

How United is Germany? Cultural Convergence Between East and West After 1991

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1. INTRODUCTION

In economics there is increasing interest for cultural and personal values and how they differ over regions, countries and with such individual characteristics as religious denomination, political inclination, income and employment status (Alesina and Ferrera 2004; Alesina and Fuchs-Schündeln 2007; Corneo and Gruner 2002; Guiso et al. 2003 and 2006; Luttmer, 2001). The interest follows a long-standing research program in other social sciences about the role of religion and cultural values in social, political and economic outcomes. Starting with Max Weber's pioneering work about the Protestant work ethic over a century ago, it is increasingly accepted that culture and informal institutions are important factors behind differences in economic performance between countries and regions (e.g. Barro and McCleary 2006; Franke et al. 1991; Granato et al. 1996; Jackman and Miller 1996; Noland 2005; North 1990; Pryor 2005; Swank 1996; Williamson 2000).

Likewise, differences in informal institutions have often been put forward as explanation for the regional gap in economic performance in reunified Germany. After reunification, formal institutions have been equalized between East and West Germany (Streeck 1997). Yet, economic performance in East Germany is still considerably below West German standards (Boltho et al. 1997; Sinn 2002). One explanation for this continuing difference is a persistent difference in values and beliefs between East and West; Germans still have a "Mauer im Kopf" (Häder and Häder 1995; Wagner 1999).

In this paper we investigate whether four decades of separation have indeed resulted in structural differences in values that are strong enough to cause the observed economic divergence. In spite of the popular appreciation of the "Mauer im Kopf"-thesis, there has been little empirical support for this claim. The research that has been done provides ambiguous results (Shiller et al. 1991; 1992; Corneo and Gruner 2002; Alesina and Fuchs-Schündeln 2007). Part of this lack of definitive results may be due to flaws in current survey-based approaches to measuring values (Clarke et al. 1999; Davis et al. 1999; Duch and Taylor 1993; Maseland and van Hoorn 2008).

In this paper we follow a novel method that uses happiness data in order to derive measures of value differences. Our method is based upon a large literature in psychology, and increasingly also in economics, that has investigated the correlates and determinants of self-reported happiness. We look at the structure of happiness, but extend the analysis to examine differences between East and West in the relationships found (cf. Alesina et al. 2004; Clark et al. 2005; Di Tella and MacCulloch 2005). Comparing the effects of such factors as income,

job and marital status, known to be strongly related to happiness, we are able to construct happiness (utility) functions for the representative East and West German inhabitant. If there are important differences in value preferences between East and West we expect these functions to differ significantly. Importantly, our method while still relying on survey data does not actually require asking people about their preferences directly to measure value differences. And as such, our method overcomes many of the problems values surveys are known to exhibit.

The remainder of this paper is organized as follows. The next section discusses some empirical work on the influence of communism on cultural values and the limitations of this approach to the study of preferences. Section 3 discusses the data we use in our analysis, our empirical strategy, and, in somewhat more detail, our happiness function-based approach to the measurement of preferences. Section 4 presents our findings on differentially structured happiness between formerly Communist and Capitalist Germany. We discuss our findings and relate them to economic convergence in Germany since the reunification in Section 5.

2. INHERITED MINDS: THE COMMUNIST LEGACY

2.1 Preferences in the East, Preferences in the West

The idea that decades of communist rule left a heritage in the minds of people is as old as the collapse of communism itself. Already in May 1990—even before the formal conclusion of the German reunification early October—Shiller et al. (1991) conducted a telephone survey of random samples of the Moscow and New York populations. They sought to examine the extent to which Soviet respondents differed from their American counterparts on economic attitudes. A year later, Shiller et al. (1992) provided an expansion of this study, adding a comparison between East and West Germany. These early efforts to find empirical support for the idea that those living in formerly communist societies would lack the attitudes needed to be successful in market economies were discouraging for those seeking a role for attitudinal factors. No significant differences were found between the populations living in formerly communist societies and those having grown up in market economies. Although there were profound differences in behavior, these differences could not be linked to attitudinal factors. Instead, situational factors—factors like the perception of economic institutions, economic expectations, and expectations about how other people will react to one’s actions—were sufficient to explain them. More recent studies such as Corneo and Grüner (2002) and Alesina and Fuchs-Schündeln (2007) do find a (limited) role for

differences in attitudes. The first compares self-reported preferences for redistribution and inequality in 6 Western countries with those of 6 ex-communist countries. Although it is found that attitudinal factors play some role in explaining preferences for redistribution, Corneo and Grüner (2002) argue that rational self-interest is the major determinant of support for governmental reduction of income inequality. Alesina and Fuchs-Schündeln (2007), by contrast, do provide support for the claim that East and West Germans hold different values. On basis of a comparison of responses to survey questions about the desired role of the state in 1997 and 2002 in East and West Germany, they conclude that differences in attitudes exist but that they are (slowly) disappearing.

In addition to the lack of definitive results, there are also some conceptual difficulties with the “Mauer im Kopf”-thesis. First, it is built upon contradictory assumptions about how fast cultural values change under influence of the social and political-economic environment. On the one hand, differences in attitudes are deemed persistent enough to continue to set back formerly communist countries for generations. For attitudes to still be able to explain the gap in economic performance between East and West Germany almost two decades after reunification, such mental variables must be fairly stable. Indeed, stability of values (or at least of their differences between societies) is a common assumption in the literature (Hofstede 1980; Inglehart 1997; Williamson 2000). On the other hand, German division has only lasted about twice as long as the period since reunification. If values matter for the current gap, this period must have been long enough to bring about significant changes in values in East and West. The “Mauer im Kopf”-thesis thus requires that values changed during division, but have been more or less stable afterwards.

Second, the attitudinal thesis has a slightly uncanny resemblance with ideas that have been popular with colonial era-thinkers about development. The proposition that East Germans lack traits such as “entrepreneurial spirit”, “motivation”, and the willingness “to assume responsibility” (Shiller et al. 1992, 127) vaguely echo ideas and myths about lazy and irresponsible natives that used to justify colonial domination or legitimize inequality (Alatas 1977; Said 1995). As Shiller et al. (1991, 1992) and Corneo and Grüner (2002) show for formerly communist countries, the attitudinal explanation for differences in performance has usually been shown to be the most superficial—a closer look often reveals a rationality behind differences in behavior. All this gives ample reason to treat the “Mauer im Kopf” thesis with due caution.

Measurement problems

An additional reason to treat attitudinal explanations with caution is the fact that they are usually based on findings from values surveys. In values surveys, typically, a large number of respondents are asked a set of questions about their perception of society or the importance they attach to various social objectives. The answers to these questions are thought to provide information about, for example, how strongly people feel that the state is responsible for the care of the elderly (Alesina and Fuchs-Schündeln 2007). Often, answers to various questions within the survey are pooled together into dimensions to provide more robust information about value orientations. Examples include Inglehart's post-materialism index and the Hofstede dimensions of individualism, uncertainty avoidance, femininity/masculinity, and power distance (Inglehart 1997; Hofstede 2001).

Although widely used in empirical research, values surveys are notorious for their measurement problems. They have been subjected to a wide range of criticisms, varying from comments on particular designs to fundamental arguments against the use values surveys in general (e.g. Haller 2002; MacIntosh 1998; Davis and Davenport 1999; McSweeney 2002a, 2002b; Silver and Dowley 2000). A particularly serious line of criticism focuses on the sensitivity of values surveys-results to variations in social-economic conditions (Clarke and Dutt 1991; Clarke et al. 1997; Clarke et al. 1999; Duch and Taylor 1993). This literature shows that changes in economic situation of respondents have a strong impact on respondents' values surveys scores. Whether a respondent is currently affected by unemployment or inflation appears to drive responses about the importance attached to combating unemployment or rising prices. This finding has caused some to question whether values surveys indeed manage to elicit values, as they claim (e.g. Clarke et al. 1997; Davis et al. 1999). Their sensitivity to economic conditions indicates that values surveys are more likely to capture salience. Maseland and van Hoorn (forthcoming) provide these findings with a strong theoretical basis, arguing on the basis of standard micro-economic reasoning that values surveys elicit marginal preferences rather than values. In direct questions about the importance a respondent attaches to a particular objective, respondents are very likely to take their current levels of satiation into consideration. They are therefore likely to provide answers about the relative importance of satiating objectives somewhat more than they currently do. Because such marginal preferences normally portray diminishing utility, scores will fluctuate significantly with changes in satiation levels, even if underlying values stay the same. This implies that values surveys do not provide reliable information about people's values or attitudes. If we seek to say anything about differences in values between East and

West Germany, we have no choice but to turn to more sophisticated methods. Happiness studies provide a means to do so.

3. METHOD AND DATA

Following in the footsteps of psychologists, who have been studying self-reported happiness—or subjective well-being (SWB)—for over 5 decades, economists are increasingly investigating the factors underlying observed differences in SWB ratings.¹ The rapidly growing happiness literature, both within and outside economics, has found a broad range of variables to be important correlates and causal determinants of happiness both at the individual and at the country level (see Diener et al. 1999; Easterlin 2003; Frey and Stutzer 2002 for overviews). Happiness is a function of such factors as marital status, health, but also of economic circumstances like inflation, the unemployment rate, and, of course, income.

Preferences and the structure of happiness

Our growing understanding of the causes and correlates of happiness has opened up the possibility to investigate the structure of happiness in more detail. As more is known about the role of various factors in self-reported happiness, interest is increasingly turning towards heterogeneity across individuals, groups of people with similar background characteristics and even nations.

Alesina et al. (2004), for example, examine the effect of inequality on happiness in both Europe and the United States. Their results show that higher inequality is generally associated with lower happiness (with several other factors such as income controlled for), but there is also evidence of heterogeneity in the way inequality affects happiness: Firstly, inequality has a larger effect on happiness in Europe than in the U.S. Secondly, in Europe poorer individuals and left-wingers are hurt more by inequality whereas in the U.S. inequality

¹ Subjective well-being (SWB) can be defined as “a broad category of phenomena that includes people’s emotional responses, domain satisfactions, and global judgments of life satisfaction” (Diener et al. 1999, p. 277) and is often used interchangeably with happiness. The SWB construct appears very much empirically driven, deriving content from the instruments used to actually measure it, often questions simply asking people how happy or satisfied they are with their lives. There is a great deal of evidence showing the reliability and validity of measures of SWB (see, for example, Diener et al. 1999 and Frey and Stutzer 2002 and references therein).

hurts the rich. Thirdly, left-wing Europeans care more about inequality than left-wing Americans, and the same holds for poorer individuals for whom inequality has a larger negative impact on happiness in Europe than in the U.S.

Other recent studies into the structure of happiness include Clark et al. (2005) and Di Tella and MacCulloch (2005). Clark et al. (2005) use data from the European Community Household Panel (ECHP) to explore heterogeneity in the transformation of income into SWB. They endogenously establish that individuals can be classified in four groups according to the way income affects satisfaction with one's financial situation. The probability that a respondent belongs to a particular group is found to be a function of individual characteristics, such as income and, education and age, and country of residence as well. Di Tella and MacCulloch (2005) use happiness data to look for differential happiness effects of unemployment and inflation between left-wing and right-wing individuals as assumed by models of partisan business cycles. Their results indicate that happiness is structured differently between left-wingers and right-wingers: both inflation and unemployment enter their respective happiness functions negatively, but left-wing individuals are bothered more by unemployment and bothered less by inflation relative to right-wing individuals.

In this paper we use an investigation into the structure of happiness in order to derive insights about differences in attitudes between East and West Germans. We seek to answer the question whether the coefficients in happiness functions differ systematically between East and West-Germans and if the difference, if any, becomes smaller over time. Our reasoning is that if East Germans were to value job status less, job status should have a smaller positive influence on SWB of East Germans than of West Germans. This approach makes more sense theoretically than reliance on values surveys. Recall that a major problem of values surveys is that they fail to distinguish between marginal preferences and underlying values, since respondents cannot be expected to not take their current situation into account in their answers. Measuring preferences through the structure of SWB, however, directs the researcher towards structural weights in the utility function of respondents, rather than contextual, marginal preferences. Theoretically, this should provide more reliable results.

The German Socio-Economic Panel (GSOEP)

The data we use for our project comes from the German Socio-Economic Panel (GSOEP). The GSOEP project follows a representative sample of persons, nested in families and households since 1984, surveying them annually. Although periodically new respondents

were added to the sample, GSOEP has a high degree of stability, which allows us to make inter-temporal comparisons. Of the 5,921 households containing 12,290 individual respondents originally included in 1984, 3,476 households containing 6,203 respondents were still in the sample in 2006. To this were added, among others, a sample of 2,179 households with 4,553 members from the former GDR in 1990. This allows us to compare participants from the former GDR with respondents originating from the former FRG. GSOEP covers a plethora of issues such as childcare, education, economic characteristics, living situation, social participation, time allocation and personal satisfaction. Our focus is on life satisfaction, which we relate to data about the living conditions of respondents. Since we are primarily interested in the idea that East and West Germans would differ from each other in their work ethic, we center on variables about work and income situation.

Empirical strategy

Following the theoretical argument and practical relevance of heterogeneous happiness functions, our empirical analysis aims to identify systematic variation in the structure of happiness between East and West Germans. In practical terms, we estimate the SWB effect of different individual-level correlates and determinants and assess whether this effect differs as a result of some communist legacy.

As our main measure of SWB we take the answer to the item in the GSOEP asking an individual how satisfied with life he or she is today. Answers to this question can be given on an 11-point scale ranging from “0 – low” to “10 – high”. To facilitate the ease of interpretation of our findings, we analyze this life satisfaction (LS) variable as though it is an ordinal variable, noting that this will not affect our results (see, for example, Diener et al. 1995; Ferrer-i-Carbonell and Frijters 2004).

The happiness functions we estimate build on traditional happiness research, which has found a variety of individual factors to be important determinants of happiness, e.g. unemployment, income, and marital status (see Appendix A for some descriptive statistics). To answer the specific question of how the structure of happiness differs between East and West, we estimate a utility function that contains an East-West dummy, which we interact with various explanatory variables. Typically our regression equation has the following form:

$$\text{Happiness}_{jt} = (\beta^{\text{West}} + r_{jt}(\beta^{\text{East}} - \beta^{\text{West}}))Z_{jt} + y_t + r_{jt}y_t + \varepsilon_{jt},$$

where $Happiness_{jt}$ is the utility of individual j in year t , r_{jt} is a dummy indicating whether a person is a West German (0) or an East German (1)², and Z_{jt} is a vector that refers to personal characteristics known to be important for happiness, such as marital status and income, and more work oriented factors such as occupational status. Further included are year dummies (y_t), which we also interact with the East-West dummy, and an error term (ε_{jt}). We estimate this model under the assumption that the full sample of East Germans and West Germans is representative of the population of East and West Germans respectively. We subsequently are neither interested in explaining differences in LS scores nor in individual-level effects. Since our interest rather goes out to higher-level effects, we do not include individual (or household) fixed effects.³ The next section presents the results of our analysis.

4. EMPIRICAL FINDINGS

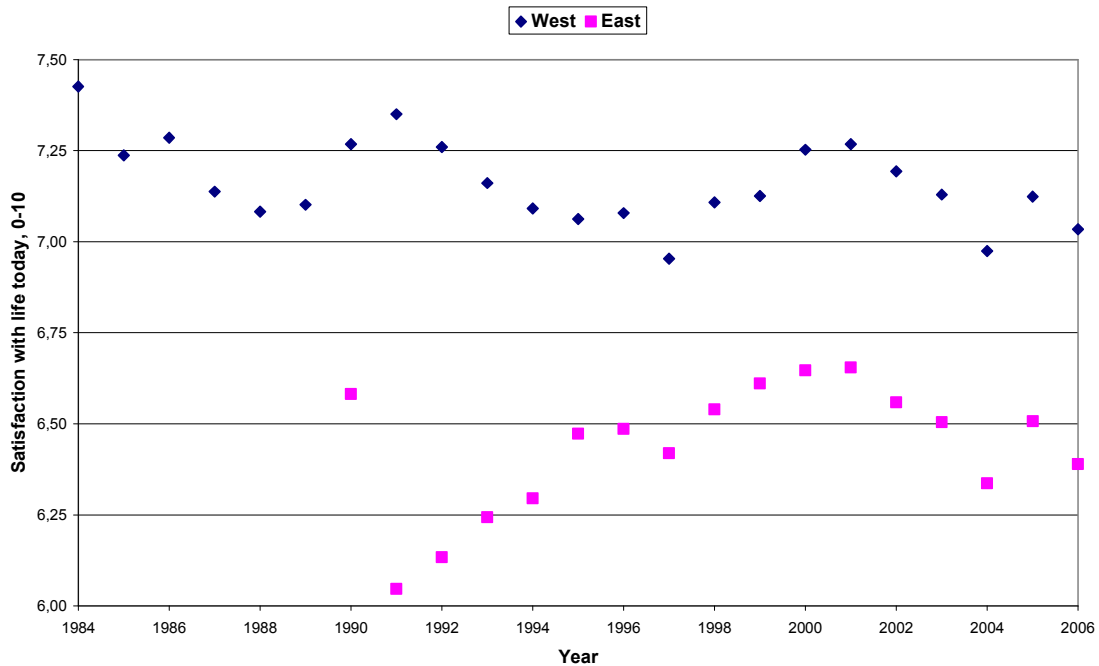
Before we delve into the structure of happiness, it is informative to compare life satisfactions in East and West Germany. Figure (1) reveals that East Germans began their spell in reunified Germany decidedly less satisfied with their lives than West Germans. Immediately after reunification, a process of catching-up set in, leaving East Germans on average still only 10% less happy than their Western counterparts in 1996. Since then, however, this gap has persisted and East Germans continue to be less satisfied with their lives than people from the former FRG. Not only does the gap remain the same since 1996, it might be noted that East and West Germans follow the same fluctuations over time.⁴

² The SOEP questionnaires have asked respondents about their country of origin before the reunification and on the basis of this information is it possible to classify individuals as East Germans or West Germans.

³ Thus, we do not use the panel structure of the GSOEP data but simply estimate the pooled data as one large cross-section. Since the sample contains repeated measures for individuals there is a tendency for standard errors to be understated (e.g. Moulton 1990).

⁴ It might be noted that this pattern is rather similar to development of economic performance in East and West Germany. The period between reunification and 1996 was a time of income convergence between East and West. After 1996, however, convergence came to a halt and the gap between the former GDR and former FRG persisted (Frick and Goebel 2005; Hall and Ludwig 2006; Maseland 2008; Sinn and Westermann 2001; Sinn 2002).

Figure 1: Life satisfaction in East and West Germany 1984-2006.



4.1 Happiness functions for East and West

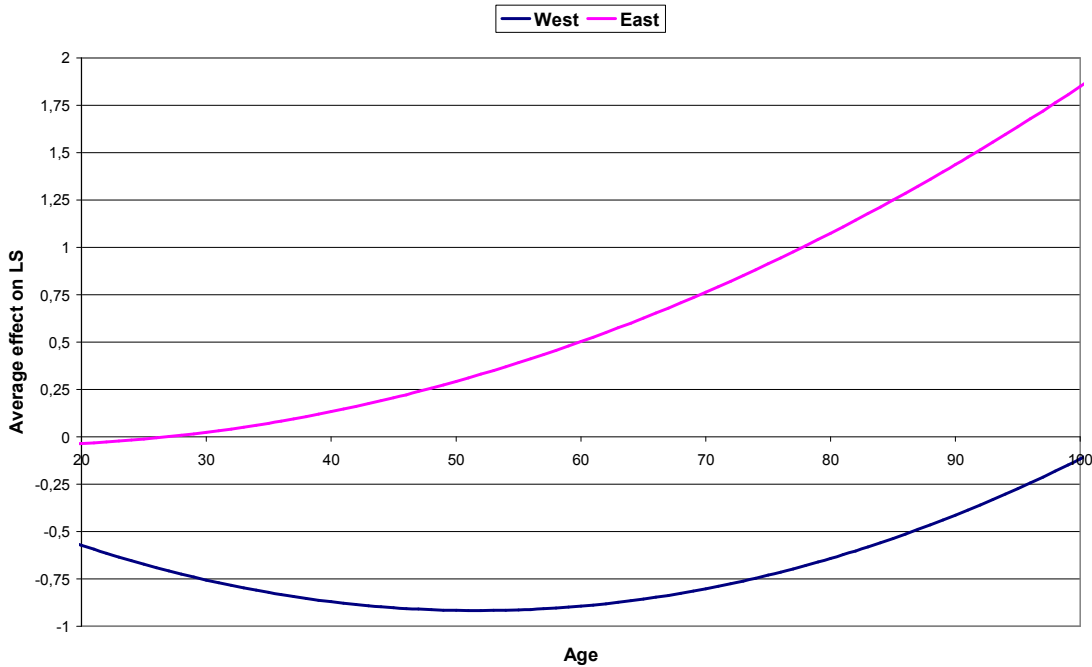
4.1.1 Baseline results

Happiness in East and West Germany not only differs in level, but also in structure. Before we turn towards differential effects of work and income related variables, we estimate a baseline model, including data on age, gender, and marital status for almost all individuals in the dataset (Appendix B). This demographic model already shows that a demographic factor such as age has different effects on life satisfaction among East and West Germans—among East Germans, growing older is evaluated more positively than among West Germans.⁵ This might indicate a difference in the extent and effectiveness of informal structures of

⁵ It should be noted that it is hard to identify exactly the extent to which this is an age-effect. Part of the difference may be caused by the observed convergence between East and West (cf. Frijters et al. 2004). As East German respondents grow older, they also move forward in time and become happier as part of the convergence-trend. In the baseline model this trend (further) shows up in our findings for the GDR Year dummy interaction terms, which show signs of a plateau being reached in 1996.

community support, causing the elderly to experience a higher quality of life in East Germany relative to the West.

Figure 2: Life satisfaction as a function of age.



Notes: Age in the sample varies from 14 to 102. For the depicted age-happiness function estimates obtained with the fully specified model (with Year dummies, Year dummies GDR, and marital status included) are used.

4.1.2 Main results

Apart from the demographic factors included in the baseline model, variables relating to work, income and health can be shown to have different impacts on life satisfaction in East and West Germany as well. Table (1a) shows the main results for a model excluding income.

On first sight, this table seems to lend some support to the (cruder versions of the) “Mauer im Kopf”-thesis, as East Germans appear significantly happier to be unemployed or civil servants. This fits prejudices about lack of motivation and initiative among people growing up in a communist system. However, it is also shown that East Germans evaluate being a blue collar worker, being a white collar worker and being self-employed more positively. By elimination, the only possible conclusion is that for East Germans not belonging to the working population must hurt more than for West Germans. In other words, it appears that East Germans have a stronger preference either for working or for looking for work (relative to being retired, a student, a housewife, or otherwise being outside the formal working population). The positive evaluation among East Germans of being self-employed

supports this interpretation. Contrary to what the “Mauer im Kopf”-thesis would predict, it is West Germans who appear to lack in entrepreneurial spirit.

Less surprising are the differences in effects of education. As one would expect, having enjoyed “only” vocational training is perceived as much less negative among East Germans than among West Germans. This corresponds with the higher status of manual laborers in communist societies.

Table 1a: Happiness functions in East and West, total population

	(LS.1)	(LS.2)	(LS.3)	(LS.4)
Hospital stay previous year	-0.388 0.012	-0.371 0.012	-0.367 0.012	-0.366 0.012
Hospital stay previous year GDR	-0.050 0.025	-0.045 0.024	-0.052 0.024	-0.043 0.024
Occupational disability	-0.782 0.012	-0.761 0.012	-0.738 0.012	-0.740 0.012
Occupational disability GDR	0.045 0.028	-0.005 0.027	-0.007 0.027	0.010 0.028
Unemployed	-	-1.130 0.018	-1.083 0.018	-1.081 0.019
Unemployed GDR	-	-0.004 0.027	0.000 0.028	0.068 0.031
Self-employed	-	-0.049 0.016	-0.111 0.016	-0.094 0.018
Self-employed GDR	-	-0.001 0.036	0.009 0.036	0.096 0.040
Inadequately	-	-	-0.622 0.036	-0.602 0.036
Inadequately GDR	-	-	0.118 0.086	0.083 0.086
General elementary	-	-	-0.463 0.033	-0.464 0.033
General elementary GDR	-	-	0.078 0.061	0.043 0.061
Middle vocational	-	-	-0.310 0.033	-0.312 0.033
Middle vocational GDR	-	-	0.103 0.060	0.063 0.060
Vocational plus abi	-	-	-0.255 0.036	-0.272 0.037
Vocational plus abi GDR	-	-	0.129 0.073	0.068 0.074
Higher vocational	-	-	-0.219 0.035	-0.252 0.036

Table 1a, continued.

Higher vocational GDR	-	-	0.200 0.066	0.149 0.067
Higher education	-	-	0.019 0.034	-0.051 0.035
Higher education GDR	-	-	0.037 0.062	-0.027 0.064
Blue collar worker	-	-	-	-0.090 0.012
Blue collar worker GDR	-	-	-	0.066 0.026
White collar worker	-	-	-	0.050 0.011
White collar worker GDR	-	-	-	0.149 0.025
Civil servant	-	-	-	0.219 0.020
Civil servant GDR	-	-	-	0.287 0.057
No. of observations	295,602	281,135	277,283	276,799
R ² adj.	0.067	0.090	0.097	0.099

Notes: Table reports coefficients and standard errors. Data are pooled individual responses spanning the period 1984-2006. Controls are Year dummies, Year dummies for the GDR, Age, Gender, and Marital status (see Table B.1). For education the base category is “In school” (ISCED classification).

Although these findings are interesting, it is likely that part of these results is caused by the income effect of education and work. For this reason, Table (1b) provides the same analysis with inclusion of income effects. Again, results are mostly at odds with ‘Mauer im Kopf’-conceptions. Contrary to what one might expect, East Germans seem to be more motivated by income than West Germans; the effect of income on their overall happiness is almost double that in the West (see also Figure 3a). The same is true for the status of one’s job (ISEI status).⁶ All this points to a higher amount of ambition and motivation in East Germany rather than a lack of it. Against these results, we also find that the number of hours worked has a more negative effect for East Germans (Figure 3b), and that being occupationally disabled

⁶ Since the method used here is geared towards measuring structural weights in the happiness functions of Eastern and Western respondents rather than marginal preferences, these results cannot be explained by the fact that East Germans value higher incomes more because they currently earn less as easily as in the case of values surveys data.

hurts less. The latter effect may be ascribed to stronger informal systems of communal support in East German society, but the former cannot be readily explained. With regard to working hours and working hours only, there seems to be some support for the claim that the economic gap between East and West is linked to differences in values and ideas.⁷

Table 1b: Happiness functions in East and West, working population.

	(LS.5)	(LS.6)	(LS.7)	(LS.8)
Hospital stay previous year	-0.304 0.016	-0.308 0.016	-0.298 0.017	-0.298 0.017
Hospital stay previous year GDR	0.046 0.035	0.058 0.036	0.039 0.036	0.040 0.036
Occupational disability	-0.536 0.019	-0.521 0.020	-0.522 0.020	-0.521 0.020
Occupational disability GDR	0.186 0.048	0.170 0.048	0.176 0.049	0.175 0.049
Monthly net labor market income	0.243 0.007	0.364 0.009	0.301 0.010	0.296 0.011
Monthly net labor market income GDR	0.226 0.017	0.232 0.020	0.229 0.022	0.239 0.023
Average actual work hours per week	-	-0.279 0.012	-0.255 0.013	-0.255 0.013
Average actual work hours per week GDR	-	-0.156 0.030	-0.171 0.031	-0.190 0.032
Occupational status	-	-	0.232 0.014	0.085 0.017
Occupational status GDR	-	-	0.028 0.029	0.078 0.035
Blue collar worker	-	-	-	-0.149 0.017
Blue collar worker GDR	-	-	-	-0.010 0.036
White collar worker	-	-	-	0.028 0.016
White collar worker GDR	-	-	-	-0.061 0.034

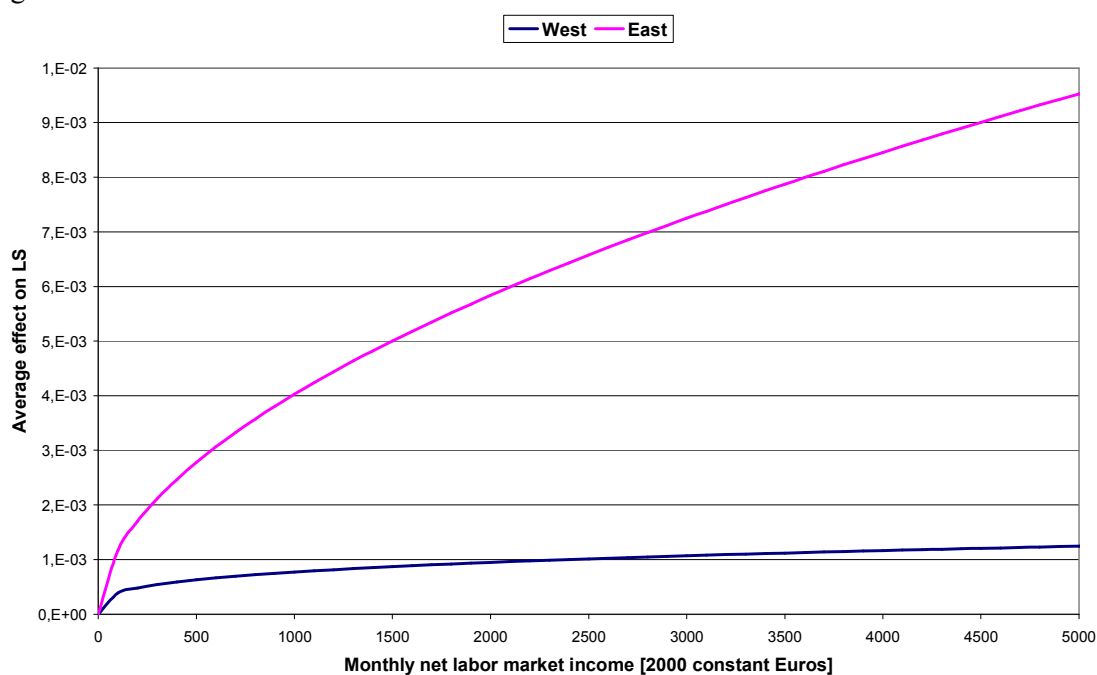
⁷ Note that whereas a lower preference for long working hours can be linked to economic performance, it is not clear beforehand why growing up in a communist system would make people value long working hours more negatively. Hence, even this result only provides partial support for the “Mauer im Kopf”-thesis.

Table 1b, continued.

Civil servant	-	-	-	0.132 0.023
Civil servant GDR	-	-	-	-0.064 0.061
No. of observations	172,007	163,821	153,784	153,529
R ² adj.	0.060	0.064	0.068	0.069

Notes: Table reports coefficients and standard errors. Data are pooled individual responses spanning the period 1984-2006. Controls are Year dummies, Year dummies GDR, Age, Gender and Marital status (see Table B.1). Of Monthly net labor market income, Average actual work hours per week, and ISEI Status the natural logarithm is included in the regression model.

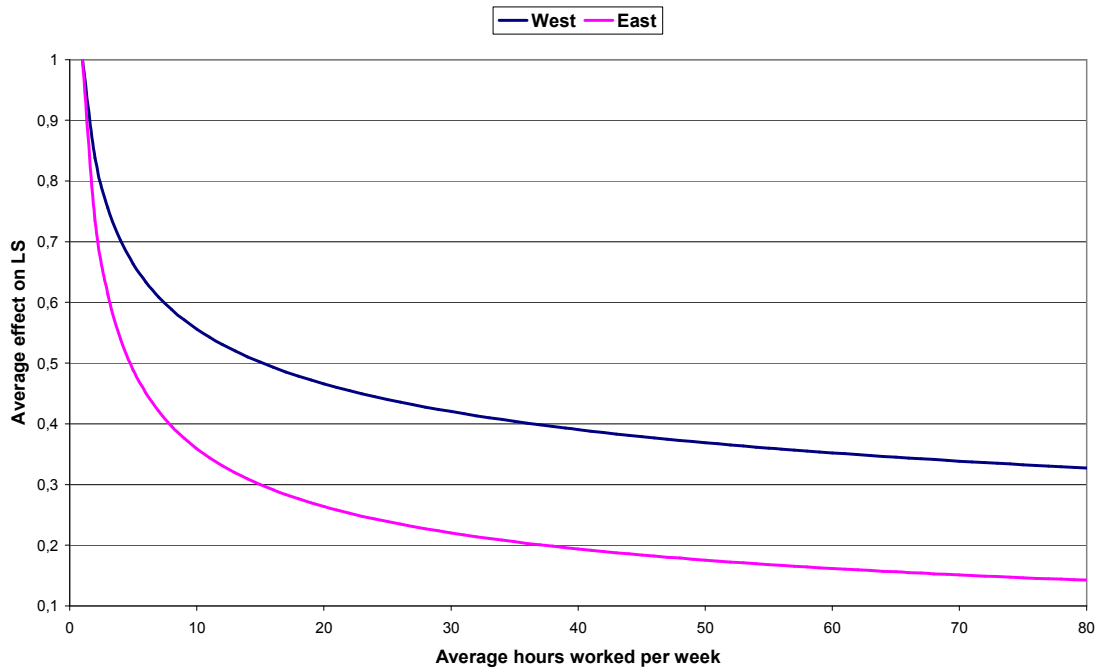
Figure 3a: Satisfaction with life as a function of income.



Notes: Monthly net labor market income in the sample ranges from 0 to almost 100,000 euros [2000 price level]; for more than 99% of the respondents the amount is below 5,000 euros however.⁸ For the depicted age-happiness function estimates obtained with the fully specified model (with Year dummies, Year dummies GDR, and marital status included) are used.

⁸ It is quite possible that respondents have mistakenly given yearly income in response to the question on net labor market income. This certainly would explain some of the striking outliers.

Figure 3b: Satisfaction with life as a function of hours worked per week.



Notes: See Figure 3a. Hours worked in the sample ranges from 0 to 80.

4.2 Socialization and preferences: Some extensions

The proposition that people originating from East and West Germany would have different values and conceptions is informed by the idea that society has an impact on the way people think and behave. We know from the values literature (e.g. Inglehart 1997) that the impact of this socialization is strongest in people's formative years. Hence, we might expect that any differences in internalized values between East and West Germans are likely to be most profound among those groups that have spent their entire formative years either in the GDR or the FRG. Appendix (C) gives the results of our baseline model, limiting the sample to individuals born between 1946 and 1971. As in the baseline model using the whole sample, we observe basic differences among those originating from the GDR and those having grown up in the FRG. The losses of happiness caused by experiencing a divorce or widowhood, for example, are decidedly lower in East Germany than in the West. Again, this is an indication that informal systems of communal support might be functioning more effectively in the new than in the old federal states. Another remarkable finding is that East Germans seem to be less male-biased. Whereas women are generally slightly less satisfied with their lives than men in Germany as a whole, this effect is reversed among East Germans. This might be a heritage of the strongly different public roles of women in the GDR and the FRG, the former putting heavy emphasis on female employment (Lemke 1990).

If we move to the effects of work related variables (Table 2a), we find that limiting ourselves to the subsample of people born between 1946 and 1971 does not seriously alter the results. Again, being unemployed hurts East Germans less, but this seems part of a general preference for belonging to the working (and work-seeking) population. Being born and raised in the GDR has a profoundly positive effect on the preference for self-employment, moreover. With regard to education, the more positive evaluation of having higher vocational training as highest education disappears. At the same time, it appears that not having finished any level of schooling is less problematic for East Germans than for Westerners. This still suggests a higher valuation of unskilled manual labor, and perhaps also a higher profusion of informal social safety nets in East Germany.

Table 2a: Happiness functions in East-West, limited sample, total population.

	(LS.9)	(LS.10)	(LS.11)	(LS.12)
Hospital stay previous year	-0.307 0.019	-0.288 0.019	-0.285 0.019	-0.265 0.019
Hospital stay previous year GDR	-0.082 0.037	-0.060 0.037	-0.065 0.037	-0.033 0.037
Occupational disability	-0.848 0.023	-0.785 0.022	-0.724 0.022	-0.697 0.022
Occupational disability GDR	0.024 0.046	-0.044 0.045	-0.052 0.045	0.057 0.046
Unemployed	-	-1.260 0.025	-1.209 0.025	-1.074 0.028
Unemployed GDR	-	-0.029 0.036	-0.015 0.037	0.239 0.047
Self-employed	-	-0.006 0.020	-0.066 0.020	0.117 0.025
Self-employed GDR	-	-0.018 0.041	0.005 0.041	0.291 0.054
Inadequately	-	-	-1.107 0.415	-1.141 0.413
Inadequately GDR	-	-	-0.631 0.160	-0.594 0.160
General elementary	-	-	-0.959 0.414	-1.049 0.413
General elementary GDR	-	-	0.062 0.048	0.047 0.049
Middle vocational	-	-	-0.775 0.414	-0.868 0.412
Middle vocational GDR	-	-	-	-

Table 2a, continued.

Vocational plus abi	-	-	-0.709 0.414	-0.823 0.413
Vocational plus abi GDR	-	-	0.027 0.064	0.034 0.064
Higher vocational	-	-	-0.712 0.414	-0.856 0.413
Higher vocational GDR	-	-	0.022 0.042	0.016 0.042
Higher education	-	-	-0.447 0.414	-0.639 0.413
Higher education GDR	-	-	-0.036 0.027	-0.059 0.030
Blue collar worker	-	-	-	0.064 0.019
Blue collar worker GDR	-	-	-	0.301 0.042
White collar worker	-	-	-	0.235 0.017
White collar worker GDR	-	-	-	0.333 0.040
Civil servant	-	-	-	0.445 0.027
Civil servant GDR	-	-	-	0.520 0.072
No. of observations	122,678	122,214	120,903	120,733
R ² adj.	0.079	0.114	0.123	0.128

Notes: Table reports coefficients and standard errors. Data are pooled individual responses spanning the period 1984-2006. Controls are Year dummies, Year dummies for the GDR, Age, Gender, and Marital status (see Table C.1). For education the base category is “In school” (ISCED classification).

The model including income is not seriously altered either by the limitation of the sample (Table 2b). Both income and status remain more important in the former GDR, whereas Easterners seem to have a preference for working fewer hours. The most striking result of this model is the slightly lower valuation of white collar labor among those having spent their formative years in the GDR. Apparently, apart from the partly contrary effects of status, manual labor is preferred by East Germans above white collar jobs. This preference might be an inheritance from the communist system.

Table 2b: Happiness functions in East-West, limited sample, working population.

	(LS.13)	(LS.14)	(LS.15)	(LS.16)
Hospital stay previous year	-0.284 0.022	-0.290 0.022	-0.289 0.023	-0.289 0.023
Hospital stay previous year GDR	0.030 0.043	0.059 0.044	0.061 0.045	0.063 0.045
Occupational disability	-0.578 0.026	-0.570 0.027	-0.567 0.027	-0.564 0.027
Occupational disability GDR	0.210 0.059	0.216 0.060	0.209 0.061	0.204 0.061
Monthly net labor market income	0.300 0.010	0.460 0.013	0.385 0.015	0.370 0.015
Monthly net labor market income GDR	0.294 0.021	0.241 0.025	0.248 0.028	0.253 0.029
Average actual work hours per week	-	-0.365 0.019	-0.335 0.019	-0.325 0.020
Average actual work hours per week GDR	-	-0.053 0.040	-0.081 0.042	-0.091 0.042
Occupational status	-	-	0.218 0.018	0.080 0.022
Occupational status GDR	-	-	0.003 0.036	0.083 0.042
Blue collar worker	-	-	-	-0.109 0.024
Blue collar worker GDR	-	-	-	0.035 0.047
White collar worker	-	-	-	0.063 0.022
White collar worker GDR	-	-	-	-0.073 0.043
Civil servant	-	-	-	0.182 0.029
Civil servant GDR	-	-	-	-0.023 0.073
No. of observations	96,765	93,171	89,241	89,129
R ² adj.	0.071	0.075	0.077	0.078

Notes: Table reports coefficients and standard errors. Data are pooled individual responses spanning the period 1984-2006. Controls are Year dummies, Year dummies for the GDR, Age, Gender, and Marital status (see Table C.1). Of Monthly net labor market income, Average actual work hours per week, and ISEI Status the natural logarithm is included in the regression model.

5. DISCUSSION

In this paper we have scrutinized the thesis that four decades of division in Germany has caused an enduring legacy in terms of differences in attitudes and values. In order to

investigate this proposition, we have followed a new strategy. Instead of relying on values surveys for information about people's values and attitudes, we have constructed utility functions for representative East and West German respondents on the basis of their scores on self-reported happiness. Since the set of main social determinants of happiness is well-known, it is possible to compare the size of the effects of these determinants on happiness between respondents in East and West. Differences in the weights by which these determinants enter are what probably corresponds most closely to differences in preferences.

Following this method, we show that for the period after reunification until 2006, there are significant differences in preferences between East and West Germans. East German "culture" turns out to be more favorable, for example, to women. Also, being divorced, widowed or elderly hurts less in the GDR. These differences may be caused by more-advanced gender equality in the former GDR compared to the FRG, and perhaps a stronger degree of family and community support in the new states.

Although there are important differences between East and West, these differences generally do not correspond to the factors indicated by people seeking a cultural explanation for the economic gap between East and West. Some do: East Germans seem to have a higher esteem for vocational training and civil service, for example. The more fundamental results go against the "Mauer im Kopf"-thesis, though. Rather than less motivated by income and job status, East Germans turn out to attach more importance to these issues than West Germans. Although unemployment hurts less among Easterners, they seem to have a higher preference for belonging to the working population. All this does not indicate a lack of the kind of motivation needed to perform well in a market economy. Even more surprisingly to the "Mauer im Kopfists," East Germans appear to value being self-employed far higher than West Germans do. In fact, in some of the specifications, it is only the East German segment of the population that perceives being self-employed as a good thing.

All in all, we conclude that a communist inheritance in the form of less market-oriented values seems to be absent. Although there are differences, East Germans appear to have values that in many respects are more rather than less compatible with a market economy. The idea that differences in preferences and beliefs are behind the persistent differences in economic performance between East and West Germany thus seems to have no basis. East is East and West is West, but the twain meet in unexpected ways.

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APPENDIX A

Table A.1: Descriptive statistics.

	No. of observations	Mean	Standard deviation
Dependent variable			
Satisfaction With Life Today, 0 - 10	338,558	6.99	1.85
Independent variables			
GDRDUM	339,803	0.24	0.42
Hospital Stay Previous Year, 0-1	308,049	0.12	0.32
Occupational Disability, 0-1	296,968	0.11	0.31
Gender: 0, male – 1, female	339,803	0.48	0.50
Age (/100)	339,803	0.449	0.172
Marital Status In Survey Year Married, Married but separated, Single, Divorced, Widowed, Spouse in native country	339,746		
Actual Weekly Work Time	189,386	39.2	12.4
Occupational status (ISEI-88 Ganzeboom)	187,341	43.4	15.8
ISCED-1997-Classification In school, Inadequately, General elementary, Middle vocational, Vocational plus abi, Higher vocational, Higher education	335,526		
Current Net Labor Income [2000 constant euros] / 1000	199,727	1.337	1.048
Unemployed, 0-1	319,839	0.07	0.25
Self-employed, 0-1	339,755	0.05	0.23
Blue collar worker, 0-1	339,773	0.21	0.41
White collar worker, 0-1	339,687	0.25	0.43
Civil servant, 0-1	334,721	0.04	0.19

APPENDIX B

Table B.1: Baseline regressions.

	(B.1)	(B.2)	(B.3)
Gender	-0.006 0.007	-0.006 0.007	-0.007 0.007
Gender GDR	0.002 0.015	0.002 0.015	0.004 0.015
Age	-3.413 0.134	-3.407 0.134	-3.333 0.134
Age GDR	-3.137 0.291	-3.173 0.291	-3.548 0.292
Age ²	2.918 0.132	2.918 0.132	2.868 0.132
Age ² GDR	3.179 0.287	3.195 0.287	3.432 0.287
Married but separated	-0.913 0.029	-0.907 0.029	-0.903 0.029
Married but separated GDR	0.231 0.062	0.218 0.062	0.159 0.062
Single	-0.233 0.012	-0.230 0.012	-0.223 0.012
Single GDR	0.083 0.025	0.074 0.025	0.011 0.026
Divorced	-0.596 0.015	-0.591 0.015	-0.588 0.015
Divorced GDR	0.229 0.029	0.220 0.029	0.195 0.029
Widowed	-0.390 0.017	-0.392 0.017	-0.395 0.017
Widowed GDR	0.210 0.035	0.211 0.035	0.222 0.035
Spouse in native country	-0.720 0.075	-0.745 0.075	-0.771 0.075
Spouse in native country GDR	-0.802 1.812	-0.818 1.810	-0.941 1.808
GDR dummy	Yes	Yes	No
Year dummies	No	Yes	Yes
Year dummies GDR	No	No	Yes
No. of observations	338,548	338,548	338,548

Table B.1, continued.

R ² adj.	0.042	0.044	0.046
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Notes: Table reports coefficients and standard errors. Data are pooled individual responses spanning the period 1984-2006. Base category for marital status is “Married”.

APPENDIX C

Table C.1: Baseline regressions, post-reunification and split by birth year.

	(C.1)	(C.2)	(C.3)
Gender	-0.014 0.008	-0.031 0.010	-0.054 0.011
Gender GDR	0.009 0.015	0.069 0.020	0.089 0.021
Age	-3.704 0.155	-5.329 0.384	-6.460 0.579
Age GDR	-3.538 0.303	-0.806 0.980	-1.532 1.121
Age ²	3.104 0.151	5.206 0.487	6.377 0.697
Age ² GDR	3.487 0.296	-1.283 1.208	-0.392 1.357
Married but separated	-0.847 0.033	-0.908 0.036	-0.850 0.039
Married but separated GDR	0.099 0.063	0.156 0.069	0.090 0.070
Single	-0.239 0.014	-0.317 0.014	-0.345 0.017
Single GDR	0.003 0.027	0.003 0.032	0.006 0.033
Divorced	-0.572 0.017	-0.567 0.019	-0.553 0.020
Divorced GDR	0.172 0.030	0.082 0.036	0.060 0.036
Widowed	-0.395 0.019	-0.661 0.050	-0.666 0.053
Widowed GDR	0.235 0.036	0.294 0.093	0.307 0.094
Spouse in native country	-1.317 0.155	-0.777 0.123	-1.580 0.269
Spouse in native country GDR	-0.403 1.761	-1.026 1.766	-0.232 1.742
No. of observations	260,651	171,910	132,250
R ² adj.	0.052	0.058	0.063

Notes: Table reports coefficients and standard errors. Model C.1, period 1991-2006. Model C.2, individuals born between 1946 and 1971. Model C.3, period 1991-2006, and individuals born between 1946 and 1971. Included controls are Year dummies and Year dummies for the GDR. Base category for marital status is “Married”.