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KNOWING WHAT IS GOOD FOR YOU. EMPIRICAL ANALYSIS OF PERSONAL PREFERENCES AND THE „OBJECTIVE GOOD"

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Abstract

The paper argues that there is a valuable overlap between "objective good" and people's preferences over basic needs. Firstly, using survey data with 30.000 observations from twenty European countries I analyse the determinants of individual's "experienced utility". The proxy for utility is overall life satisfaction. The results indicate that the commonly used measures of well-being - labour market situation, health, housing conditions and social relations - significantly influence people's satisfaction, ceteris paribus. The findings also imply that the use of non-income measures in standard analyses of well-being is justified on the grounds that these measures do have intrinsic value for the people over and above their incomes.

In the second part of the paper, the stability of preferences is tested using Hungarian data from the 1990s. The results indicate that there was only very limited change in the relationship between measures of objective well-being and life satisfaction despite the landslide of societal and economic transformation. Entrepreneurs have become more satisfied, but there is no change in the relationship of income and life satisfaction, ceteris paribus. Overall, thus the relationship between basic measures of objective well-being and people's preferences seems to be stable.

Keywords: quality of life, capabilities, happiness, basic needs, economic transition
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Social scientists are interested in understanding how to increase social welfare, but they often encounter doubts relating to whether they really know what is "good" for people. One such dilemma is whether there is an objective account of what "good life" is, or whether good is to be defined as something that makes us happy or fulfils our desires. In the first case, certain things are considered to enhance our well-being, irrespective of whether we desire or actually enjoy them; the rival theory may be called hedonism or desire-fulfilment, and holds that well-being, at least to some extent, depends on individuals' mental states.

The following question is of a more pragmatic nature: if there is an "objective good", how can we find out what it is? Can any, however well-informed, member of society set the standards of evaluation himself without being paternalistic? If the answer is no, referring to the "liberal" nature of society, where a plurality of values and beliefs prevails, and freedom of choice for individuals has intrinsic value, then the sole alternative is to rely on some "social norms" in judging people's quality of life.

This paper aims to test empirically if certain frequently used measures of well-being, which are regarded as valuable properties of human life, are actually desired by people. In other words, it investigates whether the "expert judgements" in social science overlap with social consensus on what the "good life" is. The starting hypothesis is that there is an overlap between these two in the case of *basic needs*, since basic desires tend to be largely shared by human beings (Harsanyi 1997; Nussbaum 2001). For the analysis, individuals' self-reported life satisfaction is used as a proxy for "utility", based on the recently published 2002/2003 wave of the European Social Survey, which includes about 30000 individuals from twenty different European countries.

Secondly, the stability of the relationship of utility and basic measures of well-being is tested by examining whether a major economic and social shock changes the "desirability" of these measures of well-being. Here data from a transition country, Hungary, is used. The data consists of two nationally representative household surveys from an early (1992) and later phase (1998) of economic transition, containing 5000 and 4000 individuals respectively.

The Sen-sible measure of the "good life"

The utilitarian tradition assumes that people accept utility as an ultimate object of value, and its pursuit is what drives people's behaviour. In economics the "good life" is what people choose to live, given their constraints. The problem is that they often do not act as the best agents of their own welfare. Harsányi claims that a person's "actual preferences" as indicated by his choice behaviour may not express his deeper interests or "true preferences" due to ignorance or incorrect information (1997, p. 133.). Kahneman and his colleagues show in a series of experimental studies that human behaviour is characterised by cognitive imperfections, time-inconsistent behaviour, loss aversion and "status quo bias" (Kahneman and Tversky 1979; Kahneman and Varey 1991). This indicates that actual human behaviour differs from the standard economic assumptions. It thus seems that a "benevolent dictator" may not want to leave it entirely to the people to promote their own welfare.

Rawls, whose Theory of Justice (1971) is regarded as a landmark opus on social justice in the 20th century, defines primary goods as an object of value. His work, however, is not particularly concerned about the nature and the definition of such goods. He defines primary goods as "things that every rational man is presumed to want." (Rawls 1971, p. 54). His theory of justice, however, is primarily focused on the 'basic structure' of a modern democracy and the principles of social institutions. Rawls is regarded as a liberal philosopher, because he avoids claims to universal truth. In contrast, classical utilitarianism, and other conceptions of justice, for example Plato, Aristotle and the Christian tradition as represented by Augustine and Aquinas, all hold that there is only one conception of the good which is to be recognised by all persons, in so far as they are fully rational.

A strong case for the existence of an objective account of the "good life" is presented by the Nobel laurate Amartya Sen. According to Sen, this "good life" is not subject to recognition by local traditions and individual judgements, but rather is a common feature of humanity. (Sen 1987; Sen 1992; Nussbaum 1993). This account of human good has strong theoretical connections with Aristotle's classic view. 'Eudaimonia', or 'human flourishing' as recent ethics has translated it, is an objective good, and it is desirable and choiceworthy not simply because it is desired or chosen. Sen, however, clearly distinguishes his account from the Aristotelian tradition by emphasising that, in contrast to the overspecified view of the good human life of that tradition, he does not aim for a full account of desirable human states. Rather, Sen seems to aim for the identification of the 'space' of value-objects. His extensive writings on this issue may be labelled as his "capabilities" approach (Sen 1985; Sen 1992).

Sen's capabilities are equal to neither goods nor the utility enjoyed by the individual in their consumption; they stand in between. *Capabilities* may be called 'well-being freedom', 'reflecting the person's freedom to lead one type of life or another' (Sen 1992, p. 40). Capabilities include the ability to be adequately nourished, to avoid premature mortality, and to take part in the life of the community. *Functionings*, in contrast, are the state of being well-nourished and actually taking part in the life of the community.

Although Sen's work received wide acclamation for advancing normative theory, many scholars have expressed scepticism about the empirical applicability of his theory of capabilities. Sen deliberately refrains from providing a comprehensive list of capabilities, or even of basic capabilities. He does not give clear guidance on the methodology of evaluation either. How are the features of good life to be defined then? Nussbaum (2001) argues that people's "informed desires" play an important role in finding such a list. This position seems to be in line with that of the economist Harsányi, despite his very different starting point. Harsányi (1997) also believes that there is a surprising uniformity in people's basic preferences, their basic desires. 'Substantive goods' are intrinsically valuable, he argues, because 'they are the *objects of our basic desires,* which we largely share with other human beings, due to our *common human nature* and to our *common biological and psychological needs*' (1997, p. 141, italics in the original). If Harsányi is right, then all we need to do is to describe what these "objects of our basic desires" are.

Using a qualitative method, Nussbaum provides a list of 'central human capabilities', which has been subject to both cross-cultural academic discussion and also discussion in women's groups (2001, p. 85). Thus, she argues, it includes items people would choose, and is based on informed agreement. Nussbaum's list includes for example capabilities

relating to life, bodily health, emotions, affiliation, and control over one's environment (2001, pp. 87-88). The list, however, appears to be rather comprehensive and most items identify notions which appear to be rather difficult to capture empirically[1]. How has the existing empirical literature identified the adequate measures of the "social good"? What methods have been chosen to evaluate its distribution across individuals?

Existing empirical approaches for measuring well-being

Recently, economists have increasingly turned to the concept of utility in applied research, using survey information describing individuals ' mental states. These authors argue that the earliest notion, utility, interpreted as pleasure or pain by Bentham, has been unjustly set aside in economic writing from the nineteenth century in favour of 'utility as revealed choice'. Returning to 'cardinal utility', or in the terminology of Kahneman (1997), 'experienced utility', would (1) make interpersonal comparisons of utility possible, (2) enable economics to incorporate systematic elements of human behaviour into conventional analysis (Rabin 1998). This can be done, because 'experienced utility' is measurable (Kahneman and Varey 1991; Kahneman, Wakker et al. 1997). Further, these measures have a high degree of validity, reliability and consistency (see e.g. the review of Diener, Suh et al. 1999). The measures are shown to converge with other methods of well-being measurement, such as reports of significant others, number of positive and negative events recalled, and clinical interviews (Sandvik, Diener et al. 1993). Others, however, emphasise that individuals' judgments involve pronounced context effects, thus there is room for methodological concerns (Schwarz and Strack 1999).

Empirical studies of the determinants of utility analyse the relationship between individual's characteristics and levels of happiness. Unemployment for example is a major cause of unhappiness (Clark and Oswald 1994; Winkelmann and Winkelmann 1998). Unemployment is shown to have high non-pecuniary costs, which indicate the existence of psychological costs beyond the sheer loss of income. In most countries, individuals who belong to upper income groups report somewhat higher subjective well-being (SWB) than people with lower income (Easterlin 1974; Diener and Oishi 2000). Further regularities in the variation of subjective well-being indicate that divorce is negatively correlated, while marriage, education level, good health and religion are positively correlated with happiness (Argyle 1999; Diener, Suh et al. 1999; Clark and Oswald 2002; Frey and Stutzer 2002). The analysis of the determinants of individuals' *happiness or satisfaction with life in general* in *Eastern-European countries* is still relatively scarce (e.g. Namazie and Sanfey 2001; Lelkes 2002; Hayo 2003; Lelkes forthcoming), although a number of studies have analysed some aspects of well-being in the region, including economic well-being or job satisfaction (Blanchflower and Freeman 1997; Ravallion and Lokshin 2000; Graham and Pettinato 2002).

Other studies, noting the difficulty of basing the notion of social good on people's desire-fulfilment, try to define a more "objective" account of the social good. There are two main approaches: one tries to identify the prevailing "social consensus"; the other, which may be called "expert judgement", uses a more intuitive approach to identify the measures of

[1] For example, one of Nussbaum's "central human capabilities" refers to "practical reason". It is defined as "being able to form a conception of the good and to engage in critical reflection about the planning of one's life." (2001, p. 87).

well-being. These studies often include multidimensional indicators, with reference to the inadequacy of income as a single proxy for utility, or people's quality of life.

The existing operationalisations of the capabilities approach predominantly use *functionings* as an approximation of capabilities. Capability has not yet gained ground as a major currency of interpersonal comparisons. The empirical literature on functionings can identify its roots in existing 'social indicators' research and the 'basic needs approach'. What Sen seems to have provided is a theoretical depth to the 'not deeply founded approach' (1987, p. 25).

Multidimensional measures of well-being tend to be based on "expert judgement". An important originator and proponent of such multidimensional approaches was the United Nations (UN and ILO 1954). Empirical studies in this vein include for example the Swedish Level of Living Research[2] and the Comparative Scandinavian Welfare Study (Erikson 1993). Recently, expert judgement was the apparent basis for selecting social indicators for monitoring social inclusion in the European Union. The list of indicators was subject to academic scrutiny and discussion in relevant European policy making bodies (Social Protection Committee 2001; Atkinson, Cantillon et al. 2002).

The other main strand of research establishes the notion of social good based on social consensus, using "subjective" information. Subjective approaches measure well-being on the basis of people's self-reported states. An early application of this subjective approach in economics is the so-called Leyden approach. (Van Praag and Frijters 1999). The Breadline Britain Survey was first systematic attempt in Britain to define what constitutes the minimum standard of living in the public's view, and also to assess in what ways people fail to meet these standards (Mack and Lansley 1985).

The current analysis primarily aims to present a new methodology for testing whether objective measures of well-being do actually constitute part of individuals' utility functions. In other words, do specific accounts of the "objective good" overlap with people's actual preferences? This method seems to provide a useful tool for testing whether, in Sen's terminology, certain human capabilities (or functionings) are actually desired by individuals. The proposed method uses representative surveys of individuals in twenty different European countries, which include various measures of individuals' well-being and also life satisfaction.

Based on previous sociological and economic evidence we expect a small, but prevalent relationship between life satisfaction and specific measures of objective well-being (Cantril 1965; Allardt 1977; Argyle 1999). We can hypothesise with some certainty that both income and labour market status will have significant impact on satisfaction, given the prevailing evidence across many countries (Clark and Oswald 1994; Diener and Oishi 2000). Similarly, health is expected to be strongly correlated with life satisfaction (Clark and Oswald 2002). We are much less certain, however, whether a similar relationship exists between life satisfaction and other measures of objective well-being (such as social isolation or neighbourhood characteristics), once differences in income, labour market status and other personal characteristics across individuals are accounted for. The analysis will therefore provide a systematic test of these basic measures of well-being or "social exclusion" with respect to life satisfaction. In addition, the analysis will provide novel

[2] 'Level of living' is a specific term used in the Swedish Level of Living Research, and refers not only to resources, but also to states and achievements of individuals.

results relating to the impact of economic transition on these life satisfaction equations in an Eastern European country, Hungary. In other words, the stability of the relationship between life satisfaction and basic measures of well-being is tested.

Data and methods

The analysis is based on two major sources of data. First a cross-national dataset, the European Social Survey 2002/2003 (ESS), which contains nationally representative samples of individuals in twenty countries, including non-European Union countries such as Hungary or Switzerland and the non-European Israel. The survey contains information on a wide range of attitudinal and socio-demographic characteristics. Since the survey design includes strict quality controls, such as random probability sampling, a minimum target response rate of 70% and rigorous translation protocols, we can expect high quality data. The main question of interest is: *"All things considered, how satisfied are you with your life as a whole nowadays? Please answer using this card, where 0 means extremely dissatisfied and 10 means extremely satisfied".* A total of 38357 people gave valid answers to this question, which falls to 29414 in the regression sample due to missing values. For the multivariate analysis, scores of 0 to 2 were collapsed into a single score due to the small number of associated observations. Another subjective well-being question, happiness is also included in the dataset, with responses on a similar 11 point scale. Self-reported happiness is highly correlated with life satisfaction and is used as a complementary variable to test the robustness of the results.

Second, country-specific analysis is conducted using two nationally representative Hungarian household surveys, from an early and a later point in transition. The data were collected in early 1992 and early 1998, and include a range of information on individual and household demographics, employment, housing and finances. The life satisfaction question is very similar to that in the ESS: *"How satisfied you are with your life up till now?".* Responses were similarly on an 11-point scale, where 0 stands for 'not satisfied at all', and 10 for 'fully satisfied'. The analysis covers 5105 and 3641 respondents over the age of 16 in 1992 and 1998, respectively.

The Hungarian data allow us to test the stability of the estimated well-being relationships. It also serves as a test of the cross-country results in two ways. First, the income variables are aggregated from detailed survey questions, and are hence more likely to be reliable than a single question response. We can thus test different definitions of income, which is important, given the central role of income in much applied work. Second, it contains a greater number of observations for a single country than the ESS (where observations per country range between 700 and 2300). Although in both cases the samples are nationally representative, the higher sample size is expected to produce lower standard errors, and thus may identify relationships which cannot be captured in smaller samples.

The measures of objective well-being used here include income, labour market participation, health, housing or neighbourhood conditions, and social relations. These describe different aspects of people's quality of life. Participation in the labour market or other productive activity is considered essential in avoiding "social exclusion" (Burchardt, Le Grand et al. 2002). Health is a major aspect of the quality of life and valued very highly by people. The analysis contains both self-assessed health and the (objective) occurrence of illness or disability hampering daily activities. Unfortunately health had to

be omitted from some part of the Hungarian analysis due to the lack of comparable data for 1992. The ability to live in decent housing conditions is also regarded as a basic need, although the definition of "decent" is not obvious. Therefore the models include rather conservative measures. In the European dataset, neighbourhood characteristics are analysed, such as whether the respondent or a family member was a victim of burglary or assault in the last five years, and whether he feels (or would feel) safe walking alone locally after dark. The Hungarian data measure the prevalence of housing quality shortfalls, such as dampness, fungi, darkness, air pollution, noise, or a dangerous neighbourhood. The third group of measures, social relations, are regarded as essential features of social integration, and in some ways refer back to the classic definition of poverty by Townsend (1979), and more recent studies on social exclusion and well-being (Burchardt, Le Grand et al. 2002; Stewart 2002). The two social relations variables indicate the lack of close friendships and limited social contacts with friends or relatives.

This list of indicators may be regarded as measures of an individual's functionings, or sometimes even capabilities, using Sen's terminology. The disability indicator, for example measures the liberty of being able to lead a life without being hampered by physical problems. Similarly, being able to walk home feeling safe may be regarded as a "well-being freedom", or capability. In contrast, being the victim of assault is a specific functioning, or "well-being achievement". One may argue, however, that capabilities and functionings tend to overlap in the case of basic needs, because if someone has the opportunity to fulfil those desires, he will probably fulfil them. No-one would choose to live in unhealthy housing conditions, for example, if they had the option of avoiding them.

The analysis uses ordered logit models to analyse the relationship between utility and measures of "objective well-being", as utility is not cardinal. Beyond the specific measures of objective well-being mentioned above, control variables include personal characteristics, such as sex, ethnicity, region, age, educational level, marital status, number of children, and religion. The choice of this latter set of variables partly reflects their importance as personal attributes, such as gender and ethnicity, and partly their role as determinants of happiness in earlier studies (e.g. Blanchflower and Oswald 2000; Di Tella, MacCulloch et al. 2001).

Life satisfaction and measures of well-being

There is significant variation in life satisfaction across countries as shown in Figure 1. Individuals in Hungary and Poland, and to a lesser extent in the Czech Republic, are the least satisfied. The Hungarians and Poles also have the highest proportion of dissatisfied people and are among the least happy nations. At the other extreme are Denmark, Switzerland, and the Scandinavian countries, which have the highest subjective well-being, as indicated by all three measures of life satisfaction and happiness. The aim of this paper is not to analyse these differences, but rather to look at the differences across social groups using individual level data.

Income

The regression equations estimate the relationship between specific measures of well-being and "utility", as measured by life satisfaction. As Table 3 shows, income is

positively correlated with satisfaction, controlling for age and other personal characteristics. Higher incomes yield more satisfaction in a consistent way, so that the highest income quartile group is the most satisfied. This relationship between income and satisfaction holds controlling for other determinants of well-being, such as labour market status, health, social contacts or housing conditions. Higher income thus brings greater well-being, over and above the positive impact of employment, better health or more social contacts.

Non-income measures of well-being

The importance of personal choice is apparent in the relationship between labour market status and satisfaction. The unemployed are significantly less satisfied than workers, controlling for income and personal characteristics; we can thus conclude that unemployment is involuntary. Voluntary withdrawal from the labour market, such as retirement or child care, on the contrary, is not consistently different from the reference group of workers.

The partial model (Table 3, column 2) reveals a negative coefficient for those who stay at home, which disappears once health and other elements of well-being are included in the model (column 6). Similarly, pensioners are no worse off: the full model indicates that they are more satisfied than the employed, accounting for differences in health condition, income and other variables. On the other hand, full-time education for those aged 15 and over (the sample used here), seems to be a source of pleasure: this group is more satisfied than workers. This may be related to the "fun" of that specific life period, although the model accounts for the influence of age and social contacts. Overall, then, there is no evidence for a negative impact of labour market non-participation *per se*, but there is a clear negative effect of when joblessness is involuntary, namely for the unemployed.

Health is a major component of individuals' subjective well-being. As expected, bad health is negatively correlated with overall life satisfaction, controlling for age and other personal characteristics. This holds for both health indicators: self-reported overall health status and the occurrence of disability or illness which hampers daily activities. The coefficients are negative and significant at 1% level in both the specific and the full model (columns 3 and 6, respectively). The impact of health on life satisfaction is large: the coefficient of bad health is far greater than that on unemployment or income.

Friendship and interaction are also important elements of overall well-being. Those who have nobody with whom they could discuss personal matters, or people who meet friends, relatives or colleagues less often than a month, are less satisfied, controlling for the material conditions of life, such as income and housing, and personal attributes such as age and marital status.

Neighbourhood conditions have frequently been used as measures of individuals' quality of life, especially in the literature on social exclusion. The results presented in Table 3 show that there is indeed a correlation between the two. Living in dangerous areas lowers individuals' life satisfaction. This negative neighbourhood effect prevails even when other problems frequently associated with disadvantaged areas are accounted for, such as joblessness, low income, and limited social contacts.

Robustness of the results

I carried out two specification checks of the above results. First, I used an alternative measure of subjective well-being, happiness, instead of life satisfaction as the dependent variable, and re-estimated the regressions. The results appear in Table 4. Second, I tested the results with a different dataset. For this purpose, Hungarian survey data were used, which contain more detailed income questions, and therefore arguably more reliable income data. These regressions are shown in Tables 7 and 8.

The overall correlation between self-reported life satisfaction and happiness is 0.7. As already shown in Figure 1, country means of these two alternative measures yield largely similar, although not identical, country rankings. This suggests that life satisfaction and happiness refer to the same latent variable, which may be called subjective well-being, even if they are not identical.

Table 4 shows the regression estimates for happiness. All of the major findings discussed above are confirmed. Higher income is positively correlated with happiness, just as it was with life satisfaction. The unemployed, those in bad health, with limited social contacts, and those who live in unsafe areas are less happy. Overall, this suggests that the often highlighted aspects of well-being, such as income, involuntary non-participation on the labour market, health, social contacts and neighbourhood conditions are all elements of peoples' utility functions.

The analyses of Hungarian data for 1992 and 1998 show similar results to that of the European dataset. Tables 7 and 8 show the relationship between life satisfaction, and various measures of well-being such as income, labour market status, housing, health, and social contacts. Below I will discuss only the main differences between the European and Hungarian results, and some specific concerns relating to the Hungarian findings.

The Hungarian data allows us to test the robustness of the results to the definition of income. Three alternative measures are used: (1) the log of household income (assuming diminishing returns of income in terms of utility) adjusted for household size, (2) income quintile groups, calculated similarly on the basis of equivalent household income, (3) log of personal income, which excludes the income of other household members or the income of the household as a whole. As the results show in Tables 7 and 8, the coefficients are significant for all three alternative variables, thus we can confirm the earlier findings that income correlates with life satisfaction. Income, as a measure of consumption opportunities, is an important element of individuals' utility.

This analysis also shows that personal income is a worse proxy for utility than household income adjusted for household size. The coefficient of personal income is significantly smaller than the coefficients of the two alternative household income variables in both 1992 and 1998, indicating that the relationship of personal income and life satisfaction is relatively weaker. This suggests that there is some sharing of resources within the household, although it does not reveal anything about the extent of this sharing.

Labour market status, as in the European sample, is a major element of life satisfaction. The Hungarian results also indicate the disutility of unemployment. Beyond this, however, they highlight a peculiar aspect of the Hungarian situation, supposedly related to economic transition, the psychological costs of being inactive. Disability pensioners and the inactive

who are neither pensioners nor students report lower life satisfaction than employees, ceteris paribus. The specific category of disability pensioners was introduced in the model because this is a typical way of withdrawing from the labour market during economic transition as an alternative to unemployment.

Housing conditions also affect people's satisfaction. We saw earlier that neighbourhood safety correlates with life satisfaction in Europe. The Hungarian data show a different aspect of housing, that of housing quality problems. Individuals who live in lodging with dampness, noise, pollution or others, report significantly lower levels of life satisfaction in both 1992 and 1998, controlling for differences in income and personal characteristics.

Social contacts also contribute to subjective well-being. Limited interaction with family or friends brings dissatisfaction. The variable used refers to the household (in contrast to that in the ESS data), showing whether they invite relatives or friends to their own home or visit them less often than once a month, or never meet them. Interestingly, the variable which measures the lack of an intimate friend for an *individual* is not significant. This suggests that household members share similar patterns of social interaction. An alternative, although less likely, explanation is that it is primarily a behavioural, or life-style, factor which matters for well-being (such as having meals together with relatives), and not emotional intimacy (of a friendship). This apparent contradiction from alternative measures of social contacts warrants further research.

Test of stability during social change: well-being in Hungary in the 1990's

Economic transition in Hungary, coupled with major societal change, appears to present a valuable opportunity to test the stability of the relationships examined above. In order to demonstrate the scale of the changes, I start the discussion with the facts.

Social change: facts

In Hungary the decline in the level of employment was close to 30%, which is twice as high as the average over the whole region (Economic Commission for Europe 2000). The decline in employment, and the appearance of unemployment, seems to be an inherent part of the transition process and has been widely discussed in the academic literature (Boeri 1994; Kornai 1994). One may argue that unemployment did not actually appear from nowhere, rather it came out of the 'factory walls': so-called 'unemployment on the job' (Kornai 1992, p. 223) was replaced by 'unemployment without job'. The outstanding decline in Hungarian employment is predominantly due to comparatively radical economic policy, with a rigorous bankruptcy law at an early point in the transition, and a permissive social security benefit system, which allowed 'exit' from the labour market. The labour force participation rate in Hungary, 56%, was 11% points below the European Union average in 1998 (OECD 1999).

As Table 5 shows, the share of employees has declined during the 1990's, coupled with a major increase in various forms of inactivity, including the specific category of disability pensioners. The increase in the number of students in the population aged over 17 is largely due to the expansion of higher education.

Poverty, measured as income below 50% of the national median equivalent household income, was 5% in 1992, and rose to 8% in 1998 (Tóth 2002, Table 11). There is little evidence of increasing fortunes: the income of the rich (measured as the income of the 90th percentile), who have over twice as much income as the median, only rose moderately. This may be due to increasing under-reporting of incomes among the rich. The general problem of declining response rates, however, observable in various countries during transition causing concern for representativeness and coverage[3], was observed, but was less problematic in Hungary than elsewhere[4].

Housing is dominantly owner-occupied private housing. The data indicate that there was a substantial improvement in housing quality, especially among lodgings with minor quality problems. A major change in welfare policies occurred during the 1990's in the area of housing, including the major privatisation of previously state-owned houses. Between 1990 and 1996 over half a million dwellings were sold, over two-thirds of the existing social stock (Dániel 1997). As a result, the proportion of public housing declined to around 7%.

Social relations seem to be a major deficiency in the country. The proportion of individuals who live in households saying that they invite relatives or friends to their homes or go to visit others in their homes less than a month or never is 60%, according to the 1998 data. This figures is very high by European standards. European Community Household Panel data shows that the average proportion of "relational (self)exclusion", measured in a similar way, is between 5 and 10% among the total population of 13 countries, with a maximum of 15% (Eurostat 2000, Figure 3.13). A partial explanation for this difference may be that the European survey asks about meeting people at home or elsewhere, while the Hungarian question asks about meeting people *at home*.

There is also an apparent decline in social contacts over the 1990s. Notably, while in 1993 one in five persons said that they had no friend with whom they could discuss personal problems, by 1998 this number had risen to more than one in three (Albert and Dávid 1998).

The health of Hungarians is fairly poor by European standards, as indicated by high suicide and mortality rates. As a result of high mortality, life expectancy at birth was only 66 years for men and 75 for women in 1998 (KSH 2000). Reaching the age of 65, Hungarian women and men are expected to live 3.3-3.5 years less than an average person in the OECD (OECD 2001). The two surveys used in this paper contain one comparable health measure, self-reported health. This shows that nearly one quarter of the people were very dissatisfied with their health, a figure remaining largely unchanged over the 1990's (see Table 1).

[3] See (Flemming and Micklewright 2000).

[4] Evidence for Hungary indicates that the response rates to budget surveys conducted by the Central Statistical Office fell from an average of 78% in the years between 1983 and 1987 to an average of 61% by 1993-1995. There was also some decline in the response rates in the household surveys used here. The response rates for households fell from 71% in 1992 to 66% in 1998. The problem was particularly important in Budapest, while families in small towns and villages were the most willing to participate. The special sampling method, which accounted for the possible dropouts, was thus essential in preserving the representativeness of the surveys.

Social change and the determinants of life satisfaction

Has this massive scale societal change affected how people assess the basic features of their quality of life? Have peoples' preferences changed over time? The use of Hungarian survey data allows us to test the stability of the relationship between some basic measures of well-being and overall life satisfaction. For this, a pooled dataset was used, which consists of the two cross-sections from an early and a later point in economic transition. The regression results are presented in Table 9.

Interestingly, the interaction effects reveal only small changes over time: the majority are not significant. An insignificant estimate here means that there is no difference in the relationship of the variable of interest and life satisfaction between 1992 and 1998. For example, those in the richest fifth of the income distribution are no more contented in the late 1990s than in the early 1990s. These two groups are not identical, as there was considerable mobility, which suggests that some of the members of the top quintile in 1998 are "newly rich". Money, however, does not bring *more* satisfaction, other things being equal.

Entrepreneurship has become more positively associated with life satisfaction over time, even controlling for income, education, and so on. This holds irrespective of the income definition, as Table 9 shows. The coefficient on this interaction term is positive and significant at the 5% level for household income (see columns 1 and 3) and at the 10% level for personal income (column 2). Entrepreneurs are the only labour market group whose position has improved their situation in the observed period: they can be called the winners of the transition process.

Conclusion

This paper has proposed a new methodology for testing whether objective measures of well-being do actually constitute part of individuals' utility functions; in other words, whether specific accounts of the "objective good" overlap with people's preferences. This method provides a useful tool for testing whether, in Sen's terminology, certain human capabilities (or functionings) are actually desired by individuals. We use representative household surveys of individuals from European countries, including various measures of individual well-being and socio-economic characteristics.

The results show that specific objective measures of well-being contribute to satisfaction over and above income. Unemployment, bad health, housing problems, and limited social contacts significantly decrease life satisfaction, controlling for income and demographic characteristics. In addition, we conclude that *each* of the elements above contributes to life satisfaction, all estimated coefficients being significant in the model including all of the measures. Simply put, unemployment is "bad", over and above the associated lack of social contacts, and housing problems make people unhappy even controlling for income differences.

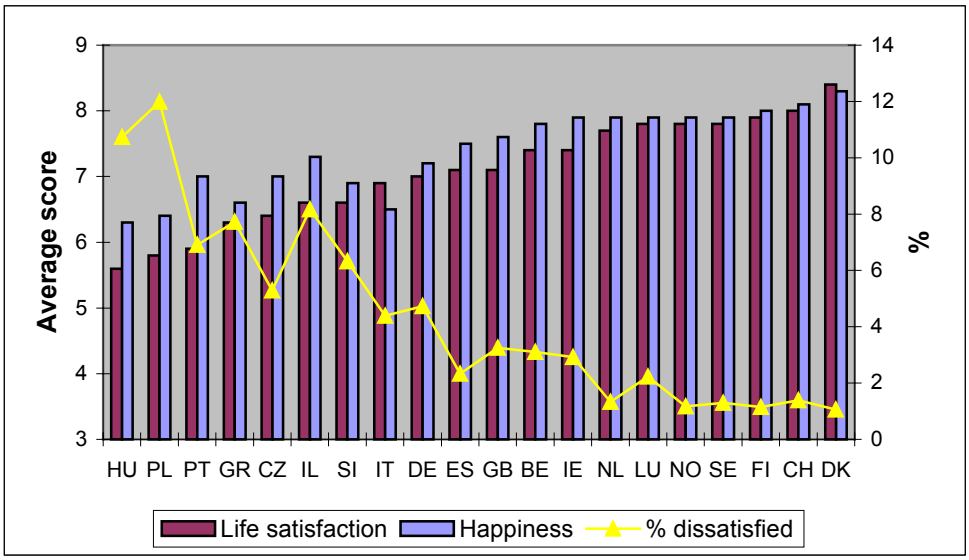
The paper also tested the stability of the relationship between objective measures of well-being and life satisfaction by using Hungarian data from the 1990s, a period of economic transition. Interestingly, there is only limited evidence of any change in the relationship despite the landslide of societal and economic change. Money, for example, does not bring

any *more* satisfaction, other things being equal. Entrepreneurship was the only variable of interest which has become more positively associated with life satisfaction over time, controlling for income, education, age and other personal characteristics. Entrepreneurs have thus benefited from the consolidation of the market economy.

These findings have two major implications. First, basic measures of well-being may be regarded as elements of individuals' utility functions. It then follows that a single measure of income is inadequate to describe the inequality of utility across individuals. Second, the method presented – the use of self-reported life satisfaction as a proxy for utility – seems to offer a useful way of testing the social desirability of specific measures of the quality of life.

The results also suggest that there is an overlap between the frequently-used measures of "objective good" and people's preferences regarding over what a good life means for them. In other words, expert judgements overlap with social consensus in the case of basic needs. One interpretation is that basic desires tend to be largely shared by human beings (Harsanyi 1997; Nussbaum 2001). Social scientists, in general, seem to know what is good for the people, but perhaps only because they actually listen to what people say.

Figure 1. Life satisfaction and happiness in specific European countries, 2002



Note: N= 38357

Table 1. Life satisfaction and happiness in Europe, 2002

	Self-reported satisfaction (%)	Self-reported happiness (%)
Extremely dissatisfied	1.7	0.6
1	1.1	0.6
2	2.3	1.5
3	4.2	2.9
4	4.5	3.6
5	11.1	10.4
6	9.1	9.6
7	17.8	18.4
8	25.4	26.8
9	13.0	15.8
Extremely satisfied	9.8	9.9
Total	**100.0**	**100.0**

Note: N=29414

Table 2. Life satisfaction in Europe by specific groups, 2002

	Average life satisfaction	% with low life satisfaction
1st income quartile group	6.0	11.1
2nd income quartile group	6.8	4.9
3rd income quartile group	7.1	3.4
4th income quartile group	7.5	1.7
Paid work	7.1	3.0
Education	7.3	2.1
Unemployed-active	5.2	17.2
Unemployed-inactive	5.6	12.4
Permanently sick or disabled	5.5	14.0
Retired	6.9	5.7
Housework, looking after children, other	6.8	6.3
Health: very good	7.7	2.4
Health: good	7.1	2.9
Health: fair	6.5	6.2
Health: bad	5.5	14.5
Health: very bad	4.5	31.6
Hampered in daily activity by illness/disability, etc.:		
Yes a lot	5.7	15.4
Yes to some extent	6.5	6.4
No	7.1	3.6
Infrequent social contact: No	7.0	3.9
Infrequent social contact: Yes	5.8	13.4
Has at least one friend	7.0	4.1
Has no friend	5.9	11.7
Crime victim in past 5 years: No	6.9	4.9
Crime victim in past 5 years: Yes	6.8	4.5
Unsafe area: No	6.9	4.4
Unsafe area: Yes	6.3	12.7

Note: N=29414

Table 3. Life satisfaction and objective well-being in Europe, ordered logit estimates

	(1) Income only	(2) Labour market	(3) Health	(4) Social contacts	(5) Housing	(6) All
2nd quartile group	0.211	0.177	0.179	0.195	0.209	0.144
	(0.031)**	(0.031)**	(0.031)**	(0.031)**	(0.031)**	(0.031)**
3rd quartile group	0.371	0.328	0.318	0.335	0.374	0.268
	(0.032)**	(0.032)**	(0.032)**	(0.032)**	(0.032)**	(0.032)**
4th quartile group	0.570	0.496	0.449	0.531	0.573	0.393
	(0.035)**	(0.035)**	(0.035)**	(0.035)**	(0.035)**	(0.036)**
Employment status: unemployed-active		-0.975				-0.934
		(0.065)**				(0.065)**
Employment status: unemployed-inactive		-0.593				-0.488
		(0.088)**				(0.089)**
Employment status: disabled		-0.911				-0.065
		(0.071)**				(0.075)
Employment status: education		0.193				0.185
		(0.050)**				(0.050)**
Employment status: housework, other		-0.059				0.042
		(0.035)				(0.036)
Employment status: retired		-0.053				0.131
		(0.041)				(0.042)**
Disabled/ill: to some extent			-0.152			-0.155
			(0.031)**			(0.032)**
Disabled/ill: yes a lot			-0.323			-0.296
			(0.056)**			(0.057)**
Health: bad			-1.465			-1.385
			(0.052)**			(0.052)**
Health: fair			-0.697			-0.667
			(0.029)**			(0.029)**
Infrequent social contacts				-0.563		-0.420
				(0.039)**		(0.039)**
Has no friend				-0.580		-0.486
				(0.039)**		(0.039)**
Crime victim in past 5 yrs					-0.117	-0.086
					(0.025)**	(0.026)**
Unsafe area					-0.399	-0.224
					(0.052)**	(0.053)**
Education: upper secondary	0.109	0.098	0.042	0.077	0.109	0.020
	(0.028)**	(0.028)**	(0.028)	(0.028)**	(0.028)**	(0.028)
Education: post secondary, non-tertiary	0.180	0.150	0.116	0.136	0.175	0.070
	(0.045)**	(0.045)**	(0.045)**	(0.045)**	(0.045)**	(0.045)
Education: tertiary	0.183	0.149	0.059	0.136	0.180	0.018
	(0.032)**	(0.032)**	(0.032)	(0.032)**	(0.032)**	(0.032)

Male	-0.110	-0.112	-0.163	-0.097	-0.126	-0.149
	(0.021)**	(0.022)**	(0.021)**	(0.021)**	(0.021)**	(0.022)**
Age	-0.084	-0.071	-0.075	-0.080	-0.085	-0.061
	(0.004)**	(0.004)**	(0.004)**	(0.004)**	(0.004)**	(0.004)**
Age squared	0.001	0.001	0.001	0.001	0.001	0.001
	(0.000)**	(0.000)**	(0.000)**	(0.000)**	(0.000)**	(0.000)**
Separated	-0.926	-0.901	-0.915	-0.895	-0.917	-0.851
	(0.086)**	(0.086)**	(0.086)**	(0.085)**	(0.085)**	(0.086)**
Divorced	-0.602	-0.570	-0.553	-0.577	-0.595	-0.508
	(0.043)**	(0.043)**	(0.043)**	(0.043)**	(0.043)**	(0.043)**
Widowed	-0.653	-0.641	-0.581	-0.602	-0.642	-0.525
	(0.044)**	(0.044)**	(0.044)**	(0.044)**	(0.044)**	(0.044)**
Never married	-0.527	-0.508	-0.473	-0.492	-0.527	-0.433
	(0.034)**	(0.034)**	(0.034)**	(0.034)**	(0.034)**	(0.034)**
Children living at home	0.126	0.096	0.068	0.124	0.127	0.066
	(0.029)**	(0.029)**	(0.029)*	(0.029)**	(0.029)**	(0.029)*
Religious	0.211	0.193	0.195	0.195	0.207	0.167
	(0.026)**	(0.026)**	(0.026)**	(0.026)**	(0.026)**	(0.026)**
Country dummies	Yes	Yes	Yes	Yes	Yes	Yes
Observations	29268	29268	29268	29268	29268	29268

Notes: * significant at 5% level; ** significant at 1% level; Standard errors in parentheses; Dependent variable = self-reported life satisfaction on a nine-point scale (0, 1 and 2 of the original eleven-point scale were collapsed into a single category of "dissatisfied").

Table 4. Happiness and objective well-being in Europe, ordered logit estimates

	(1) Income only	(2) Labour market	(3) Health	(4) Social contacts	(5) Housing	(6) All
2nd quartile group	0.166	0.138	0.134	0.147	0.164	0.103
	(0.031)**	(0.031)**	(0.031)**	(0.031)**	(0.031)**	(0.031)**
3rd quartile group	0.272	0.235	0.215	0.228	0.272	0.164
	(0.032)**	(0.032)**	(0.032)**	(0.032)**	(0.032)**	(0.033)**
4th quartile group	0.452	0.382	0.333	0.404	0.453	0.270
	(0.035)**	(0.035)**	(0.035)**	(0.035)**	(0.035)**	(0.036)**
Employment status: unemployed-active		-0.702				-0.639
		(0.064)**				(0.065)**
Employment status: unemployed-inactive		-0.625				-0.495
		(0.088)**				(0.088)**
Employment status: disabled		-0.761				0.077
		(0.072)**				(0.076)
Employment status: education		0.053				0.043
		(0.050)				(0.050)
Employment status: housework, other		-0.017				0.083
		(0.036)				(0.036)*
Employment status: retired		-0.114				0.068
		(0.041)**				(0.042)
Disabled/ill: to some extent			-0.119			-0.123
			(0.032)**			(0.032)**
Disabled/ill: yes a lot			-0.097			-0.098
			(0.056)			(0.058)
Health: bad			-1.603			-1.516
			(0.053)**			(0.053)**
Health: fair			-0.721			-0.690
			(0.029)**			(0.029)**
Infrequent social contacts				-0.648		-0.511
				(0.039)**		(0.039)**
Has no friend				-0.770		-0.687
				(0.039)**		(0.039)**
Crime victim in past 5 yrs					-0.081	-0.052
					(0.026)**	(0.026)*
Unsafe area					-0.331	-0.157
					(0.053)**	(0.053)**
Education: upper secondary	0.060	0.051	-0.007	0.018	0.059	-0.039
	(0.028)*	(0.028)	(0.028)	(0.028)	(0.028)*	(0.028)
Education: post secondary, non-tertiary	0.068	0.049	0.000	0.013	0.066	-0.049
	(0.045)	(0.045)	(0.045)	(0.045)	(0.045)	(0.045)
Education: tertiary	0.105	0.081	-0.019	0.046	0.103	-0.065
	(0.032)**	(0.032)*	(0.032)	(0.032)	(0.032)**	(0.032)*

Other personal characteristics	Yes	Yes	Yes	Yes	Yes	Yes
Country dummies	Yes	Yes	Yes	Yes	Yes	Yes
Observations	29268	29268	29268	29268	29268	29268

Notes: * significant at 5% level; ** significant at 1% level; Standard errors in parentheses; Dependent variable = self-reported happiness on a nine-point scale; Reference categories are 1st income quartile group, paid work, health=very good, ill/disabled=no; Other controls: education, male, age, marital status, children living at home, and religion.

Table 5. Life satisfaction in Hungary in 1992 and 1998

	1992	*1998*	*1992*	*1998*
	%	%	N	N
Satisfaction with life so far				
0 (Not satisfied at all)	6.7	5.7	306	255
1	2.6	2.9	120	128
2	3.3	4.0	152	180
3	6.1	7.7	281	342
4	4.4	6.3	200	284
5	29.5	28.0	1349	1250
6	8.3	11.2	379	501
7	10.3	10.6	472	475
8	12.4	11.1	568	498
9	4.9	4.0	222	177
10 (Fully satisfied)	11.6	8.5	530	378

Table 6. Average life satisfaction in various social groups in Hungary

	Average life satisfaction		*% with low life satisfaction*	
	1992	*1998*	*1992*	*1998*
1st quintile group	4.7	4.4	22.7	22.8
2nd quintile group	5.3	5.2	13.5	12.9
3rd quintile group	5.9	5.3	9.1	11.0
4th quintile group	6.1	6	7.4	6.4
5th quintile group	6.5	6.5	5.6	3.4
Employee	6.0	5.8	7.9	6.6
Unemployed	4.3	4.0	27.6	31.3
Disability pensioner	4.8	4.6	21.3	21.6
Pensioner	5.7	5.3	12.1	12.4
Self-employed	5.8	6.4	9.5	2.8
Student	7.3	6.9	3.3	1.5
Other inactive	5.0	5.1	19.6	16.3
Owner-occupier	5.9	5.6	9.8	10.0
Tenant	5.1	4.6	16.0	23.3
Other	5.6	5.4	11.0	10.9
Has no friend		5.1		17.8
Has at least one friend		5.7		9.4
Infrequent social contact: Yes		5.2		13.0
Infrequent social contact: No		6.0		7.5
Sick: Yes		5.2		15.2
Sick: No		5.8		10.1
Self-reported health: bad	4.6	4.3	22.8	26.4
Self-reported health: average	5.5	5.2	12.0	10.5
Self-reported health: good	6.3	6.2	7.3	6.4

Table 7. Life satisfaction and objective well-being in Hungary, 1992, ordered logit estimates

	(1) Income only	(2) Labour market	(3) Health	(4) Housing	(5) All	(6) All	(7) All
Equivalised household income (ln)	0.754	0.662	0.646	0.702	0.551		
	(0.061)**	(0.063)**	(0.061)**	(0.062)**	(0.064)**		
2nd quintile group						0.194	
						(0.087)*	
3rd quintile group						0.424	
						(0.089)**	
4th quintile group						0.483	
						(0.091)**	
5th quintile group						0.674	
						(0.094)**	
Personal income (ln)							0.027
							(0.013)*
Disability pensioner		-0.593			-0.058	-0.073	-0.179
		(0.124)**			(0.130)	(0.130)	(0.129)
Other inactive		-0.290			-0.189	-0.202	-0.239
		(0.113)*			(0.114)	(0.115)	(0.124)
Pensioner		-0.088			0.055	0.021	-0.069
		(0.101)			(0.101)	(0.101)	(0.100)
Self-employed		-0.212			-0.238	-0.191	-0.168
		(0.129)			(0.129)	(0.129)	(0.129)
Student		1.161			1.108	1.136	1.333
		(0.139)**			(0.139)**	(0.139)**	(0.165)**
Unemployed		-0.706			-0.672	-0.672	-0.704
		(0.135)**			(0.136)**	(0.136)**	(0.138)**
Subjective health: average			-0.533		-0.504	-0.503	-0.522
			(0.066)**		(0.066)**	(0.066)**	(0.066)**
Subjective health: bad			-1.133		-1.112	-1.106	-1.157
			(0.074)**		(0.077)**	(0.077)**	(0.077)**
Housing ownership: other				-0.152	-0.112	-0.134	-0.168
				(0.136)	(0.136)	(0.136)	(0.136)
Housing ownership: tenant				-0.226	-0.238	-0.251	-0.288
				(0.067)**	(0.068)**	(0.068)**	(0.068)**

Housing quality problems: moderate				-0.187	-0.193	-0.197	-0.208
				(0.061)**	(0.062)**	(0.062)**	(0.061)**
Housing quality problems: serious				-0.502	-0.445	-0.465	-0.501
				(0.097)**	(0.098)**	(0.098)**	(0.098)**
Other personal characteristics	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	5105	5105	5105	5105	5105	5105	5105
Log likelihood	-10084	-10015	-9961	-10060	-9885	-9894	-9921
Log likelihood at zero	-10368	-10368	-10368	-10368	-10368	-10368	-10368

Notes: * significant at 5% level; ** significant at 1% level; Standard errors in parentheses; Dependent variable = self-reported satisfaction on a nine-point scale. Reference categories=employee, good health, owner-occupier; Other personal characteristics=male, ethnicity, education, age, lives in Budapest, marital status, number of children, religion.

Table 8. Life satisfaction and individual well-being in Hungary, 1998, ordered logit estimates

	(1) Income only	(2) Labour market	(3) Health	(4) Housing	(5) Social contacts	(6) All	(7) All	(8) All
Equivalised household income (ln)	0.644	0.571	0.581	0.599	0.604	0.474		
	(0.066)**	(0.069)**	(0.066)**	(0.066)**	(0.066)**	(0.068)**		
2nd quintile group							0.312	
							(0.103)**	
3rd quintile group							0.406	
							(0.104)**	
4th quintile group							0.702	
							(0.106)**	
5th quintile group							0.853	
							(0.113)**	
Personal income (ln)								0.048
								(0.014)**
Disability pensioner		-0.458				0.113	0.132	0.050
		(0.121)**				(0.127)	(0.127)	(0.127)
Other inactive		-0.150				-0.037	-0.009	-0.068
		(0.116)				(0.117)	(0.118)	(0.121)
Pensioner		-0.231				-0.003	-0.005	-0.068
		(0.114)*				(0.116)	(0.116)	(0.115)
Self-employed		0.194				0.140	0.184	0.197
		(0.161)				(0.160)	(0.161)	(0.161)
Student		1.008				0.998	1.033	1.320
		(0.159)**				(0.161)**	(0.161)**	(0.200)**
Unemployed		-0.772				-0.712	-0.667	-0.764
		(0.167)**				(0.169)**	(0.170)**	(0.171)**
Subjective health: average			-0.741			-0.736	-0.726	-0.750
			(0.077)**			(0.079)**	(0.079)**	(0.079)**
Subjective health: bad			-1.382			-1.386	-1.370	-1.406
			(0.089)**			(0.093)**	(0.094)**	(0.093)**
Housing ownership: other				-0.006		-0.033	-0.029	-0.052
				(0.181)		(0.182)	(0.183)	(0.182)
Housing ownership: tenant				-0.101		-0.056	-0.060	-0.125
				(0.134)		(0.135)	(0.134)	(0.134)
Housing quality problems: moderate				-0.218		-0.184	-0.182	-0.191
				(0.094)*		(0.095)	(0.095)	(0.095)*
Housing quality problems: serious				-0.902		-0.767	-0.754	-0.824
				(0.134)**		(0.135)**	(0.135)**	(0.135)**
Contact with people less often than once a month or never					-0.375	-0.362	-0.348	-0.396
					(0.062)**	(0.063)**	(0.063)**	(0.062)**
Has no friends					-0.118	-0.076	-0.063	-0.096

					(0.066)	(0.067)	(0.067)	(0.066)
Other personal characteristics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	3641	3641	3641	3641	3641	3641	3641	3641
Log Likelihood	-7191	-7148	-7064	-7166	-7171	-6990	-6981	-7010
Log Likelihood at zero	-7449	-7449	-7449	-7449	-7449	-7449	-7449	-7449

Notes: * significant at 5% level; ** significant at 1% level; Standard errors in parentheses; Dependent variable=self-reported satisfaction on a nine-point scale; Reference categories=employee, good health, owner-occupier; Other personal characteristics=male, ethnicity, education, age, lives in Budapest, marital status, number of children, and religion.

Table 9. Life satisfaction and individual well-being during economic transition, pooled data, ordered logit estimates

	(1)	(2)	(3)
Interaction effects			
Equivalised household income (ln)*year	-0.085		
	(0.092)		
Personal income (ln)*year		0.016	
		(0.019)	
2nd quintile group*year			0.081
			(0.134)
3rd quintile group*year			-0.037
			(0.136)
4th quintile group*year			0.192
			(0.138)
5th quintile group*year			0.161
			(0.145)
Unemployed*year	0.054	0.015	0.098
	(0.215)	(0.218)	(0.215)
Disability pensioner*year	0.176	0.233	0.211
	(0.181)	(0.180)	(0.181)
Pensioner*year	-0.063	-0.006	-0.028
	(0.153)	(0.152)	(0.153)
Self-employed*year	0.413	0.397	0.411
	(0.204)*	(0.204)	(0.204)*
Student*year	-0.190	-0.135	-0.189
	(0.210)	(0.255)	(0.210)
Other inactive*year	0.167	0.175	0.209
	(0.163)	(0.173)	(0.164)
Health: bad*year	-0.144	-0.116	-0.127
	(0.118)	(0.117)	(0.118)
Health: average*year	-0.171	-0.163	-0.158
	(0.101)	(0.101)	(0.101)
Housing ownership: tenant*year	0.177	0.158	0.186
	(0.149)	(0.148)	(0.148)
Housing ownership: other*year	0.070	0.100	0.103
	(0.225)	(0.224)	(0.225)
Housing quality problems: moderate*year	0.021	0.029	0.029
	(0.112)	(0.112)	(0.112)
Housing quality problems: serious*year	-0.231	-0.229	-0.194
	(0.164)	(0.164)	(0.164)
Main effects			
Year: 1998	0.921	-0.504	-0.372
	(1.102)	(0.284)	(0.216)
Equivalised household income (ln)	0.571		
	(0.064)**		
Personal income (ln)		0.028	
		(0.013)*	
2nd quintile group			0.200

			(0.088)*
3rd quintile group			0.439
			(0.090)**
4th quintile group			0.501
			(0.092)**
5th quintile group			0.698
			(0.095)**
Unemployed	-0.697	-0.729	-0.698
	(0.137)**	(0.140)**	(0.137)**
Disability pensioner	-0.058	-0.184	-0.074
	(0.131)	(0.130)	(0.131)
Pensioner	0.056	-0.072	0.021
	(0.102)	(0.101)	(0.102)
Self-employed	-0.248	-0.177	-0.201
	(0.130)	(0.130)	(0.130)
Student	1.150	1.383	1.181
	(0.140)**	(0.166)**	(0.140)**
Other inactive	-0.196	-0.247	-0.209
	(0.115)	(0.125)*	(0.116)
Subjective health: bad	-1.149	-1.196	-1.146
	(0.078)**	(0.077)**	(0.078)**
Subjective health: average	-0.520	-0.539	-0.521
	(0.066)**	(0.066)**	(0.067)**
Housing ownership: tenant	-0.247	-0.299	-0.261
	(0.068)**	(0.068)**	(0.068)**
Housing ownership: other	-0.115	-0.172	-0.138
	(0.137)	(0.137)	(0.138)
Housing quality problems: moderate	-0.200	-0.215	-0.204
	(0.062)**	(0.062)**	(0.062)**
Housing quality problems: serious	-0.461	-0.519	-0.482
	(0.099)**	(0.099)**	(0.099)**
Other personal characteristics	Yes	Yes	Yes
Observations	8796	8796	8796
Log Likelihood	-17024	-17084	-17023
Log Likelihood at zero	-17965	-17964	-17964

Notes: * significant at 5% level; ** significant at 1% level; Standard errors in parentheses;
Pooled cross-sectional time series dataset, using cross-sectional surveys from 1992 and 1998;
Dependent variable=self-reported life satisfaction on a nine-point scale; Year is a dummy, taking the value one in 1998; Other personal characteristics include main and interaction effects for sex, age, ethnicity, region (Budapest dummy), marital status, and number of children.

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