

Session Number: Plenary Session 1
Time: Monday, 25 August, AM

*Paper Prepared for the 30th General Conference of
The International Association for Research in Income and Wealth*

Portoroz, Slovenia, August 24-30, 2008

Life in transition: are people happier after a decade and a half?

Peter Sanfey and Utku Teksoz

For additional information please contact:

Peter Sanfey
EBRD
One Exchange Square, London EC2A 2JN, UK
sanfey@ebrd.com

This paper is posted on the following website: <http://www.iariw.org>

Life in transition: are people happier after a decade and a half?¹

Peter Sanfey² and Utku Teksoz³

1. Introduction

The transition from communism to market economies has been a painful one for many people in central and eastern Europe and the former Soviet Union. The dramatic upheavals that have occurred since the early 1990s, following the collapse of the old regimes, were unprecedented and, in terms of severity, largely unexpected. However, the present decade has seen a major turnaround in the region's fortunes. Economic growth has been robust, particularly in the poorer countries of the Commonwealth of Independent States (CIS), which are rebounding strongly. Foreign investment has poured into many parts of the region, major infrastructure programmes have been completed or are in progress, and the financial sector has been transformed. The transition countries are now firmly integrated into the global economy, and ten countries in central Europe and the Baltic States (CEB) are now members of the European Union.

This paper asks whether the objective results in terms of economic growth have translated into an improved subjective perception of well-being in transition countries. To put it more simply: do people feel happier or more satisfied with life than they did about 15 years ago? The paper addresses this question using a relatively new and comprehensive dataset – the “Life in Transition survey” (LiTS) carried out in autumn 2006 by the EBRD and World Bank. The LiTS is the first time that the whole region has been surveyed in a comprehensive fashion, with 1,000 interviews carried out in each country, giving a total sample of 29,000 (28 transition countries plus Turkey). It therefore gives a unique insight into the ways in which transition has affected people's lives, their attitudes to markets and democracy, and their views on a range of issues, ranging from the quality of public services to corruption and trust.

Our analysis using the LiTS generates a number of interesting findings. One striking result is that one's perception of how far one has come in the transition, in terms of objective well-being (income) is a highly significant predictor of life satisfaction, independently of one's current position on the ladder. This suggests strongly that people are indeed happier after 15 years of transition if they feel their household is better off relative to other households than under the old regime – in other words, if transition has “worked” for them. A second important finding is the association of higher levels of happiness with self-employment, a finding that parallels our previous work on the transition region but contrasts with more developed, non-transition countries. Third, males tend to be happier than females, a result that once again contrasts with much of the literature on other countries.

The structure of the paper is as follows: Section 2 contains a brief literature review, concentrating on the relatively small, but growing, number of papers that are devoted

¹ The views expressed in this paper are those of the authors only and not of the EBRD or Credit Suisse.

² Office of the Chief Economist, EBRD.

³ European Economics team, Credit Suisse.

to the transition region. Section 3 describes the structure of the LiTS and summarises some of the results from existing published research using this data set. Section 4 outlines the questions to be addressed and the methodology, and section 5 contains the main results. The paper concludes in section 6.

2. Literature review

The economics of happiness has received widespread attention in recent years, both in academic literature and in the popular media. Both the economics profession and the public at large seem to be increasingly fascinated by some of the patterns and puzzles that arise from surveys and questionnaires on people's subjective assessments of their well-being. Cross-country surveys of happiness are particularly interesting, both because they give some alternative ranking of welfare to the more common objective measures such as GDP per capita, and because in the richer countries there seems to be little relation over time between GDP growth and happiness. Also, different surveys across countries and time reveal similar patterns, for example with regard to the correlation between happiness and variables such as age, employment status and education.⁴

With regard to transition countries, the literature to date is somewhat sparse, but increasing attention is now being focused on the effects that transition has had on people's lives and opinions. It has been well-known for some time that people are more miserable in this region than in other regions of comparable economic size (see, for example, Veenhoven's world database of happiness, or Frey and Stutzer (2002)). However, the underlying causes are only now starting to be understood.

Some of the early literature examined life satisfaction data in Russia. Graham *et al.* (2004) find high levels of unhappiness on average among Russians, and uses panel data to show evidence of a two-way relation between happiness and income. Namazie and Sanfey (2001) analyse subjective well-being in the Kyrgyz Republic, based on a household survey in 1993, while Lelkes (2006) focuses on life satisfaction in Hungary. Although these studies identify a number of interesting patterns, it is not clear that they have relevance for other countries. Another weakness of the latter two papers is the lack of a panel component, which makes it difficult or impossible to identify any type of causal relationship.

Recent years have seen an increasing use of cross-country datasets to explore the interactions among the different correlates of happiness across countries. Most of these have relied on the World Values Survey, a major multi-country effort that inquires into people's basic values and attitudes across a broad range of issues, including politics and economics, family and religious values, gender issues and environmental awareness. So far, four waves of the WVS have been published, and the release of the fifth wave is imminent. The life satisfaction question asks people to answer on a scale from 1 (most dissatisfied) to 10 (most satisfied) the following question: "All things considered, how satisfied are you with your life as a whole these days?" The richness of the data, and the fact that there are now a number of waves covering the period (for some countries) from the early transition to the more mature phase, open up new possibilities for researchers to gain an understanding of happiness in transition.

⁴ Layard (2005) is a most useful and readable survey of the literature on happiness.

Helliwell (2002) uses waves 1-3 of the WVS to estimate a general happiness equation for all countries, and then conducts a regional analysis, dividing the transition region into eastern Europe and the former Soviet Union (FSU). The main result of interest is the growth over time in average self-reported happiness in the former region (from a very low base) but not in the latter region. (We explore regional comparisons below, using the new data.) This analysis is extended, both methodologically and using wave 4 of the WVS, by Sanfey and Teksoz (2007), who identify a “V-shaped” pattern of transition through time for a number of countries. Sanfey and Teksoz also show that many of the same patterns identified in non-transition countries also hold in the transition case, but others do not. Most notably, the self-employed enjoy greater life satisfaction than those in wage employment, in contrast to common results in the non-transition countries, and the age effects also differ, with satisfaction declining with age longer than in other countries. A similar analysis is contained in Easterlin (2008), who also shows that while satisfaction with material well-being is indeed rising across the region, satisfaction with other factors such as health provision and employment security has been falling. Finally, Guriev and Zhuravskaya (2008) use the WVS to examine the extent to which people in transition countries are “different” from those elsewhere when it comes to subjective well-being. Their conclusion is quite striking and worth quoting directly: “once we take a closer look there is virtually nothing unique about transition countries.” That is, the reported low levels of life satisfaction can be explained by a combination of objective factors such as income differences, age structure, the declining quality of public goods, and an important sample bias effect.

3. The LiTS

The EBRD-World Bank LiTS was motivated by the desire to understand better how people’s attitudes and living standards in central and eastern Europe and the former Soviet Union have been influenced by the extraordinary changes that have taken place over the past couple of decades. It was designed during the first half of 2006 and was implemented later that year between August and October. The survey covered 29 countries, including 28 in which the EBRD operates as well as Turkey, which is part of the World Bank’s Europe and Central Asia (ECA) region.⁵ In each country, a sample of 1,000 individuals was selected randomly for face-to-face interviews, making a total of 29,000 interviews across the whole region.

The survey is divided into seven sections: household; housing and expenses; attitudes and values; current activities; education and labour; life history; and personal questions, such as nationality, religion, health and voting behaviour. These sections cover four broad themes. First, personal information on aspects of material well-being, including household income, possession of consumer goods such as a car or mobile phone, and access to local public services and utilities. Second, measures of satisfaction and attitudes towards economic and political reforms, as well as public expectations and appetite for further reforms. Third, individual “histories” through transition, such as family backgrounds, employment situations over time, and other key events in their lives. Fourth, the extent to which crime and corruption are affecting people’s lives, and the degree to which trust, both among ordinary citizens and in state institutions, has changed over time.

⁵ Turkmenistan was excluded from the survey, because of the political situation prevailing at the time.

Although the LiTS dataset is still relatively unexplored, several papers and reports have drawn on the findings. The EBRD produced two reports during 2007 that analysed the results in some detail. The first (EBRD, 2007a) described the main findings by country and region, highlighting (*inter alia*) the major cross-country differences in life satisfaction. Broadly speaking, the richer, more advanced countries tend to report the highest average levels of happiness; Slovenia, the richest country in the region in terms of GDP per capita, reports satisfaction rates of around 70 per cent. However, there are some surprising results. For example, life satisfaction is very low in Hungary, possibly because it was undergoing a period of low growth and political turbulence at the time of the survey, whereas it was high in Belarus and Uzbekistan, two countries with lower living standards and rather authoritarian regimes that have shown weak commitment to market reforms and political pluralism.

The EBRD Transition Report (EBRD, 2007b) analysed the LiTS results in greater depth. Regarding life satisfaction, the Report confirms the results of previous studies in terms of the correlations with factors such as income, education and employment status, as well as the U-shaped relationship between happiness and age. A particular area of focus is the link between life satisfaction and labour market histories. Here, the results are somewhat mixed, but the analysis tentatively identifies a positive association between self-employment status and life satisfaction. This result is tested more rigorously below.

Within the World Bank, several papers have been produced that explore further some of the main findings of the survey. The one most relevant to our analysis is Alam et al. (2008), which contains a tabulation of many of the main correlates of life satisfaction. The paper documents the correlation between the main variable of interest with factors such as household spending, inequality, age, education and the like. Interestingly, the authors find that subjective assessments of issues such as trust in others and health status are also strongly correlated with life satisfaction. The authors also make some attempt to compare the raw scores on average happiness from the LiTS with those from the WVS, and they claim that improvements or disimprovements over time tend to be correlated with overall economic performance during the same period. This claim will be examined more rigorously below.

4. Methodology

The LiTS gives us a unique opportunity to gain new insights into life satisfaction and related factors across the region. Earlier analysis by a number of authors based on the WVS was restricted by the lack of coverage in certain countries. Now we have additional information for some countries that never made it to the WVS. This raises the question of whether one can generalise the conclusions drawn earlier to virtually the whole transition space. This is interesting also because this is not only a comparison across countries, but also across time. We are actually comparing 1999-2001 period with 2006.

The earlier analysis of Sanfey and Teksoz (2007) identified a number of new results regarding the correlates of life satisfaction in transition. It will be interesting to see if these results still hold, namely those concerning self-employment, the prolonged downward relation between satisfaction and age, and the link with macro variables on governance and inequality. It will also be important to see which country dummies are

positive and which ones negative. Finally, how important are factors not examined previously such as health, and the ladder variables, and mother's education?

Before turning to the results, a few words on the choice of the dependent variable are justified at this stage. As noted earlier, it has become common practice to use a survey question inquiring into respondents' life satisfaction on an ordinal scale as a relevant dependent variable and treat this as a proxy for happiness.⁶ This way of gleaning information on subjective welfare from surveys is not without problems, of course, as identified by the works of Kahnemann and others. Notwithstanding these problems, which are well-known in the literature, we still believe the best, and most feasible method of collating a dataset with a reasonable degree of cross-country comparability is through surveys. This does not mean, however, that survey data negates deep insights on the topic that can be gained from experimental studies, but rather that it offers complementary insights to research and explore.

Our dependent variable of interest comes from the section 3 of the LiTS. Respondents are asked to what extent they agree with the following statement:

“All things considered, I am satisfied with my life now”.

The responses are marked on a 5-point scale, where 1=strongly disagree, 2=disagree, 3=neither agree, nor disagree, 4=agree, and 5=strongly agree. This question comes relatively early in the sequence of questions⁷ and is one of the most straightforward in the whole survey; hence there is reason to believe that it is not as susceptible to fatigue on the part of the respondent. Furthermore, at approximately 98%, it has an extremely low non-response rate, which suggests that it is not as contaminated by noise as other parts of the survey.

Methodologically, we treat our dependent variable as ordinal and, in line with most of the literature, we run ordered probit regressions of the life satisfaction question on a battery of personal and country level characteristics. The equation takes the following form:

$$S_{ij}=f(X_{ij},Z_j)+\varepsilon_{ij},$$

where S_{ij} is a vector of life satisfaction responses on a scale of 1 to 5, X_{ij} are the correlates of life satisfaction that vary by country and individual, Z_j is a matrix of country-level characteristics (country-dummies in most of the specifications and macroeconomic variables in some specifications) and finally ε_{ij} is a vector of idiosyncratic error terms. It is worth emphasising here that we are controlling for fixed country-level effects by using country dummies in these regressions. This also allows us to say a few words on the cross-country differences in life satisfaction. In doing so, we specify Turkey as the omitted category and interpret the dummies' coefficients relative to the omitted category. As a country that never adopted communism or the planned economy, Turkey provides an interesting counter-factual. Furthermore, as a candidate to the European Union, it also falls between EU new

⁶ In fact, in some surveys, life satisfaction and happiness are treated as separate concepts and each receives its own question. However, earlier research suggests that these could be used interchangeably (see Layard, 2005, for a discussion). This paper follows the same practice.

⁷ The survey was designed such that Sections 1 & 2 would be answered by the head of household, and the rest by a randomly selected member of the household. In cases where the two were not the same person, this question would in fact be one of the first few questions in the survey, otherwise it would come after 10-15 minutes.

member states, countries on the road to accession and countries that do not have a full EU membership horizon.

5. Results

Table 1 summarises the results of the first set of regressions. We test the relevance of earlier results (e.g. Sanfey and Teksoz, 2007), which were obtained for an earlier point in transition period using the WVS data for a limited number of transition countries, and we introduce a number of new variables to the analysis. The first column of the table displays the results for the whole sample and is therefore referred to as the benchmark regression.

A number of interesting points arise from this regression. The link between education and happiness kicks in only at the very highest level of schooling; i.e., university/college degrees and postgraduate degrees. Beyond one's own education, parents' education also matters. Although they do not work in regressions when introduced simultaneously, on their own both father's and mother's highest obtained degree matters for reporting higher levels of life satisfaction. This makes sense as we would expect better educated people to be able to afford better schools for their children and in general give them better guidance in various stages of life. Following this line of reasoning, we have kept mother's education as an explanatory variable in the regressions as mothers typically spend more time with the children while they are growing up.

As far as employment status is concerned, compared to regular full-time employment, self-employment is associated with higher levels of life satisfaction. Self-employment has been not only a relatively safe strategy to deal with the upheavals of transition earlier in the period, but also a more rewarding strategy in later stages of transition to a market economy.⁸

We treat income status in two dimensions. First of all, we use an objective expenditure based variable at the household level, fine-tuned using the OECD equivalised scale. This variable is then divided into deciles, which are used to construct lower, middle and higher income groups. In a sense, starting from objective expenditure data we get to the households' relative positioning in these broad groups. As expected, the results are strongly significant and higher levels of income are associated with higher levels of life satisfaction.

Table 1: Ordered probit regressions of life satisfaction

	1. Whole sample	2. Males	3. Females
Education (omitted category: no education)			
primary	-0.017	-0.144**	0.047
	0.036	0.065	0.044
secondary	0.021	-0.091	0.080
	0.038	0.066	0.047
vocational training	0.001	-0.096	0.050
	0.038	0.066	0.047
university/college	0.108***	0.027	0.148
	0.040	0.070	0.050

⁸ For potential reasons as to why self-employment goes hand in hand with higher levels of life satisfaction in the context of transition, see Sanfey and Teksoz (2007).

	postgraduate	0.203** <i>0.091</i>	0.176 <i>0.145</i>	0.191 <i>0.117</i>
Mother's education		0.014* <i>0.008</i>	0.008 <i>0.012</i>	0.018* <i>0.010</i>
<u>Employment status</u> (omitted category: employed)				
	self-employed	0.096*** <i>0.028</i>	0.071* <i>0.037</i>	0.116*** <i>0.044</i>
	unemployed	-0.096*** <i>0.020</i>	-0.187*** <i>0.031</i>	-0.030 <i>0.027</i>
	housewife/man	0.052* <i>0.030</i>	0.053 <i>0.076</i>	0.069** <i>0.035</i>
	student	0.132*** <i>0.046</i>	0.114* <i>0.069</i>	0.146** <i>0.062</i>
	retired	0.052** <i>0.026</i>	0.002 <i>0.043</i>	0.088*** <i>0.034</i>
<u>Income status (objective)</u> (omitted category: lower income)				
	middleinc.	0.103*** <i>0.017</i>	0.119*** <i>0.027</i>	0.094*** <i>0.022</i>
	higherinc.	0.212*** <i>0.019</i>	0.232*** <i>0.030</i>	0.201*** <i>0.025</i>
<u>Income status (subjective)</u>				
	self placement ladder	0.155*** <i>0.005</i>	0.166*** <i>0.008</i>	0.147*** <i>0.007</i>
	dynamic ladder	0.084*** <i>0.004</i>	0.079*** <i>0.006</i>	0.088*** <i>0.005</i>
<u>Health status</u> (omitted category: very good)				
	good	-0.132*** <i>0.027</i>	-0.072*** <i>0.038</i>	-0.188*** <i>0.038</i>
	medium	-0.269*** <i>0.028</i>	-0.231*** <i>0.041</i>	-0.306*** <i>0.040</i>
	bad	-0.529*** <i>0.033</i>	-0.442*** <i>0.050</i>	-0.595*** <i>0.045</i>
	very bad	-0.789*** <i>0.047</i>	-0.677*** <i>0.076</i>	-0.867*** <i>0.061</i>
<u>Location</u> (omitted category: rural)				
	urban	-0.016 <i>0.016</i>	0.011 <i>0.025</i>	-0.037* <i>0.021</i>
	metropolitan	-0.073*** <i>0.021</i>	-0.039 <i>0.032</i>	-0.095*** <i>0.027</i>
Age		-0.022*** <i>0.003</i>	-0.027*** <i>0.004</i>	-0.018*** <i>0.003</i>
Age -squared		0.0002*** <i>0.000</i>	0.0003*** <i>0.000</i>	0.0002*** <i>0.000</i>
Ethnic minority dummy		-0.020 <i>0.023</i>	-0.001 <i>0.036</i>	-0.033 <i>0.031</i>
Male dummy		0.069*** <i>0.016</i>	- -	- -
# of obs.		24393	10091	14302
Pseudo-R ²		0.115	0.122	0.112

Notes: Standard errors in italics; *, ** and *** denote 10%, 5% and 1% degrees of significance, respectively.

Other variables broadly conform to prior expectations. Health status is closely associated with satisfaction, with people reporting themselves more miserable the worse their health status is. Location also matters. We divide the geographical location into three groups: rural, urban and metropolitan. In the whole sample, people living in metropolitan centres report consistently lower levels of life satisfaction

compared to the omitted category, namely rural. The stylised fact of U-shaped pattern of life satisfaction first decreasing and then rising with age after a midlife minimum also holds here. In common with Sanfey and Teksoz (2007), the minimum appears to come later in life in transition countries than in the non-transition case, with satisfaction decreasing up to age 55 and then rising afterwards.

Finally, we add two dummies to the equation. First, an ethnic minority dummy, which takes the value one if the respondent considers him/herself as a member of an ethnic minority. This variable fails to reach conventional levels of significance. Secondly, we add a dummy for gender taking the value one for male respondents. Much to our surprise and in contrast to our earlier results, the results from the benchmark regressions suggest males report higher levels of life satisfaction than females. There are a number of reasons why this might be the case (see Box 4.1 of EBRD, 2007b for a discussion). One possible explanation is the fact that many women were forced to leave the labour force in the early years of transition, in the face of a combination of declining economic activity and the collapse of state provision of child care.

This significant difference on the basis of gender leads us to consider males and females in different samples so as to get a better insight into what makes the reported levels of life satisfaction significantly higher for males. The results of these regressions are reported in columns 2 and 3. There are some differences worth noting. For example, men deeply dislike unemployment and are indifferent between being employed and retired, while women do not seem to mind unemployment so much and are much happier being retired than employed. Another difference occurs with regard to location, with a statistically significant association between lower satisfaction and urban/metropolitan living for women but not for men. Otherwise the results are more or less the same, which gives some justification for pooling the sample in subsequent regressions.

Finally, it is worth looking at the country dummy coefficients to see how living in one country rather than another is associated with different degrees of life satisfaction, even when one controls for other socio-economic variables. Table 2 summarises the sign and statistical effect of the dummies (with Turkey as the reference point). An examination of Table 2 reveals that most of the new EU member states from the 2004 wave of enlargement enjoy country-specific factors that make their residents more likely to report higher levels of life satisfaction now. The two exceptions to this observation are Hungary, which is in the negative category and Poland, whose country dummy fails to reach conventional levels of significance. Likewise, it was not possible to conclude statistically on the direction of the country fixed effects in the cases of Kyrgyz Republic, Mongolia, and Russia. On the other hand, negative country fixed effects prevailed in the cases of the new EU member states from the 2007 wave of enlargement, namely Bulgaria and Romania. Also included in this group are most other South-east European countries and a number of CIS countries such as Armenia, Azerbaijan, Georgia and Ukraine. Life satisfaction is particularly low in several former Yugoslav countries, which is not surprising given the relatively high living standards that prevailed before the break-up of the old Yugoslavia and the subsequent turmoil that these countries went through.

Table 2: Qualitative country fixed effects from the ordered probit regressions

<i>1. Positive</i>	Belarus, Croatia, Czech Republic, Slovak Republic, Slovenia,
--------------------	--

	Estonia, Kazakhstan, Latvia, Lithuania, Tajikistan, Uzbekistan
2. <i>Negative</i>	Albania, Bosnia & Herzegovina, Bulgaria, FYROM, Hungary, Moldova, Montenegro, Romania, Serbia, Ukraine, Armenia, Azerbaijan, Georgia
3. <i>Insignificant</i>	Poland, Kyrgyz Republic, Mongolia, Russia
<u>Note:</u> In all regressions, Turkey is the omitted category.	

This leads to the obvious question of whether the patterns of life satisfaction or happiness found in the pooled sample also hold when the sample is divided into sub-regions. Up to now, it has not really been possible to draw meaningful comparisons between these regions, because of missing data for a number of countries in surveys such as the WVS. Now it is possible with the LiTS. The division made is three groups: Central Eastern Europe and the Baltic States (CEB), South-Eastern Europe (SEE) and the Commonwealth of Independent States plus Mongolia (CIS+M). Table 3 shows the results.

Table 3: Ordered probit regressions of life satisfaction

	CEB	CIS+M	SEE
<u>Education</u> (omitted category: no education)			
primary	-0.100 0.084	0.024 0.072	-0.044 0.055
secondary	-0.061 0.087	0.019 0.072	0.076 0.061
vocational training	-0.049 0.085	0.011 0.073	-0.018 0.058
university/college	0.098 0.090	0.093 0.075	0.120* 0.065
postgraduate	0.105 0.142	0.003 0.205	0.468*** 0.154
Mother's education	0.022 0.015	0.007 0.011	0.008 0.015
<u>Employment status</u> (omitted category: employed)			
self-employed	0.071 0.067	0.070* 0.041	0.177*** 0.054
unemployed	-0.093** 0.044	-0.120*** 0.032	-0.071* 0.037
housewife/man	0.006 0.088	0.039 0.046	0.118** 0.054
student	0.263* 0.092	0.112 0.078	0.077 0.077
retired	0.101** 0.047	-0.018 0.046	0.062 0.048
<u>Income status (objective)</u> (omitted category: lower income)			
middleinc.	0.168*** 0.033	0.069*** 0.027	0.098*** 0.032
higherinc.	0.217*** 0.038	0.199*** 0.031	0.238*** 0.036
<u>Income status (subjective)</u>			
self placement ladder	0.147*** 0.011	0.157*** 0.008	0.161*** 0.010
dynamic ladder	0.097*** 0.008	0.081*** 0.006	0.075*** 0.007

Health status (omitted category: very good)			
good	-0.234 *** <i>0.053</i>	-0.018 <i>0.053</i>	-0.135 *** <i>0.040</i>
medium	-0.389 *** <i>0.057</i>	-0.171 *** <i>0.054</i>	-0.254 *** <i>0.044</i>
bad	-0.637 *** <i>0.066</i>	-0.421 *** <i>0.060</i>	-0.544 *** <i>0.056</i>
very bad	-1.063 *** <i>0.088</i>	-0.630 *** <i>0.085</i>	-0.727 *** <i>0.080</i>
Location (omitted category: rural)			
urban	-0.069 ** <i>0.030</i>	0.012 <i>0.027</i>	0.001 <i>0.031</i>
metropolitan	-0.061 <i>0.039</i>	-0.032 <i>0.033</i>	-0.171 *** <i>0.040</i>
Age	-0.014 *** <i>0.005</i>	-0.025 *** <i>0.004</i>	-0.022 *** <i>0.005</i>
Age –squared	0.0002 *** <i>0.000</i>	0.0003 *** <i>0.000</i>	0.0002 *** <i>0.000</i>
Ethnic minority dummy	-0.098 ** <i>0.048</i>	0.081 ** <i>0.036</i>	-0.011 <i>0.044</i>
Male dummy	0.047 <i>0.029</i>	0.067 *** <i>0.026</i>	0.094 *** <i>0.031</i>
# of obs.	6845	9596	7063
Pseudo-Rsquared	<i>0.113</i>	<i>0.120</i>	<i>0.099</i>

Notes: Standard errors in italics; *, ** and *** denote 10%, 5% and 1% degrees of significance, respectively.

One of the most interesting results from Table 3 is actually a “non-result”, namely the lack of any correlation between life satisfaction and education in CEB and the CIS+M. only in SEE, it seems, is there any statistically significant link between higher education and happiness. It is also in SEE that the self-employment result comes through most strongly, whereas it is weaker (though still significant) in CIS+M and it disappears in CEB. Similarly, the male dummy is not significant in CEB, but is in SEE and CIS+M. In general, however, it is striking that that most of the same patterns observed in the broad, pooled sample also hold when broken into sub-regions. The only variable where there is a significant sign change occurs with the ethnic dummy, which is positive and statistically significant in CIS+M, negative and statistically significant in CEB and insignificant in SEE.

Finally, we adopted the approach in Sanfey and Teksoz (2007) and experimented with the inclusion of macroeconomic variables instead of country dummies. The variables added to the regression include the annual inflation rate, the unemployment rate, growth of GDP per capita (in purchasing power parity terms) and a measure of institutional quality, called “governance”, derived from the Global Competitiveness Survey carried out annually by the World Economic Forum.⁹ The growth variable is constructed in the same spirit as the “dynamic ladder” variable discussed earlier, in that it captures how far a country has advanced (in terms of GDP growth) during the transition period. (Similar results are obtained when looking simply at growth in the previous year, i.e., between 2004 and 2005.)

Table 4 presents the results. All of the coefficients on the macroeconomic variables have the expected sign and are statistically significant. That is, life satisfaction is positively associated with lower inflation and unemployment rates, higher growth and

⁹ This governance variable is a simple average of six different dimensions of governance

better institutional quality. Interestingly, virtually all other coefficients remain substantially unchanged from the earlier benchmark regression, with the exception of the ethnic dummy variable which is now positive and statistically significant, although only at the 10 per cent level.

Table 4: Ordered probit regressions of life satisfaction with macroeconomic variables

		Whole sample
Macroeconomic factors		
	inflation (CPI)	-0.001 *** 0.000
	unemployment rate	-0.019 *** 0.001
	gdp per capita growth	0.001 *** 0.000
	governance	0.880 *** 0.097
<u>Education</u> (omitted category: no education)		
	primary	-0.050 0.039
	secondary	0.045 0.040
	vocational training	0.008 0.040
	university/college	0.095 ** 0.043
	postgraduate	0.235 ** 0.094
Mother's education		
		0.006 0.008
<u>Employment status</u> (omitted category: employed)		
	self-employed	0.090 *** 0.031
	unemployed	-0.167 *** 0.021
	housewife/man	-0.001 0.033
	student	0.129 *** 0.050
	retired	0.021 0.028
<u>Income status (objective)</u> (omitted category: lower income)		
	middleinc.	0.117 *** 0.018
	higherinc.	0.226 *** 0.021
<u>Income status (subjective)</u>		
	self placement ladder	0.152 *** 0.006
	dynamic ladder	0.086 *** 0.004
<u>Health status</u> (omitted category: very good)		
	good	-0.151 *** 0.029
	medium	-0.304 *** 0.030
	bad	-0.577 ***

		0.035
	very bad	-0.848 ***
		0.048
<hr/>		
Location (omitted category: rural)		
	urban	-0.032 *
		0.017
	metropolitan	-0.142 ***
		0.021
<hr/>		
Age		-0.023 ***
		0.003
Age -squared		0.0003 ***
		0.000
<hr/>		
Ethnic minority dummy		0.042 *
		0.024
Male dummy		0.041 ***
		0.017
<hr/>		
# of obs.		24393
Pseudo-Rsquared		0.115
<hr/>		

6. Conclusion

Survey data on individuals or households across the whole transition region is a rarity, and until recently we had limited knowledge of how transition has affected people's lives. This is why the EBRD-World Bank Life in Transition Survey is potentially so useful, because it is the first time that a large random sample of people from central Europe to central Asia has been asked for their views on a range of topics. This paper has focused on one issue – happiness or life satisfaction – to see how this is affected by a range of socio-economic and macroeconomic variables.

Our analysis has highlighted the importance of changes in relative household status, it has brought out the success of entrepreneurship, and it has identified important age, education, location and gender effects. Most importantly, the analysis has brought home the benefits of economic growth and progress in institutional reform as correlates of subjective well-being. Institutional development is a gradual process at best. Perhaps its rewards are not seen immediately. To maintain good governance requires strong commitment from governments, particularly in the case of transition countries. It has been documented elsewhere that good governance or reform commitment has a strong “growth dividend”.¹⁰ Beyond that, we also suggest in this present paper that it is correlated with higher life satisfaction. These are important points to bear in mind as some countries appear to have encountered a type of “reform fatigue” and as economic growth slows down somewhat.

¹⁰ See for instance Falcetti et al. (2006) and Kaufmann et al (???)

References

Alam, A., Mitra, P. and Zaidi, S. (2008). 'Key factors affecting Satisfaction with Life in Eastern Europe and the former Soviet Union: Some Insights from the 2006 Life in Transition Survey', manuscript, World Bank.

Easterlin, R. (2008). 'Lost in transition: life satisfaction on the road to capitalism' IZA Discussion Paper No. 3409.

EBRD (2007a). *Life in Transition: a Survey of People's Experiences and Attitudes*, London, EBRD.

EBRD (2007b). *Transition Report 2007: People in transition*, London, EBRD.

Falcetti, E., Lysenko, T. and Sanfey, P. (2006). 'Reforms and growth in transition: re-examining the evidence', *Journal of Comparative Economics*, 34, pp. 421-445.

Frey, B.S. and Stutzer, A. (2002). *Happiness and economics: how the economy and institutions affect human well-being*, Princeton University Press.

Graham, C., Eggers, A. and Sukhtankar, S. (2004). 'Does happiness pay? An exploration based on panel data from Russia', *Journal of Economic Behavior and Organization*, 55, pp. 319-342.

Guriev, S. and Zhuravskaya, E. (2008). '(Un)happiness in transition', *Journal of Economic Perspectives*, forthcoming.

Helliwell, J.F. (2002). 'How's life? Combining individual and national variables to explain subjective well-being', *NBER Working Paper No. 9,065*, <http://papers.nber.org/papers/w9065>.

Kaufmann, D., Kraay, A. and Mastruzzi, M. (2007). 'Governance Matters VI: Governance Indicators for 1996-2006', World Bank Policy Research Working Paper No. 4280.

Layard, P.R.G. (2005). *Happiness: lessons from a new science*, Allen Lane.

Lelkes, O. (2006). 'Tasting freedom: happiness, religion and economic transition', *Journal of Economic Behavior and Organization*, 59, pp.173-194.

Namazie, C. and Sanfey, P. (2001). 'Happiness and transition: the case of Kyrgyzstan', *Review of Development Economics*, 5, pp. 392-405.

Sanfey, P. and Teksoz, U. (2007). 'Does Transition Make You Happy?', *Economics of Transition*, 15(4), pp. 707-731.