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Competitive pressure and subjective welfare

Part I
Uncertainty and Demand for Redistribution

Paper to be presented at the Final conference of 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), Budapest, 28-29 April, 2006

Introduction[1]

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 inequality, decreasing mobility) and demand for redistribution. Estimating the determinants of preferences for redistribution in Hungary we use our supplementary interview for 2002 and the Hungarian Household Rotation Panel data set for the years 2000-2002. *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, whereas 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. *People's preferences for greater income distribution vary with their current household income and expenditure, their future income expectations, their social status and economic positions, and the dynamics of these variables.*

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. People perceive economic and social inequality and mobility processes in different ways, and their demand for redistribution strongly 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*.

Although disapproval of redistribution increases with income, there is a sizeable percentage of people in the highest income deciles who also approve redistribution policies, and

[1] Our study is part of the COMPPRESS *research programme,* Workpackage 4: "The Effect of Competitive Pressure on Income Distribution and Social Policy, Public Perception, Attitudes and Norms", Institute of Economics HAS, Budapest. We would like to thank László Halpern, Gábor Kőrösi, Claudia Senik, Manuela Stanculescu and Tine Stanovnik for their useful advice.

respondents in the lower income groups do not necessarily support greater distribution. Furthermore, 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).)

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 may be much stronger in the case of transition.

We show that income is negatively correlated with support for redistribution in Hungary, but there are other, much more important factors, factors such as *uncertainty, risk to income, unemployment, and household circumstances* which strongly affect and also determine the demand for redistribution. After controlling for income, risk averse individuals, and those who expect to be unemployed in the future we show a tendency to support greater distribution. Even the relatively rich elderly who have few prospects of upward mobility strongly support greater redistribution, whereas younger and relatively poorer people have less demand for such a policy.

Descriptive statistics

In our supplementary interview we have two questions concerning redistribution (see Tables A14 and A15 in Annex for raw distribution):

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 (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, and broad enough to cover both the type of redistribution for equity, and the type of redistribution for the poor. 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. Distribution of the answers to the redistribution questions (%, N=3186)

	Allocate more income to the poor

Restrict the income of the rich	Essentially disagree	More disagree than agree	More agree than disagree	Essentially 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

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 respondents 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 modelling (see Molnár and Kapitány (2006)). The variables identifying the respondents who answer 'yes' to the redistribution questions have negative and significant coefficients in our two satisfaction models. 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.*

We can hypothesise with a high degree of certainty that expenditure and labour market status will have a significant impact on the demand for redistribution. Similarly, health, housing conditions, family structure, family events, and social life are also expected to correlate with a demand for redistribution. We would like to focus mainly on the impact of competitive pressure, but using the referenced literature we made a list of basic and possible determinants of demand for redistribution (see Ohtake and Tomioka (2004)). 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 variables of preferences for redistribution in the literature

(1) *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 appears in the reported expenditure.

(2) Expected income and social mobility. Alesina and La Ferrara (2001) 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 income and mobility variables.

(3) Imperfect knowledge about the objective upward or downward mobility. Alesina and La Ferrara (2001) and Ravallion and Lokshin (2000) found past personal experiences concerning dynamics of mobility very important in the formation of attitude towards income redistribution.

(4) Income inequality. Alesina, di Tella and MacGullock (2001) analysing special subgroups of the population 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.

(5) *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).) The proxies we consider are: self-employment, unemployment, risk to income (inequality growth aversion, income uncertainty), concern about job loss, and expectations regarding the future financial situation.

(6) 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.

(7) Gender. According to Ohtake and Tomioka (2004), females, especially married ones, favour redistribution less than do males. This finding that women oppose redistribution contrasts with findings in Alesina and La Ferrara (2001) 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.

Results

First the basic objective measures of the two types of redistribution questions were tested. The two columns of Table 2 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, but probably very surprisingly for the reader, the *variable of redistribution for the poor* (second redistribution question) *has no significant relationship with either income nor 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 favourably 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.

Table 2. Models with objective variables (N=3122)

	(1)	(2)
Log of equalised household expenditures	-0.41 (0.16)*	
Highest qualification ≤ 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 [a]	0.44 (0.16)**	
Rel. Inc. pos.: up-up & in the lower 5 deciles in year 2000 [b]		0.72 (0.25)**
Relative income position: down-down [c]	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^2	0.0648	0.0550

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).
[a] Up-up: relative income position of the household increased both from 2000 to 2001, and from 2001 to 2002
[b] 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.
[c] Down-down: relative income position decreased both from 2000 to 2001, and from 2001 to 2002.

Education has a significant effect. The lower the education level of the person, the more the support for redistribution. 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.)

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 outskirts of activity' and 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 social mobility on demand for redistribution. As we defined mobility in an earlier chapter we order the people in the sample according to the equalised income and normalise the sequence between 0 and 100 per cent. We name this parameter the *relative position* of the persons (which is a simple generalisation of the decile, or percentile structure). The changes in relative income positions can be used to measure the relative mobility. As we have shown already relative mobility was decreasing in Hungary between 1993 and 2001. After the stabilisation and in the period of growth mobility decreases, and the relative position of the majority of people is becoming more and more frozen. Between 2000 and 2002 income and expenditure mobility were increasing slightly.

The continuous variable of the change in relative income positions between 2000 and 2002 was also used in modelling satisfaction. 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 “up-up” 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 (almost) 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 year 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 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 property ownership is not unambiguous. It was found that both people who own a flat with relatively small reported value and people who have an 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, family structure, flat value, recreation expenditures) depending on age have a significant and strong relationship with demand for redistribution.

Now, we focus on the basic objective and subjective measures of the two types of redistribution together. The two columns of Table 3 show the results of the two logistic regressions using both objective, and subjective variables.

We can categorize 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 categorize 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.

Introducing subjective variables improves significantly our estimations. These 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 (self-employed 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 Annex). We have already seen in our descriptive statistics that many respondents think that income and wealth inequalities have increased in the past. 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.*

Table 3. Models with objective and subjective variables (N=3122)

	(1)	(2)

Highest qualification ≤ 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 (0.14)*
Relative income position: up-up [a]	0.37 (0.17)*	
Rel. inc. pos.: up-up, in the lower 5 deciles in year 2000 [a]		0.60 (0.25)*
Relative income position: down-down [a]	0.32 (0.14)*	0.34 (0.15)*
Expenditures on cultural activities and recreation	$-5.1*10^{-6}$ $(1.4*10^{-6})$**	$-3.4*10^{-6}$ $(1.6*10^{-6})$*
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 [b]	-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 worse	0.47 (0.20)*	0.68 (0.25)**
Log pseudolikelihood at step 0	-3597	-3010
Log pseudolikelihood at last step	-3202	-2717
Pseudo R^2	0.1098	0.0974

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).
[a] See notes to previous Table.
[b] 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 Annex) **and** the person belonged to the 1st or 2nd income quintile in 2000.

Attitudes toward redistribution are basically affected by measures of 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) place 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.

Surprisingly and contrasting with our expectations, the strongly upwardly mobile people – ceteris paribus – are very favourably inclined to redistribution. This group perceives the changes of their position very well, almost all of them are in the highest three deciles in 2002, so they are the wealthiest. However, their subjective ranking is much lower, according to their subjective valuation of their material situation, none of them is higher than the sixth level. However, we have to add to this analysis that this group is very small, they consist only of one per cent of the sample.

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 income of the rich than the others. 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.

Conclusion

To understand how people in Hungary adjust to the competitive pressure situation it is important to explain the individuals preferences for redistribution. Comparing our data with the data of West-European countries, we found that – 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.

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. The indecisive people favour redistribution more than those with negative expectations.

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. 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 references for redistribution. On the other hand, the variables (e.g. presence of children, family structure, flat 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.

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Annex

Subjective variables of supplementary interview attached to the Hungarian Household Budget Survey, 2002 (questionning in March 2003)
(N= 3540, age of respondents ≥ 18 years)

Table A1. All things considered to what extent are you satisfied or dissatisfied with your life in 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 your household?

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
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 your family lose 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 the Hungarian 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 the middle 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)

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 three years? (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