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Attitudes to Equality:

The "Socialist Legacy" Revisited

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Abstract

It is routinely assumed that residents of post-socialist countries have a preference for greater income equality, other things being equal, owing to the legacy of socialism. This proposition is examined in the context of Eastern Europe and the former Soviet Union using data from three waves of the *World Values Survey*. Contrary to expectations, the authors find little evidence of a 'socialist legacy' *en bloc*. Considering the former Soviet Union separately from other post-socialist countries, the analysis finds that as a group these countries display significantly lower preference for moving toward greater income equality than both Eastern Europe and other comparator groups (developed and developing countries). These findings hold up even when controlling for the conventional determinants of attitudes such as income level and employment status of the individual respondent, as well as national factors such as per-capita income and its distribution. Moreover, the preference for greater income inequality appears to have persisted at least since the mid-1990s and possibly since the early 1990s (data difficulties preclude a robust examination of this latter question). The results are consistent with the fairly low levels of public spending on redistribution commonly found in the former Soviet Union.

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This paper—a product of the Poverty Reduction and Economic Management Sector and Human Development Sector Units, Europe and Central Asia Region—is part of a larger effort in the department to understand the economic transition in former centrally planned economies. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at mmurthi@worldbank.org and etiongson@worldbank.org.

Attitudes to equality: The "socialist legacy" revisited

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1 Introduction²

It is generally believed that owing to the legacy of the past there is a strong preference for income equality and redistributive state spending in post-socialist countries. Indeed a large body of literature points in this direction (see Table 1). Yet countries in Eastern Europe and the former Soviet Union which are the focus of this paper are very diverse. In the decade and a half since the end of the Soviet Union income inequality has increased everywhere but has risen far more in some countries than in others. At one end of the spectrum, EU member-state Hungary remains among the world's most equal countries. Its Gini coefficient for consumption in 2002 was 0.25. At the other of the spectrum, Georgia has become more unequal in terms of the distribution of income than the United States. Its Gini coefficient for consumption in 2003 was 0.39 (World Bank, 2005). If there is a strong preference for more equal outcomes owing to a 'socialist legacy', why do we observe highly unequal outcomes in countries such as Georgia? Do other factors, such as weak capacity to administer redistributive social programs, get in the way of implementing a broader social preference for more equal outcomes? Or is the 'socialist legacy' itself a myth, there being no social or political consensus in favor of greater equality in countries such as Georgia despite the history of socialism?

Existing literature does not provide much guidance on these questions as it largely focuses on countries in Eastern Europe with little or no coverage of the former Soviet Union (outside of Russia) where some of the more unequal outcomes are observed. This paper attempts to address this gap in the literature by examining data from the *World Values Survey* which includes a large number of countries from both Eastern Europe and the former Soviet Union. The survey, which has been conducted in several rounds since the late 1980s, seeks people's *views* on a number of issues, including income inequality and the role of the state. We use the responses to examine whether there are systematic differences in professed views between post-socialist countries and others, but also within post-socialist countries between Eastern Europe and the former Soviet Union and whether these differences have evolved over time. In conducting our investigation we do our best to 'control' for personal characteristics of the respondent such as age, gender, income group, labor market status and other factors, as well as societal characteristics such as per-capita income and overall levels of inequality in the country which may influence declared attitudes.

The paper focuses on three questions in particular. The first is, how do attitudes towards income equality and the role of the state differ between post-socialist countries and other countries in the world? Is there 'a socialist legacy' in the sense of a stronger preference for equality in Eastern Europe and the former Soviet Union than elsewhere? This question essentially revisits the earlier literature using data from a wider group of countries than in previous studies. Our results show that Eastern Europe and the former Soviet Union are a diverse group with little robust statistical evidence that *as a group* they display a greater preference for equality than other countries. There is a strong preference for equality in

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Study	Data ¹	Year	Sample	Socialist Legacy ²
Andreβ and Heien (2001)	ISSP	1992	Germany (East and West), Norway, USA	Yes
Alesina & Fuchs-Schündeln (2006)	GSOEP	1997, 2002	Germany (East and West)	Yes
Austen (2002)	ISSP	1987, 1992	Hungary, Poland and high-income (OECD) countries	Yes
Blanchflower & Freeman (1997)	ISSP	1987, 1992	Bulgaria, Czech Republic, Hungary, Poland, Russia and Slovenia and high-income (OECD) countries including Germany (East and West)	Yes
Boeri and others (2001)	Own	2000	Germany (East and West), France, Italy and Spain	Yes
Corneo (2001)	ISSP	1992	Germany (East and West), United States	Yes
Corneo and Gruner (2002)	ISSP	1992	Bulgaria, Czechoslovakia, Hungary, Poland, Russia and high-income (OECD) countries including Germany (East and West)	Yes
Delhey (1999)	ISSP	1992	Bulgaria, Czech Republic, Hungary, Poland, Russia and Slovenia and high-income (OECD) countries including Germany (East and West)	Yes
Heien (2000)	ISSP	1985, 1990, 1996	Bulgaria, Hungary and high-income (OECD) countries including Germany (East and West)	Mixed
Lipsmeyer and Nordstrom (2003)	ISSP	1996	Bulgaria, Czech Republic, Hungary, Latvia, Poland, Russia and Slovenia and high-income (OECD) countries	Mixed
Mason (1995)	ISJP	1991	Bulgaria, Czechoslovakia, Estonia, Hungary, Poland, Russia, Slovenia	Yes
Redmond and others (2002)	ISSP	1999	Bulgaria, Czech Republic, Hungary, Latvia, Poland, Russia, Slovakia, and Slovenia and high- income (OECD) countries including Germany (East and West)	Yes
Shiller, and others (1991)	Own	1990	U.S. and Russia	No
Suhrcke (2001)	ISSP	1999	Bulgaria, Czech Republic, Hungary, Latvia, Poland, Russia, Slovakia, and Slovenia and high- income (OECD) countries including Germany (East and West)	Yes
Verwiebe and Wegener (2000)	ISJP	1991, 1996	Bulgaria, Czech Republic, Hungary, Russia and Western Germany	No
Wong (2004)	WVS	1990	Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Russia, Slovenia other countries including China and Germany (East and West)	No

Table 1. Preferences for Redistribution and the "Socialist Legacy": Summary of Selected Studies

¹GSOEP: German Socioeconomic Panel; ISJP: International Social Justice Program; ISSP: International Social Survey Programme; WVS: World Values Survey; and own survey.

²The papers covered here do not necessarily explicitly test for the existence of a socialist legacy. The summary information is based on our judgement of whether the main empirical results suggest the existence of such a legacy.

some countries but not in others making it difficult to conclude that there is a socialist legacy in attitudes for the group as a whole.

Second, are there systematic differences between post-socialist countries and if so, do they fall along familiar 'fault lines'? In particular, do attitudes differ systematically between Eastern Europe and the former Soviet Union? As the opening paragraph illustrates, many countries in Eastern Europe are characterized by lower income (consumption) inequality, which is related in part to higher levels of redistributive public spending. Is this pattern of redistribution consistent with underlying preferences? Our results show that it is. Even when controlling for other factors residents of the former Soviet Union profess significantly lower preference for equality than their counterparts in Eastern Europe. What is interesting - and a little surprising - is that they also profess lower preference for equality than the denizens of developing countries. The socialist legacy - if there was ever one - has long since evaporated.

Finally, how have attitudes evolved over time? We find no evidence of change in attitudes in the post-socialist countries since the mid-1990s and on a more restricted sample since the early 1990s. This sets apart our findings from previous work. The majority of studies on attitudes towards equality are cross-sectional in nature, examining differences at a point in time across countries or individuals. A few however look at changes over time. The ones that do suggest that people's preferences may evolve over time to favor *less* equal outcomes. For example, Blanchflower and Freeman (1997) and Verwiebe and Wegener (2000) present evidence to suggest that even though residents of post-socialist countries may inherit preferences which are influenced by the egalitarian values of the past, these are likely to be eroded over time in response to actual increases in inequality. In our results we find no evidence of such a negative time trend in preference for equality.

The rest of the paper is structured as follows. The next section (Section 2) provides a brief overview of the socialist legacy literature. Section 3 explores the data on attitudes towards equality from the *World Values Survey* using graphs and tables while Section 4 presents the detailed econometric specification. Section 5 presents the main results from the most recent wave of the data. Section 6 discusses how attitudes appear to have evolved over time. Section 7 presents results based on alternative estimates of preferences while Section 8 concludes.

2 Attitudes to equality: what do we know?

The literature on attitudes to inequality in post-socialist countries – summarized in Table 1 - has two main strands.

In the first, the emphasis is on whether attitudes to equality systematically differ between post-socialist countries and established market economies. The premise of these studies is that if people living in post-socialist countries are significantly more in favor of income equality (and thus significantly more averse to income inequality) than those living in the West, then this could represent a significant attitudinal barrier to policy reforms, especially those of the kind that are likely to raise inequality. Shiller, Boycko and Korobov (1991) considered attitudes towards income inequality along with other 'market-oriented' behaviors and concluded that Soviet and American respondents were "basically similar".³ Their analysis was however based on a survey of Moscow and New York residents alone.

Subsequent work based on more representative samples of the populations in question - typically drawn from the International Social Justice Program (ISJP) or the International Social Survey Programme (ISSP) - concluded differently, with residents of former socialist countries found to display more egalitarian attitudes to a range of indicators of income equality (Mason 1995, Blanchflower and Freeman 1997, Delhey 1999, Verwiebe and Wegener 2000, Suhrcke 2001, Redmond, Schnepf and Suhrcke 2002, Alesina and Fuchs-Schündeln 2006). The conclusion was that there may in fact be significant attitudinal barriers to market-oriented reforms. At the same time, the studies that looked at trends found that the preference for equality declined over time (Blanchflower and Freeman 1997, Verwiebe and Wegener 2000, Alesina and Fuchs-Schündeln 2006). Thus, post-socialist countries, even if they did not start out with similar preferences, appeared over time to be approaching the preferences found in market economies. Owing to the absence of data these studies did not cover the former Soviet Union extensively outside of Russia. There was also limited attempt to differentiate between post-socialist countries through the use of country dummies and other approaches which allow for variation among countries. So, all post-socialist countries were basically 'tarred with the same brush'.

The second strand of the literature probes people's preferences for redistributive spending by the state, which is distinct but not unrelated to attitudes to income inequality. The purpose is to determine the degree to which there is political support for a larger or more active role of the state in addressing issues of poverty and inequality through transfer programs. Data sources for this strand of the literature are broader than the first strand, and include data from the *World Values Survey* (WVS), in addition to International Social Justice Program and the International Social Survey Program. Coverage of post-socialist countries is somewhat greater (Heien 2000, Andreß and Heien 2001, Boeri, Borsch-Supan and Tabellini 2001, Corneo and Gruner 2002, Lipsmeyer and Nordstrom 2003, and Wong 2004).

The findings of this second strand are consistent with the first strand in the sense that respondents from post-socialist countries are generally found to profess greater support for redistributive state spending than their U.S. or Western counterparts. At the same time, this literature conveys a more nuanced picture. Heien (2000) finds that compared to the U.S., there is greater professed support for redistributive government programs not only among post-socialist countries but also among OECD countries such as Norway and Italy. Thus, strong support for redistribution compared to the U.S. does not appear to be confined to post-socialist countries. Lipsmeyer and Nordstrom (2003) look at two composite indicators of support for redistribution, one based on views of the types of services governments should be responsible for and the other related to views on levels of public spending (including redistributive state spending). They find post-socialist countries to be different from high income OECD countries only on the second indicator but not on the first. Both these papers thus provide only qualified support for the "socialist legacy"

³ In their words "Although the Soviet respondents were somewhat less likely to accept exchange of money as a solution to personal problems and although their attitudes toward business were less warm, we found that Soviet and American respondents were basically similar...in their attitudes towards fairness, income inequality, and incentives and in their understanding of the working of markets" (385).

hypothesis. Wong (2004) goes a step further. Using the 1990 wave of the *World Values Survey*, Wong reports significant variation among post-socialist countries with some countries found to be more supportive of redistribution, but others no different and still others *less* supportive than the United States, thereby calling into question the existence of a socialist legacy *en bloc*. In the most recent installment of this literature, Chong and Gradstein (2006) compare support for public spending in Finland with that in the Baltic republics and find that along selected dimensions, the Baltic states appear no different from Finland.

3 The World Values Survey and attitudes to equality

This paper probes attitudes to inequality using micro-data from successive waves of the *World Value Surveys* (WVS). As with other attitudinal surveys, these surveys are designed to enable cross-country comparisons of values and attitudes on a broad range of issues.⁴ For our purposes one of the important features of these surveys is that they cover a wide range of post-socialist countries from both Eastern Europe and the former Soviet Union. As the survey has been fielded in four waves since the early 1980s, the data allow us to examine trends in attitudes to equality over time.

We focus in this paper on the three waves conducted since the fall of the Berlin wall: 1999-2001, 1995-97, and 1990.⁵ The 1999-2001 wave includes 23 countries from Eastern Europe and the former Soviet Union out of a total of 78, the 1995-97 survey 18 out of a total of 49, and the 1990 survey 12 out of a total of 42. However, as data on a few key independent variables such as educational attainment of individuals surveyed are not available for a number of countries, the sample of countries covered by the regression analysis in the next section is smaller. In particular, we have samples of 17, 15, and 4 countries from Eastern Europe and the Soviet Union from the 1999-2001, 1995-1997, and 1990 waves, respectively (see Appendix Table 1). Country coverage varies from wave to wave. Because the 1999-2001 wave covers the greatest number of post-socialist economies, we focus first on this wave.

Preferences for equality may be gauged from more than one question in the WVS. The most relevant question for our purposes is one in which respondents are asked to rank their views on a ten-digit scale where 1 stands for "Incomes should be made more equal" and 10 for "Incomes differences should be larger to provide incentives for individual effort." It is also the survey question with the most number of responses and covers the most number of countries. The interpretation of this indicator requires caution: **lower values of this measure indicate** greater preference for equality. ⁶

There is a huge variation in response to this question both within and across countries. In Figure 1 we plot mean response by country against GDP per capita for the

⁴ The surveys are conducted by the Inter-university Consortium for Political and Social Research (ICPSR) based at the University of Michigan. A detailed description of the survey method and instrument may be found in Inglehart et. al. (2004).

⁵ Data from the most recent wave 2005-2007 are not available at this time.

⁶ Other questions are discussed in the final section of the paper.

1999-2001 wave. We see that per capita income and preference for equality are positively correlated with richer countries showing a greater preference for equality, and that the relationship is possibly stronger among countries of Central and Eastern Europe and the former Soviet Union than in the sample as a whole. The positive correlation may be for several reasons. The preference for equality may be something of a luxury, which becomes more affordable as countries grow richer. Richer countries may also have greater means to redistribute and this may affect preferences. In Figure 2, we present a similar plot of the mean response by country against the Gini coefficient (averaged over the 1990s through the early 2000s, due to limited data availability). Preferences for equality are somewhat negatively related to income inequality in the sample as a whole. As in Figure 1, this may have several drivers and the line of causality is not clear: On one hand, a more equal distribution of income may serve to promote a greater collective preference for equality. On the other hand, greater preferences for equality may lead to policy choices that promote a more egalitarian distribution of income. It is interesting that for the countries which are the subject of this paper, higher inequality in the distribution of income is associated with a lower preference for moving towards greater equality.





Source: World Bank (2005) WDI database; WVS 1999-2001; and authors' calculations. Note: Per capita income is log of 2000 income in 2000 PPP terms. Lower values of preference for equality indicate greater preference for income equality.



Figure 2. Preference for Equality and Income Inequality

Source: World Bank (2005) WDI database; WVS 1999-2001; and authors' calculations. Lower values of preference for equality indicate greater preference for income equality.

However, underlying levels of income and inequality are not the whole story. Table 2 presents mean scores by quartiles and suggests that in addition to income and inequality there are distinct geographic patterns in preferences. The lowest quartile representing the greatest preference for equality is dominated by countries from Central and Eastern Europe. Preferences in this group are similar to more advanced economies such as Austria (4.6), Finland (4.6), and France (4.8). However, Lithuania, part of the former Soviet Union, also falls in this group. The top-most quartile reflecting the lowest preferences for equality is dominated by countries from the former Soviet Union (FSU) such as Estonia, Moldova, Ukraine and Russia. However, Bulgaria also falls in this group. The preferences of these countries are roughly comparable to those of low-income and middle-income developing countries such as Bangladesh (7.6), Peru (7.5), and Uganda (7.2). The exceptions notwithstanding, it would appear that if countries display a strong preference for equality they are likely to be from the former Soviet Union.

There are several reasons why countries in Central and Eastern Europe may be more inclined towards greater equality than countries that descended from the Soviet Union. First, this group of countries endured the economic disruption that ensued after the fall of the Berlin wall in 1989 and the end of communism relatively well. The decline in output was smaller for countries of Central and Eastern Europe than for countries of the former Soviet Union. Indeed, by the mid-1990s CEE had begun climbing out of the transition recession. By contrast, output decline was steeper and persisted longer in the former Soviet Union (World Bank 2002). This steeper and longer decline in the former Soviet Union may have resulted in more fraying of the social fabric, and a greater emphasis on self-preservation than among the citizens of the CEE.

Quartile	Country	Mean Score
T'I	D '	2 (0
Lowest quartile	Romania	3.69
	Slovenia	4.05
	Croatia	4.08
	Lithuania	4.81
Second quartile	Montenegro	5.18
	Belarus	5.27
	Republic Of Macedonia	5.33
	Czech Republic	5.48
Third quartile	Serbia	5.78
	Albania	5.96
	Poland	6.09
	Bosnia And Herzegovina	6.10
Highest quartile	Bulgaria	6.12
	Republic Of Moldova	6.69
	Estonia	6.88
	Russian Federation	7.15
	Ukraine	7.35

Table 2. Mean Preference for Equality Ranked by Quartile:Selected Post-Socialist Economies

Note: Lower scores mean greater preference for equality.

Second, many countries of Central and Eastern Europe have a longer history as nation-states than countries of the former Soviet Union. Moreover, the end of the Soviet Union was marked by large ethnic migrations as people moved in an attempt to be reunited with dominant ethnic groups in other nations. This is particularly true of ethnic Russians who migrated to Russia in large numbers, but is also true of many other nationalities (Mansoor and Quillin 2006). This, too, may have resulted in a greater sense of solidarity within countries in Central and Eastern Europe than in countries of the former Soviet Union. Finally, countries in CEE had some pre-socialist experience as market economies whereas this experience was largely absent in large parts of the former Soviet Union. This, combined with geographical proximity to Western Europe, may have made them opt for a more socialist approach to a market economy in which income inequality is kept to a manageable minimum. By way of contrast, countries of the former Soviet Union may have embraced greater inequality as a part of a strong desire to move away from the former command economy with its host of regulations dampening differences in income, particularly wage-income.

For all these reasons we have reason to believe that preference for greater inequality is likely to be stronger in the former Soviet Union than in Central and Eastern Europe. Whether this "cleavage" is upheld by the data is examined further in the sections below.

4 Data and specification

The country averages presented in Table 2 suggest that post-socialist countries display widely differing attitudes towards income equality. Moreover, a higher preference for equality is more likely to be found in the countries of Eastern Europe than in the former Soviet Union. Is this borne out when we control not just for income and societal levels of inequality, but also the many individual factors that influence the scores?

To probe further we undertake an analysis of the micro-data on individual preferences from the WVS. In line with the rest of the literature, we hypothesize that an individual's preference for equality is a function of personal characteristics, such as age, education, marital status, number of children, gender, income, and so on, as well as societal factors, such as per-capita income, prevailing levels of inequality and country 'legacy'. Thus:

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

where P_{ij} is a vector of preferences for equality (on a scale of 1 to 10) of individuals i in country j, X_{ij} is vector of personal characteristics, Z_j is a vector of country-specific factors, and ε_{ij} a vector of individual-specific errors.

To estimate the relationship between these variables we use an ordered probit model that explains inequality aversion as a function of individual and country-level characteristics. The model allows for the fact that the variable we are trying to explain is an ordinal variable – reflecting ordering of preferences - rather than a cardinal variable whose value can be used to infer precise strength of preference (we can make no presumption that a score of 4 is twice as strong as a score of 2). In the context of such a model, a positive and statistically significant coefficient on an explanatory variable means that it increases the preference for the highest score 10 (that is, it increases the preference for greater income inequality).

Much of the literature finds age affects preferences such that older people believe more strongly in equality of income than the younger people. This may be related to a number of factors, including greater expectations of state provision of income security in old age. On the other hand, inequality aversion typically falls with educational attainment possibly reflecting the belief of the higher educated that they are more deserving of greater rewards. Women are typically found to have stronger preferences for equality than men. This may represent gender differences in preferences or may reflect an underlying economic condition, such as average job insecurity (Scehve 2005). Those who are relatively well off are found to believe less in income equality, possibly because they see their relative income as a reflection of past effort, or merit, or both. The unemployed are found to have a greater preference for equality than the employed perhaps owing to their disadvantage in the labor market. The self-employed, on the hand, often see higher incomes as a reward for effort and risk taking and therefore have lower preference for income equality.

The WVS has information on age, gender, number of children, marital status, education, income and labor market status. Age is measured in years. Educational attainment is measured in terms of four levels of education—primary, secondary (technical or vocational), secondary (general), and university—with information on whether the level was completed or was incomplete. Income status which is self-declared is either lower income, middle income or higher income. Labor market status can be: full time employee (30 or more hours a week), part time employee (less than 30 hours a week), self-employed, retired, or other. In the specification adopted for the analysis, the impact of variables such as gender, education, income and labor market status is assessed relative to a middle income, full-time employed, male with completed primary education (the default group).

At the country level, we include data on per-capita GDP and the prevailing level of inequality. Per capita GDP is measured in PPP terms (2000) while income inequality is measured by the Gini coefficient. Because data on the Gini is not typically available on an annual basis, we use the average Gini for the 1990 to 2002 period. Data are drawn from the World Development Indicators (WDI) database.

We also allow for variation among countries and country-groups using dummies. We begin by using dummies for each country. Then to consider whether there is a distinct pattern among all post-socialist countries in Eastern Europe and the former Soviet Union we treat them as as a block. Finally, we consider distinct country groups within post-socialist countries as suggested by Table 2. Our first group consists of the countries of Central and Eastern Europe (CEE) where we expect to find a higher preference for equality. The second group consists of countries of former Soviet Union (CIS) where we expect to find a lower preference for inequality. The Baltic republics are somewhat hard to classify, so we create a distinct group for them. In the specifications with individual country dummies the U.S. is the default country. Where country group dummies are used the default is the group of Advanced Economies. A full list of countries that fall into different groups may be found in Appendix Table 1.⁷

In the analysis that follows we typically consider all countries and individuals for which we have a complete set of data (both left and right hand side variables). The WVS also includes a few sub-national units which are not appropriate for our analysis. These units were excluded from the analysis.⁸ As country coverage varies by wave, trends over time may reflect both changes in preferences and changes in the country composition of the sample. For the trend analysis we therefore focus on countries which are represented in each of the waves.

⁷ It should be noted that for the purposes of our analysis South Korea and Singapore are classified as developing countries as they were not classified in international statistical publications as "Advanced Economies" till 1997 which is well into the period under consideration.

⁸ The following units were deleted: Northern Ireland and Puerto Rico (1990, 1995-97, 1999-2001); Tambov, Moscow, Basque, Andalusia, Galicia, & Valencia (1990, 1995-97).

5 Main results

Table 3 reports the summary results of an ordered probit regression using data from the 1999-2001 wave. In column 1 we use country dummies for individual countries (the country coefficients are too numerous to be shown), Column 2 distinguishes the postsocialist economies as a group from other comparator countries, and Columns 3 and 4 classify post-socialist economies into three groups as discussed above. Measures of goodness of fit suggest that our regressions perform as well as the existing literature.

Beginning first with the impact of personal characteristics we see that employment status, gender, education, income are generally significant and in the direction consistent with the literature across all specifications. For example, the unemployed are more likely to prefer greater equality or greater redistribution while the self-employed (individuals who can be typically assumed to be less risk averse) prefer greater inequality. Those with relatively low (high) income also prefer greater (lesser) equality. Similarly, individuals with lower (higher) educational attainment prefer greater (lesser) equality.

We now turn to our main research question. We find that there is limited evidence of a socialist legacy in attitudes to equality as typically understood in the literature. When we use individual country dummies (Table 3, Column 1), we find that some countries prefer greater, some less, and some as much inequality as the benchmark country (U.S.), controlling for all other independent variables. This is consistent with Wong's (2004) previous finding, based on the 1990 wave of the WVS. Turning next to post-socialist countries as a group (Table 3, column 2) we find that they do *not* display a greater preference for equality than the benchmark group (advanced economies). In fact, they show a stronger preference for inequality than advanced economies. Disaggregating further however reveals differences across the different sub-groups of post-socialist economies (Table 3, column 3). Countries in Central and Eastern Europe do in fact display a stronger preference for equality than advanced economies. But countries in the former Soviet Union show a greater preference for inequality. This is the case with both the Baltics and the rest of the former Soviet Union. The relative size of the coefficients suggests, however, that the preference for inequality is weaker in the Baltics than in the remainder of the former Soviet Union. Thus the Baltics fall in between the patterns observed in Central and Eastern Europe and the former Soviet Union. Another interesting finding is that preference for inequality in the former Soviet Union (excluding the Baltics) is *stronger* than in developing countries as a whole.

We now turn briefly next to the impact of income inequality (as proxied by the Gini coefficient) and the average income per capita (Table 3, Column 4). Although this analysis is for a slightly smaller number of countries due to issues of data availability, the results suggest that firstly, including these additional country level factors does not overturn our basic conclusions, and the geographic pattern to preference for equality is upheld. Secondly, lower measured inequality is significantly associated with greater preference for equality, as hypothesized in section 3, but there is no measurable statistical link between income per capita and preferences for equality.

It is possible that these findings across the different geographical groupings are driven by differences in the level of confidence in the effectiveness of governments'

redistributive mechanisms, in particular where there is higher confidence in government, there may be a preference for lower income inequality because of the belief that government's may be able to address the issue of income inequality effectively.⁹ We attempted to examine this question by adding a variable on the level of confidence in government.¹⁰ We find that results in Table 3 are robust the inclusion of this new variable. The coefficient estimates for the country groups are basically the same and remain significant.

To examine whether our findings on geographic patterns in attitudes to equality are robust to survey year we conducted similar analyses using the 1995-97 and 1990 waves of the WVS. As mentioned previously, the 1995-97 wave has useable data on 15 post-socialist countries and the 1990 wave data on 4 post-socialist countries. To look at patterns in preferences we estimate the same regression as in Table 3, column 3.¹¹ For the 1990 wave, we can consider only CEE and the Baltics as there are no countries from the former Soviet Union (outside of the Baltics) in the sample.

Our analysis suggests that our findings are indeed robust. We find that there is a greater preference for inequality in post-socialist countries compared to advanced economies in both waves. Where data permit, we find that countries in the former Soviet Union in particular show a marked preference for income inequality compared to both advanced economies and the countries of CEE (see Appendix Table 2). It should be noted, however, that because the country coverage of WVS in 1995-97 and 1990 is somewhat different from that of 1999-2001 (see Appendix Table 1) the results are not fully comparable across waves unless we restrict the sample to countries represented in both waves. We take this up further below.

⁹ We thank Giacomo Corneo for this suggestion

¹⁰ The measure of confidence in government is based on responses to the following survey question: "I am going to name a number of organizations. For each one, could you tell me how much confidence you have in them: is it a great deal of confidence, quite a lot of confidence, not very much confidence or none at all?" Responses are recoded into a binary variable, with 1 signifying a "great deal" or "quite a lot" of confidence in government.

¹¹ We do not include per-capita income and inequality in this analysis to keep the sample size as large as possible. Relative to the 1999-2001 period, fewer observations on the Gini coefficient are available for the 1990 and 1995-07 periods. In addition, reliable data on per capita income in 1990 are generally not available for post-socialist economies. The results in Table 3 (columns 3 and 4), however, suggest that the relative rankings of the country groups are invariant to the inclusion of per-capita income and inequality in the analysis.

	(1)	(2)	(3)	(4)
Age ¹	-3.5	-6.243	-5.711	-5.854
	(1.82)	(3.33)**	(3.05)**	(3.05)**
Age-squared ¹	29.472	56.717	49.115	53.623
	(1.44)	(2.82)**	(2.44)*	(2.60)**
Female	-0.045	-0.03	-0.035	-0.029
No. of Children	(4.32)**	(2.93)**	(3.45)**	(2.77)**
No. of Children	0.001	(5.00)**	0.017	0.016
Married	0.022	-0.013	-0.006	-0.03
	(1.88)	(1.13)	(0.54)	(2.62)**
Education	· · · ·			
Incomplete Technical/Vocation Education	0.033	0.072	0.063	0.094
	(1.66)	(3.73)**	(3.26)**	(4.90)**
Complete Technical/Vocation Education	0.141	0.215	0.19	0.212
In a second second second second	(8.28)**	(13.09)**	(11.61)**	(12.63)**
incomplete Secondary Education	(5.83)**	(0.1/3	(6.46)**	(6.02)**
Complete Secondary Education	0 171	0.193	0 174	0.163
Somplete Secondary Education	(10.49)**	(12.71)**	(11.43)**	(10.24)**
Incomplete University Education	0.214	0.266	0.254	0.258
	(11.01)**	(14.33)**	(13.67)**	(13.52)**
Complete University Education	0.255	0.326	0.292	0.278
	(14.77)**	(20.17)**	(18.01)**	(16.54)**
Income	0.020	0.017	0.001	0.000
Lower Income	-0.039	-0.017	-0.024	-0.023
Higher Income	0.113	(1.40) 0.119	0.123	0.115
Tigher meome	(9.40)**	(10.34)**	(10.65)**	(9.62)**
Labor Force Status	(*****)	(1000)	(10100)	(,,,,)
Part-Time Employed	-0.039	-0.04	-0.058	-0.059
	(1.89)	(2.01)*	(2.93)**	(2.87)**
Self-Employed	0.094	0.055	0.063	0.045
	(5.50)**	(3.25)**	(3.73)**	(2.61)**
Unemployed	-0.0/2	-0.106	-0.098	-0.092
Retired	(0.07)	(0.11)	(0.10)	(0.12)
Relifed	(3.68)**	(5.40)**	(5.33)**	(5.95)**
Other	-0.026	-0.056	-0.049	-0.071
	(1.77)	(3.96)**	(3.48)**	(4.89)**
Country Group Dummies ²				
Post-socialist economies		0.092		
		(8.16)**		
Developing countries		0.147	0.142	0.174
Control and Fostorn Europa		(12.63)**	(12.14)**	(9.00)**
Central and Eastern Europe			-0.001 (4.75)**	-0.194 (9.74)**
Baltics			0.09	0.03
			(2.84)**	(0.86)
Other Former Soviet Union (FSU)			0.423	0.316
			(24.71)**	(13.09)**
Other country-level control variables				
Per capita income (in PPP terms) ¹				-0.004
				(5.70)**
Gini coefficient				-0.01
Observations	63 874	63.874	63.874	(11.94)** 61.281
Country Dummies	Ves	No	No	No
	100			

Table 3. Preference for Equality (Ordered Probit): 1999-2001 (Robust z-statistics in parentheses)

* significant at 5 percent; ** significant at 1 percent Note: Dependent variable is a 10-point scale from 1 (Preference for equality) to 10 (Preference for inequality).

¹Age and per capita income divided by 1,000, to produce sufficiently large coefficients for display.

²Where country dummies are ised, the benchmark country is the U.S. Where country group dummies are used, the benchmark group are the advanced economies.

6 The evolution of attitudes over time

We now turn to an analysis of trends in preferences over time. If we look at all countries, and not just former transition economies, the three waves of the World Values Survey suggest that over the 1990s there has been a small but significant shift in preferences towards greater equality. On average, on a scale from 1 to 10 where 1 indicates a preference for greater equality and 10 greater inequality, scores fell from 6.8 in the 1990 wave to 5.8 in 1999-2001.

Inference is however made difficult by the fact that country composition has changed over the waves, with countries being added over time. If we focus only on countries which are repeated in each of the waves, while inference is more straightforward, we are confined to a smaller sample of countries. The smaller sample, too, suggests that there has been a shift in preferences towards greater equality. The shift is largely driven by shift in preferences in developing countries. Preferences in other groups have moved marginally, if at all, also in favor of greater equality. These shifts have not changed the relative preferences across country groupings, with CEE showing a stronger preference for equality than the CIS, and the Baltics somewhere in between.

We now examine conditional trends over time by replicating the analysis in Table 3. As mentioned previously country coverage varies across waves. As coefficients may vary either due to differences in preferences or due to changes in the country composition of the sample, we need to maintain the same countries in the sample over time. In order to do this we consider two distinct samples (see Appendix Table 1 for details):

(i) "Panel-2" which includes countries represented in both the 1995-97 and 1999-2001 waves; and

(iii) "Panel-3" which includes countries represented in all three waves (1990, 1995-97 and 1999-2001).

As there were no countries from the former Soviet Union outside of the Baltics in the 1990 wave, "Panel-3" is not useful for addressing one of our main hypotheses, namely, that these countries display a weaker preference for inequality than Central and Eastern Europe. In addition, this sample includes a single CEE country (Poland). The inference, which can be drawn for the period of the 1990s as a whole, is therefore somewhat limited. With this caveat on sample size and composition in mind, we use the "Panel-2" and "Panel-3" samples to replicate the equation in Table 3 column 3. Table 4 presents our findings.

We first consider the period from the mid 1990s to the late 1990s using the "Panel-2" sample. As Table 4 suggests, preferences for equality in post-socialist economies remained largely stable over this period, with the possible exception of CEE. Countries of the former Soviet Union maintained a stronger preference for income inequality relative to advanced economies over this period. At the same time, relative to advanced economies, countries in Central and Eastern Europe also maintained a stronger preference for income inequality, although this effect is not statistically significant in 1999-01 and is weaker than the preference for income inequality among countries of the former Soviet Union. The Baltic republics lie somewhere in between the two groups.

	Panel-2		Panel-3			
	1995-97	1999-01	1990-93	1995-97	1999-01	
	1775 77	1777 01	1,,,0,,,5	1995 97	1,,,, 01	
Age ¹	-16 493	-4 084	-23 786	-22.045	-7 964	
nge	(4.64)**	(1.550)	(2.66)**	(2.81)**	(1.670)	
Age-squared ¹	126.392	21.078	237.163	202.542	61.385	
	(3.32)**	(0.730)	(2.42)*	(2.28)*	(1.170)	
Female	-0.083	-0.019	-0.079	-0.013	-0.002	
	(5.00)**	(1.450)	(2.00)*	(0.380)	(0.100)	
No. of Children	0.042	0.006	0.072	0.023	0.014	
	(5.87)**	(1.250)	(4.22)**	(1.700)	(1.680)	
Married	0.001	-0.046	-0.056	-0.021	-0.139	
	(0.060)	(3.05)**	(1.150)	(0.540)	(5.16)**	
Education						
Incomplete Technical/Vocation Education	0.026	0.216	0.053	0.014	0.066	
	(0.910)	(7.82)**	(0.840)	(0.280)	(1.400)	
Complete Technical/Vocation Education	0.219	0.317	0.215	0.182	0.317	
	(9.17)**	(15.05)**	(4.90)**	(3.74)**	(7.99)**	
Incomplete Secondary Education	0.049	0.18	0.385	0.015	0.013	
	(1.410)	(6.56)**	(6.63)**	(0.230)	(0.250)	
Complete Secondary Education	0.173	0.264	0.365	0.086	0.101	
T 1. TT 1. TT 1. T	(5.90)**	(12.47)**	(4.21)**	(1.380)	(2.74)**	
Incomplete University Education	0.375	0.416	-0.23	0.269	0.442	
Consider Hair and Education	(9.07)**	(14.96)**	(1.680)	(3.39)**	(8.25)**	
Complete University Education	(12.69)**	(19.72)**	9.514	(5.60)**	0.296	
Income	(12.08)**	$(18./3)^{++}$	(/0.9/)**	(5.69)**	(7.43)**	
Lower Locomo	0.022	0.000	0.051	0.127	0.050	
Lower meome	-0.025	(0.010)	-0.031	(3 33)**	-0.030	
Higher Income	0.126	0.084	0.16	0.124	0.03	
righer meome	(6.20)**	(5 49)**	(3 41)**	(3.27)**	(1.030)	
Labor Force Status	(0.20)	(5.47)	(3.41)	(3.27)	(1.050)	
Part-Time Employed	-0.049	-0.039	-0.151	-0.088	-0.078	
rait rine Employed	(1.420)	(1.540)	(2.67)**	(1.300)	(1.540)	
Self-Employed	0.159	0.145	0.301	0.160	0.193	
·····	(5.51)**	(6.30)**	(4.01)**	(3.17)**	(5.05)**	
Unemployed	-0.085	-0.035	0.038	-0.102	-0.071	
r J	(2.56)*	(1.440)	(0.310)	(1.450)	(1.540)	
Retired	-0.048	-0.061	-0.145	-0.114	-0.147	
	(1.540)	(2.20)*	(2.07)*	(1.620)	(2.95)**	
Other	0.104	0.012	(0.057)	(0.020)	0.027	
	(4.13)**	(0.660)	(0.880)	(0.380)	(0.750)	
Country Group Dummies ²						
Developing countries	0.312	-0.082	-0.087	0.126	-0.084	
1 0	(12.36)**	(4.44)**	(1.250)	(2.51)*	(2.31)*	
Central and Eastern Europe	0.077	0.024	0.824	0.733	0.500	
	(2.91)**	(1.080)	(11.77)**	(11.05)**	(11.11)**	
Baltics	0.062	0.098	0.562	0.246	0.344	
	(2.01)*	(3.10)**	(9.37)**	(4.88)**	(8.11)**	
Other Former Soviet Union (FSU)	0.519	0.406				
	(20.23)**	(19.00)**				
Observations	23,571	31,491	5,164	6,084	10,509	

Table 4. Preference for Equality (Ordered Probit): 1999-2001 (Robust z-statistics in parentheses)

* significant at 5 percent; ** significant at 1 percent Note: Dependent variable is a 10-point scale from 1 (Preference for equality) to 10 (Preference for inequality).

¹Age and per capita income divided by 1,000, to produce sufficiently large coefficients for display.

²Benchmark group are the advanced economies.

Next, we consider the period of the 1990s using all three waves. As previously mentioned, the number of countries represented in all three waves is small, making it difficult to draw strong conclusions, and the absence of countries from the former Soviet Union precludes an analysis of the differences with Central and Eastern Europe. These caveats notwithstanding, results from Table 4 support our main hypothesis. We find that the post-socialist economies covered in this sample do not as a group display a greater preference for income equality than advanced economies. There is little support for the "socialist" legacy hypothesis.

7 Alternative survey questions on preferences for equality

To conduct our analysis of attitudes to equality we have so far relied on a question that asks respondents to rank their preferences on a ten-digit scale where 1 stands for greater equality and 10 for less equality. The question is asked in a large number of countries, is repeated over time, and has been used in other parts of the literature to elicit information on attitudes to equality. Thus, it is an ideal question for the purposes of our analysis.

Are our findings robust to different ways of eliciting information on attitudes to equality? This is not an easy question to answer owing to data limitations. The 1999-2001 wave of WVS includes one other question, which gets at the same issue in a more roundabout way. It asks respondents to convey their views on what a society—to be considered 'just'—should provide. In particular, respondents are asked to rank the importance of *eliminating inequality* on a 5-point scale, from "1" which stands for "Very important" to 5 "Not at all important." As this question, which we shall call 'eliminating inequality' for short, appears to be trying to elicit very similar information as the question used in the analysis so far (the 'preference for equality' question), we use the responses to examine whether our findings are robust to a different way of eliciting respondents' views. Unfortunately, the question was not asked in earlier waves of the WVS, so we cannot use it to examine trends over time.

Table 5 reports the results of estimating the same equation as in Table 3, column 3 using the 'eliminating inequality' question. The question is asked of a much smaller sample of countries than the 'preference for equality' question. Table 5, Column 1 reports the results from using this smaller sample: the total number of observations (30,454) is around half the total number of observations in the baseline regression of Table 3, column 3 (over 60,000). Comparing results with Table 3 is rendered difficult by differences in country coverage of the two questions. So, as a solution, we also report two further sets of results based on the common sample of countries where both questions were asked. Table 5 columns 2 and 3 report results from using the sample of individuals and countries common to both measures (21,302 observations).

Keeping in mind that lower values of both measures indicate greater preference for equality we find again that CEE countries are more likely to prefer greater equality (or consider eliminating inequalities) while countries of the former Soviet Union outside the Baltics are less likely to prefer equality (or consider eliminating inequality). The Baltic states are somewhere in between but they generally appear to be closer in their preferences to their CEE counterparts. Thus, our findings on the preferences of CEE relative to the former

Eliminate Inequality Preference for Equality Eliminate Inequality (1) (2) (5) Age ¹ -15.775 -18.507 -10.401 (5.2) ^{2+*} (5.75) ^{**} (5.38) ^{**} (2.33) ^{**} Age-squared ¹ 125.141 134.868 94.824 (4.39) ^{**} (3.89) ^{**} (2.93) ^{**} Female -0.094 -0.106 -0.025 No. of Children -0.011 -0.016 -0.026 Married 0.048 0.026 0.041 (2.98) ^{**} (1.31) (2.20) ^{**} Incomplete Technical/Vocation Education 0.047 -0.011 0.118 Incomplete Technical/Vocation Education 0.047 -0.011 0.128 Incomplete Secondary Education 0.067 0.095 0.188 Incomplete Secondary Education 0.144 0.186 0.274 Complete Secondary Education 0.201 0.233 0.302 Incomplete University Education 0.211 0.233 0.302 Complete University Education			Restricted Sample		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		Eliminate	Preference for	Eliminate	
(1) (2) (3) Age ¹ -15.775 -18.507 -10.401 (5.92)** (5.35)** (5.38)** Age-squared ¹ 125.141 134.868 94.824 (4.39)** (3.89)** (5.35)** (0.087) Fernale -0.094 -0.106 -0.087 No. of Children -0.011 -0.016 -0.002 Married 0.048 0.026 0.035) Married 0.048 0.026 0.035) Married 0.047 -0.011 0.128 Incomplete Technical/Vocation Education 0.067 0.095 0.188 Complete Technical/Vocation Education 0.067 0.092 0.185 Incomplete Secondary Education 0.102 0.092 0.185 Complete Secondary Education 0.102 0.092 0.185 Complete Secondary Education 0.102 0.0292 0.185 Complete University Education 0.201 0.233 0.302 Income (6.38)** (6.87)**		Inequality	Equality	Inequality	
Age ¹ -15.775 -18.507 -10.401 (5.92)** (5.75)** (5.38)** Age-squared ¹ 125.141 134.868 94.824 (4.39)** (3.89)** (2.93)** Female -0.094 -0.106 -0.087 Ko of Children -0.011 -0.016 -0.002 (1.91) (2.26)* (0.35) Married 0.048 0.026 0.041 Complete Technical/Vocation Education 0.047 -0.011 0.128 Complete Technical/Vocation Education 0.047 -0.011 0.128 Complete Technical/Vocation Education 0.047 -0.011 0.128 Incomplete Vaction Education 0.047 -0.011 0.128 Complete Secondary Education 0.102 0.092 0.185 Complete Secondary Education 0.102 0.092 0.185 Complete University Education 0.28 0.329 0.302 Complete University Education 0.28 0.329 0.392 Complete University Education		(1)	(2)	(3)	
Incomplete (5.22)** (5.75)** (3.38)** Age-squared ¹ (25.141 134.868 94.824 (4.39)** (3.89)** (2.93)** Female -0.094 -0.106 -0.087 (6.64)** (6.18)** (5.35)** No. of Children -0.011 -0.016 -0.002 (1.91) (2.26)* (0.35) Married 0.048 0.026 0.041 Complete Technical/Vocation Education 0.047 -0.011 0.128 Incomplete Technical/Vocation Education 0.067 0.092 0.185 Incomplete Secondary Education 0.102 0.092 0.185 Complete Secondary Education 0.1044 0.186 0.274 Incomplete University Education 0.201 0.233 0.302 Complete University Education 0.28 0.329 0.392 Income -0.084 -0.066 -0.013 Lower Income -0.084 -0.066 -0.013 Lower Income -0.0153 0.192	$A\sigma e^{1}$	-15 775	-18 507	-10 401	
Age-squared ¹ 125.141 134.368 94.824 (4.39)** (3.89)** (2.93)** Female -0.094 -0.106 -0.087 Ko. of Children -0.011 -0.016 -0.002 Married 0.048 0.026 0.041 (1.91) (2.20)* (0.53) Married 0.048 0.026 0.041 (2.98)** (1.31) (2.20)* (0.55) Married 0.047 -0.011 0.128 Complete Technical/Vocation Education 0.047 -0.011 0.128 Complete Technical/Vocation Education 0.047 -0.011 0.128 Complete Secondary Education 0.067 0.095 0.188 (2.71)** (3.20)** (6.15)** (6.49)** Incomplete Secondary Education 0.144 0.186 0.274 Complete Secondary Education 0.201 0.233 0.302 (7.44)** (6.91)** (10.41)** (13.46)** Income -0.084 -0.066 -0.013 (10.64)** (10.64)** (13.2)** (0.62)		(5.92)**	(5.75)**	(3.38)**	
Type squares (4.39)** (3.89)** (2.93)** Female -0.094 -0.106 -0.087 (6.64)** (6.18)** (5.35)** No. of Children -0.011 -0.016 -0.002 Married 0.048 0.026 0.041 (2.98)** (1.31) (2.20)* Education 0.047 -0.011 0.128 Incomplete Technical/Vocation Education 0.047 -0.011 0.128 Complete Technical/Vocation Education 0.047 -0.011 0.128 Incomplete Technical/Vocation Education 0.047 -0.011 0.128 Complete Technical/Vocation Education 0.047 -0.011 0.128 Incomplete Vectorial Education 0.010 0.092 0.188 Complete Secondary Education 0.102 0.092 0.185 Complete University Education 0.201 0.233 0.302 Incomplete University Education 0.28 0.329 0.392 Income -0.084 -0.066 -0.013	Age-squared ¹	125 141	134 868	94 824	
Female (0.05) (0.05) (0.05) 66.64)** (6.18)** (5.35)** No. of Children (0.011 -0.002 (1.91) (2.26)* (0.03) Married (0.048 0.026 0.041 (2.98)** (1.31) (2.20)* Education (1.67) (0.07) (4.40)** Incomplete Technical/Vocation Education 0.067 0.095 0.188 Complete Technical/Vocation Education 0.102 0.092 0.185 Complete Secondary Education 0.102 0.092 0.185 Incomplete Secondary Education 0.102 0.092 0.185 Complete Secondary Education 0.102 0.092 0.185 Incomplete University Education 0.102 0.023 0.302 Complete University Education 0.281 0.233 0.302 Complete University Education 0.28 0.329 0.392 Complete University Education 0.28 0.329 0.392 Commet -0.084 -0.066 <td>nge squared</td> <td>(4 39)**</td> <td>(3.89)**</td> <td>(2.93)**</td>	nge squared	(4 39)**	(3.89)**	(2.93)**	
(6.64)** (6.18)** (5.35)** No. of Children -0.011 -0.016 -0.002 Married 0.048 0.026 0.041 (2.9)** (1.31) (2.20)* Edmation (1.86) 0.037 (4.40)** Incomplete Technical/Vocation Education 0.047 -0.011 0.128 Complete Technical/Vocation Education 0.067 0.095 0.188 Incomplete Secondary Education 0.102 0.092 0.185 Complete Secondary Education 0.102 0.092 0.185 Incomplete Secondary Education 0.144 0.186 0.274 Incomplete University Education 0.201 0.233 0.302 Complete University Education 0.28 0.329 0.3392 Complete University Education 0.28 0.329 0.392 Lower Income -0.084 -0.066 -0.013 Lower Income -0.014 0.058 -0.019 (5.55)** (6.01)** (5.83)** (6.62) Higher Income<	Female	-0.094	-0.106	-0.087	
No. of Children -0.011 -0.016 -0.002 Married (1.91) (2.26)* (0.35) Married 0.0448 0.026 0.041 (2.98)** (1.31) (2.20)* Education 0.047 -0.011 0.128 Incomplete Technical/Vocation Education 0.067 0.095 0.188 (2.71)** (3.26)** (6.48)** (6.48)** Incomplete Secondary Education 0.102 0.092 0.185 Complete Secondary Education 0.144 0.186 0.274 Incomplete University Education 0.201 0.233 0.302 Complete University Education 0.201 0.233 0.302 Complete University Education 0.201 0.233 0.302 Complete University Education 0.201 0.233 0.302 Income -0.084 -0.066 -0.013 Income -0.084 -0.066 -0.013 Intome -0.011 0.058 -0.019 Unemployed <td< td=""><td></td><td>(6.64)**</td><td>(6.18)**</td><td>(5.35)**</td></td<>		(6.64)**	(6.18)**	(5.35)**	
(1.91) (2.26)* (0.35) Married 0.048 0.026 0.041 (2.98)** (1.31) (2.20)* Education 0.047 -0.011 0.128 Incomplete Technical/Vocation Education 0.067 0.095 0.188 Complete Technical/Vocation Education 0.067 0.095 0.188 Complete Secondary Education 0.102 0.092 0.185 Complete Secondary Education 0.1144 0.186 0.274 (6.38)** (6.87)** (10.11)** Incomplete University Education 0.201 0.233 0.302 Complete University Education 0.28 0.329 0.392 Incomplete University Education 0.28 0.329 0.392 Income -0.084 -0.066 -0.013 Image 0.153 0.192 0.11 Income -0.026+* (9.73)** (5.83)** Labor Fore Status -0.01 0.058 -0.013 Intermed -0.01 0.058 -0.0	No. of Children	-0.011	-0.016	-0.002	
Married $0.048'$ $0.026'$ $0.041'$ (2.98)** (1.31) (2.20)* Education (1.36) (0.37) (4.40)** Incomplete Technical/Vocation Education 0.067 0.095 0.188 Complete Technical/Vocation Education 0.102 0.092 0.185 Incomplete Secondary Education 0.102 0.092 0.185 Complete Secondary Education 0.102 0.092 0.185 Complete Secondary Education 0.102 0.092 0.185 Complete Secondary Education 0.201 0.233 0.302 Complete University Education 0.201 0.233 0.302 Complete University Education 0.28 0.329 0.392 Income (10.64)** (10.64)** (13.46)** Lower Income -0.084 -0.066 -0.013 Lower Income -0.015 0.112 0.088 -0.019 (15.5)** (6.91)** (5.83)** (5.83)** Unemployed -0.017 0.044 -0.019		(1.91)	(2.26)*	(0.35)	
(2.98)** (1.31) (2.20)* Ediacation	Married	0.048	0.026	0.041	
Education 0.047 -0.011 0.128 Incomplete Technical/Vocation Education 0.067 0.095 0.188 Complete Technical/Vocation Education 0.067 0.092 0.185 Incomplete Secondary Education 0.102 0.092 0.185 Complete Secondary Education 0.102 0.092 0.185 Complete Secondary Education 0.144 0.186 0.274 Complete University Education 0.201 0.233 0.302 Complete University Education 0.28 0.329 0.392 Complete University Education 0.28 0.329 0.392 Income -0.084 -0.066 -0.013 Lower Income -0.084 -0.066 -0.013 Uneme 0.153 0.192 0.11 Part-Time Employed -0.01 0.058 -0.019 (5.5)*** (6.01)** (5.8)** (0.68) Self-Employed -0.121 -0.088 -0.039 (4.03)*** (2.43)* (1.09) Ret		(2.98)**	(1.31)	(2.20)*	
Incomplete Technical/Vocation Education 0.047 -0.011 0.128 (1.86) (0.37) (4.40)** Complete Technical/Vocation Education 0.067 0.095 0.188 Incomplete Secondary Education 0.102 0.092 0.185 Incomplete Secondary Education 0.102 0.092 0.185 Complete Secondary Education 0.1144 0.186 0.274 Incomplete University Education 0.201 0.233 0.302 Complete University Education 0.201 0.233 0.302 Complete University Education 0.28 0.329 0.392 Complete University Education 0.28 0.329 0.392 Income 0.066 -0.013 Lawer Income -0.084 -0.066 -0.013 Labor Fore Status Interme (5.5)** (6.61)** (5.83)** Labor Fore Status Interme (0.37) (1.48) (0.62) Higher Income 0.0173 0.244 0.193 (5.5)** Labor Fore Status	Education				
$\begin{array}{c c c c c c c } (1.86) & (0.37) & (4.40)^{**} \\ Complete Technical/Vocation Education & 0.067 & 0.095 & 0.188 \\ (2.71)^{**} & (3.26)^{**} & (6.48)^{**} \\ Incomplete Secondary Education & 0.102 & 0.092 & 0.185 \\ (4.22)^{**} & (2.99)^{**} & (6.15)^{**} \\ Complete Secondary Education & 0.144 & 0.186 & 0.274 \\ (6.38)^{**} & (6.7)^{**} & (10.11)^{**} \\ Incomplete University Education & 0.201 & 0.233 & 0.302 \\ (7.44)^{**} & (6.91)^{**} & (9.83)^{**} \\ Complete University Education & 0.28 & 0.329 & 0.392 \\ (10.64)^{**} & (10.64)^{**} & (10.46)^{**} \\ Income & 0.28 & 0.329 & 0.392 \\ (10.64)^{**} & (10.64)^{**} & (0.64)^{**} \\ Income & -0.084 & -0.066 & -0.013 \\ Higher Income & -0.084 & -0.066 & -0.013 \\ (4.80)^{**} & (3.12)^{**} & (0.62) \\ Higher Income & -0.084 & -0.066 & -0.013 \\ (5.26)^{**} & (9.73)^{**} & (5.83)^{**} \\ Labor Force Status & & & & & & & & & & & & & & & & & & &$	Incomplete Technical/Vocation Education	0.047	-0.011	0.128	
Complete Technical/Vocation Education 0.067 0.095 0.188 $(2.71)^{**}$ $(3.20)^{**}$ $(6.48)^{**}$ Incomplete Secondary Education 0.102 0.092 0.185 Complete Secondary Education 0.144 0.186 0.274 $(6.38)^{**}$ $(6.87)^{**}$ $(10.11)^{**}$ Incomplete University Education 0.201 0.233 0.302 $(7.44)^{**}$ $(6.91)^{**}$ $(9.83)^{**}$ $(6.91)^{**}$ $(9.83)^{**}$ Complete University Education 0.28 0.329 0.392 $(10.49)^{**}$ $(13.40)^{**}$ Income 0.28 0.329 0.392 $(10.49)^{**}$ (0.62) Income 0.084 -0.066 -0.013 $(16.29)^{**}$ (0.62) Higher Income 0.153 0.192 0.11 $(9.23)^{**}$ (0.68) Self-Employed 0.011 0.058 -0.019 $(6.51)^{**}$ $(6.82)^{**}$ Unemployed -0.121 -0.088 -0.039 $(4.03)^{**}$ <td>-</td> <td>(1.86)</td> <td>(0.37)</td> <td>(4.40)**</td>	-	(1.86)	(0.37)	(4.40)**	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Complete Technical/Vocation Education	0.067	0.095	0.188	
Incomplete Secondary Education 0.102 0.092 0.185 (4.22)** (2.99)** (6.15)** Complete Secondary Education 0.144 0.186 0.274 Incomplete University Education 0.201 0.233 0.502 Complete University Education 0.201 0.233 0.502 Complete University Education 0.28 0.329 0.392 Complete University Education 0.28 0.329 0.392 Income 0.28 0.329 0.392 Income 0.28 0.329 0.392 Income 0.084 -0.066 -0.013 Income 0.053 0.192 0.11 Lower Income 0.053 0.192 0.11 Higher Income 0.037 (1.85) (0.62) Higher Income 0.017 0.058 -0.019 Self-Employed -0.01 0.058 -0.019 Unemployed -0.121 -0.088 -0.039		(2.71)**	(3.26)**	(6.48)**	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Incomplete Secondary Education	0.102	0.092	0.185	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		(4.22)**	(2.99)**	(6.15)**	
Incomplete University Education $(6.38)^{**}$ $(6.87)^{**}$ $(10.11)^{**}$ Incomplete University Education 0.201 0.233 0.302 Complete University Education 0.28 0.329 0.392 $(10.64)^{**}$ $(10.64)^{**}$ $(10.64)^{**}$ $(13.46)^{**}$ Income $(10.64)^{**}$ $(3.12)^{**}$ (0.62) Income -0.084 -0.066 -0.013 Lower Income 0.153 0.192 0.11 $(9.26)^{**}$ $(9.73)^{**}$ $(5.83)^{**}$ Labor Force Status (0.37) (1.85) (0.68) Self-Employed 0.01 0.058 -0.019 (0.37) (1.85) (0.68) Self-Employed 0.173 0.244 0.193 $(5.55)^{**}$ $(6.91)^{**}$ $(5.82)^{**}$ Unemployed -0.121 -0.088 -0.039 $(4.03)^{**}$ $(2.43)^{*}$ (1.09) Retired -0.057 -0.024 -0.077 $(2.10)^{*}$ (0.71) $(2.48)^{*}$ Other -0.012 0.02 0.01 (0.57) (0.94) (0.42) Country Group Dummies ² (0.57) (0.94) (0.42) Country Group Dummies ² $(2.11)^{**}$ $(9.15)^{**}$ $(8.85)^{**}$ Other Former Soviet Union (FSU) -0.371 -0.171 0.093	Complete Secondary Education	0.144	0.186	0.274	
Incomplete University Education 0.201 0.233 0.302 (7.44)** (6.91)** (9.83)** Complete University Education 0.28 0.329 0.392 (10.64)** (10.64)** (10.64)** (13.46)** Income -0.084 -0.066 -0.013 Lower Income -0.084 -0.066 -0.013 Higher Income 0.153 0.192 0.11 (9.26)** (9.73)** (5.83)** Labor Force Status 9art-Time Employed -0.01 0.058 -0.019 Self-Employed -0.173 0.244 0.193 Unemployed -0.121 -0.088 -0.039 (4.03)** (2.43)* (1.09) Retired -0.057 -0.024 -0.077 (2.10)* (0.71) (2.48)* (0.64) Other -0.012 0.02 0.01 (0.57) (0.94) (0.42) -0.077 (2.10)** (0.57) (0.94)		(6.38)**	(6.87)**	(10.11)**	
Complete University Education $(7.44)^{**}$ $(6.91)^{**}$ $(9.83)^{**}$ Complete University Education 0.28 0.329 0.392 $(10.64)^{**}$ $(10.64)^{**}$ $(13.46)^{**}$ Income -0.084 -0.066 -0.013 Lower Income -0.084^{**} $(3.12)^{**}$ (0.62) Higher Income 0.153 0.192 0.11 $(2.26)^{**}$ $(9.73)^{**}$ $(5.83)^{**}$ Labor Force Status (0.37) (1.85) (0.68) Self-Employed -0.01 0.058 -0.019 (0.37) (1.85) (0.68) Self-Employed 0.173 0.244 0.193 $(5.55)^{**}$ $(6.91)^{**}$ $(5.82)^{**}$ Unemployed -0.121 -0.088 -0.039 $(4.03)^{**}$ $(2.43)^{*}$ (1.09) Retired -0.057 -0.024 -0.077 (0.57) (0.94) (0.42) Country Group Dummies ² (0.57) (0.93) (0.42) Central and Eastern Europe -0.955 -0.938 -0.746 $(20.40)^{**}$ $(1.13)^{**}$ $(16.29)^{**}$ Baltics -0.349 -0.182 -0.175 $(21.11)^{**}$ $(9.15)^{**}$ $(8.85)^{**}$ Other Former Soviet Union (FSU) -0.371 -0.171 0.093	Incomplete University Education	0.201	0.233	0.302	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		(7.44)**	(6.91)**	(9.83)**	
(10.64)** (10.64)** (13.46)** Income -0.084 -0.066 -0.013 Lower Income -0.084 -0.066 -0.013 (4.80)** (3.12)** (0.62) Higher Income 0.153 0.192 0.11 (9.26)** (9.73)** (5.83)** Labor Force Status	Complete University Education	0.28	0.329	0.392	
Income -0.084 -0.066 -0.013 Lower Income (4.80)** (3.12)** (0.62) Higher Income 0.153 0.192 0.11 (9.26)** (9.73)** (5.83)** Labor Force Status -0.01 0.058 -0.019 Part-Time Employed -0.01 0.058 -0.019 (0.37) (1.85) (0.68) Self-Employed -0.173 0.244 0.193 (5.55)** (6.91)** (5.82)** Unemployed -0.121 -0.088 -0.039 (4.03)** (2.43)* (1.09) Retired -0.057 -0.024 -0.077 (0.57) (0.94) (0.42) 0.01 Other -0.012 0.02 0.01 (0.57) (0.94) (0.42) 0.02 Country Group Dummies ² -0.055 -0.938 -0.746 (20.40)** (19.13)** (16.29)** -0.349 -0.182 -0.175 Baltics -0.371		(10.64)**	(10.64)**	(13.46)**	
Lower Income -0.084 -0.066 -0.013 (4.80)** (3.12)** (0.62) Higher Income 0.153 0.192 0.11 (9.26)** (9.73)** (5.83)** Labor Force Status -0.01 0.058 -0.019 Part-Time Employed -0.01 0.058 -0.019 (0.37) (1.85) (0.68) Self-Employed 0.173 0.244 0.193 (5.55)** (6.91)** (5.82)** Unemployed -0.121 -0.088 -0.039 (4.03)** (2.43)* (1.09) Retired -0.057 -0.024 -0.077 (2.10)* (0.71) (2.48)* Other -0.057 -0.024 -0.071 (0.57) (0.94) (0.42) -0.071 Country Group Dummies ² -0.055 -0.938 -0.746 (20.40)** (19.13)** (16.29)** -0.175 Baltics -0.349 -0.182 -0.175 (21.11)** </td <td>Income</td> <td></td> <td></td> <td></td>	Income				
Higher Income $(4.80)^{**}$ $(3.12)^{**}$ (0.62) Higher Income 0.153 0.192 0.11 $(9.26)^{**}$ $(9.73)^{**}$ $(5.83)^{**}$ Labor Force Status -0.01 0.058 -0.019 Part-Time Employed -0.01 0.058 -0.019 (0.37) (1.85) (0.68) Self-Employed 0.173 0.244 0.193 $(5.55)^{**}$ $(6.91)^{**}$ $(5.82)^{**}$ Unemployed -0.121 -0.088 -0.039 $(4.03)^{**}$ $(2.43)^{*}$ (1.09) Retired -0.057 -0.024 -0.077 $(2.10)^{*}$ (0.71) $(2.48)^{*}$ Other -0.057 -0.024 -0.071 $(2.10)^{*}$ (0.71) $(2.48)^{*}$ Other -0.055 -0.938 -0.746 $(20.40)^{**}$ $(19.13)^{**}$ $(16.29)^{**}$ Baltics -0.349 -0.182 -0.175 $(21.11)^{**}$ $(9.15)^{**}$ $(8.85)^{**}$ Other Former Soviet Union (FSU) -0.371 -0.171 0.093	Lower Income	-0.084	-0.066	-0.013	
Higher Income 0.153 0.192 0.11 (9.26)** (9.73)** (5.83)** Labor Force Status		(4.80)**	(3.12)**	(0.62)	
(9.26)** (9.73)** (5.83)** Labor Force Status -0.01 0.058 -0.019 Part-Time Employed -0.01 0.058 -0.019 (0.37) (1.85) (0.68) Self-Employed 0.173 0.244 0.193 (5.55)** (6.91)** (5.82)** Unemployed -0.121 -0.088 -0.039 (4.03)** (2.43)* (1.09) Retired -0.057 -0.024 -0.077 (2.10)* (0.71) (2.48)* Other -0.012 0.02 0.01 (0.57) (0.94) (0.42) 0.02 Country Group Dummies ² 0.057 (0.938 -0.746 (20.40)** (19.13)** (16.29)** 0.175 Baltics -0.349 -0.182 -0.175 (21.11)** (9.15)** (8.85)** Other Former Soviet Union (FSU) -0.371 -0.171 0.093	Higher Income	0.153	0.192	0.11	
Labor Force Status -0.01 0.058 -0.019 Part-Time Employed (0.37) (1.85) (0.68) Self-Employed 0.173 0.244 0.193 (5.55)** (6.91)** (5.82)** Unemployed -0.121 -0.088 -0.039 (4.03)** (2.43)* (1.09) Retired -0.057 -0.024 -0.077 (2.10)* (0.71) (2.48)* Other -0.012 0.02 0.01 (2.10)* (0.71) (2.48)* Other -0.057 -0.024 -0.077 (2.10)* (0.71) (2.48)* Other -0.057 (0.94) (0.24) Country Group Dummies ² 0.02 0.01 (0.57) Central and Eastern Europe -0.955 -0.938 -0.746 (20.40)** (19.13)** (16.29)** (21.11)** Baltics -0.349 -0.182 -0.175 (21.11)** (9.15)** (8.85)**		(9.26)**	(9.73)**	(5.83)**	
Part-Time Employed -0.01 0.058 -0.019 (0.37) (1.85) (0.68) Self-Employed 0.173 0.244 0.193 (5.55)** (6.91)** (5.82)** Unemployed -0.121 -0.088 -0.039 (4.03)** (2.43)* (1.09) Retired -0.057 -0.024 -0.077 (2.10)* (0.71) (2.48)* Other -0.012 0.02 0.01 Other -0.012 0.02 0.01 Country Group Dummies ² 0.057 (0.94) (0.29)** Baltics -0.349 -0.182 -0.175 (21.11)** (9.15)** (8.85)** Other Former Soviet Union (FSU) -0.371 -0.171 0.093	Labor Force Status				
$\begin{array}{ccccccc} & (0.37) & (1.85) & (0.68) \\ & (0.173 & 0.244 & 0.193 \\ & (5.55)^{**} & (6.91)^{**} & (5.82)^{**} \\ & (0.173 & 0.244 & 0.193 \\ & (5.55)^{**} & (6.91)^{**} & (5.82)^{**} \\ & (0.121 & -0.088 & -0.039 \\ & (4.03)^{**} & (2.43)^{*} & (1.09) \\ & (4.03)^{**} & (2.43)^{*} & (1.09) \\ & (2.10)^{*} & (0.71) & (2.48)^{*} \\ & (0.71) & (2.48)^{*} \\ & (0.71) & (2.48)^{*} \\ & (0.71) & (2.48)^{*} \\ & (0.71) & (2.48)^{*} \\ & (0.71) & (0.71) & (2.48)^{*} \\ & (0.71) & (0.71) & (2.48)^{*} \\ & (0.71) & (0.94) & (0.94) \\ & (0.94) & (0.94) & (0.94) \\ & (16.29)^{**} \\ & \\ & & (20.40)^{**} & (19.13)^{**} & (16.29)^{**} \\ & & (16.29)^{**} \\ & & (21.11)^{**} & (9.15)^{**} & (8.85)^{**} \\ & \\ & & Other Former Soviet Union (FSU) & -0.371 & -0.171 & 0.093 \\ \end{array}$	Part-Time Employed	-0.01	0.058	-0.019	
Self-Employed 0.173 0.244 0.193 (5.55)** (6.91)** (5.82)** Unemployed -0.121 -0.088 -0.039 (4.03)** (2.43)* (1.09) Retired -0.057 -0.024 -0.077 (2.10)* (0.71) (2.48)* Other -0.012 0.02 0.01 (0.57) (0.94) (0.42) Country Group Dummies ² -0.055 -0.938 -0.746 (20.40)** (19.13)** (16.29)** Baltics -0.349 -0.182 -0.175 (21.11)** (9.15)** (8.85)** Other Former Soviet Union (FSU) -0.371 -0.171 0.093		(0.37)	(1.85)	(0.68)	
$\begin{array}{cccccccc} (5.5)^{**} & (6.91)^{**} & (5.82)^{**} \\ \text{Unemployed} & -0.121 & -0.088 & -0.039 \\ (4.03)^{**} & (2.43)^{*} & (1.09) \\ \text{Retired} & -0.057 & -0.024 & -0.077 \\ (2.10)^{*} & (0.71) & (2.48)^{*} \\ \text{Other} & -0.012 & 0.02 & 0.01 \\ (0.57) & (0.94) & (0.42) \\ \hline \textit{Country Group Dummies}^2 \\ \hline \textit{Central and Eastern Europe} & -0.955 & -0.938 & -0.746 \\ (20.40)^{**} & (19.13)^{**} & (16.29)^{**} \\ \text{Baltics} & -0.349 & -0.182 & -0.175 \\ (21.11)^{**} & (9.15)^{**} & (8.85)^{**} \\ \hline \textit{Other Former Soviet Union (FSU)} & -0.371 & -0.171 & 0.093 \\ \hline \end{array}$	Self-Employed	0.173	0.244	0.193	
$\begin{array}{c ccccc} & -0.121 & -0.088 & -0.039 \\ & (4.03)^{**} & (2.43)^* & (1.09) \\ \mbox{Retired} & -0.057 & -0.024 & -0.077 \\ & (2.10)^* & (0.71) & (2.48)^* \\ \mbox{Other} & -0.012 & 0.02 & 0.01 \\ & (0.57) & (0.94) & (0.42) \\ \mbox{Country Group Dummies}^2 & & & & \\ \mbox{Country Group Dummies}^2 & & & & & \\ \mbox{Country Group Dummies}^2 & & & & & \\ \mbox{Country Group Dummies}^2 & & & & & & \\ \mbox{Country Group Dummies}^2 & & & & & & \\ \mbox{Country Group Dummies}^2 & & & & & & \\ \mbox{Country Group Dummies}^2 & & & & & & \\ \mbox{Country Group Dummies}^2 & & & & & & \\ \mbox{Country Group Dummies}^2 & & & & & & \\ \mbox{Country Group Dummies}^2 & & & & & & \\ \mbox{Country Group Dummies}^2 & & & & & & & \\ \mbox{Country Group Dummies}^2 & & & & & & & \\ \mbox{Country Group Dummies}^2 & & & & & & & \\ \mbox{Country Group Dummies}^2 & & & & & & & \\ \mbox{Country Group Dummies}^2 & & & & & & & \\ \mbox{Country Group Dummies}^2 & & & & & & & \\ \mbox{Country Group Dummies}^2 & & & & & & & & \\ \mbox{Country Group Dummies}^2 & & & & & & & & \\ \mbox{Country Group Dummies}^2 & & & & & & & & \\ \mbox{Country Group Dummies}^2 & & & & & & & & & \\ \mbox{Country Group Dummies}^2 & & & & & & & & & \\ \mbox{Country Group Dummies}^2 & & & & & & & & & \\ \mbox{Country Group Dummies}^2 & & & & & & & & & & \\ \mbox{Country Group Dummies}^2 & & & & & & & & & & & & & & \\ \mbox{Country Group Dummies}^2 & & & & & & & & & & & & & & & & & \\ \mbox{Country Group Dummies}^2 & & & & & & & & & & & & & & & & & & &$		(5.55)**	(6.91)**	(5.82)**	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Unemployed	-0.121	-0.088	-0.039	
Retired -0.057 -0.024 -0.077 (2.10)* (0.71) (2.48)* Other -0.012 0.02 0.01 (0.57) (0.94) (0.42) Country Group Dummies ² -0.012 0.02 0.01 Country Group Dummies ² -0.0955 -0.938 -0.746 (20.40)** (19.13)** (16.29)** Baltics -0.349 -0.182 -0.175 (21.11)** (9.15)** (8.85)** Other Former Soviet Union (FSU) -0.371 -0.171 0.093		(4.03)**	(2.43)*	(1.09)	
$\begin{array}{ccccc} & (2.10)^{*} & (0.71) & (2.48)^{*} \\ \\ \text{Other} & -0.012 & 0.02 & 0.01 \\ & (0.57) & (0.94) & (0.42) \end{array} \\ \\ \hline \textit{Country Group Dummies}^{2} \\ \hline \text{Central and Eastern Europe} & -0.955 & -0.938 & -0.746 \\ & (20.40)^{**} & (19.13)^{**} & (16.29)^{**} \\ & Baltics & -0.349 & -0.182 & -0.175 \\ & (21.11)^{**} & (9.15)^{**} & (8.85)^{**} \\ \hline \text{Other Former Soviet Union (FSU)} & -0.371 & -0.171 & 0.093 \end{array}$	Retired	-0.057	-0.024	-0.077	
$\begin{array}{ccccccc} \text{Other} & -0.012 & 0.02 & 0.01 \\ & & & & & & & & & & & & & & & & & & $		(2.10)*	(0.71)	(2.48)*	
(0.57) (0.94) (0.42) Country Group Dummies ² -0.955 -0.938 -0.746 Central and Eastern Europe -0.955 -0.938 (16.29)** Baltics -0.349 -0.182 -0.175 (21.11)** (9.15)** (8.85)** Other Former Soviet Union (FSU) -0.371 -0.171 0.093	Other	-0.012	0.02	0.01	
Country Group Dummies ² Central and Eastern Europe -0.955 -0.938 -0.746 (20.40)** (19.13)** (16.29)** Baltics -0.349 -0.182 -0.175 (21.11)** (9.15)** (8.85)** Other Former Soviet Union (FSU) -0.371 -0.171 0.093		(0.57)	(0.94)	(0.42)	
Central and Eastern Europe -0.955 -0.938 -0.746 (20.40)** (19.13)** (16.29)** Baltics -0.349 -0.182 -0.175 (21.11)** (9.15)** (8.85)** Other Former Soviet Union (FSU) -0.371 -0.171 0.093	Country Group Dummies ²				
$\begin{array}{ccccc} (20.40)^{**} & (19.13)^{**} & (16.29)^{**} \\ \\ \text{Baltics} & -0.349 & -0.182 & -0.175 \\ & (21.11)^{**} & (9.15)^{**} & (8.85)^{**} \\ \\ \text{Other Former Soviet Union (FSU)} & -0.371 & -0.171 & 0.093 \end{array}$	Central and Eastern Europe	-0.955	-0.938	-0.746	
Baltics -0.349 -0.182 -0.175 (21.11)** (9.15)** (8.85)** Other Former Soviet Union (FSU) -0.371 -0.171 0.093		(20.40)**	(19.13)**	(16.29)**	
(21.11)** (9.15)** (8.85)** Other Former Soviet Union (FSU) -0.371 -0.171 0.093	Baltics	-0.349	-0.182	-0.175	
Other Former Soviet Union (FSU) -0.371 -0.171 0.093		(21.11)**	(9.15)**	(8.85)**	
	Other Former Soviet Union (FSU)	-0.371	-0.171	0.093	
(13.50)** (4.89)** (2.72)**		(13.50)**	(4.89)**	(2.72)**	
Developing countries 0.001 0.046 0.38	Developing countries	0.001	0.046	0.38	
(0.06) (1.85) $(15.68)^{**}$		(0.06)	(1.85)	(15.68)**	
Observations 30,454 21,302 21,302	Observations	30,454	21,302	21,302	

Table 5. Preference for Equality and for Eliminating Inequality (Ordered Probit): 1999-2001 (Robust z-statistics in parentheses)

* significant at 5 percent; ** significant at 1 percent

Note: Dependent variable is a 10-point scale from 1 (Preference for equality) to 10 (Preference for inequality).

and a 5-point scale from 1 (Eliminating inequality very important) to 5 (Not at all important).

¹Age and per capita income divided by 1,000, to produce sufficiently large coefficients for display.

²Benchmark group are the advanced economies.

Soviet Union appear to be robust to alternative questions to elicit preferences. One conclusion that does not appear entirely robust to the change of question is that post-Soviet economies have a greater preference for inequality than the advanced economies – this appears to hold in the common sample (Table 5, column 3) but not in the full sample (Table 5, column 1).

8 Implications and conclusions

Our results taken all together contest the current consensus in the literature. We find little evidence of a socialist legacy *en bloc* in attitudes to equality. CEE countries are more likely to prefer greater equality compared to the CIS countries, with the Baltic states somewhere in-between. These patterns also appear relatively stable over time. The results also confirm the conventional individual and demographic determinants of preferences for equality. Our results appear to be more or less upheld when we consider an alternative approach to eliciting preferences for a much smaller sample of countries, namely the preference for eliminating inequality.

Our findings do not seem to be unique to the WVS. A newly available source of data, the *Life in Transition Survey (2006)*, which covers all transition economies in Eastern Europe and the former Soviet Union, also provides evidence of differences in preference for equality across CEE, the Baltics and the countries of the former Soviet Union.¹² On average, Central and Eastern European economies are found to have more egalitarian preferences than their CIS counterparts. The Baltic countries stand out as being distinct from other countries of the former Soviet Union. However, in contrast to the results presented in this paper, this data source suggests that suggest that the Baltics have more egalitarian preferences as a group than CEE countries.

What do the findings in this paper mean for policy? Our findings suggest that in countries of the former Soviet Union there may be little political or social consensus for moving towards greater income equality. Thus, the unequal outcomes observed may not be the consequence of limited administrative capacity of the state to redistribute incomes, or different levels of confidence in ability of the state, but the lack of a political consensus that it should do so. In contrast, in countries in CEE there appears to be greater support for income equality.

The differences between the two groups of countries may simply reflect different means towards a common end. The WVS also seeks respondents' views on government responsibility for different aspects of economy and society (such as pensions). Although we do not present the results in detail here, our analysis suggests that all residents of postsocialist economies prefer greater government responsibility than their advanced economy counterparts. *Significantly, there is no difference in reported preference for government responsibility between CEE countries and the countries of the former*

¹² We look at unconditional mean scores for different country groups. The LITS measure of "preference for equality" is based on responses to the following survey question: To what extent do you agree with the following statement, "The gap between the rich and the poor today in this country should be reduced", where 1=Strongly disagree, and 5 =Strongly agree.

Soviet Union. It is possible that residents of CEE regard reducing income equality through redistribution as an important means whereby the government takes responsibility for societal harmony whereas residents of the former Soviet Union place greater emphasis on government responsibility in other spheres. Another question in the WVS asks respondents' views on the role of the state in ensuring minimum standards of living. In analyzing responses to this question we find that countries of the former Soviet Union view it important that the government provide basic needs for all, *more* so than CEE countries and the Baltics. Thus, countries of the former Soviet Union may have a greater preference for government interventions that reduce absolute deprivation rather than those that restrain inequality. Our data do not allow us to probe any of these hypotheses further, so we leave it to further research to take up these issues in detail.

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	1990	1995-97	1999-2001	Panel-2	Panel-3
Post-Socialist Economies					
CIS					
Armenia		х			
Azerbaijan		X			
Belarus		X	x	x	
Georgia		X			
Moldova		X	x	x	
Russia		X	X	X	
Ukraine		X	x	X	
The Baltics					
Estonia	x	x	x	x	x
Latvia	X	X			
Lithuania	X	X	x	x	x
CEE/SEE			11		
Albania			x		
Bosnia and Herzegovina		v	X X	v	
Bulgaria		А	X	1	
Croatia		v	X	v	
Croch Republic		А	X V	1	
Uno com			Α		
Magadagia EVP			v		
Mactoreans		V	A V	v	
Delevel	V	A V	A V	A V	V
Poland	Λ	Λ	A V	Λ	Λ
Komama C. 1.		V	A V	V	
Serbia		Х	А	Х	
Slovakia			37		
Slovenia			Х		
Advanced Economies					
Austria	Х		Х		
Belgium			Х		
Canada			Х		
Denmark	Х				
Finland	Х	Х	Х	Х	Х
France			Х		
Germany					
East Germany		Х			
West Germany		Х			
Greece					
Iceland			Х		
Ireland			Х		
Italy			Х		
Japan			Х		
Luxembourg			Х		
Malta					
Netherlands			Х		
Norway	Х	Х			
Spain		X	Х	Х	
Sweden	х	X			
Switzerland		x			
USA		x	x	x	
United Kingdom			X		

Appendix Table 1. Countries in the Benchmark Regression Sample By Survey Year¹

Other X X Algeria X X X Argentina X X X Bangladesh X X X Brazil X X X Brazil X X X Chile X X X Chile X X X China X X X Dominican Republic X X X Egypt X X X X India X X X X India X X X X Jordan X X X X Mexico X X X X Nigeria X X X X Nigeria X X X X Peru X X X X Singapore X X X X South Korea X X X X Taivan X X X X		1990	1995-97	1999-2001	Panel-2	Panel-3
AlgeriaXXXArgentinaXXXBangladeshXXXBrazilXXXChileXXXChileXXXChinaXXXDominican RepublicXXEgyptXXIndiaXXXIndiaXXXIndiaXXXIndonesiaXXIranXXMexicoXXXMoroecoXXXNigeriaXXXPakistanXXXPililippinesXXXSingaporeXXXSouth AfricaXXXTaivanXXXTaivanXXXTurkeyXXXVariationXX <td>Other</td> <td></td> <td></td> <td></td> <td></td> <td></td>	Other					
ArgentinaXXXArgentinaXXXBangladeshXXXBrazilXXXChileXXXChinaXXXDominican RepublicXXXEgyptXXXIndiaXXXIndiaXXXIndonesiaXXXIranXXXJordanXXXMoroccoXXXNigeriaXXXPakistanXXXSouth AfricaXXXSouth AfricaXXXTanzaniaXXXTurkeyXXXUnceducXXX	Algeria			X		
IngentialXXXXBangladeshXXXBrazilXXXChileXXXChileXXXChinaXXXDominican RepublicXXXEgyptXXXIndiaXXXXIndiaXXXXIndiaXXXXIndonesiaXXXXIranXXXXMexicoXXXXMoroccoXXXXNigeriaXXXXPakistanXXXXPhilippinesXXXXSouth AfricaXXXXTaiwanXXXXTurkeyXXXXLuradaXXXX	Argentina		x	X	x	
IndigatesIIIIBrazilXXXXChileXXXXChinaXXXXDominican RepublicXXXXEgyptXXXXXIndiaXXXXXIndonesiaXXXXIranXXXXJordanXXXXMexicoXXXXNigeriaXXXXPakistanXXXXPeruXXXXSingaporeXXXXSouth AfricaXXXXTanzaniaXXXXTurkeyXXXXLuscheXXXX	Bangladesh		X	X	X	
JanualAAChileXXXChinaXXXDominican RepublicXXEgyptXXIndiaXXXIndiaXXXIndonesiaXXIranXXJordanXXMexicoXXMoroccoXXNigeriaXXPakistanXXPeruXXSingaporeXXSouth AfricaXXTanzaniaXXTurkeyXXXXXTurkeyXX </td <td>Brazil</td> <td>X</td> <td>X</td> <td>11</td> <td></td> <td></td>	Brazil	X	X	11		
ChineXXXChinaXXXDominican RepublicXXEgyptXXIndiaXXXIndiaXXXIndonesiaXXIranXXJordanXXMexicoXXMoroccoXXNigeriaXXXPakistanXXXPeruXXXPhilippinesXXXSouth AfricaXXXTanzaniaXXXTurkeyXXXYurkeyX	Chile	21	x	x	X	
ChinaAAADominican RepublicXXEgyptXXIndiaXXXIndiaXXXIndonesiaXXIranXXJordanXXMexicoXXMoroccoXXNigeriaXXXXXPeruXXPhilippinesXXSouth AfricaXXXXXTanzaniaXXTurkeyXXKXX	China		X	X	X	
Dominan RepublicXEgyptXIndiaXIndiaXIndonesiaXIranXJordanXMexicoXMexicoXXXMoroccoXNigeriaXXXPakistanXXXPeruXXXSingaporeXSouth AfricaXXXTanzaniaXTurkeyXX	Dominican Republic		X	24	24	
LegyptXXXXXIndiaXXXXXIndonesiaXXXXIranXXXXJordanXXXXMexicoXXXXMoroccoXXXXNigeriaXXXXPakistanXXXXPeruXXXXPhilippinesXXXXSouth AfricaXXXXSouth KoreaXXXXTanzaniaXXXXTurkeyXXXXYangaliaXXXX	Egypt		24	v		
InduaAA	India	V	v	X V	V	v
InductsaXIranXJordanXMexicoXMoroccoXNigeriaXXXPakistanXXXPeruXXXSingaporeXSouth AfricaXXXXXYanzaniaXTurkeyXXX <td>Indonesia</td> <td>14</td> <td>24</td> <td>X V</td> <td>24</td> <td>21</td>	Indonesia	14	24	X V	24	21
IndianXXJordanXXMexicoXXMoroccoXXNigeriaXXPakistanXXPeruXXPhilippinesXXSingaporeXXSouth AfricaXXXXXTanzaniaXXTurkeyXXX	Iran			X V		
JordanXXXMexicoXXXMoroccoXXNigeriaXXXPakistanXXXPeruXXXPeruXXXPhilippinesXXSingaporeXXSouth AfricaXXSouth KoreaXXTanzaniaXXTurkeyXXLiendicXXXXXXXXXXXXXXXXXXXXXXXXXX	Iordan			X		
MexicoXXXXMorocecoXXXXNigeriaXXXXXPakistanXXXXXPeruXXXXXPhilippinesXXXXSingaporeXXXXSouth AfricaXXXXSouth KoreaXXXXTanzaniaXXXXTurkeyXXXXUseradaXXXX	Mexico		x	X	x	
NonceoXXXXXNigeriaXXXXXPakistanXXXXXPeruXXXXXPhilippinesXXXXSingaporeXXXXSouth AfricaXXXXSouth KoreaXXXXTaiwanXXXXTurkeyXXXXLuandaXXXX	Morocco		24	X	24	
FugeriaXXXXXPakistanXXXXPeruXXXXPhilippinesXXXSingaporeXXXSouth AfricaXXXSouth KoreaXXXTaiwanXXXTurkeyXXXLucadaXXX	Nigeria	X	X	X	X	v
ParticularAAAPeruXXXPhilippinesXXSingaporeXXSouth AfricaXXSouth KoreaXXTaiwanXXTanzaniaXXTurkeyXXUsendaXX	Pakistan	24	X	X	X	21
FindXXXPhilippinesXSingaporeXSouth AfricaXSouth KoreaXXXTanzaniaXTurkeyXXX	Peru		X	X	X	
SingaporeXSouth AfricaXSouth KoreaXXXTaiwanXTurkeyXXX	Philippines		24	X	24	
South Africa X X X X X X Taiwan X X X X X X X X X X X X X X X X X X X	Singapore			X		
South Kirea X X X X South Korea X X X Taiwan X Tanzania X Turkey X X X X X X Usanda	South Africa	x		X		
Taiwan X X X X X X X X X X X X X X X X X X X	South Korea	24	X	X	X	
Tanzania X Turkey X X X X X Usanda	Taiwan		X	24	24	
Turkey X X X X X X	Tanyania		24	v		
Tunky A A A A A	Turkey	X	X	X	X	v
	Uganda	14	24	X V	24	21
Uganda A	Ummene		v	Λ		
Veneruela V V V	Vepezuela		X V	v	V	
Vietnam V	Vietnam		Δ	X V	Δ	
Zimbabwe V	Zimbabwe			X V		
	Zimbabwe			Δ		

Appendix Table 1. (concluded)

¹Based on the benchmark (Table 3) regression with preference for equality as dependent variable. Regressions using other dependent variables may have smaller samples.

	All		
	1990-93	1995-97	
Age ¹	-11.265	-13.806	
-	(2.01)*	(4.67)**	
Age-squared ¹	133.897	114,984	
	(2.25)*	(3.66)**	
Female	-0.08	-0.059	
	(3.14)**	(4.26)**	
No. of Children	0.03	0.026	
	(2.75)**	(4.15)**	
Married	-0.018	0.004	
	(0.630)	(0.240)	
Education			
Incomplete Technical/Vocation Education	-0.003	0.026	
	(0.080)	(1.120)	
Complete Technical/Vocation Education	0.18	0.178	
	(5.28)**	(8.81)**	
Incomplete Secondary Education	0.332	0.079	
	(8.98)**	(2.90)**	
Complete Secondary Education	0.329	0.142	
	(4.59)**	(5.87)**	
Incomplete University Education	0.077	0.337	
	(1.520)	(10.65)**	
Complete University Education	0.273	0.328	
	(0.800)	(14.13)**	
Income	0.404	0.025	
Lower Income	-0.104	-0.035	
TT' 1 T	(3.62)**	(2.12)*	
Higher Income	0.195	0.14	
L. Jun France Co. Ann	(6.39)**	(8.80)**	
Labor Force Status	0.1	0.06	
Part-Time Employed	-0.1	-0.00	
Solf Employed	(2.23)**	(2.57)**	
Sen-Employed	(5.00)**	0.124 (E.0E)**	
The out allowed	(5.99)***	(3.05)***	
Unemployed	-0.097	-0.129	
Datirad	(1.040)	(4.01)	
Retifed	-0.101	(2.66)**	
Other	(2.21)*	0.039	
ould	(0.050)	(1.850)	
$C \rightarrow C \rightarrow D \rightarrow 2$	(0.070)	(1.050)	
Country Group Dummies	0.091	0.220	
Developing countries	-0.081	(10.22)**	
Central and Eastern Europa	(2.37)*	(19.22)***	
сепитагани назени нигоре	(16 70)**	(3.21)**	
Baltica	0.524	0.151	
Datues	0.534	0.131	
Other Former Seriet Union (FSU)	$(10./1)^{m\pi}$	(0.03)**	
Other Former Soviet Union (FSU)		(26.00)**	
Observations	11 011	(20.09)	
Observations	11,211	55,210	

Appendix Table 2. Preference for Equality (Ordered Probit): 1990-93 and 1995-97 (Robust z-statistics in parentheses)

* significant at 5 percent; ** significant at 1 percent

Note: Dependent variable is a 10-point scale from 1 (Preference for equality) to 10 (Preference for i ¹Age and per capita income divided by 1,000, to produce sufficiently large coefficients for display.

²Benchmark group are the advanced economies.