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Forschungsinstitut zur Zukunft der Arbeit Institute for the Study of Labor

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ABSTRACT

Lost in Transition: Life Satisfaction on the Road to Capitalism

In the transition from socialism to capitalism in Eastern Europe life satisfaction has followed the V-shaped pattern of GDP but failed to recover commensurately. In general, increased satisfaction with material living levels has occurred at the expense of decreased satisfaction with work, health, and family life. Disparities in life satisfaction have increased markedly with those hardest hit being the less educated and persons over age 30; women and men have suffered about equally. The asymmetric response of life satisfaction to decreases in GDP in transition countries and increases in GDP in non-transition countries is arguably due to loss aversion.

JEL Classification: I31, P5, P27, D60

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What has happened to subjective well-being as the former communist nations of Europe have transitioned from central planning to market economies? Are people more or less satisfied with their lives? Have disparities in life satisfaction within the population widened or lessened? Are there differences between women and men, young and old, and the more and less educated? Although one might suppose these questions are of interest --some might even say, fundamental interest, considering that they involve comparing capitalism and socialism -- they have received little attention in the voluminous literature on transition economies. This paper is a start at filling this gap. The geographic scope is central, southern, and eastern Europe; the time -- governed by data availability -- the first decade of transition, 1989-99.

The broad economic facts of the transition have been spelled out numerous times, especially for the period studied here (see, for example, Campos and Coricelli 2002, Havrylyshyn 2006, Mickiewicz 2005, Murrell 1996, Philipov and Dorbritz 2003, Simai 2006, Svejnar 2002, UNICEF 2001, World Bank 2002). Most notable was an abrupt and massive economic collapse, with measured GDP falling to levels of around 50 to 85 per cent of the 1989 level, usually in a few years or less. Subsequently GDP recovered somewhat, though rarely by 1999 to the initial level. A visiting economist from Mars, confronted only with these GDP data, might well conclude that an economic disaster on the scale of the Great Depression had befallen some 400 million of the world's population. On the plus side, consumer goods shortages -- a chronic condition under socialism -- largely disappeared. With regard to factor inputs, capital shrank and there was a significant increase in flows out of the labor force. Unemployment rates rose from

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¹ The parallel to the Great Depression has not escaped the notice of transition analysts, most notably Branko Milanovic 1997.

near zero to double digit levels in many countries. "[P]overty and inequality ... both increased sharply in the beginning of the transition and have so far [1999] not shown signs of declining" (Campos and Corticelli, 2002, 816; cf. also World Bank 2000b). The social safety nets that prevailed under socialism were severely ruptured (Fox 2003, Orenstein and Haas 2002, Pascall and Manning 2000, Simai 2006, UNICEF 1999, 2001, World Bank 2000a). Accompanying these striking socio-economic developments were equally dramatic changes in the political system. Former police states were replaced by new, often democratic, regimes, and the populations endowed with much wider civil and political rights.

Exactly how such massive changes should play out in terms of people's feelings of well-being is far from clear a priori. On the economic side, there is the debate on whether absolute or relative income determines well-being. If absolute income, then one might expect well-being more or less to follow the course of GDP. If relative income, then well-being might remain unchanged, people simply adapting hedonically to economic vicissitude. This would be in keeping with the growing evidence that in upper income nations (and those under study here fell in 1989 in the upper middle-income group) increasing GDP is not accompanied by growing happiness (Easterlin 1974, 1995, 2005).

There is also the question of how political change might weigh against economic in its impact on life satisfaction. On the one hand, there is the evidence that when asked about their sources of well-being, people worldwide rarely mention political circumstances. Rather, they put foremost those concerns that principally occupy their time, most notably making a living, family life, and health (Easterlin 2000). On this basis,

one might argue that economic circumstances would carry the day. On the other hand, there are findings for Switzerland that direct democracy, in the form of access to initiatives and referenda, has a significant positive effect on well-being, other things equal (Frey and Stutzer 2000). Also, a recent cross-country analysis of mostly European nations finds a significant positive relation between democracy and happiness, controlling for income, language, and religion (Dorn et al 2006). If political change were particularly stressed as determining life satisfaction, one might expect a rise in subjective well-being despite adverse economic events.

The few published empirical studies of trends in life satisfaction during transition usually relate to only one country, cover varying time periods, and give no consistent picture. Frijters and his collaborators find life satisfaction rising along with income in East Germany from 1991 to 2001 (Frijters et al. 2004ab) and also varying directly with ups and downs in income in Russia between 1995 and 2001 (Frijters et al. 2006). These results are, in their view, vindication of the importance of absolute income in determining well-being. Saris (2001) and Veenhoven (2001) both report declines in life satisfaction in Russia between 1988 and the late 1990s, and Llelkes (2006), a decline in Hungary from the early to late 1990s. Hayo and Seifert (2003) consider economic, as opposed to overall, well-being from 1991 to 1995 and find in seven of ten transition countries declines in the proportion saying their economic situation is satisfactory or very satisfactory. All in all, neither theory nor the existing evidence point conclusively to the course of life satisfaction during the transition. (A newly-published article by Sanfey and Teksoz [2007] is discussed in the conclusion to this paper.)

² In transition countries, however, the effect of the shift to democracy is not significant, ibid., p. 514.

The analysis that follows first describes briefly the concept and methods employed. It then turns to evidence on the course of life satisfaction during the transition, and, following this, an analysis of who in the population gains and loses in life satisfaction. The primary aim is to present the facts, but the facts immediately raise questions of "why", and so some tentative explanations are ventured, essentially hypotheses deserving further exploration. As will be seen, life satisfaction gives a rather different perspective on the transition than that common in most economic studies where the emphasis is on evaluating different types of economic reform.

1. Concept, data, methods

The concept of central interest here is that of overall satisfaction with life, the response to the question: "All things considered how satisfied are you with your life as a whole these days?" The response scale ranges in integer values from 1(= dissatisfied) to 10 (= satisfied). Until the last decade, economists have typically inferred well-being from what are known as "objective" measures – GDP per capita, life expectancy, educational attainment, and the like – with GDP per capita typically the featured measure. Recently, however, increasing attention has been paid to measures of "subjective" well-being (SWB) – responses to questions on personal happiness or general life satisfaction. This growing literature analyzes both substantive and methodological issues, including the reliability, validity, and comparability of the responses to such questions (Clark et al., 2006; DiTella and MacCulloch, 2006; Frey and Stutzer, 2002ab; Graham, forthcoming; Layard, 2005; van Praag and Ferrer-i-Carbonell, 2004; van Praag and Frijters, 1999;

³ Simon Kuznets' insistence that GDP is a subjective, not objective, measure is conventionally ignored by economists (see the exchange between Kuznets [1948] and analysts at the National Income Division of the Department of Commerce).

Veenhoven, 1993). The methodological consensus is that SWB measures of the type used here are meaningful measures of well-being although, as with any well-being measures, including GDP, they have their shortcomings. The conclusion that the SWB measures are meaningful is buttressed by numerous cross sectional regression studies starting with those of Andrew Oswald and his collaborators that find in country after country the same patterns of association between subjective well-being and a wide range of economic and social variables (Blanchflower and Oswald 2004, Oswald 1997). The interest of the present analysis is substantive, not methodological – what the life satisfaction measure tells us about the course of subjective well-being during the transition.

The primary data are those of the World Values Survey (WVS), conducted in an increasing number of countries throughout the world in four waves 1981-84, 1989-93, 1994-99, and 1999-2004 (European and World Values Surveys Four-Wave Integrated Data File 2006). (The basic data are given in Appendix Table A-1.) Transition countries start to make their appearance in wave 2 (except for Hungary which is included in wave 1), some very shortly after the start of the transition. The WVS data have the special advantage of asking the same question in different countries and in successive surveys, thus ensuring substantial comparability. Also included in this analysis are annual data for East Germany (the former GDR) from June 1990 onward gathered in the German Socio-Economic Panel (GSOEP, Appendix Table A-2). This longitudinal survey contains a general satisfaction question very similar to that in the WVS. In all, the analysis covers thirteen transition countries spanning central Europe, the Baltic States, the Balkans, and

⁴ Cf. Haisken-DeNew and Frick 2005. The German data were made available by the German Socio-Economic Panel Study of the German Institute for Economic Research (DIW), Berlin.

the former Soviet Union. The transition countries of central Asia are not represented, because they were not surveyed until wave 3 of the WVS.

In any given wave the WVS surveys often differ from one country to another in both the year and month of the survey. The life satisfaction observations have been dated here to match the annual GDP observation that they most likely reflect. Thus a survey conducted in the first four months, say, of 1991, is dated 1990; a mid-year survey, say June-July 1991, is dated 1990.5 and compared to the GDP average of 1990 and 1991; and a survey in the latter part of the year, say August - December 1991, to 1991 GDP. For six countries (Poland, Czech Republic, Slovakia, Hungary, Bulgaria, Romania) the surveys in waves 3 and 4 both fall in years close together toward the end of the decade, and these surveys have been merged for simplicity and increased reliability.

Based on the data for which the earliest life satisfaction observation is available, the thirteen countries fall into two groups. For eight, the first observation occurs early in the transition, when GDP is typically 95 per cent or more of its 1989 level and the unemployment rate around 2 per cent or less (Table 1). For the other five, the first observation comes later in the transition when GDP is on the order of 85 per cent of its 1989 level and the unemployment rate, usually 10 per cent or more. The eight countries for which early-transition life satisfaction observations are available provide the fullest picture of the trend in life satisfaction in the first decade of transition and are principally relied on here.

⁵ GDP data here are from Economic Commission of Europe 2003, except those for 1986-88, which are from Philipov and Dorbritz 2003.

2. The trend in well-being

What can be said about the course of life satisfaction in transition countries during the 1990s? The data for the countries available, although less than comprehensive, give a fairly consistent picture. They suggest two generalizations.

First, life satisfaction plummets and then recovers, roughly following the course of the economy as indexed by real GDP. Second, the recovery of life satisfaction falls short of that in GDP.

The evidence for the first is as follows. Of the eight countries in the upper panel of Table 1 with early transition observations, there is one, the former GDR, for which annual life satisfaction data are available, and five with life satisfaction observations for the mid-nineties as well as the late nineties. When the observations for these six countries are plotted against time and compared with annual GDP data, life satisfaction in all six follows a V-shaped pattern similar to that of GDP (Figure 1). In a seventh country (Slovenia), which also has three well-spaced observations, with the first falling close to the GDP trough, life satisfaction conforms to the recovery phase of GDP.

Such sizeable and rapid declines in life satisfaction as those in Figure 1 are very rare. The magnitudes of the decline from peak to trough in the six transition countries of Figure 1 fall outside the range of virtually all of the between-wave changes (both positive and negative) observed in fourteen non-transition European countries in the entire survey period since 1980-84.

The finding that in this set of upper middle income countries life satisfaction moves directly with GDP is in stark contrast to the usual one for countries at this income

level, namely, that as GDP increases, SWB changes very little. Is it possible to reconcile these disparate results on the association of SWB and GDP?⁶

The answer, perhaps, is that the response to a drop in GDP differs from that to an increase, and what one is observing in the transition countries is "loss aversion" writ large. A considerable number of small group studies by social psychologists and behavioral economists have found that an increase in income means considerably less to people in terms of well-being than a loss of equivalent amount (the pioneering study is Tversky and Kahneman 1991; for a good overview, see Rabin 1998). The relevance of this argument here can be illustrated by adapting a figure from Easterlin (2001).

Assume that at a given point in time, mean income is y_1 and happiness u_1 on the utility function A_1 , which illustrates the usual cross sectional positive relation observed between happiness and income (Figure 2). If when income increases, aspirations rise commensurately, then when GDP per capita increases from y_1 to y_2 , average happiness remains unchanged at u_1 (a movement from point 1 to point 2, illustrated by the heavy broken line connecting the two points). This is because the positive effect on happiness of the growth in GDP per capita (an upward movement along A_1) is undercut by a downward shift in the utility function from A_1 to A_2 as rising material aspirations shrink the happiness value of a given dollar of income. If, however, GDP per capita falls, say from y_1 to y_3 , and income aspirations remain fixed at their initial level, then happiness falls from u_1 to u_2 (a downward movement along A_1 from point 1 to point 3, illustrated by the broken line connecting these points). Correspondingly, a recovery in GDP per capita from y_3 that moves people back along y_1 toward the reference level, point 1, raises

⁶ Throughout this analysis GDP and GDP per capita are used interchangeably, because total population size changes very little during the 1990s in these transition countries.

happiness back toward u₁. For illustrative purposes the diagram pictures the extreme case of complete hedonic adaptation to an income gain, and zero adaptation to an income loss.

Put simply, the argument is that people adapt hedonically to an increase in income from a given initial level, their aspirations tending to rise commensurately with income. But aspirations are much less flexible downward. Once people have attained a given level of income, they cling to this reference point -- the well-known "endowment effect" (Kahneman, Knetsch, and Thaler 1991). Hence, if income falls they feel deprived, and their subjective well-being declines. In turn, a recovery in income that returns them toward the reference level increases subjective well-being. Readers will note that the kink in the broken line at point 1 of Figure 2 is analogous to that in diagrams of loss aversion (ibid., p. 200).

As an illustration, consider the contrasting experience of East and West Germany, sitting side by side, with a common language, history and culture. In East Germany in 1990 GDP collapses and then recovers with life satisfaction following a roughly similar course. In West Germany real GDP increases by 15 per cent from 1990 to 2004, but life satisfaction drifts slightly downward (Easterlin and Zimmermann forthcoming). East Germany's pattern conforms roughly to the broken line movement between points 1 and 3 in Figure 2; West Germany's, to that between points 1 and 2.

The evidence for the second generalization, that the recovery of life satisfaction falls short of that in GDP, is presented in Figure 3. For the eight countries in the upper panel of Table 1, those with both an early transition and late 1990s observation, the change in life satisfaction over the full period is plotted against the change in the GDP index, and an OLS regression line fitted to the data. If life satisfaction typically recovered

to its 1989-90 level when GDP did, then the regression line would go through the origin. In fact, the y-axis intercept is a significant negative .25 when GDP fully recovers to its initial level (zero change in GDP). Given that the peak to trough decline in life satisfaction is typically around 1.00 or less, the .25 shortfall is sizeable.

Why does life satisfaction fail to recover commensurately with GDP? The most obvious hypothesis is the sharp deterioration in employment conditions in the transition countries. In the WVS data in every one of the thirteen transition countries included here the employment rate, the percentage of the population employed, falls substantially between the first and last dates for which life satisfaction is observed, with most countries experiencing double-digit declines. The declines reflect increases in both the unemployment rate and the proportion not in the labor force, with increased unemployment typically the larger of the two, especially for men (Table 2). As one might expect, the declines in the employment rate are less for the group of five countries whose initial observation occurs later in the transition, but the same pattern is observed in both groups of countries with regard to the increase in the unemployment rate and labor force exit (cf. panels A and B).

Trends in the absolute level of real wages also provide evidence of the deterioration of employment conditions. In 1999, average real wages ranged from around 40 to less than 90 per cent of those in 1989, save for the Czech Republic, at 107 per cent and Poland, 96 per cent (UNICEF 2001, App. Table 10.9). But while deterioration in employment and wages in the 1990s is universal in the countries under study here, there is considerable variation in the specific form this takes. In the Russian Federation, for example, labor hoarding by state firms occurred along with growing wage arrears of

sizeable magnitude. Such variations make difficult simple overall quantitative comparisons of countries' labor market conditions (Barr 2005 provides a good overview).

The significance of the deterioration in employment conditions goes beyond the direct economic effect, for it is also symptomatic of the deterioration of the social support system. Prior to transition there was what has been called the "socialist greenhouse", "an artificial environment typical for the state socialist societies of Eastern Europe..."

(Sobotka 2002, p. 41; chapter 4 gives details). A key feature of this system was that many social benefits were tied to employment -- "[w]ith a huge appetite for able labour, the state encouraged women to study, marry and have jobs and babies, and, where kinship support was weak, the state provided the means to help women manage competing demands "(UNICEF 1999, p. viii). With the collapse of employment and the socialist state there occurred a substantial reduction in these additional sources of support (World Bank 2000a).

The implications for life satisfaction of the loss or reduction of such benefits is suggested by data for two countries, the former GDR and Hungary, for which evidence is available on satisfaction with specific domains of life. What stands out is that satisfaction declines in domains with formerly assured support. Thus, in the former GDR satisfaction with health, work, and childcare all decline (Table 3, panel A). In contrast, satisfaction with conditions relating to living level is typically greater in 1999 than 1990 -- indeed, much greater in the case of goods availability and the environment, two notably deficient areas under socialism. In Hungary, where the first observation is unfortunately not until 1992, satisfaction with work, home, neighborhood, and health are all lower in 1997,

while satisfaction with income and standard of living are virtually unchanged (Table 3, panel B).

The experience of another transition country, China, perhaps provides additional support for the importance for life satisfaction of employment and social support conditions. The reported growth of China's real GDP has been truly stunning -- the 2004 level is estimated to be almost three times that in 1990 (Maddison 2003). Despite such unprecedented growth, life satisfaction has declined. Based on Gallup World Poll data for four dates between 1994 and 2004, Kahneman and Krueger (2006) report a steady decline in the per cent of the population somewhat or very satisfied with life. The WVS data used here give a similar picture -- a decline in mean life satisfaction from 1990 to 1995, and again from 1995 to 2000. Though China did not experience the severe economic collapse of the European countries, several features of the European transition are evident there, notably rising unemployment, increasing inequality, and dismantling of the social safety net. It is possible that these conditions have exerted both in China and Europe a similar drag on life satisfaction.

Can anything be said about the trend in life satisfaction in the European countries prior to the transition? One suggestive bit of WVS evidence is mean life satisfaction in 1981 in the Russian oblast (county) Tambov, "a region that [the Russians conducting the survey] considered representative of Russia as a whole" (Inglehart and Klingemann 2000,

⁷ The WVS trend for 1990-1995 is based on the urban population only; however, the 1995 data reveal no significant difference between the urban and rural population's life satisfaction.

⁸ For those who find it hard to believe that life satisfaction did not improve in a poor country like China experiencing such enormous improvement in real income, it is worth noting that in China's neighbor, Japan, life satisfaction has not increased in the last half century, despite an over five-fold rise in GDP per capita from initially low levels (Easterlin 1995, Kusago 2007).

p. 175). Given below is mean life satisfaction for Tambov in 1981 and 1995 and, for comparison, that in Russia as a whole and Belarus in 1990 and 1995:

	<u>1981</u>	<u>1990</u>	<u>1995</u>
Tambov	7.26	n.a.	4.23
Russia	n.a.	5.37	4.45
Belarus	n.a.	5.51	4.35

The 1995 observations for all three areas are quite similar. If one assumes the trends were also roughly alike, then these numbers imply considerable decline in life satisfaction during the 1980s in Russia.

Further support for the inference of a decline in life satisfaction in the transition countries in the 1980s comes from the WVS data for Hungary. In 1982, when the first wave of the WVS was conducted there, the mean level of life satisfaction was 6.93, much higher than the 1990 value of 6.03. In Hungary in the latter part of the 1980s, communism was starting to unravel, the economy was faltering, and there was growing uncertainty and anxiety with regard to the future (Andorka et al 1999). Speder et al (1999) report rising anomie, and present as evidence the differing responses to several survey questions in 1978 and the early 1990s. The responses uniformly indicate a substantial rise between 1978 and 1990 in feelings of anxiety and insecurity (Figure 4).

The WVS surveys provide additional evidence of the growth of insecurity in Hungary during the 1980s. In 1982, when asked "how much freedom of choice and control you feel you have over the way your life turns out", respondents averaged 6.81 on a scale of 1 (= none at all) to 10 (= a great deal); in 1990, the corresponding mean was 6.52. (By the end of the 1990s it had dropped to 6.26.) One might suppose that the dissolution of the communist police state and growing sense of freedom would increase

life satisfaction prior to the transition; the fact that life satisfaction in Hungary declined suggests that economic stagnation and growing uncertainty about the future were dominating life satisfaction. The growth of uncertainty about the future is said to have been common in the transition countries (Philipov and Dorbritz, 2003, p. 19; cf. also Brainerd and Cutler 2005, pp. 125-128).

3. Winners and losers

Those with the biggest loss in life satisfaction during the transition are the less educated and the population ages 30 and over; women and men are both about equally affected. Disparities in life satisfaction, as measured by the Gini coefficient, typically widened.

The impact of the transition on different demographic groups is evidenced by comparing the coefficients of a multiple regression on end-of-decade data with those on beginning-of-decade data, where the regression is life satisfaction on gender, age, and education. In the case of education the gradient in life satisfaction is typically negligible at the start of the transition, but turns noticeably and significantly positive over the course of the decade (Figure 5 left panel). Education is measured here by the age at which education is completed, the only education measure available in the WVS at both dates, with 7 years or less typically the minimum value and 23 years or more, the maximum.

Both panels of the figure are plots based on coefficients from a multiple regression with

⁹ It is likely that some ethnic minorities are also among the losers, but this has not been explored here. ¹⁰ There are no controls for life circumstances because the impact of the transition operates via life circumstances. If, say, deteriorating employment conditions differentially affect those with more and less education, one wants to see the effect of this on the relative life satisfaction of the more and less educated, and a control for employment status would eliminate this effect.

country dummies on pooled data for the eight countries in the upper panel of Table 1.

Regressions on the individual country data yield quite similar results.

There is fairly little evidence of an age gradient in life satisfaction at the start of the transition, a result similar to that for education (Figure 5, right panel). By the late 1990s, however, a significant negative gradient emerges. The age categories here are less than 30 years, 30 - 44, 45 - 59, and 60 +, and the end-of-decade coefficients for the last three are all significantly less than that on the youngest group. The two oldest age groups suffer, on average, the largest declines in life satisfaction relative to those under 30 years old. Regressions on the individual country data typically yield similar results, except that for those 60 years old and over there is more variation among countries, probably due to differences in pension policy.

It is plausible to suppose that the leveling of life satisfaction within the population at the start of the transition is linked to the socialist policies of wage equalization (political standing aside) and full employment, and that the appearance of the differentials just noted is to a considerable extent a reflection of the growth of income and unemployment differences as free market forces take hold. A simple comparison of the change in the Gini coefficient for life satisfaction with that for income provides some support for this hypothesis. In almost all of the eight countries in Figure 5, inequality in life satisfaction rose in the 1990s and this rise tends to be associated positively with the rise in income inequality (Figure 6; the slope coefficient of the regression line is slightly short of significance at the 10 per cent level). The rise in income inequality is probably due to several things -- the emergence of substantial wage differentials (Brainerd 1998,

¹¹ The exception to the rise in life satisfaction inequality is the former GDR, where massive income transfers from West to East Germany buttressed especially the income of the poorer segments of the East German population. See Busch 1999, Headey et al 1995, Schwarze 1996.

Milanovic 1999), the growth and differential incidence of unemployment in the population, and the associated demise of the social support system.

Why, controlling for education, is there a greater decline in life satisfaction among those in the population 30 and over than among young adults? For those ages 60 and over, the answer probably lies largely in the deterioration of old-age pension support. For those between ages 30 and 59, the answer is perhaps that, when free market conditions were established, most persons age 30 to 59 were already well-embarked on a life course set under the conditions of the socialist greenhouse -- both spouses working, career paths set, and families established with housing and child-rearing arrangements in place. The collapse of the established system left many such families in turmoil, seeking to cope with family responsibilities while job opportunities and social support were disappearing. 12 Some families were literally uprooted, moving back to small villages in reasonable proximity to urban centers where subsistence agriculture could be coupled with nonfarm employment.¹³ Symptoms of social stress grew markedly -- increased alcoholism, smoking, and use of drugs; increased male mortality; and a rise in domestic violence against women (UNICEF 1999, 2001; Brainerd and Cutler 2005). Though not confined to those over age 30, these developments were usually more pronounced in the older age groups.

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¹² A good overview of economic coping strategies, with empirical evidence for Latvia is Gassman and deNeubourg 2000, 2002 (cf. also Gorniak 2001). A forerunner of this type of analysis of coping strategies is Modigliani (1949), who argued that during the Great Depression households sought to maintain their habitual consumption in the face of falling income by reducing their savings rates.

¹³ Cf. Brown et al 2005, Tammaru et al 2004. Mickiewicz (2005, p. 86) notes the rise of subsistence agriculture. In the WVS data in 5 countries for which comparison is possible, the population living in places with less than 2,000 population rises noticeably -- by an average of 7 percentage points -- between the beginning and end of the 1990s, a redistribution of population that contrasts markedly with increasing urbanization observed during long term economic growth.

In contrast, those under age 30 were less wedded to the "socialist greenhouse". 14 Raised, so to speak, more nearly in the wild, they were in a better position to adapt to the new environment. Many of those under 30 years old at the start of the transition had the option of postponing marriage and/or having children. This demographic strategy for coping with economic stress was a feature of the Great Depression, and, as the evidence shows, it has been widely exercised in the transition countries (Philipov 2002, Philipov and Dorbritz 2003, Sobotka 2002, 2003, Szivós and Giudici 2004). Some of these demographic changes were already underway in a few countries before the transition, but in the 1990s they appear in virtually every transition country, usually at an accelerated pace. They are not the result of young adults reducing their family size goals as free market forces replace the socialist greenhouse. Surveys conducted in seven of the transition countries included here typically find that the completed family size expected by women ages 20-24 in the mid-1990s is no different from that for women fifteen years older (Philipov and Dorbritz 2003, p. 115, Table 2.5.2). Rather, they reflect decisions to postpone family formation as a way of coping with the less stable economic environment.

Why do women and men have about equal declines in life satisfaction? The answer may lie in two parallel and related developments. On the one hand, unemployment rises and this affects men more than women; on the other, family dissolution increases and this impacts women more than men. Both cross sectional and panel studies in the SWB literature repeatedly indicate sizeable negative effects on life satisfaction of both unemployment and marital dissolution (Blanchflower and Oswald

¹⁴ Alesina and Fuchs-Schündeln (2005) find that younger cohorts in the former GDR are less favorably disposed toward welfare policies than their elders. Similarly, the 2006 survey by the European Bank for Reconstruction and Development (2007) finds that young people in transition countries have a more favorable view of the economic and political situation than older.

2004, Diener, Lucas, and Scollon 2006, Frey and Stutzer 2002, Helliwell and Putnam 2004, Winkelmann and Winkelmann 1998, Zimmermann and Easterlin 2006). End-of-decade regressions for the countries included here give the same result.

4. Conclusions and implications

To sum up, the collapse of output and employment in the European transition countries precipitated a sharp drop in life satisfaction. Subsequently GDP improved, but stagnating labor market conditions and a deteriorating social safety net prevented a commensurate recovery of life satisfaction. The evidence strongly suggests that economic circumstances trumped political in their impact on subjective well-being. In addition, differences within the population in life satisfaction widened as wage and employment disparities increased, and family life was disrupted. Those hit hardest were the less educated and persons over age 30, with women and men suffering about equally. The asymmetric response of life satisfaction to decreases in GDP in transition countries compared with increases in GDP in non-transition countries is arguably due to the psychological phenomenon of loss aversion.

With the exception of the former GDR, the life satisfaction data used in this analysis end in 1999.¹⁵ In the former GDR life satisfaction by 1999 had just about recovered to its 1990 level; since then there has been only slow growth in output, unemployment has remained high, and life satisfaction has slipped from its post-transition peak (Figure 1).

The economies of the other transition countries included here have generally fared better than the former GDR. In the six years after 1999 the increase of GDP has averaged

¹⁵ Wave 5 of the WVS was conducted in 2005-2006, and should be in the public domain by 2009.

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over 40 per cent, with a range from 22 to 66 per cent, and in most countries unemployment rates declined (TransMONEE 2007, Tables 10.1, 10.6). Consistent with the recovery of GDP and employment, life satisfaction appears to have increased in most countries. This is suggested by tabulations of mean life satisfaction 2001-2006 in Blanchflower (2007, Table 1) that cover all of the transition countries included here except Russia and Belarus. Because the life satisfaction questions are quite different in Blanchflower's source, the Eurobarometer, and the WVS, it is not possible to say whether by 2006 life satisfaction had returned to its pre-transition level.

Shortly after this study was completed Sanfey and Teksoz (2007) published a valuable analysis of life satisfaction in the transition countries. There is substantial agreement between some of their conclusions and those of the present study, most notably with regard to the V-shaped pattern of life satisfaction in the transition countries and the differential impact of the transition by demographic group. This consistency is reassuring, especially because the two studies overlap significantly with regard to both data (chiefly WVS) and time span (the 1990s). In other respects, however, there are important differences. Perhaps most fundamental is the answer to the question posed in the title of their paper, "Does transition make you happy?". Their response, that by the end of the 1990s "life satisfaction levels have returned close to pre-transition levels in most cases" (p. 707) is considerably more sanguine than that of the present analysis, which finds a considerable shortfall still prevailing at that time (Figure 3). The difference in results stems from their including all wave 2 countries of the WVS in their analysis of the degree of recovery in life satisfaction, while the present study considers only eight WVS countries plus the former GDR, countries which all have an initial life satisfaction

reading falling at or close to the date of the pre-transition levels of GDP and unemployment (Table 1). Clearly the larger set of WVS countries studied by Sanfey and Teksoz start, on average, later in the transition and consequently with life satisfaction values already depressed below the pre-transition level by the collapse of GDP and rise in unemployment. Given the lower initial reference point, it is not surprising that they find a greater degree of recovery in life satisfaction.

The present analysis also differs from theirs in other respects. For one thing, it addresses the asymmetry in the response of life satisfaction to decreases versus increases in income. Also, it adds an analysis of inequality of life satisfaction, demonstrating rising inequality, and it includes data on domain satisfaction that reveal the differing directions of change in satisfaction with material living levels versus with work, family, and health. The domain satisfaction results are of special interest, because they suggest that while the transition from socialism to capitalism in Eastern Europe has, on average, been raising satisfaction with material living levels, this has been at the expense of satisfaction with employment, health, and family security, with the net balance in well-being at best not clearly improved.

The study by economists of life satisfaction and happiness is new, and we are only beginning to understand what these measures tell us about well-being. It seems reasonable to suggest, however, that they add a dimension to the evaluation of well-being that is a useful complement to the standard armory. For example, the disparate trends in satisfaction with different realms of life just mentioned suggest a somewhat different "message for policy makers" (in the words of Sanfey and Teksoz, p. 727) than the

¹⁶ Some psychologists are, in fact, advocating the adoption by government policy makers of a variety of measures of subjective well-being (Diener and Seligman 2004), and there is some evidence of a movement in this direction in Europe (cf. e.g. Donovan and Halpern 2002).

predominant emphasis on economic growth found in the economic literature on the transition. The message suggested by the life satisfaction data is the need for policies responsive to the everyday worries of women and men about work, health, and family life, as well as living levels. If the need for a broader set of policy goals had been recognized by economists formulating transition policy, perhaps there would have been fewer "lost in transition".

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Table 1
GDP Index and Unemployment Rate at Date of Earliest Life Satisfaction
Observation, 13 Transition Countries

	(1)	(2)	(3)
	Date of earliest	GDP index	Registered
	LS observation	(1989=100)	Unemployment
			Rate, per cent
GDP Index > 90			
Former GDR	1989.5	92	0
Poland	1989	100	1.3
Hungary	1990	96	1.7
Estonia	1989.5	96	1.6
Latvia	1989.5	101	2.3
Lithuania	1989.5	98	3.5
Belarus	1990	98	0.5
Russian Federation	1990	97	0.8
GDP Index < 90			
Slovenia	1991	84	10.1
Czech Republic	1991	87	4.1
Slovakia	1991	83	11.8
Bulgaria	1991	83	11.1
Romania	1993	82	10.4

Source: Column 2, Economic Commission for Europe 2003, Table B-1. Column 3, <u>ibid</u>, Table B-7, except Poland, from WVS, and former GDR, from GSOEP. For the Baltic states, Belarus, and the Russian Federation, the date for the unemployment rate is the earliest available, 1992.

Table 2 Change in Employment Status of Persons Age 20-59, by Gender, c. 1990 to 1999

	(1)	(2)	(3)	(4)			
	Per cent	Percentage point change,					
Country	employed _		first to last date	?			
	first date	Employed	Unemployed	Not in labor force			
A. Eight countries, in	itial GDP index >	90					
<u>Females</u>							
Mean	80.2	-14.9	8.4	6.5			
(s.d.)	(9.0)	(6.3)	(4.4)	(6.5)			
<u>Males</u>							
Mean	90.6	-15.6	13.0	2.6			
(s.d.)	(4.9)	(6.1)	(6.6)	(3.4)			
B. Five countries, init	tial GDP index < 1	90					
<u>Females</u>							
Mean	74.1	-11.4	5.8	5.6			
(s.d.)	(6.4)	(9.6)	(6.4)	(10.1)			
Males							
Mean	86.6	-9.3	7.7	1.6			
(s.d.)	(7.2)	(7.3)	(6.8)	(4.2)			

Source: WVS except former GDR, from GSOEP. The countries are grouped as in Table 1.

Table 3 Satisfaction with Specified Domains of Life

A. Former GDR, 1990 and 1999

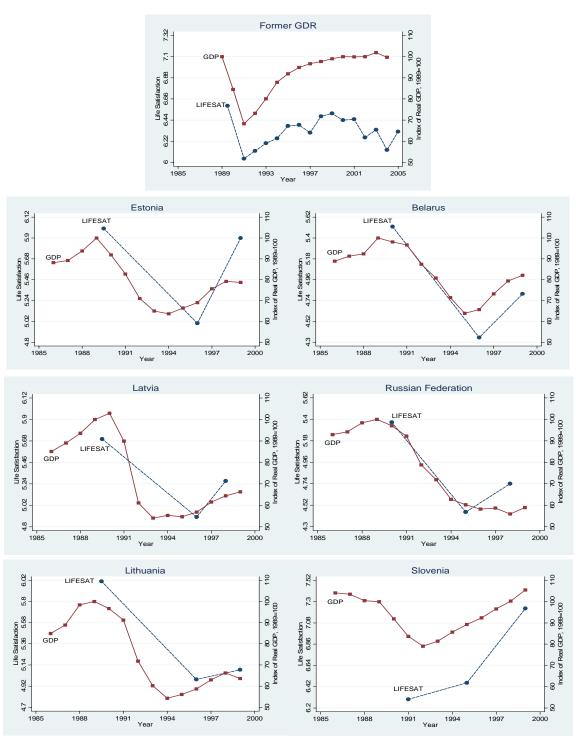
	(1)	(2)	(3)
	1990	1999	Change
			1990 to 1999
Satisfaction with:			
Childcare	7.54	6.48	-1.06
Work	7.23	6.48	-0.75
Health	6.62	6.20	-0.42
Household income	5.54	5.55	+0.01
Standard of living	6.36	6.56	+0.20
Dwelling	6.93	7.32	+0.39
Goods availability	3.18	6.17	+2.99
Environment	3.13	6.50	+3.37

B. Hungary, 1992 and 1997

	1992	1997	Change
			1992 to 1997
Satisfaction with:			
Work	7.4	6.7	-0.7
Home	7.1	6.5	-0.6
Neighborhood	7.3	6.5	-0.8
Health	6.4	5.8	-0.6
Household income	3.6	3.4	-0.2
Standard of living	4.6	4.5	-0.1

Source: Former GDR, GSOEP. Hungary, Spéder et al, 1999. In both countries the scale is 0-10.

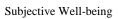
Figure l Life Satisfaction c. 1990, 1995, and 1999, and Index of Real GDP, Annually 1986-1999^a



Source: Real GDP, Economic Commission for Europe, 2003, Appendix Table B-1. For Former GDR, GDP 2003 on is extrapolated from 2002 via real household income from GSOEP. Life satisfaction, Appendix Tables A-1, A-2.

^a Former GDR, 1989-2005

Figure 2
Subjective Well-being (u) as a Function of Income (y) and Aspiration Level (A)



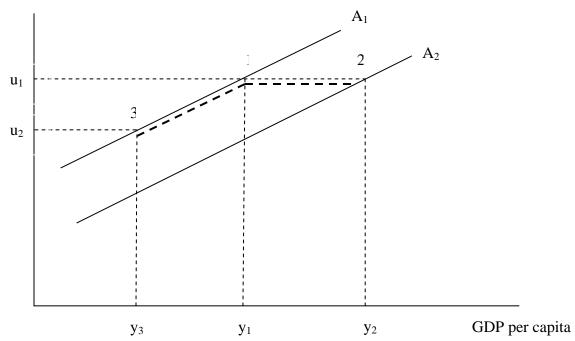
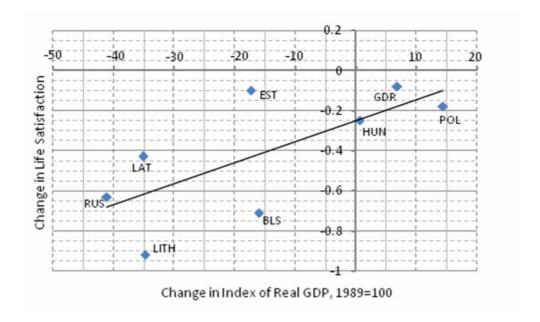


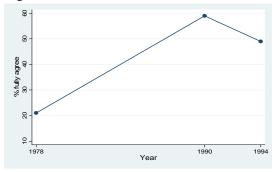
Figure 3
Change in Life Satisfaction and Index of Real of Real GDP (1989=100), c. 1990 to 1999, Eight Countries with Early Transition Observations of Life Satisfaction



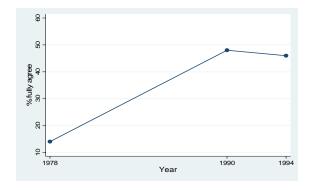
Note: The equation for the OLS regression is: y = 0.010x-0.251 (the t-stats are respectively 2.44 and -2.34; the adjusted $R^2 = 0.414$). The countries are those in the upper panel of Table 1.

Figure 4
Agreement with Indicators of Uncertainty and Anxiety, Hungary, 1978, 1990, and 1994

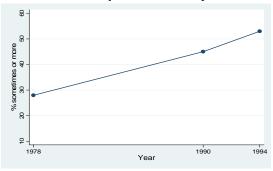
A. Everything is changing at such speed that one no longer knows what to believe in



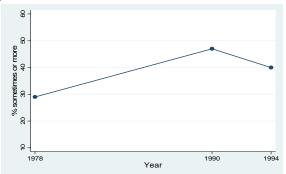
B. One lives from hand to mouth; there is no point in making plans for the future



C. How often do you feel that you lead an aimless life and that your existence is pointless?

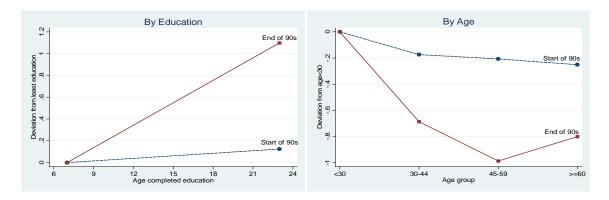


D. How often do you feel that you are good for nothing, and that you have lost all your belief in yourself?



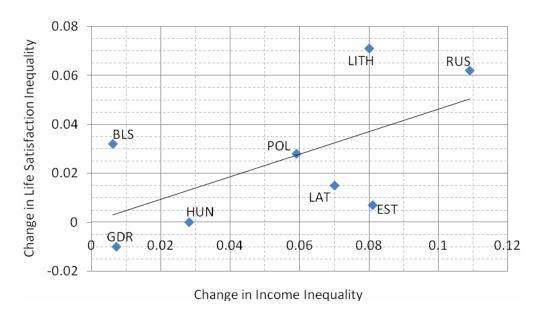
Source: Spéder et al. 1999, pp. 485-486.

Figure~5 Life Satisfaction by Education and Age at Start and End of 1990s, Seven Countries with Early Transition Observations



Note: In top panel, controlling for gender and age; in lower panel, gender and education. Country dummies are also used. The countries are those in the upper panel of Table 1, except the former GDR for which comparable data were not available. Source: WVS, waves 2 and 4.

Figure 6
Change in Inequality of Life Satisfaction and of Income, c. 1990 to 1999, Countries with Early Transition Observations of Life Satisfaction



Note: The equation for the OLS regression is: 0.4603x+0.0003 (the t-stats are respectively 1.84 and 0.02; the adjusted $R^2=0.254$). The countries are those in the upper panel of Table 1.

Source: Income inequality: UNICEF 2001, Appendix Table 10.11, except GDR from GSOEP, with 1992 observation extrapolated to 1990 via Schwarze 1996, Table 2; life satisfaction inequality: WVS, except GDR from GSOEP.

Appendix A. Basic Data

Table A-1
Mean and Inequality of Life Satisfaction, 12 Countries, c. 1990 to c. 1999

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
			sfaction	Mid-		sfaction			isfaction
	Initial	Mean	Gini	period	Mean	Gini	Terminal	Mean	Gini
	date		coef.	date		coef.	date		coef.
Poland	1989	6.58	.193	n.a.	n.a.	n.a.	1997.5	6.40	.221
Hungary	1990	6.03	.230	n.a.	n.a.	n.a.	1998.5	5.78	.230
Estonia	1989.5	6.00	.200	1996	5.00	.256	1999	5.90	.207
Latvia	1989.5	5.70	.242	1996	4.90	.256	1998	5.27	.257
Lithuania	1989.5	6.01	.221	1996	4.99	.299	1999	5.09	.292
Belarus	1990	5.52	.228	1996	4.35	.282	1999	4.81	.260
Russian Federation	1990	5.37	.252	1995	4.45	.318	1998	4.74	.314
Slovenia	1991	6.29	.197	1995	6.46	.184	1999	7.23	.165
Czech Republic	1991	6.69	.180	n.a.	n.a.	n.a.	1998	6.72	.165
Slovakia	1991	6.62	.205	n.a.	n.a.	n.a.	1998	6.05	.208
Bulgaria	1991	5.03	.258	n.a.	n.a.	n.a.	1998	5.00	.288
Romania	1993	5.88	.225	n.a.	n.a.	n.a.	1998	5.04	.298

Source: WVS. Cols. 1 - 3 from wave 2, and cols. 4 - 6 from wave 3. Col. 7 - 9 are from wave 4, except the following countries for which waves 3 and 4, both in the late 1990s, are merged: Poland, Hungary, Czech Republic, Slovakia, Bulgaria, and Romania.

Table A-2 **Mean and Inequality of Life Satisfaction, Former GDR, 1990 to 2005**

Date	Mean	Gini coef.	Date	Mean	Gini coef.
1990	6.59	.164	1998	6.48	.152
1991	6.04	.183	1999	6.51	.154
1992	6.12	.164	2000	6.44	.149
1993	6.20	.174	2001	6.45	.151
1994	6.25	.165	2002	6.26	.160
1995	6.38	.160	2003	6.34	.156
1996	6.39	.157	2004	6.13	.173
1997	6.31	.156	2005	6.32	.173

Source: GSOEP (Haisken-DeNew and Frick 2005)

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