

Economic Reference Group Salience in Post-Communist Eastern Europe:
Causes and Consequences

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The collapse of Soviet communism marked not only the demise of central planning and one-party rule, but also the rapid Westward reorientation of the former Eastern bloc countries. For decades East European governments had engaged in concerted and costly efforts to limit the penetration of Western ideas behind the Iron Curtain based on well-founded concerns about the destabilizing political potential of the images of Western living standards. Even though these efforts were only partially and unevenly effective – Levi’s jeans, Marlboros and Coca Cola were certainly important status and political symbols in much of the East – most communist citizens had only limited exposure to the full range of consumer goods available in the average Western household. However, this situation changed decisively due to the rapid removal of travel restrictions and the gradual penetration of Western media sources into Eastern Europe. Thus, many ex-communist citizens were rapidly exposed to many of the temptations of Western consumer societies, either directly by travelling or working in the West, or indirectly, through the stories of friends or the growing penetration of Western mass media. However, the consumption demands fueled by these images and by the pent-up deprivation created by communist-era shortages were at odds with the modest resources available to the average East European.

At the same time another gap started opening in most East European societies: whereas under communism the fairly equal income distribution and the ideological commitment to economic equality had significantly reduced the public displays of conspicuous consumption, the early transition period witnessed a rapid increase in inequality, whose repercussions were exacerbated by the serious economic crisis that affected all countries in the region. As a result, the transition produced deep and highly visible fault lines between economic elites engaging in conspicuous consumption and the majority of the population, which experienced a significant decline in disposable incomes for much of the 1990s. Even though by the mid-1990s most

countries in the region started a gradual (if somewhat uneven) process of economic recovery, living standards for the average citizen have improved only slowly and have usually not kept up with the rapidly rising consumption expectations.

Given these dramatic transformations, post-communist Eastern Europe seems like an obvious setting for analyzing the dynamics of economic reference group choices and their impact on subjective economic well-being as well as on a broader set of economic and political attitudes that may be affected by relative deprivation. In addition to contributing to a better theoretical understanding of the important dynamics of economic discontent, such an approach promises to provide some answers to the puzzle about the widespread economic and political dissatisfaction that has characterized much of Eastern Europe since the fall of communism even in the face of significantly improving fortunes in the last decade (Pop-Eleches 2008). Even though the broader dynamics of domestic and international inequality have been widely discussed in the transition countries and beyond, to the best of my knowledge there has been very little systematic work on the specific link between reference group choices and relative deprivation in the post-communist context.¹

Therefore, this paper analyzes the drivers and consequences of economic reference group choice in three post-communist East European countries: Romania, Moldova and Bulgaria. Even though a number of alternative reference groups – such as neighbors, parents and neighboring countries – will also be discussed, the main emphasis will be on three comparisons, which we should expect to play an important role in the post-communist context. First, the increasing penetration of Western media programming, combined with increasingly widespread

¹ One partial exception is a paper by Carletto and Zezza (2004), which compares objective and subjective welfare measure but its main objective is to use subjective welfare to improve objective welfare indicators. Therefore, the paper implicitly accepts subjective measures of welfare at face value and does not address the role of reference groups.

international travel (for either pleasure or temporary work) and the growing number of East Europeans with friends or relatives living abroad, raised the salience of *Western consumption models*. This westward reframing of consumption references was reinforced by the widespread illusion - fueled at least in part by the overoptimistic “return to Europe” rhetoric among both Eastern and Western politicians – that the wholesale adoption of Western political and economic institutions would lead to a rapid and substantial improvement of living standards in the post-communist world. Second, the nascent *domestic economic elite* with its often conspicuous consumption habits, became an increasingly visible reference point for ordinary people and arguably created a sense of relative poverty while others prospered. Third, the traumatic experience of the post-communist economic reform process understandably triggered frequent comparisons to *communist-era living standards*. While such inter-temporal comparisons are obviously not an exclusively post-communist phenomenon,² their salience was arguably heightened in Eastern Europe both because the fall of communism provided a major historical watershed and because politicians of all stripes used either positive or negative references to the communist past to pursue their political agendas.

This paper draws on several strands of ideas from across three disciplines. Ever since Veblen’s (1899) pioneering work on conspicuous consumption, a small strand of economic literature has been devoted to understanding the role of reference groups and status concerns as drivers of individual consumption patterns and relative economic satisfaction. While a number of authors have established the importance of “keeping up with the Joneses” for explaining household expenditure in the United States (Schor 1997, Luttmer 2005), these studies focus on domestic reference groups and ignore the possibility of international consumption models.

² For a good review of the extensive literature on inter-temporal comparisons in developed countries, see Hagerty (2003).

Moreover, since individuals are assigned to reference groups based on a number of demographic variables (age, occupational status, race, residence and gender) these studies circumvent the process of reference group choice, which is a critical component of the political dynamics analyzed in this paper.

A second strand of relevant ideas comes from a series of experimental studies in psychology (Emmons and Diener 1985, Fox and Kahneman 1992) which tried to infer the importance of intertemporal and interpersonal comparisons in respondents' assessment of life satisfaction across a broad range of domains ranging from standard of living to love life. While taking an important step towards unpacking the process of reference group comparisons, these studies nevertheless focused only on the respondents' immediate peer group – the average college student – as a social referent, rather than offering a broader menu of potential social comparisons.

Finally, sociologists and political scientists have emphasized the role of international diffusion for a wide range of political phenomena including European nationalism (Greenfeld 1993), post-communist economic and political reforms (Kopstein and Reilly 2000), electoral revolutions (Bunce and Wolchik 2006) and financial liberalization (Elkins and Simmons 2004). The more specific question about the implications of the international diffusion of Western consumption models to the developing world goes back at least to the work of Ragnar Nurkse (1957) and has been discussed in great detail by Janos (2000) in the context of pre-war Eastern Europe. Arguments along similar lines have also been made about Latin America (Wells 1977), the West Indies (Lowenthal 1972) and developing countries more broadly (James 1987) but so far very little systematic empirical work has been done on the subject in the context of the rapid global integration of the former communist bloc countries after 1990.

Empirical strategy

In trying to explain the dynamics of reference group choice, this paper will test a number of different venues through which individuals may choose certain economic reference points over others. Following Janos' (2000) discussion of the international demonstration effect late 19th century Eastern Europe, one of the most obvious channels for the adoption of international consumption models is an individual's direct experience of such consumption by travelling to the West. Whereas in the 19th century travel was facilitated by improvements in transportation, in the late 20th century the crucial element was the removal of communist restrictions on Western travel. A secondary effect of this rapid increase in Western travel (and work) is that it affects not only the people directly engaged in crossing borders but indirectly reaches many others, who may never leave home but get to hear second-hand reports about life abroad. However, it should be noted that despite their common trigger, these are two very distinct methods of coming into contact with the West, and they may result in very different patterns of comparison. Unlike the actual travelers or migrants, those left behind only get second-hand and often highly stylized accounts of their friends and relatives' experiences, and therefore may end up with very partial and potentially biased views.

The same holds true for the even more widespread channel through which most East Europeans get to experience the West (and well as much of their own country outside their immediate community): the mass media. The increasing penetration of cable TV and internet access, combined with the ubiquitous commercials and foreign films and TV series on state television, means that few if any East Europeans can escape the images of consumption.

However, we should expect that individuals with greater exposure to such mass media content to be more likely to resort to outside comparisons. (O'Guinn and Schrum 1997, Schrum et al 1998)

A fourth explanation focuses on the role of culture in shaping reference group choices. Thus, it is conceivable that in certain groups, comparisons to elites and foreigners are more culturally appropriate, and therefore more widespread, than in other groups. For example, one would expect that to the extent that ethnic minorities feel excluded from social and economic upward mobility, their reference choices may differ from those of the ethnic majority. In particular, we should expect minorities to be less likely to identify with domestic elites, and focus more on family and friends or international references.

Finally, a number of demographic factors, which will be discussed in greater detail in a later section, should be expected to influence what economic comparisons are the most appealing for an individual. From the perspective of such structural explanations, one would expect the elderly to resort more heavily to past comparisons, whereas the education and urban residence may promote familiarity with and comparisons to domestic elites and international living standards (James 1987).

To test these different predictions, I have used a series of four original public opinion surveys of nationally representative samples from three East European countries (Romania in 2004, Moldova in 2005, and Bulgaria in 2005 and 2008.), along with quasi-experimental evidence from a survey of parent-children pairs from low-income Romanian families, and a set of survey experiments from the Bulgarian survey of 2008.

The most straightforward approach to analyzing the salience of economic reference groups is through direct questions in public opinion surveys. In particular, respondents in the

four surveys (Romania 2004, Moldova 2005, Bulgaria 2005 and 2008)³ were asked to rate the satisfaction with the consumer goods in their household and their overall standard of living (both scored on a scale of 1- “not at all satisfied” to 4- “very satisfied.”) Following these assessments, subjects were then asked the following multi-item question: “When thinking of your current economic situation, how much does it matter to you:

1. How your parents lived at your age
2. How you lived before 1990
3. How your friends and neighbors live
4. How the [domestic] elite lives
5. How people live in neighboring countries
6. How people live in Western Europe

with choices ranging from 1- “not at all important” to 4 –“very important.” Since such direct questions on a fairly abstract issue may raise concerns about the validity of the answers, a later section of the paper presents some alternative approaches using experimental evidence to address this question.

Table 1 presents the national averages in the salience of different reference groups as a basis for evaluating respondents’ satisfaction with their living standards. Several patterns are worth noting: In all three countries the West and the communist past were the most important comparative benchmarks by which East Europeans judged their economic situation. Thus, it appears that the subjective economic evaluations of citizens of transition countries are anchored by the two extremes of the transition process: the increasingly distant (and often idealized) memory of the relative security of the communist welfare state and the “golden goal” of a

³ While the cross-national comparison of public opinion surveys suffers from well-known limitations (King and Wand 2007), two factors mitigate the usual problems inherent in such comparisons: first, the English versions of the questions were identically worded and in the case of the Moldovan and Romanian surveys there is not even the issue of translation nuances, since most respondents in both countries were administered the Romanian version of the question which had the identical wording in both surveys. Second, the surveys were administered to nationally representative samples of almost identical sample sizes in three geographically contiguous East European countries and three of them occurred within less than seven months of each other, which reduces the potential risk of broad cross-temporal and cross-regional comparisons.

prosperous future in a united Europe. By contrast, the living standards of neighboring countries mattered significantly less in all three countries, which contradicts explanations based on geographic and cultural proximity and of shared historical legacies. Domestic reference groups were also less prominent than their Western counterparts: despite growing inequality and increasingly ostentatious displays of wealth the average post-communist citizen cared less about domestic elites, while the role of friends and neighbors – keeping up with the Joneses (or Ionescus and Ivanovs) – was slightly greater but still fairly modest (except in Moldova). Finally, the role of parents was of moderate importance but was weaker than the personal inter-temporal comparison (to the communist period) in all three countries.

Table 1 here

Despite these important similarities, the cross-national averages also reveal some interesting differences, which suggest that the relative importance of reference groups is at least in part shaped by cultural and historical peculiarities. Thus, for all six reference groups, Bulgarian respondents were the most inclined to resort to inter-group or inter-temporal comparisons, while Romanians were the least inclined to do so and the Moldovans occupied the intermediate position. While we obviously need to be careful about drawing cultural conclusions from such broad national averages, it is worth noting that the responses of the Bulgarian minority in Moldova were actually aligned more closely with those of Bulgarian respondents in Bulgaria than with their Moldovan co-nationals, which reinforces the important cultural component of such comparisons. Beyond aggregate levels, it is worth noting that whereas in Bulgaria and Moldova, pre-1990 standards of living were clearly the most salient comparative benchmark, in Romania the more enthusiastic embrace of the West combined with the more somber legacy of the Ceausescu regime are reflected in the higher salience of Western comparisons compared to

inter-temporal ones. Romania also stands out in that it is the only country where comparisons to the domestic elite were more important than the more immediate comparison to friends and neighbors. Therefore, it appears that while Romanians are less wedded to outside comparisons than their Bulgarian and Moldovan neighbors, the particular relative focus of their comparisons is focused on reference groups with greater “down-side potential” and may therefore result in more disadvantageous overall assessments of personal economic fortunes.

Finally, a comparison of the results of the 2005 and 2008 Bulgarian surveys shows that even though Bulgaria joined the EU in January 2007 (at the mid-point between the two surveys), Western comparisons did not gain in absolute importance, though their relative importance may have increased given that the salience of pre-1990 comparisons predictably declined as the communist era receded further into the past.⁴ Once again, domestic elite comparisons played the least important role, and their relative importance further declined between 2005 and 2008. However, the most striking conclusion is the high over-time stability in the overall and relative salience of different reference groups. This stability is encouraging from the perspective of the reliability of the survey questions and it suggests that like most cultural factors, the salience of economic reference points changes only slowly over time, even in the face of major political developments such as Bulgaria’s EU accession. Of course, this stability does not preclude the possibility of more fundamental changes in the profile of reference group importance – especially with respect to the likely erosion of the salience of the communist past – but such changes are likely to be driven primarily by generational effects rather than through the dramatic re-orientation of individual reference points.⁵

⁴ Nonetheless, it is worth noting that even 18 years after the fall of communism, the past remains the most important reference point for the average Bulgarian citizen.

⁵ The role of age and generational change will be addressed in greater detail in the following section.

Drivers of economic reference point choice: cross-national survey evidence

In this section I will use public opinion data from the four surveys discussed above, as well as an additional survey of poor families in Romania in 2007, to test the hypotheses developed earlier about the potential drivers of economic reference point choice among post-communist citizens. Due to space constraints I will only focus on three of the reference groups discussed in the previous section: Western Europe, pre-1990 living standards, and domestic elites. The first two groups are justified both because of their overall salience and for theoretical reasons, given that the communist past and the hope of a European future can be considered the two key reference points of the post-communist transition. Even though domestic elites seem to play a more marginal role as targets of economic comparisons, they will be included in the current discussion because such comparisons should be expected to have more immediate political repercussions if the grievances they breed are exploited by political entrepreneurs.⁶ Since all three variables are 4-point categorical variables, the statistical tests presented in Table 2 are ordered probit tests.

The independent variables included in the regressions in Table 2 include several indicators meant to capture the different channels through which individuals may develop different comparative reference groups. The first two variables test the impact of direct personal contact with outside living standards through travel to the West and work abroad. The third variable – which asks respondents if they have friends or family working abroad – gets at the indirect demonstration effect due to the widespread contact with persons with international experience. The next two variables focus on the second main channel through which international (and potentially also domestic) comparisons could be encouraged: the role of mass

⁶ By contrast, it may be harder to get political capital from frustrated comparisons with friends and neighbors (unless politicians are prepared to play the ethnic card in multi-ethnic regions.)

media and particularly that of TV programs. The two indicators measure the frequency with which the respondent watches TV and the frequency of watching Western TV stations. We should expect that watching foreign TV stations would promote Western comparisons, while potentially de-emphasizing other comparative reference points. By contrast, overall TV program consumption could potentially fuel all three types of comparisons, depending on the type of programming.⁷

The regressions also include a battery of standard economic and demographic control variables, some of which are nevertheless of theoretical interest for understanding the dynamics of post-communist economic reference group choice. Thus, the regressions include a logged household income measure and an ownership index, which captures what proportion of a series of eight consumer goods (ranging from automobiles to cell phones) a respondent's household owned. These two variables should provide a fairly good proxy of a respondent's objective economic situation, which will not only be important as a baseline for the tests about objective vs. subjective well-being but may also drive reference group choice, since greater economic success may change the relevance of different comparisons. The tests also included indicators for the respondent's gender, education and place of residence, all of which may affect the extent to which an individual comes into direct or indirect contact with different reference groups.⁸ From the perspective of the earlier discussion about the role of time and generational differences, the age variable is of particular importance.⁹

⁷ Thus, even domestic TV stations (especially cable networks) have a high proportion of Western films and TV series, which can fuel Western comparisons. On the other hand, domestic news and talk shows often report on the life styles of domestic elites.

⁸ For example, an uneducated woman living in a remote village will probably have much fewer contacts to the West or the domestic elite than an educated urban resident.

⁹ The regressions use a continuous age indicator, since tests indicated that it had higher predictive power than categorical versions and that the inclusion of a squared age term was not justified.

Finally, for each of the countries I included dummy indicators for the main ethnic minorities in a given country: Hungarians and Roma in Romania, Turks and Roma in Bulgaria, and Ukrainians, Russians, Gagauz and Bulgarians in Moldova (with the excluded category in each case being the dominant ethnic group.) As discussed earlier, ethnic minorities are interesting for at least three reasons: first, their different cultural heritage may emphasize certain types of comparisons at the expense of others. Second, ethnic minorities could be expected to identify less with domestic economic elites (especially if they are underrepresented among such elites.) Third, for historical reasons, ethnic minorities may be expected to be either more oriented towards the West (e.g. Hungarians in Transylvania) or less oriented to the West (such as Russians in Moldova). Due to historical considerations, the regressions for Romania also include a dummy variable for Transylvania, a region that was part of the Habsburg empire until 1918 and where strong Austro-Hungarian and German influences should be expected to result in a more westward cultural (and possibly economic) outlook.

Table 2 here

The statistical results in Table 2 provide very limited support for the role of direct contact with the West in promoting economic comparisons with West European living standards. The only supportive finding in this respect was a fairly large and statistically significant increase in Western comparisons among Bulgarians who had worked abroad prior to the 2008 survey, but the results were negligible for the other three surveys. The impact of traveling to the West was even less important, and in fact led to a significant reduction of the salience of Western comparisons among Moldovans in 2005. On the other hand, having friends or relatives working abroad was a much stronger driver of Western consumption comparisons: thus, this second-hand experience of the West was associated with a large and statistically significant increase in the

adoption of Western economic standards in Romania and Bulgaria (in both 2005 and 2008). However, the effect was substantively smaller and statistically insignificant in Moldova, which combined with the previously mentioned negative effects of Western travel suggests a qualitatively different experience of the West by Moldovans compared to their Romanian and Bulgarian counterparts. Given that at the time of the surveys, Moldova was significantly poorer and had much more distant European integration prospects than the other two countries, this difference suggests that Moldovans travelling and working abroad may have been more likely to experience the “reality check” of the chasm between their own economic prospects and Western living standards, thereby weakening the potential demonstration effect.

The greater importance of mediated rather than direct contact to the West is further confirmed by the fact that in all four surveys, greater exposure to TV was associated with a higher salience of Western comparisons. While the relative importance of viewing Western channels vs. any TV channels differed across surveys – Western channels played a more important role in Moldova (perhaps because national TV under the Communists was less Western in its program content) and overall TV viewing frequency mattered more in Romania and Bulgaria – the statistical tests confirm the importance of mass media in promoting Western comparisons. The contrast between the high impact of TV viewership and the modest role of Western travel and foreign work experience is arguably due to the fact that TV shows and advertising make Western consumption patterns seem natural and easily achievable, whereas direct contact with the reality of life in the West tends to drive home how far removed this golden goal is for the average East European.

Somewhat surprisingly, the statistical tests reveal no cross-nationally consistent demographic patterns underlying Western economic comparisons: thus, higher income is

associated with more frequent Western comparisons in Romania and Moldova but not in Bulgaria, while materially better endowed households have a more Western outlook in Bulgaria but not elsewhere. The effects of urban residence were negligible across the board and while younger and more educated respondents generally reported more Western reference points, the results were consistently statistically significant only in Moldova.

Finally, while the statistical tests confirm significant reference group differences across ethnic groups, they do not offer unqualified support for a straightforward Western proximity hypothesis. Thus, the Roma in Bulgaria reported higher Western consumption salience (especially in 2005) but East European Roma can hardly claim a greater cultural/historical proximity to the West. Similarly, Bulgarians in Moldova were more likely to compare themselves to the West than other ethnic groups, but since they were also more likely to compare themselves to domestic elites (Model 6) and to Russia (results omitted) these findings are probably more reflective of cultural norms emphasizing the importance of economic comparisons than of cultural proximity to the West. Meanwhile, other ethnic groups in the two countries did not display greater Western proclivities, and in the case of Russians in Moldova the effect was actually negative (though it barely missed statistical significance.)

Arguably the most interesting findings about the role of cultural and historical proximity emerge from Romania: on the one hand, the positive and statistically significant effect of the Hungarian minority dummy variable seems to confirm the importance of the closer Western ties of Hungarian speakers. However, this finding needs to be qualified in two respects: first, given that the vast majority of Hungarians reside in Transylvania and the Transylvania dummy has a negative and comparatively sized effect, the overall salience of Western comparisons for an ethnic Hungarian is virtually identical to that of a non-Transylvanian ethnic Romanian. In other

words, the real outliers are not ethnic Hungarians but ethnic Romanians from Transylvania, who are significantly less likely to resort to Western comparisons despite the fact that they reside in a region with much closer cultural and historical ties to the West than the rest of the country. A second surprising finding emerges if we disaggregate the Hungarian-speaking minority into ethnic Hungarians and Szekely: once we do so, we find that it is only the Szekely and not the ethnic Hungarians who are more likely to resort to comparisons to Western Europe¹⁰ (results omitted), despite the fact that the latter are both geographically and culturally closer to the West than the former.¹¹

These statistical findings were also confirmed by evidence from focus groups conducted in 2007 about the as part of the Eurequal project, which probed into the salience of different types of inequality. In line with the regression results above, respondents from the southern part of Romania (including poor villagers from a fairly isolated village) identified the difference between Romania and the West as one of the most important forms of inequality, while respondents in Transylvania barely mentioned this issue and at least in one case explicitly rejected the point of such a comparison¹² and instead focused on concrete local grievances.

While the particular reasons for these two reversals – between Romanian regions and within the Hungarian-speaking minority – are beyond the scope of the present paper, they nevertheless provide further evidence in support of the fact that Western consumption comparisons are usually not driven by straightforward measures of geographic and historical proximity (at the group level) and direct contact with the West (at the individual level.) Instead,

¹⁰ In fact the coefficient for ethnic Hungarians turns significantly negative, and I obtained similar results when looking at comparison to other ex-communist countries (such as Hungary.)

¹¹ While the details of these differences are beyond the scope of this paper, the Hungarians and the Szekely were considered two separation nations in Austro-Hungarian Transylvania (due to ethnic, regional and class differences) but these differences have gradually declined after 1918 because of their shared ethno-linguistic claims against the Romanian government.

¹² “Now, we should not compare our living standards with the European standard...” (Focus group participant in Hungarian village from Transylvania)

it appears that the Western consumption model is at its most seductive when mediated either by the second-hand stories from friends/relatives working abroad or by the even more abstract but ever-present image of the good life in commercials, films and TV series.

Models 5-8 indicate that the only fairly consistent predictor of domestic elite comparisons was once again TV viewing habits, which had a large impact in Romania and Bulgaria. Meanwhile, in Moldova the impact of overall TV watching was slightly negative but once again foreign TV programs had a more important catalytic role, perhaps due to the tighter control of the Moldovan government over the content of the domestic TV programming. As expected, the role of international experience had a fairly modest impact on domestic elite comparisons. While city residents in Bulgaria and younger people in Romania and Bulgaria were somewhat more likely to resort to domestic elite comparisons, the statistical results hardly produce a coherent demographic profile of citizens prone to such comparative evaluations. Given that neither education, nor income or consumer good ownership appear to have been instrumental in getting East Europeans to compare themselves to domestic elites, it seems that once again it is not the actual economic, social and physical proximity to a reference group that matters in determining its relevance as an economic standard. Instead, the answer seems to lie in the extent to which such associations are activated by the mass media and by certain cultural proclivities, as suggested by the greater reluctance of Transylvanians in Romania and the greater eagerness of Bulgarians in Moldova to resort to such comparisons.

Comparisons to the communist past, whose drivers are presented in Models 9-12 of Table 2, are perhaps not surprisingly driven most importantly by age, as older respondents were significantly more likely across the three countries to contrast their current livelihood to their economic situation under communism. While the finding may seem obvious for the youngest

respondents – an 18-year old in 2005 had few if any concrete memories of the communist period – it actually holds across the age spectrum. This pattern suggests two possible cognitive processes: first, since the elderly have suffered the greatest economic losses and the fewest opportunities during the post-communist transition, their greater reliance on the past could simply imply a greater focus on tangible losses than on unlikely future gains. However, I found that the substantive and statistical significance of age was only minimally reduced by controlling for a post-communist economic change index,¹³ which suggests that such an explanation is insufficient. Alternatively, age could simply be a proxy for the relative balance between the time lived under communism and the more recent post-communist past or a possible European future with their different frames of comparison.

Beyond the effects of age, it is worth noting the clear contrast in terms of media and demographic patterns between Bulgaria and Romania on one hand and Moldova on the other. Thus, more frequent TV viewers in both Romania and Bulgaria were more likely to consider the communist past a relevant reference point whereas in Moldova the effect was insignificant and actually pointed in the wrong direction. This finding is surprising given that the ruling Moldovan Communist Party derived much of its political support from communist nostalgia, and therefore one would expect that it would use its influence over the media to promote such a message.¹⁴ In demographic terms, more educated respondents were less likely to resort to past comparisons in Romania and Bulgaria but were more inclined to do so in Moldova, while urban residence had a significant negative effect in Moldova but not elsewhere. These differences confirm the

¹³ The index was constructed from four questions, which asked respondents to compare their present situation to the pre-1990 period in terms of housing, food, household goods and entertainment/recreation opportunities. The regressions are omitted here for space reasons, but are available from the author.

¹⁴ However, this impulse was probably counteracted by the fact that by 2005 the PCM had been ruling Moldova for the past four years, and as such may not have benefitted from negative references to the current economic situation.

important implications of Moldova's much more traumatic post-communist economic trajectory for the way its citizens relate to the communist past and judge their present economic situation.

Parents, children and computers: quasi-experimental evidence from Romania

While the analysis so far has established a link between mass media consumption and economic reference group choice, cross-sectional surveys are somewhat limited in their ability to establish the direction of causation. In the case of mass media, this is particularly problematic, since it is conceivable that individuals who place a great emphasis on Western life styles would also be drawn to media and entertainment forms that provide such cultural references and consumption images. One useful approach for establishing causation is via experimental or quasi-experimental research designs, which allow the researcher to manipulate one of the variables of interest and observe its impact on the relevant outcome. Therefore, this section presents evidence from a public opinion survey executed in May-July 2007 in two Romanian counties among participants in a recent Romanian government program, which awarded about 27,000 vouchers worth 200 Euro (roughly \$240 at the time) towards the purchase of a personal computer for students from low-income families. While the survey has the drawback of not focusing on a nationally representative sample, it has the significant advantage of offering a quasi-experimental research design, whose details are discussed below.

The program allocated a fixed number of such 200 Euro coupons on the basis of a simple ranking of family income in ascending order. The income cutoff line was not announced in advance but was determined based on the number of eligible applicants and the constraints

imposed by the total allocated funding.¹⁵ The winners were notified of having been selected and received the coupon, which could be applied towards the purchase of a personal computer at a number of participating local retailers. Since the lists of winners and losers were published on the website of the program initiative, we were able to use this publicly available information to run a public opinion survey of 852 randomly selected program applicants from two Romanian counties.

Surveying both winners and losers of this program has the great advantage that the abrupt and exogenous income cutoff separating winners from losers affords a stark “regression discontinuity” that allows comparisons across families with very similar income and other background characteristics. Such an approach practically eliminates concerns about omitted variables bias between recipients and non-recipients – in other words we know that both winners and loser wanted to acquire computers but only the winners were actually able to do so. Therefore, we can interpret the winner variable as capturing the “supply-side” effect of owning a computer on economic reference group choices.¹⁶ Since computer ownership may facilitate at least two types of activities that promote Western comparisons – internet/e-mail access and watching movies on DVD – the focus of the analysis in this section will be primarily on the impact of winning the computer voucher lottery on the adoption of Western reference points.

¹⁵ The post-facto nature of the income cutoff reduces possible concerns about participants misrepresenting their income to squeeze in below the cutoff. While individual instances of underreporting are possible, it is unlikely that these would be concentrated around the income cutoff of 506,000 ROL, and should therefore have a negligible effect on our regression discontinuity findings.

¹⁶ More formally, the basic regression model is as follows: $outcome_i = \beta'X_i + \delta winner_i + f(income_i) + \varepsilon_i$ where $outcome_i$ represents a particular attitude of respondent i . X_i includes a set of control variables, such as age, ethnicity, urban/rural location, and educational attainment. $winner_i$ is a dummy variable indicating whether a given respondent has received a voucher, and 0 otherwise. Finally, $f(income)$ is a smooth function of income, which is the forcing variable in the context of a regression discontinuity design. In line with recent studies employing this technique (Dinardo and Lee 2004), I used a linear model of $income$, but allow it to vary on either side of the discontinuity (by including an interaction term between $winner$ and $income$.)

The statistical results of this regression discontinuity approach are presented in Models 1 and 3 of Table 3, which deal with the impact of winning a computer through the government voucher program on parents and children respectively. Since the dependent variable is once again the four-category answer to the question about the salience of Western European living standards in judging one's individual well-being, the tests employ ordered probit regressions. The results are rather striking: whereas according to Model 1, for the parents of voucher recipients the access to a computer resulted in a substantively large and statistically significant increase in the salience of Western comparisons, judging by Model 3 the corresponding impact for children was weak and even pointed in the wrong direction. This contrast shows that greater access to a certain type of information environment – in this case the potential to access the internet and to watch DVD movies – does not automatically trigger greater Western comparisons. As will be discussed in greater detail below, the absence of an effect on children is not due to their being immune to Western influences. Instead, what arguably matters is the fact that children reported using computers largely to play video games, and the time they spent doing so cut not only into their studying time but also reduced the time spent in front of the television.¹⁷

Given the earlier discussion about the importance of cultural factors in driving the salience of comparative references, the computer voucher survey offers an additional insight into the dynamics of reference group choice. In particular, the fact that for each household both a parent and a child were interviewed separately – and given the confidential nature of some of the other survey questions, the interviewers took great pains to ensure that parents did not get to listen to their children's interviews and vice-versa – the dataset offers a unique opportunity to investigate the intergenerational dynamics of reference group choice. Understanding whether and

¹⁷ For a more detailed analysis of these issues using the same survey, see Malamud and Pop-Eleches (2008).

how parents' reference group choices inform their children's attitudes is an important step in tracing the way in which the cultural norms underlying such choices are transmitted from one generation to the next.

Judging by simple bivariate correlations, there is quite a strong link between the degree to which parents and children rely on Western comparisons: for the overall sample, the two indicators were very highly correlated (.37) considering the fairly abstract nature of the question. Moreover, models 2 and 4 suggest that this correlation survives even once we control for the main demographic commonalities shared by parents and children, such as income, urban residence and ethnicity. However, the two regression models ultimately only establish that even controlling for other confounding factors and personal characteristics (age, education), the Western reference point salience of parents and children living in the same household tend to be very similar but not what the mechanisms are that bring this about: thus, it could be that parents raise their children in their own image (which includes Western consumption comparisons) or that children fuel their parents' material yearnings and insecurities based on ideas they get from their peers or from the mass media, or that both parents and children respond to a certain cultural and informational environment (e.g. by watching TV together or by talking to their relatives abroad.)

Figure 1 here

While these questions cannot be answered definitively in the absence of longitudinal data, two pieces of evidence point suggest that at least in the early childhood years the impetus for Western comparisons flows quite clearly from parents to children. First, judging by the graph in Figure 1, the youngest children in the sample (aged 7-11) expressed a very low reliance on Western consumption models, which suggests that children are not simply born with an innate

proclivity for international comparisons but instead learn this behavior from family, peers or the mass media. Second, Model 5 in Table 3 includes a series of interaction effects between the three child-age dummies and the parent's western comparison salience. Given that the youngest age group is the excluded category, the much larger size of the coefficient for *parent's western comparison salience* in Model 5 compared to Model 4 suggests that parental influence is significantly higher in the early childhood years. However, already starting with the early teenage years, parental influence is reduced by almost half judging by the fairly large negative interaction effects in Model 5 (especially for the 12-14 and 15-17 age groups.) While the parent-child correlation once again increases for the 18-21 age group (as suggested by the smaller and less significant negative interaction effect in model 5), it is unclear whether this is due to children overcoming their teenage rebelliousness or because at this point the children are having a more significant impact on their parents' attitudes. The latter possibility is reinforced by Figure 1, which shows that for the three oldest age groups children are actually more westward oriented in their consumption comparisons, which makes it unlikely that the further increase is driven by their parents and instead points to alternative sources of influence.

Compare at your own risk: the repercussions of reference group choices

This final section focuses on the socio-economic and political consequences of economic reference group salience in the three East European countries analyzed in this paper. As discussed in the introduction, one would expect that individuals who evaluate their personal welfare compared to wealthier reference groups – such as West European citizens or domestic elites – should be less satisfied than their counterparts living under similar objective economic

circumstances but for whom such outward and upward comparisons matter less. Therefore, the first question addressed by the empirical analysis in this section is how the salience of the three key reference groups discussed in the preceding sections – Western Europe, domestic elites, and an individual’s own welfare at the start of the post-communist transition – affects the relative satisfaction of respondents with their economic situation. In particular, I am using the same survey question in all four surveys, which simply asks respondents to rate their satisfaction with their standard of living on a scale of 1- not at all satisfied to 4- very satisfied. In addition to the three indicators of reference group salience, the regressions include the standard demographic controls discussed in the previous section (age, urban residence, education, gender, ethnicity) and, most importantly, two indicators of objective economic well-being: logged total household income and a household goods ownership index. To the extent that relative deprivation occurs, we should expect the subjective economic satisfaction to be lower for respondents prone to upward comparisons even if we control for objective economic conditions.

Table 4 here

The results of the regression analysis in Table 4, which once again uses ordered probit models, reveals two different patterns of relative deprivation in the three East European countries. The first pattern – typified very clearly by Romania and Bulgaria – corresponds to the predictions of the international demonstration effect discussed by Janos (2000) in late 19th century Eastern Europe: thus, even though in both countries objective economic conditions (income and consumer goods ownership) have a substantively large and statistically highly significant positive impact on economic satisfaction, respondents with a high propensity to resort to Western comparisons were considerably less satisfied than their economically and socially comparable counterparts. These effects were not only statistically significant (at .05 or better) in

all three surveys but they were substantively very large: for example, judging by the results in Model 1, the predicted difference in economic satisfaction between a respondent for whom Western comparisons are very important, compared to an otherwise similar person who does not make such comparisons is equivalent to a change in income from the 20th to the 85th percentile of the range observed in this survey. This result suggests that short of dramatic increases in income, most gradual improvements in the objective economic conditions of the average Romanian or Bulgarian citizen may be very easily countered by even gradual increases in the salience of Western comparisons. On the other hand, in both countries comparisons to domestic elites and to the communist past had a much weaker and statistically inconclusive impact, which further confirms the primacy of international comparisons as a driver of relative deprivation in the two new EU member countries.

The results from the Moldovan survey present a fundamentally different picture: unlike in Romania and Bulgaria, Western comparisons had a minimal impact on economic satisfaction. This (non)finding confirms earlier discussion of the different nature of Moldovans' relationship to West European life styles: whereas in the other two countries Western comparisons were driven at least in part by contacts with friends and relatives living abroad, in Moldova they were almost exclusively fueled by watching Western TV channels. The combination of this much more abstract and mediated perception of Western life styles combined with the much weaker European integration prospects of their country seems to have significantly reduced the frustration inherent in such comparisons. Therefore, it appears that international comparisons produce the greatest deprivation not when the desired goal is completely out of reach (as it arguably is for most Moldovans for the foreseeable future) but when the prospect seems at least

potentially attainable but has not yet been reached (as in the case of most Romanians and Bulgarians.)

While Western comparisons were inconsequential for the average Moldovan, the same cannot be said about comparisons to the communist past. Thus, the results in Model 3 of Table 4 indicate that Moldovans who place a great weight on such past comparisons tend to be less satisfied with their economic fortunes than their less retrospective counterparts. This finding confirms that despite sharing many of the same economic and political challenges as Romania and Bulgaria, Moldova's post-communist transition ultimately produced a very different outlook among its citizens. Due to the much more traumatic depths of economic decline (Orlova and Ronnas 1999) and the much slower subsequent recovery (Svejnar 2002), most Moldovans still lived significantly worse by 2005 than they had in 1989, which helps explain why the comparison to the communist past was so important and so frustrating for many Moldovan citizens. At the same time, the country's much slower European integration arguably delayed the replacement of such retrospective reference points with the more forward-looking comparisons to advanced Western market economies. Finally, Model 5 also provides some evidence (albeit only marginally significant at .1 one-tailed) that comparisons to domestic elites contributed to relative deprivation among Moldovans, whereas it did not matter for the other two countries, perhaps because Moldova has experienced the largest increases in inequality during the post-communist transition among the three countries discussed here.

Reference groups and relative deprivation: evidence from survey experiments

Given the previously mentioned concerns about the validity of direct survey questions about reference group salience, in this section I will briefly present the results of a survey

experiment included in the 2008 Bulgarian survey. The experiment consisted of splitting the sample into four equal-sized groups (of roughly 300 respondents each) and asking respondents to answer different priming questions prior to being asked to evaluate their satisfaction with the consumer goods they owned and their living standards.

One group was primed to think about Western comparisons by being read the following statement: “Even though Bulgaria is now an EU member, average wages in our country are still less than a quarter of those in Western Europe.” Afterwards they were asked “How long do you think it will take until most Bulgarians will have living standards similar to people in the West?” (with options ranging from 1- Within the next 10 years to 4-never).

Another group was primed to think about domestic elites by being read the following statement: “Since the fall of Communism some people in our country have made a lot of money, which allows them to lead a comfortable and even luxurious life style.” Afterwards they were asked to identify the two most important reasons why people got rich in their country (with options ranging from hard work and education to bribes and theft).

The rest of the respondents were split among a control group (which received no priming statements/questions) and a group, which was primed to think about the Communist past by being asked to evaluate their family’s economic situation compared to the pre-1990 period along a number of dimensions. However, the experimental results for the pre-1990 comparisons were weak and are not presented here due to space considerations.

Based on the regression results in model 4 of table 4, we would expect respondents primed to think about Western European reference groups to be less satisfied with their living standards, whereas the effect of domestic elite comparisons should be much weaker and possibly even positive. To test these predictions, in Tables 5a and 5b I present the predicted values of

living standard satisfaction for respondents who received a certain priming question vs. those who did not. While similar results were obtained using simple averages, the values in Tables 5a and 5b were calculated using *Clarify* on the basis of regressions that included the standard demographic controls from Table 4 and an interaction between income and questionnaire type.

Broadly speaking, the survey experiments confirm the earlier statistical findings whereby Western consumption comparisons were more frustrating for Bulgarian citizens than comparisons to the life styles of domestic elites. However, comparing the results in Table 5a and 5b, suggests that this divergence was driven almost exclusively by the effects of priming on the wealthier survey respondents. Thus, whereas poor respondents actually seemed to be slightly more satisfied with their living standards when primed to think about West European reference points, wealthier Bulgarians reported a significantly lower degree of economic satisfaction when prompted to contemplate Western living standards. While higher income was still associated with greater satisfaction, its impact was significantly reduced when put in international perspective.

Table 5b reveals a reversed statistical pattern: whereas the impact of domestic elite comparisons was modest for poor respondents, for their economically more privileged counterparts the priming effect was actually positive (albeit only marginally statistically significant.) In other words, when indirectly reminded of their relatively privileged status, Bulgarian economic elites were more likely to report higher degrees of economic satisfaction than in the absence of such explicit reference group priming.

Taken together, these two findings confirm the importance of reference group salience for relative economic deprivation in Eastern Europe. Moreover, the fact that this effect is largely confined to the relatively more affluent post-communist citizens confirms the logic of relative

deprivation: since poor Bulgarians are significantly poorer than both domestic elites and West Europeans, the relative choice of reference group matters less; by contrast, for relatively wealthier Bulgarians, who have an easier time “competing” against domestic elites than against West Europeans, the choice of comparative reference point has important implications for their subjective evaluation of their personal economic situation.

Broader implications of reference group salience

Beyond the immediate question of relative deprivation, what are the broader social and political implications of different patterns of reference group salience? While the yearnings and frustrations bred by such comparisons may affect a wide range of outcomes, including savings and consumption patterns, voting behavior and economic policy preferences, and deserve greater attention in future research, the present analysis focuses on two aspects of particular relevance to the post-communist transition: migration and satisfaction with democracy.

Given the prominence of migration in the political economy of both Eastern and Western Europe focusing on the drivers of migration arguably requires little additional justification. Earlier research has shown that relative deprivation due to negative within-village comparisons was a driver of migration in rural Mexico (Stark and Taylor 1991). Since the bulk of migration from the three countries is driven by economic rather than political grievances, the role of economic comparisons – and particularly comparisons to Western Europe, which receives the bulk of East European immigrants – deserves greater scholarly attention. Western consumption comparisons are important both because the relative deprivation they breed may send East Europeans abroad in search of higher incomes and because the prominence of Western consumption models would make Western Europe a particularly attractive destination.

The statistical tests in models 5-7 of Table 4 are based on a survey question, which asked respondents whether they were considering working abroad in the foreseeable future: the national averages were 18.1% in Romania (2004) 25.2% in Moldova (2005) and 14.6% in Bulgaria (2005).¹⁸ The regression results in Models 5 and 7 confirm the importance of the international demonstration effect in Romania and Bulgaria, where Western comparison salience emerged as statistically significant drivers of migration intentions, whereas objective economic indicators played a negligible role. Once again, Moldova was somewhat of an exception: while both Western and elite comparisons were associated with greater migration intentions, the results in Model 6 failed to reach statistical significance.¹⁹ Overall, these results confirm the theoretical expectation that East Europeans frustrated by the contrast between their lofty economic aspirations and their limited domestic opportunities may choose (at least temporarily) to take the exit option and try their luck in the West.

The last part of the analysis presented in Table 4 focuses on the impact of economic reference group salience on citizens' satisfaction with democracy. While the link between the two is not as direct as for the first two outcomes, the close association between democracy and Western life styles in the minds of many East Europeans (average citizens and political elites alike) suggests that citizens frustrated by unattainable economic standards may extend their frustration to the broader political system. To test this hypothesis, I used a survey question, which asked respondents to rate their satisfaction with democracy on a scale from 1-not at all satisfied to 4- very satisfied.

¹⁸ The Bulgarian average may actually be significantly higher, since an additional 21% of respondents chose "maybe" as their answer (an option that was not available in the other two surveys.) Note also that the question was not asked in the 2008 Bulgarian survey.

¹⁹ However, this result was due at least in part to the rather higher correlation between elite and Western comparison salience. If the two measures were used separately, both produced at least marginally significant positive effects.

The results of the ordered probit regressions in Models 8-11 provide a mixed picture of the link between relative deprivation and democratic satisfaction. Thus, in Romania the substantively large and statistically significant negative effect of higher Western comparisons confirms the “generalized” frustration hypothesis. On the other hand, in Bulgaria in 2005 the situation was diametrically opposed with respondents prone to Western comparisons reporting greater democratic satisfaction. This somewhat surprising reversal may be explained at least in part by the fact that the EU had ratified Bulgaria’s accession treaty just prior to the 2005 Bulgarian survey. This decision may have provided a boost of confidence in Bulgaria’s democracy among Bulgarians eager to embrace Western life styles. However, according to Model 11, by 2008 the effect had vanished (but not been reversed). Perhaps not surprisingly, Model 9 suggests that there were no significant links between Western reference group salience and democratic satisfaction among Moldovans. Overall, these more mixed findings suggest that there is no straight-forward link between Western consumption comparisons and democratic satisfaction, and that future research needs to focus more on identifying under what circumstances such yearnings can be harnessed to support or undermine the region’s fledgling democracies.

Conclusion

This paper has focused on an important and surprisingly under-studied facet of the post-communist transition: the roots and consequences of economic reference group choices. While such economic comparisons – especially when using advanced market economies as a frame of reference – are gaining in importance in the context of the increased flow of people, goods and information across the globe, they are arguably particularly relevant in post-communist Eastern

Europe. As I have shown in this paper, the post-communist transition has exposed East Europeans to a slew of competing comparative reference frames: for some – particularly among the elderly – the communist past provided an obvious starting and reference point. For many others, the previously forbidden capitalist West provided a more tempting reference point, albeit one that was often based on second-hand stories from friends and relatives or on the even more stylized versions served by the newly accessible mass media outlets. For others yet, the rising inequality and the ostentatious displays of the conspicuous consumption led them to focus on the new economic elites.

While it seems intuitively obvious that such comparisons should matter to East Europeans and could have important socio-economic and political consequences, this paper has tried to take a first step towards a systematic analysis of the drivers of such economic comparisons and some of their implications. To do so, I have used a series of four original public opinion surveys of nationally representative samples from three East European countries (Bulgaria, Romania and Moldova), along with quasi-experimental evidence from a survey of parent-children pairs from low-income Romanian families, and a survey experiment from a 2008 Bulgarian survey.

The evidence presented in this paper suggests that the choice of economic reference groups cannot be predicted by either the economic circumstances or demographic characteristics of the individual – the only reasonably robust finding in this respect is that older people are more likely to resort to past comparisons and less prone to compare themselves to the West and domestic elites. Instead three other factors provide more promising alternative explanations. First, in all three countries frequent TV viewers were more likely to engage in comparison with the West, domestic elites and (at least in some cases) with the communist past. The importance

of media access is further confirmed by the quasi-experimental evidence from Romania, where parents who won computers through the government program were more likely to engage in Western comparisons than their otherwise similar counterparts. Second, having friends and family working abroad triggered greater Western comparisons among Romanian and Bulgarians, even though the more immediate personal experience of travelling or working in the West generally did not have the same effect. Third, the higher overall comparative propensity of Bulgarians (including the Bulgarian minority in Moldova), combined with the lower comparison salience among Transylvanians and non-Szekely Hungarians in Romania suggests that cultural transmission mechanisms play an important role in shaping the relative salience of different reference groups. The paired parent-child surveys from the Romanian computer voucher program provide evidence for one of the key transmission mechanisms of such cultural continuity since they demonstrate that particularly in the early childhood years the comparative reference points of children are significantly shaped by their parents' attitudes. While obviously distinct, all three of these explanations emphasize the importance of *mediation* - personal/social, mass media, and cultural – in shaping the reference point choices of post-communist citizens. While cultural patterns and familial transmission mechanisms are obviously hard to change, other aspects – particularly the content of mass media programming and the political discourse that often fuels these “consumption narratives” – are more easily manipulable (in either direction.)

The second part of the paper has briefly documented some of the socio-economic and political consequences of individual economic reference points. The survey evidence confirms the importance of reference groups in triggering relative deprivation among post-communist citizens, but finds that whereas in Bulgaria and Romania such frustration is triggered primarily

by Western comparisons, in Moldova the comparison to the “golden communist past” produces the greatest discontent. Thus, even though in all three countries Western and pre-1990 comparisons rank as the two most important reference points, their implications for relative deprivation are significantly mediated by the specific nature of the post-communist transition experience of the three countries. The malaise triggered by frustrating economic comparisons is not limited to an abstract sense of dissatisfaction but appears to have potentially significant socio-economic implications, given that respondents with Western consumption frames were more likely to plan to leave their countries to work abroad. Finally, the more mixed findings about democratic satisfaction suggest that the political implications of economic reference group salience are mediated to a significant extent by the specific political context and need to be studied in greater detail by future research.

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Appendix

Table 1: Cross-national comparison of reference group salience

Saliency of comparison with...	Romania 2004	Moldova 2005	Bulgaria 2005	Bulgaria 2008
West	2.47	2.47	2.68	2.67
Neighboring countries	1.99	2.26	2.49	N/A
Domestic elite	2.18	2.27	2.36	2.26
Friends and neighbors	2.02	2.48	2.50	2.52
Own situation pre-1990	2.34	2.72	2.89	2.78
Parents at same age	2.12	2.44	2.51	2.47

Table 2: Drivers of economic reference group salience

	Western comparison				Domestic elite comparison				Pre-1990 comparison			
	ROM04	MOL05	BUL05	BUL08	ROM04	MOL05	BUL05	BUL08	ROM04	MOL05	BUL05	BUL08
Traveled to West	.022 (.104)	-.250* (.113)	.049 (.092)	-.091 (.098)	-.026 (.105)	-.185 (.113)	.165# (.092)	-.115 (.098)	.006 (.100)	-.207# (.109)	-.033 (.091)	-.170# (.098)
Worked abroad	.048 (.123)	.004 (.082)	-.111 (.113)	.390** (.124)	.055 (.127)	.108 (.081)	-.107 (.114)	.403** (.122)	-.021 (.122)	.058 (.079)	-.095 (.113)	.178 (.124)
Friends/family working abroad	.398** (.094)	.028 (.065)	.356** (.069)	.154* (.074)	.097 (.095)	-.051 (.064)	.149* (.070)	-.017 (.074)	.347** (.092)	-.126* (.062)	.120# (.068)	.076 (.074)
TV viewing freq	.068* (.037)	.001 (.050)	.123** (.043)	.078# (.049)	.122** (.036)	-.075 (.049)	.103* (.042)	.070# (.049)	.066* (.033)	-.049 (.047)	.139** (.040)	.030 (.048)
Western TV viewing freq	.037 (.036)	.210** (.045)	.030 (.035)	-.078* (.038)		.228** (.045)						
HH income (log)	.117* (.059)	.130** (.037)	-.067 (.078)	-.111 (.084)	.104# (.059)	.021 (.037)	-.144# (.080)	-.128 (.084)	.091 (.056)	.018 (.035)	-.010 (.077)	.027 (.084)
Ownership index	-.155 (.167)	-.105 (.163)	.179 (.166)	.429* (.212)	-.130 (.168)	-.188 (.160)	.105 (.169)	.303 (.212)	-.335* (.160)	-.010 (.153)	-.021 (.164)	-.213 (.209)
Town resident	-.041 (.089)	-.009 (.086)	.119 (.079)	-.065 (.085)	.029 (.086)	-.113 (.085)	.084 (.078)	.129 (.085)	.011 (.083)	-.283** (.082)	.071 (.077)	.160# (.084)
City resident	.040 (.091)	.116 (.089)	-.039 (.093)	-.124 (.105)	.042 (.089)	.058 (.088)	.141# (.094)	.203* (.104)	.040 (.084)	-.362** (.086)	.021 (.093)	.163 (.104)
Education	-.003 (.019)	.032* (.016)	.069** (.027)	.012 (.026)	-.043* (.020)	.024 (.016)	-.020 (.027)	.027 (.026)	-.039* (.019)	.027# (.016)	-.047# (.026)	-.033 (.026)
Age	-.002 (.002)	-.007** (.002)	-.001 (.002)	-.007** (.002)	-.004* (.002)	-.003* (.002)	.002 (.002)	-.003 (.002)	.006** (.002)	.004* (.002)	.017** (.002)	.010** (.002)
Male	-.024 (.068)	.039 (.062)	.021 (.064)	.125# (.070)	.010 (.068)	.068 (.061)	.055 (.064)	.110 (.069)	.007 (.064)	-.048 (.059)	.002 (.063)	-.037 (.069)
Transylvania	-.346** (.074)				-.458** (.074)				-.156* (.070)			
Hungarian	.321* (.145)				.562** (.145)				-.091 (.138)			
Roma	.061 (.277)		.431* (.169)	.136 (.146)	.510# (.265)		.080 (.163)	-.291* (.146)	-.045 (.259)		.054 (.155)	.213 (.145)
Ukrainian		-.017 (.094)				.043 (.093)				.021 (.090)		
Russian		-.160 (.117)				.015 (.115)			-.125 (.141)	.186 (.113)		
Gagauz		.023 (.141)				-.059 (.147)				.229 (.140)		
Bulgarian		.580** (.224)				.428# (.231)				.109 (.219)		
Turkish			-.123 (.123)	.139 (.188)			-.167 (.125)	.161 (.184)			.141 (.124)	-.016 (.182)
Observations	1152	1371	1231	1041	1163	1407	1214	1039	1214	1457	1300	1054

Ordered probit regression coefficients with standard errors in parentheses - significant at 10%; * significant at 5%;

** significant at 1%

Table 3: Mass media and family influences on Western comparisons

	(1) Parent western comparison importance	(2) Parent western comparison importance	(3) Child's western comparison importance	(4) Child's western comparison importance	(5) Child's western comparison importance
Computer voucher winner	.326* (.194)		-.049 (.183)		
Computer voucher winner* Income	1.198** (.448)		.444 (.430)		
Income	-.305 (.230)	-.094 (.119)	-.474* (.216)	-.206* (.098)	-.216* (.098)
Child's western comparison importance		.372** (.046)			
Parent western comparison importance				.394** (.040)	.694** (.203)
Parent age 36-40	.145 (.120)	.251 (.159)			
Parent age 41-46	.067 (.127)	.025 (.164)			
Parent age over 47	-.038 (.128)	-.074 (.162)			
Child age 12-14			.342* (.203)	.312# (.210)	.954* (.472)
Child age 15-17			.442* (.201)	.361* (.208)	1.027* (.468)
Child age 18-21			.602** (.208)	.592** (.215)	1.017* (.482)
Child age 12-14* Parent W comparison importance					-.332# (.215)
Child age 15-17* Parent W comparison importance					-.340# (.211)
Child age 18-21* Parent W comparison importance					-.219 (.221)
Observations	754	550	792	735	735

Ordered probit regression coefficients with standard errors in parentheses - significant at 10%; * significant at 5%; ** significant at 1% (one-tailed where appropriate)

Note: Also included in the regressions but not reported in the table were parents' education, gender, urban residence, ethnicity and a dummy variable indicating whether the family had friends or relatives working abroad.

Table 4: Reference group choices and their economic and political consequences

	Living standard satisfaction				Intention to work abroad			Satisfaction with democracy			
	ROM04	MOL05	BUL05	BUL08	ROM04	MOL05	BUL05	ROM04	MOL05	BUL05	BUL08
Western comparison	-.117** (.032)	-.008 (.035)	-.084* (.037)	-.082* (.039)	.179** (.046)	.043 (.048)	.072* (.042)	-.096** (.032)	.032 (.036)	.096* (.038)	.007 (.039)
Domestic elite compar.	-.037 (.035)	-.049# (.036)	.058 (.036)	.009 (.040)	-.082* (.049)	.049 (.049)	-.042 (.042)	.067# (.035)	.020 (.037)	-.035 (.037)	-.025 (.040)
Pre-1990 comparison	-.020 (.032)	-.071* (.035)	.006 (.033)	.003 (.034)	.140** (.048)	-.037 (.048)	-.069# (.037)	.023 (.033)	-.023 (.036)	-.065# (.034)	-.038 (.034)
Ownership index	.957** (.169)	.227** (.039)	1.378** (.183)	1.337** (.222)	.111 (.237)	-.000 (.049)	.062 (.201)	-.136 (.169)	.102** (.039)	.733** (.185)	.510* (.215)
HH income (log)	.237** (.061)	.740** (.161)	.350** (.084)	.486** (.087)	-.131 (.088)	.895** (.212)	-.013 (.096)	.126* (.061)	.073 (.164)	.189* (.085)	.280** (.086)
Town resident	-.340** (.090)	-.333** (.089)	.073 (.086)	.040 (.086)	-.198 (.129)	-.267* (.127)	.139 (.101)	-.076 (.089)	-.298** (.091)	-.099 (.088)	-.105 (.086)
City resident	-.089 (.092)	-.112 (.092)	-.040 (.101)	.151 (.108)	-.009 (.132)	-.544** (.132)	.079 (.117)	-.205* (.093)	-.250** (.095)	.079 (.101)	-.006 (.108)
Male	.084 (.069)	.012 (.063)	.007 (.069)	.002 (.071)	.298** (.099)	.399** (.086)	.181* (.080)	.086 (.069)	.007** (.002)	-.050 (.070)	-.051 (.071)
Education	-.004 (.020)	.011 (.017)	.116** (.029)	.061* (.026)	.003 (.030)	.028 (.024)	-.033 (.033)	.012 (.020)	-.029 (.065)	.024 (.029)	.030 (.026)
Age	.002 (.002)	.004* (.002)	.003 (.002)	.001 (.003)	-.037** (.003)	-.042** (.003)	- (.003)	-.002 (.003)	-.026 (.017)	.000 (.002)	-.006* (.003)
Transylvania	.154* (.076)				.083 (.110)			.089 (.076)			
Hungarian	-.241 (.148)				.175 (.216)			-.461** (.150)			
Roma	-.152 (.292)		-.167 (.189)	-.396# (.207)	-.087 (.378)		.409* (.191)	.013 (.289)		-.375# (.209)	-.265 (.201)
Ukrainian		-.027 (.096)				-.010 (.143)			.305** (.102)		
Russian		-.023 (.123)				.052 (.178)			.227# (.126)		
Gagauz		-.188 (.152)				-.111 (.219)			-.197 (.156)		
Bulgarian		.466* (.235)				.087 (.330)			.042 (.247)		
Turkish			.139 (.141)	.117 (.145)			.117 (.155)			-.018 (.148)	.067 (.145)
Obs.	1068	1329	1081	970	1077	1350	1078	1042	1219	1007	970

Ordered probit regression coefficients with standard errors in parentheses - significant at 10%; * significant at 5%; ** significant at 1% (one-tailed where appropriate)

Table 5a: Experimental results – Western Europe priming

	Western Europe priming		
	No	Yes	Difference
Low income (5 th percentile)	2.14	2.20	+.06
High income (95 th percentile)	3.10	2.82	-.27*

* - significant at .05

Table 5b: Experimental results – Domestic elite priming

	Domestic elite priming		
	No	Yes	Difference
Low income (5 th percentile)	2.13	2.20	+.06
High income (95 th percentile)	2.99	3.17	+18#

- significant at .1 (one-tailed)

