that those who expect a negative effect will be rather favourably inclined to the restriction of income of the poor than the others. In contrast with this we found a significant difference among those people who gave a valid answer and who could not answer the question, respectively. This latter group is more favourably inclined to the restriction of the rothers. We found the same in the case of supporting redistribution for the poor, but it is not shown in the table, because the variable is significant only at the 10 per cent level.

The same kind of result was found in the case of expectation with respect to the children's future life (see Table A16). The attitude toward redistribution of respondents with children who chose the answer "doesn't know" is the same as the attitude of those who expect their children to live in a much worse situation in the future compared with them. These people are more favourably inclined to redistribution than the others.

In sum, we can establish that the most frustrated and indecisive people are those who have no clear knowledge about the immediate and the distant future, and – ceteris paribus – are more averse to the rich, and primarily that the government is supposed by them to improve the future life conditions of their children.

In conclusion, in this paper we focused on the uncertainty connected with the present and the future, and the link between uncertainty and demand formation of redistribution. This relationship can be introduced quite well with the aid of the main determinant of the competitive pressure, namely, with the aid of the valuation of the labour market situation. *Labour market status is a major element of dissatisfaction and demand for redistribution*. In the case of questions concerning changes in consumer markets and changes in position of Hungary in the near future we did not find the same relationship.

In the case of the question concerning the financial situation of households in the next three years (see Table A8) we can see that *the people who are favourably inclined towards redistribution are those who expect either their position to deteriorate in the future, or* – *surprisingly* – *their position to improve significantly*. If we draw out the control variable of the cultural and recreation expenditure, those people who expect their position to improve significantly no longer support redistribution. In this case we can assume that we introduce here a unique attitude of people having high cultural and recreation expenditure, having presumably high level cultural capital, and who feel antipathy toward the "uncultured rich".

Among our questions concerned with the future, the question that proved to be the most useful was the one which took into consideration and assessed the private chances of the respondents instead of changes taking place in the outside world. According to the answers to the question "Do you see any chance for your household to obtain a better financial situation?" (see Table A6) we divided the observations into two groups. The people in the first group are those who answered the following: work prospects, children's future prospects, or other prospects. In the second group we find those who answered the following: no prospect, health status prospects, do not know. We call the first group active, referring to the fact that the answers they chose are dependent on the extent of their activity. The second group is called *passive*. (E.g. waiting for better health is a passive action and, in this sense, is similar to the "no prospect" situation.) *The active people favour redistribution less than passive ones;* however, in the case of our second redistribution question the difference is significant only at 10 per cent level.

The situation becomes much clearer if we distinguish active people by their relative income positions. Those respondents oppose only both types of redistribution who belonged to the two lowest income quintiles in 2000. This argument also supports the POUM hypothesis.

#### CONCLUSIONS

To understand how people in Hungary adjust to the competitive pressure situation (unemployment, uncertainty, rising income and wealth inequalities, decreasing mobility) it is important to explain the individual's preferences for redistribution. After thirteen years of living in a western style democracy *the share of redistribution believers in Hungary is surprisingly high, and the share of people who are strong opponents of redistribution is quite low.* Still, we can show differences between the support of *redistribution for the poor* and *redistribution from the rich*, the former is significantly larger.

The support of redistribution for the poor has no significant relationship with neither income nor expenditure. Greater household expenditure is negatively correlated with support for restricting the income of the rich. Introducing subjective variables we could show that in this respect the subjective income/wealth position matters and not the factual income.

Education and larger cultural and recreation expenditures involve lower demand for redistribution in both directions.

Labour market positions have crucial role in forming the demand for redistribution. Entrepreneurs, managers oppose restricting the income of the rich, while members of marginal activity groups prefer redistribution for the poor but do not feel special antipathy towards the rich.

Downward mobile people are more in favour of redistribution than the others. Those upward mobile people whose income was below the median in 2000 support redistribution for the poor. We may reason that winners of large-scale redistribution measures in 2002 feel uncertainty about the persistency of this upward mobility. Upward mobile people support restricting the income of the rich. We can say that members of the emerging middle-class do not support redistribution for the poor but they are frustrated by the rich.

Both the factual and the subjective mobility have effect on the support of redistribution for the poor. The consistent difference between the subjective assessment and the objective value of relative income mobility is partly caused by uncertainty. This uncertainty characterizes most the marginal activity groups, the middle aged households and households before retirement. The influence of the subjectively chosen reference groups may also lead to the underestimation of the real size of changes in financial positions. This can be illustrated with the example of households living in big cities.

Labour market expectations also have crucial role in forming the demand for redistribution. To be more concerned about losing job entail more support for redistribution. Uncertainty is another key element of forming the demand for redistribution. The more people feel that inequalities are increasing the more they favour redistribution. Dissatisfied respondents are more favourably inclined to redistribution. The most frustrated are the indecisive people – who have no clear knowledge about the future – and they are more averse to the rich. We could find negative correlation between expected mobility (personal or intergenerational) and support for redistribution.

To summarise these findings, the paper clearly shows that both objective and subjective economic conditions play important role in shaping redistribution preferences. Income and labour market risks, that is uncertainty in actual and future income and employment are the main sources of preferences for social protection. Uncertainty raises the demand for redistribution even among the upwardly mobile people since redistributive spending serves as an insurance against the risk of future income loss. Labour market status is a major element of dissatisfaction and demand for redistribution. The most frustrated and indecisive people are those who have no clear knowledge about the immediate and the distant future. Indecisive people favour redistribution more than those with negative expectations.

Despite the fact that individuals in Hungary have quite acceptable knowledge about the objective probability of upward or downward mobility, subjective variables – past personal experiences and the expectations for future income – have a very strong effect on the formation of thinking about income redistribution. Even those who are currently mobile in income tend to support redistribution if they are expecting a decline in their future income and welfare. According to the POUM hypothesis, we also found a negative correlation between expected intergenerational mobility and individual support for redistribution.

Age does not significantly affect the preferences for redistribution directly, but has an indirect effect on it through the mobility perception difference. Moreover, the variables (e.g. presence of children, flat/house value, recreation expenditures) depending on age have a significant and strong relationship with demand for redistribution.

People perceive their relative income position, their relative mobility and economic and social inequality in different ways, and their demand for redistribution strongly depends on this perception. This demand substantially depends on the subjective and not on the objective income position. Concerning perception of changes in inequality, we found that the more people feel that inequalities are increasing, the more they favour redistribution policies. The people who perceive increasing inequality interpret greater inequality as a risk to income, and they demand more redistribution in order to avoid this increased uncertainty.

Our main policy conclusion is that the demand for redistribution is influenced mainly by the labour market situation and expectations and not by the income level. Instead of direct income redistribution the reduction of uncertainty on the labour market and raising employment ratio can be the most important governmental tools for diminishing the demand for redistribution.

#### REFERENCES

- Alesina, Alberto F. & Angeletos, George-Marios, 'Fairness and Redistribution', *American Economic Review*, 95, 4, September 2005, pp. 960-980.
- Alesina, Alberto F. & di Tella, Rafael & MacCulloch, Robert, 'Inequality and Happiness: Are Europeans and Americans Different?', CEPR Discussion Paper No. 2877, July 2001, p. 37.
- Alesina, Alberto F. & Di Tella, Rafael & MacCulloch, Robert, 'Inequality and Happiness: Are Europeans and Americans Different?', *Journal of Public Economics*, 88, 9-10, 2004, pp. 2009-2042.
- Alesina, Alberto F. & La Ferrara, Eliana, 'Preferences for Redistribution in the Land of Opportunities', Harvard Institute of Economic Research Paper No. 1936, November 2001, p. 41.
- Alesina, Alberto F. & La Ferrara, Eliana, 'Preferences for Redistribution in the Land of Opportunities', *Journal of Public Economics*, 89, 5, 2005, pp. 897-931.
- Alesina, Alberto F. & Fuchs-Schundeln, Nicola, 'Good bye Lenin (or not?): The Effect of Communism on People's Preferences', Harvard Institute of Economic Research Discussion Paper No. 2076, 2005, p. 37.
- Benabou, Roland & Ok, Efe A., 'Social Mobility and the Demand for Redistribution: The POUM Hypothesis', *The Quarterly Journal of Economics*, May 2001a, p. 447-487.
- Benabou, Roland & Ok, Efe A., 'Mobility as Progressivity: Ranking Income Processes According to Equality of Opportunity', NBER Working Paper No. W8431, August 2001b, p. 29.
- Benabou, Roland & Tirole, Jean, 'Belief in a Just World and Redistributive Politics', CEPR Discussion Paper No. 4952, March 2005, p. 40.
- Blanchflower, David G., 'Unemployment, Well-being, and Wage Curves in Eastern and Central Europe', *Journal of the Japanese and International Economies*, 15, 2001, pp. 364-402.
- Blanchflower, David G. & Oswald, Andrew J., 'Well-being Over Time in Britain and the USA', *Journal of Public Economics*, 88, 2004, pp. 1359-1386.
- Blanchflower, David G. & Oswald, Andrew J., 'Happiness and the Human Development Index: The Paradox of Australia', IZA Discuassion Paper No. 1601, May 2005, p. 22.
- Boeri, Tito & Brandolini, Andrea, 'The Age of Discontent: Italian Households at the Beginning of the Decade', IZA Discussion Paper No. 1530, March 2005, p. 45.
- Clark, Andrew, E. & Etilé, Fabrice & Postel-Vinay, Fabien & Senik, Claudia & Van der Straeten, Karine, 'Heterogeneity in Reported Well-being: Evidence from Twelve European Countries', IZA Discussion Papers No. 1339, October 2004, p. 25.
- Clark, Andrew E. & Etilé, Fabrice & Postel-Vinay, Fabien & Senik, Claudia & Van der Straeten, Karine, 'Heterogeneity in Reported Well-being: Evidence from Twelve European Countries', *The Economic Journal*, 115, 502, March 2005, pp. C118-C132(1).
- Clark, Andrew E. & Oswald, Andrew J., 'Unhappiness and Unemployment ', *The Economic Journal*, 104, 424, 1994, pp. 648-659.
- Cusack, Thomas, R. & Iversen, Torben & Rehm, Philipp, 'Risk at Work: The Demand and Supply Sides of Government Redistribution', Social Science Research Center, Berlin, WZB-Markets and Political Economy Working Papers, August 2005, available at SSRN: http://ssrn.com/abstract=791305, p. 35.
- Fong, Christina, 'Social Preferences, Self-interest, and the Demand for Redistribution', *Journal of Public Economics*, 82, 2, 2001, pp. 225-246.

- Fong, Christina, 'Prospective Mobility, Fairness, and the Demand for Redistribution', Department of Social and Decision Sciences, Carnegie Mellon University, Pittsburgh, January 2005, available at SSRN: http://ssrn.com/abstract=638302, pp.1-37.
- Graham, Carol & Pettinato, Stefano, 'Frustrated Achievers: Winners, Losers and Subjective Well-being in New Market Economies', *The Journal of Development Studies*, 38, 4, 2002a, pp. 100-140.
- Graham, Carol & Pettinato, Stefano, Happiness and Hardship, (Washington, D.C., Brookings Institution Press, 2002b), p. 174.
- Kapitány, Zsuzsa & Molnár, György, 'Inequality and Mobility Analysis by the Hungarian Rotation Panel, 1993-98', Discussion Papers MT-DP.2002/4, Institute of Economics, Hungarian Academy of Sciences, 2002, p. 42, <u>http://econ.core.hu/doc/dp/dp/mtdp0204.pdf</u>
- Kapitány, Zsuzsa & Molnár, György, 'Inequality and Income Mobility in Hungary, 1993-1998', *Europe-Asia Studies*, 56,8, December 2004, pp. 1109-1129.
- Luttmer, Erzo, F.P, 'Group Loyalty and the Taste for Redistribution', *Journal of Political Economy*, 109, 3, June 2001, pp. 500-528.
- Luttmer, Erzo F. P., 'Neighbours as Negatives: Relative Earnings and Well-being', *The Quarterly Journal of Economics*, 120, 3, August 2005, pp. 963-1002.
- Molnár, György & Kapitány, Zsuzsa, 'Mobility, Uncertainty and Subjective Well-being in Hungary', Institute of Economics, Hungarian Academy of Sciences, Discussion Paper MT-DP 2006/5, p. 1-45, and also available at <u>http://econ.core.hu/doc/dp/dp/mtdp0605.pdf</u>
- Ohtake, Fumio & Tomioka, Jun, 'Who Supports Redistribution?', *Japanese Economic Review*, 55, 4, December 2004, pp. 333-354.
- Ravallion, Martin & Lokshin, Michael, 'Who Wants to Redistribute? Russia's Tunnel Effect in the 1990s', *Journal of Public Economics*, 76,1, 2000, pp. 87-104.
- Rehm, Philipp, 'Citizen Support for the Welfare State: Determinants of Preferences for Income Redistribution', WZB Markets and Political Economy Working Paper No. SP II 2005-02, January 2005, pp. 1-37, available at SSRN: http://ssrn.com/abstract=670761

#### APPENDIX

# Subjective variables of supplementary interview attached to the Hungarian Household Budget Survey, 2002 (questioning in March 2003) (N= 3540, age of respondents $\geq$ 18 years )

Table A1. All things considered to what extent are you satisfied or dissatisfied with your lifein general? (%)

Very dissatisfied	15
Fairly dissatisfied	22
Neither satisfied nor dissatisfied	39
Fairly satisfied	21
Very satisfied	2
Doesn't know, no answer	1
Total	100

Table A2. To what extent are you satisfied or dissatisfied with the material situation of yourhousehold?

Very dissatisfied	21
Fairly dissatisfied	28
Neither satisfied nor dissatisfied	31
Fairly satisfied	18
Very satisfied	1
Doesn't know, no answer	1
Total	100

Table A3. How does your household get along with its monthly disposable income?

With great difficulty	12
With difficulty	18
With some difficulty	30
Reasonably	35
Easily	4
Very easily	0
Doesn't know, no answer	1
Total	100

 Table A4. To which step would you place your household at the present time on a 9-step ladder (first step means poorest, ninth step means richest)?

1	4
2	7
3	19
4	27
5	26
6	10
7	4
8	0
9	0
Doesn't know	3
Total	100

Table A5. On which step was your household in 2000 in the previous poor-rich scale?

1	4
$\frac{1}{2}$	8
3	18
4	28
5	26
6	10
7	3
8	1
9	0
Doesn't know	2
Total	100

Table A6. Do you see any chance for your household to obtain a better financial position?

No chance	29
Work prospects	43
Health status prospects	13
Children's future prospects	8
Other	3
Doesn't know, no answer	4
Total	100

Table A7. How will the economic situation of Hungary change in the next 3 years,considering also the effect of Hungary's joining the EU?

		% of real responses
Considerably declines	6	8
Slightly declines	13	16
Doesn't change	34	41
Slightly improves	26	32
Considerably improves	3	3
Doesn't know, no answer	18	-
Total	100	100

# Table A8. How will the financial situation of your household change in the next 3 years,considering also the effect of Hungary's joining the EU?

		% of real responses
Considerably declines	6	7
Slightly declines	16	20
Doesn't change	21	27
Slightly improves	32	40
Considerably improves	5	6
Doesn't know, no answer	20	-
Total	100	100

Table A9. To what extent are you concerned about the idea that you, or somebody else in<br/>your family loses her/his job?

		% of real responses
Very concerned	32	40
Fairly concerned	22	28
A little bit concerned	18	22
Not at all concerned	9	11
Non specific, doesn't know, no answer	19	-
Total	100	100

 Table A10. Imagine the situation that tomorrow you lose your job! How certain are you that you will be able to find another job not worse than the present one?

		% of real responses
Absolutely uncertain	24	42
Fairly uncertain	21	38
Fairly certain	8	15
Absolutely certain	3	5
Non specific, doesn't know, no answer	44	-
Total	100	100

Table A11. What kind of effect will have Hungary's joining the EU on the chances of theHungarian employees?

		% of real responses
Negative effect	12	17
No significant effect	18	40
Positive effect	31	43
Doesn't know, no answer	29	-
Total	100	100

 Table A12. What kind of effect will have the stronger market competition, caused by our joining to the EU, on the interest of the Hungarian consumers?

		% of real responses
Negative effect	19	28
No significant effect	21	29
Positive effect	30	43
Doesn't know, no answer	30	-
Total	100	100

Table A13. How have the income and wealth inequalities changed in Hungary from themiddle of the 1990s?

Considerably increased	54
Increased	30
Slightly increased	6
No significant change	4
Slightly decreased	1
Decreased	1
Considerably decreased	0
Doesn't know, no answer	4
Total	100

Table A14. Do you agree that the government should restrict the income of the rich?

Essentially disagree	6
More disagree than agree	13
More agree than disagree	27
Essentially agree	45
Doesn't know, no answer	9
Total	100

Table A15. Do you agree that the government should allocate more income to the poor?

Essentially disagree	3
More disagree than agree	6
More agree than disagree	28
Essentially agree	58
Doesn't know, no answer	5
Total	100

Table A16. According to your expectations, how will your child(ren) live in the future	
compared with you? (N=2288, respondents having child)	

		% of real responses
Much worse	1	1
Worse	7	9
Essentially in the same way	26	29
Better	47	55
Much better	6	6
Doesn't know, no answer	13	-
Total	100	100

Table A17. How are your grown-up children living at present time compared with you (only for children living outside of the household? (N=1414, respondents having grown-up children)

Much worse	1
Worse	10
Essentially in the same way	36
Better	43
Much better	5
Doesn't know, no answer	5
Total	100

Table A18. How has the financial situation of your family changed during the last threeyears? (asked in the HBS, one answer per household)

Considerably declined	13
Slightly declined	27
Did not change	43
Slightly improved	15
Considerably improved	1
Doesn't know, no answer	1
Total	100

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