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INDIVIDUAL PREFERENCES FOR POLITICAL REDISTRIBUTION

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ABSTRACT

Individual Preferences for Political Redistribution

What drives people's support of governmental reduction of income inequality? We employ data from a large international survey in order to evaluate the explanatory power of three competing forces, referred to as the '*homo oeconomicus* effect', the 'public values effect', and the 'social rivalry effect'. The empirical analysis reveals that at the aggregate level all three effects play a significant role in shaping individual preferences for political redistribution. Attitudes of citizens in formerly socialist countries turn out to differ from those of Western citizens in a systematic way.

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NON-TECHNICAL SUMMARY

Following the Industrial Revolution and the rise of the working class within the political arena, governments became very much engaged in the process of reducing income inequality. Currently, a major share of the government's budget in developed countries is devoted to equalizing living conditions for individuals. Income differentials are usually reduced by means of progressive income taxation and money transfers to the needy. In some countries the government tries to promote equality also by publicly providing some private goods like school, health insurance and housing, either to targeted groups of the population or simply to everyone who applies for them. A crucial issue in political economy is therefore to identify the factors that drive the support for income redistribution in society. The current Paper explores that issue by analysing self-reported preferences for governmental redistribution in twelve middle- and high-income countries in Europe, America and Oceania.

In analysing preferences for redistribution, economists are used to concentrating on the net pecuniary gain accruing to individuals from redistribution. The basic claim in most politico-economic models is that an individual will support the redistributive programme A rather than the alternative programme B if, and only if, the individual's net income is higher under A than under B (*homo oeconomicus* effect, HOE). This is however not the only way to think about how preferences form. An alternative approach sees the individuals' attitudes towards redistribution as reflecting the value system individuals endorse. People might not support the redistributive program which maximizes their private benefit, but the one which conforms with their vision of what constitutes a good policy for society as a whole (public values effect, PVE). Or it may well be that preferences merely reflect personal interest, but that may include the social status enjoyed by the individual, i.e. the relative position of the individual in society. In that case, one's judgement about political redistribution may depend on its impact upon the distribution of consumption in one's social environment, and not only on one's consumption (social rivalry effect, SRE). These three approaches do not necessarily exclude each other. Not only may different individuals have different motivations, even the same individual may try to balance them when making up their mind.

The current Paper offers an empirical analysis of the explanatory power of the three approaches just mentioned. We utilize data of the International Social Survey Programme (ISSP), 1992 Social Inequality II Module. This data set contains a survey question asking individuals whether the government should reduce income differences between people with high and low income. The answers to this question allow a description of how the support of governmental redistribution of income varies within the sample.

The standard approach that egoistic pecuniary motives are a major determinant of an individual's attitude towards redistribution is strongly confirmed by our empirical analysis. This result is in line with similar findings obtained by Ravallion and Lokshin (2000) from a different data source. These authors have analysed survey data from a sample of Russian adults, and found that support for governmental redistribution is greater for the poor than the rich. The main novelty of the current analysis, however, is that pecuniary self-interest is not the only force behind people's support for governmental redistribution. The approach in terms of public values also receives a fairly good support in the data. Furthermore, status effects seem to play a significant role in shaping the individuals' preferences for political redistribution. The importance of status effects in the current cross-country study confirms what we found for a sample of US adults in Corneo and Grüner (2000).

Our sample includes six former socialist countries and six older capitalist countries. This allows us to study the role the socialist experience plays in the attitudes individuals entertain with respect to the political redistribution of income. Based on the estimated coefficients for the national dummy variables, an almost stable ranking of countries according to their preferences for redistribution is identified. The country effect against governmental redistribution is strongest in the USA. It follows Australia, then Canada, New Zealand, and West Germany. The Western country with the strongest fixed effect in favour of redistribution is Norway. Comparing the results for the Eastern European countries with those obtained for the Western countries yields the following picture. The HOE retains a strong explanatory power in both groups of countries. The PVE, however, remains strongly significant. The SRE completely loses statistical significance in the Eastern European countries.

The final step in our investigation consists of trying to gain some insight about which effects contribute more to explaining the observed international differences in attitudes towards redistribution. Our analysis yields that social rivalry and public values seem to explain at least as much of the observed international differences as the standard pecuniary motives. Moreover, fixed country effects tend to explain most of the international differences in attitude towards redistribution.

1   Introduction

Following the industrial revolution and the rise of the working class within the political arena, governments became very much engaged in the process of reducing income inequality. Currently, a major share of the government's budget in developed countries is devoted to equalize living conditions across individuals. Income differentials are usually reduced by means of progressive income taxation and money transfers to the needy. In some countries the government tries to promote equality also by publicly providing some private goods, like school, health insurance and housing, either to targeted groups of the population or simply to everyone who applies for them. A crucial issue in political economy is therefore to identify the factors which drive the support for income redistribution in society. The current paper explores that issue by analyzing self-reported preferences for governmental redistribution in twelve middle- and high-income countries in Europe, America and Oceania.

In analyzing preferences for redistribution, economists are used to concentrating on the net pecuniary gain accruing to individuals from redistribution. The basic claim in most politico-economic models is that an individual will support the redistributive program A rather than the alternative program B, if and only if the individual's net income is higher under A than under B. This is however not the unique way to think about how preferences form. An alternative approach sees the individuals' attitudes towards redistribution as reflecting the value system individuals endorse. People might not support the redistributive program which maximizes their private benefit, but the one which conforms with their vision of what constitutes a good policy for society as a whole. Or, it may well be that preferences merely reflect personal interest, but that may include the social status enjoyed by the individual, i.e. the *relative* position of the individual in society. In that case, one's judgement about political redistribution may depend on its impact upon the distribution of consumption in one's social environment, and not only on one's consumption. These three approaches do not necessarily exclude each other. Not only may different individuals have different motivations, even the same individual may try to balance them when making up his mind.

The current paper offers an empirical analysis of the explanatory power of the three approaches just mentioned. We utilize data of the International Social Survey Programme (ISSP), 1992 Social Inequality II Module. This data set contains a survey question asking individuals whether the government should reduce income differences between people with

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high and those with low incomes. The answers to this question allow one to describe how the support of governmental redistribution of income varies within the sample.

The standard approach that egoistic pecuniary motives are a major determinant of an individual's attitude towards redistribution is strongly confirmed by our empirical analysis. This result is in line with similar findings obtained by Ravallion and Lokshin (2000) from a different data source. These authors have analyzed survey data from a sample of Russian adults, and found that support for governmental redistribution is greater for the poor than the rich.[1]

The main novelty of the current analysis is however that pecuniary self-interest is *not* the only force behind people's support for governmental redistribution. The approach in terms of public values also receives a fairly good support in the data. Furthermore, status effects seem to play a significant role in shaping the individuals' preferences for political redistribution. The importance of status effects in the current cross-country study confirms what we found for a sample of U.S. adults in Corneo and Grüner (2000).

2   Views on preferences for redistribution

2.1   The homo oeconomicus effect

In politico-economic models with exogenous and deterministic pre-tax income, the standard approach to determining an individual's attitude towards governmental redistribution simply derives it from the effect of redistribution upon the individual's net income. When purely redistributive tax-transfer schemes are considered, the "homo oeconomicus effect" (henceforth HOE) requires that the support in favor of the more redistributive one be inversely related to an individual's position in the income scale. By way of an example, under a linear redistributive scheme, all individuals with income less than average are expected to favor a higher marginal tax rate. Similarly, when pre-tax income (labor supply) is endogenous, an individual's attitude toward redistribution is the more likely to be positive, the lower his income generating ability as compared to the average one [Roberts (1977)]. This conclusion carries over to the case where pre-tax income is affected by additive stochastic shocks [Varian (1980)].

The conclusion that support for redistribution comes from the poor is also likely to hold in the case of public provision of many private goods. In the case e.g. of high school education and health care, universal free provision may implicitly transfer resources from the rich to the poor even if such provision schemes are financed by a head tax. Provided that the quality level chosen by the government is not too high, some households prefer

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[1]They also find that a rising-income trajectory inhibits demand for redistribution.

not to consume the publicly provided good and instead pay for a higher quality level in the private sector. If quality is a normal good, the households who opt out of the public sector will be those with higher incomes [Besley and Coate (1991)].

In order to test for the HOE one needs a proxy of the individual's net pecuniary gain from governmental redistribution. Our data set allows us to proxy that gain in two ways. The first one is the individual's response to the question whether he would experience a pecuniary loss or a pecuniary gain from a reduction of economic inequality. The second one is a measure of the distance separating the individual's gross income to the average income in the individual's country of residence.

2.2   The public values effect

The second approach we empirically scrutinize relates an individual's preferences for redistribution to his public values. In the spirit of Arrow (1963), individuals may be endowed with a social welfare function that expresses their preferences over resource allocations to all individuals in society. An individual's attitudes towards redistribution may reflect such a social welfare function. We term this effect on individual attitudes the "public values effect", henceforth PVE.

According to this approach, there is no *a priori* link between an individual's gross income and his support of conservative policies. In order to derive testable predictions we proceed as follows. At a very fundamental level all individuals might be assumed to share the same values, possibly because of a "veil-of-ignorance" argument. However, individuals may entertain idiosyncratic beliefs about the contributions of, respectively, family background and individual effort to personal economic success. An individual who thinks that family background, in terms of wealth and human capital, is the major determinant of the income of individuals is expected to favor governmental redistribution. On the other hand, an individual who believes in the importance of personal hard work is expected to oppose redistribution.

Two explanations can be offered for the above claim. The first one grounds on ethics. To the extent that one's entitlement to one's income is stronger if his income was generated by factors the individual is entirely responsible of, the importance of personal hard work may justify income inequality. Conversely, the importance for income generation of factors which lie beyond an individual's control may legitimate the government's attempt to reduce inequality.[2]

The second explanation refers to efficiency. If hard work is heavily responsible of

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[2]In the theory of distributive justice that kind of approach is typically associated with the writings of Ronald Dworkin. For an economic analysis of that approach see e.g. Roemer (1996, ch. 8).

actual income generation, one expects the incentive costs of redistributive taxation to be high. This may lead one to oppose redistribution because society's aggregate income shrinks. Following the current line of reasoning, Piketty (1995) detailed an argument based on costly experimentation and learning about the contributions of respectively family background and individual effort to personal economic success, which generates a link between an individual's experience of upward income mobility and his degree of political conservatism.

In order to test for the PVE one thus needs either data on individual beliefs about success factors or data on the mobility experience of individuals. Both types of data are available for our empirical investigation.

2.3   The social rivalry effect

The third approach we explore centers around the idea that an individual's preferences for redistribution depend upon its effect on the *relative* living standard of the individual. We term this effect the "social rivalry effect", henceforth SRE.

The quality of an individual's social environment heavily affects his well-being. However, that quality is not the direct object of market transactions. Conversation, parties, being married to someone, are nonmarket goods, for which a keen social competition often develops. As shown by Cole *et al.* (1992), the presence of social, rather than market, competition for some goods can endogenously generate a concern for relative consumption. The SRE arises when preferences for redistribution are driven by the consideration that governmental redistribution affects the quality of the individuals' social environment.

One important example of SRE is the social composition of residential areas. Suppose that within each neighborhood the mere play of social interaction gives rise to a local public good - the social quality of living in that neighborhood. Suppose also that before redistribution the neighborhood is mainly inhabited by a relatively homogeneous middle-class. By redistributing income from the rich to the poor, the government indirectly increases the probability that lucky upwardly-mobile lower-class individuals replace unlucky downwardly-mobile residents in the neighborhood. The incumbents may dislike the entry of new neighbours coming from lower social strata because they make the incumbents' environment less valuable. Sometimes, such feelings may be fuelled by racial or ethnic prejudices. To the extent that inhabitants dislike living with the new entrants, they may oppose political redistribution even if they derive no monetary disadvantage from it.

Another channel through which the SRE can come about is marriage. Suppose that middle-class parents send their son to college and care about the social quality of his future

wife. Suppose also that college students get married more than proportionally to other college students. If redistributive taxation allows a larger fraction of college students to come from the working class, this raises the probability that the son will get married to a working-class parents' girl. This may turn the middle-class parents against redistributive taxation even if their net income is raised by redistribution.[3] The same line of reasoning applies to the class composition of many places in which individuals happen to socialize. Holiday places, sport clubs, pubs and cafes have a value for their visitors which greatly depends on the social identity of the other visitors, which is endogenous with respect to the degree of income redistribution.

How can the empirical relevance of the SRE be evaluated? Suppose that within each country it is possible to identify the social value people associate with different income levels (the next Section explains how). The social value of a given income class can be thought of as the average contribution to their social environment made by people with that income. So, if there are K income classes denoted by $k = 1, ..., K$, people inside class k are associated with a social value v_k. If the income classes are monotonically ordered, so that class $k + 1$ is richer than class k, then each class $k \in \{2, ...K - 1\}$ has two neighboring classes, $k - 1$ and $k + 1$. Suppose that income classes are so defined that a marginal increase in the government's reduction of economic inequality increases the amount of social contact between neighboring classes without affecting the contact with more distant classes. Increasing the degree of political redistribution therefore changes the average quality of social contacts of class-k individuals in two ways. First, their milieu will consist of an increased fraction of class-$k - 1$ individuals, which tends to decrease the expected utility from social interactions proportionally to $v_k - v_{k-1} \equiv DVD_k$, which we term the downward value differential for individuals of class k. Second, their social environment will be made up by an increased portion of individuals from class $k+1$, which improves the quality of social life of class-k individuals in proportion to $v_{k+1} - v_k \equiv UVD_k$, the upward value differential of class k. The SRE for an individual of class k can then be defined as $SRE_k \equiv DVD_k - UVD_k$. The prediction to be tested is that increasing the SRE makes the individual less likely to support political redistribution.

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[3]A formal model in which issues of couple formation affect preferences about political redistribution is developed by Corneo and Grüner (2000). There we show that incentives concerning social decision may be sufficient to mobilize a majority of voters against redistributive taxation even if the gross income of the median voter is less than average income. This might explain why the poor do not expropriate the rich in democracies.

3 The data set

3.1 Data from the ISSP Social Inequality II Module

We use data from the International Social Survey Programme (ISSP), 1992 Social Inequality II Module. This empirical source provides individual data obtained from surveys conducted in 1992 with representative samples of the population of several countries. The data required by our research are only available for the twelve following countries: Australia, Bulgaria, Canada, Czechoslovakia, Germany (East), Germany (West), Hungary, New Zealand, Norway, Poland, Russia, U.S.A.. For each of these countries, several hundreds of respondents are available.

The data set contains an indicator of the support given by individuals to political redistribution. Survey question V57 asks individuals whether they agree with the following statement: "*It is the responsability of the government to reduce the differences in income between people with high incomes and those with low incomes.*" Respondents can choose among "strongly agree", "agree", neither agree nor disagree", "disagree", "strongly disagree". This empirical variable is the one we employ in order to recover the individual preferences for political redistribution. Table 1 reports the frequencies of the various answers for the 12 countries in our sample.

<div align="center">Table 1 about here</div>

The individual pecuniary incentive to support a reduction of inequality is neatly captured by survey question V84, which asks individuals: "*If incomes became more equal in (country of the respondent), some people would get higher incomes and some would get lower incomes. Do you think your income: 1. Would definitely go up; 2. Would probably go up; 3. Would stay the same; 4. Would probably go down; 5. Would definitely go down.*" Table 2 reports the frequencies of the various answers for the 12 countries in our sample. It is worthwhile noticing that in three of the six western countries, viz. Australia, the U.S. and Canada, the percentage of respondents who favor income redistribution is less than the percentage of respondents who believe that they would personally gain if incomes became more equal.

<div align="center">Table 2 about here</div>

As a second way to capture the HOE, we employ the personal gross income of respondents. In order to achieve international comparability, we adopt the transformation $\ln(y_i/\overline{y})$, where y_i is the respondent's personal income and $\overline{y}$ is average personal income in the respondent's country. Unfortunately, the definition of income is not uniform across

countries, e.g. it may or may not include transfer incomes, like unemployment benefits and pensions. Furthermore, missing values are quite frequent, due to high refusal and acclaimed ignorance with respect to income. For all these reasons, we have privileged the answers to survey question V84 as the most suitable proxy for the pecuniary incentives we are interested in.

In order to test for the PVE we use the answers given by individuals to question V9, which asks: *How important is hard work for getting ahead in life?* Respondents can choose among "essential", "very important", "fairly important", not very important", "not important at all".[4] Following Piketty (1995), we can also test the PVE by looking at the mobility experience of individuals. The ISSP data set contains the survey question V75, which asks the following: *Compared with your father when he was about your age, are you better or worse off in your income and standard of living generally?* Respondents can tick one of the following answers: "much better off", "better off", "about equal", "worse off", "much worse off". Tables 3 and 4 report the frequencies of the answers to these questions.

Table 3 about here
Table 4 about here

3.2   International Prestige Scores

In order to test for the SRE, we proceed as follows. The ISSP data set provides detailed information about the occupation of each respondent. These occupations can be made internationally comparable using the International Standard Classification of Occupation 1988 of the International Labor Office. For each occupation identified in this way one can find an index measure of social prestige. Internationally comparable measures of occupational prestige are delivered by the Standard International Occupational Prestige Scale (SIOPS). Prestige scores are computed from responses to survey questions asking people to evaluate occupations according to their social standing. A 0-100 scale is employed, a higher score meaning a higher prestige. The methodology used to construct internationally comparable measures is discussed in depth by Ganzeboom and Treiman (1996).

We assign each individual in our sample the SIOPS-value corresponding to his occupation. For each income class in each country then an average prestige score can be

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[4]A similar role is played by survey question V4, which asks: *How important is coming from a wealthy family for getting ahead in life?* Results by using this question instead of V9 are qualitatively similar and are therefore not reported here.

computed. These average scores have been used as the social values of the various income classes.[5]

For symmetry reasons, five income classes were considered in each country, which we label the lower class, the lower middle class, the middle class, the upper middle class, and the upper class. Income classes were constructed in such a way that in each country the maximal income differences to be found in each class were the same for all classes in that country.

Figures 1 to 12 depict how the average prestige score varies with income in all countries of the sample. Notice that while in all six Western countries average prestige definitely increases with income, in two out of six former socialist countries the relation between prestige and income is not monotone. Recall that this not due to national differences in judging the social worth of the various occupations, but to national differences in the frequency of the various occupations within the various income classes.

Figures 1 to 12 about here

The next step has been to employ the empirical social values in order to compute the SRE_k variable. For each individual in the sample a downward (DVD_k) and an upward value differential (UVD_k) were computed. Value differentials were computed as differences between the social values of contiguent income classes in the various countries. From these, one computes the SRE_k as:

$$SRE_k = DVD_k - UVD_k = 2v_k - (v_{k-1} + v_{k+1}).$$

Notice that this variable is not empirically defined for both the lower class and the upper class, since DVD_k cannot be computed for the bottom class and UVD_k cannot be computed for the top class. We therefore use only the data for the three middle classes of the sample, for which the value differentials are empirically defined.

4   Estimation Results

4.1   Twelve-country analysis

We present in what follows logit estimates for an encompassing model of individual attitudes toward political redistribution. Probit estimates do not alter the picture emerging from the empirical analysis and are therefore not reported here. Our general empirical model is:

$$R_i^* = X_i\beta + \epsilon_i$$

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[5]The same methodology is employed in Corneo and Grüner (2000), where a small-scale analysis based on U.S. data is conducted.

where R_i^* is a latent variable, R_i is the observed variable (answer to question V57), equal to 1 for individual i if $R_i^* > 0$ and she or he therefore agrees with the statement that the government should reduce income differences (question V57 answered by "strongly agree" or "agree"), and 0 otherwise,[6] and X_i is a vector of explanatory variables. These include variables that proxy the three effects discussed above.

Our strategy consists of analyzing several specifications of the above model, so as to test for the explanatory power of the various theoretical approaches presented in Sect. 2. The main results are reported in Table 5. Independent variables include a constant (unreported), eleven country-specific dummy variables, and standard control variables. Available controls for all countries are the marital status, sex, age, and the employment status of the respondent. These controls and the constant are used in all regressions presented in the paper.

<div align="center">

Table 5 about here

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To begin with, let us focus on the HOE. In Logit (1) the HOE is captured by a dummy variable ("*I would gain*") that equals one for individual i if he thinks that his income goes up when inequality is reduced, and zero otherwise. As expected, the coefficient of that variable shows a positive, and strongly significant, sign. Individuals who claim to derive pecuniary advantages from a reduction of inequality are more likely to support governmental redistribution of income. This result is confirmed if one looks at different specifications of our estimated equation, as Logit (3) and Logit (4). In all specifications the variable "*I would gain*" turns out to have a strong explanatory power of individual attitudes toward redistribution.[7]

Another way to test for the HOE is to proxy it by means of the income of the respondents. Logit (2) includes the variable *Income*, that equals the difference between the natural logarithm of the respondent's income and the natural logarithm of the average income in the respondent's country. In line with the HOE, we find that there is a statistically significant negative effect of an individual's relative income on the probability with which he is going to favor political redistribution.

Now, consider the PVE. In Logit (1) of Table 5 the PVE is captured by a dummy variable ("*Hard work is key*") that equals one for individual i if he thinks that hard work is at least fairly important for getting ahead in life, and zero otherwise. According to the theory, we expect a negative coefficient on that variable, which means that people

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[6]The estimation of ordered variants of the empirical model yields similar results. We stick to the binary model for the sake of expositional clarity.

[7]Imposing linearity on the effects from question V84 or employing a dummy variable for each of the responses to question V84 yields similar results.

who thinks income to be very elastic with respect to effort are less likely to favor political redistribution. Logit (1) does show such an effect, and this effect is strongly significant. The explanatory power of this version of the PVE is confirmed if one looks at Logit (2) and Logit (4). In all specifications the variable *"Hard work is key"* turns out to have a strong explanatory power of individual attitudes toward redistribution.[8] The same occurs if one uses respondents' beliefs about the role of family wealth for achieving individual success (not reported here). Believing in the importance of family wealth increases the probability that the individual supports a reduction of income inequality.

In Logit (3) the PVE is proxied by the dummy variable *"Better off than father"*, that equals one for individual i if he has experienced an upward intergenerational mobility, i.e. he claims that his standard of living is better or much better than his father's. According to Piketty's learning model, upward mobility is predicted to enhance the probability that the individual opposes governmental redistribution of income. The results in Logit (3) confirms this prediction.

We now turn to the SRE. We expect that income classes with a high prestige as compared to that of neighbouring classes be less likely to favor political redistribution. As expected, Logit (1) shows that variable SRE displays a negative, statistically significant, sign. This result is robust to different specifications, as shown by Logit (2) and Logit (3).

Logit (4) aims at disentangling from the SRE the effect of upward and downward value differentials across classes. Conservatism should be more likely in income classes that are associated with a much larger prestige than the one poorer income classes are associated with. Hence, the expected sign of the coefficient of the downward value differential DVD is negative. Symmetrically, the expected sign of the coefficient of the upward value differential UVD is positive. The estimated coefficients have the correct sign and are statistically significant at conventional levels.

Many of the national dummy variables exhibit statistically significant coefficients. Among the control variables, gender and age display a statistically significant effect. Being female and being old enhance the preference for governmental redistribution.[9]

We see the estimation results presented in Table 5 as the main contribution of our investigation. On the one hand, they suggest that standard political economy is right in positing that preferences for governmental redistribution are driven by selfish pecuniary incentives. On the other hand, those are not the sole incentives behind the preferences

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[8]Again, imposing linearity on the effects from question V9 or employing a different dummy variable for each response to question V9 yields similar results.

[9]We also experimented with a quadratic and a cubic for age, but nonlinear terms turned out to be not significant. Similar findings about the effects from being female and being old are reported by Ravallion and Lokshin (2000).

actually expressed by people. Both public values and concerns for the own social standing appear to be significant factors that shape individual attitudes toward government's attempts to reduce economic inequality.

4.2 International Comparisons

Our sample includes both former socialist countries (six) and older capitalist countries (also six). This allows us to study the role of the socialist experience on the attitudes individuals entertain with respect to the political redistribution of income.

In the first two columns of Table 6 we present the results of re-estimating Logit (1) of Table 5 using interaction terms for Eastern Europe. Fixed country effects are captured by the country-specific dummy variables and a dummy for the six eastern european countries (*East Europe*).

Table 6 about here

The coefficients of the fixed country effects in Logit (1.a) and in the regressions presented in Table 5 point out that, *ceteris paribus*, individuals living in a formerly socialist country are more likely to support an active role of the state in reducing economic inequality. This finding can be interpreted in several ways. One is that eastern european economies are characterized by a more incertain environment and the absence of a fully developed private insurance market. This may raise the demand for political redistribution as an insurance device. A second interpretation is that when one has lived in a socialist country, one is more likely to have being exposed to egalitarian ideas and this in turn translates into support for political redistribution. A third interpretation is that the probability of introducing a socialist system was larger in the countries in which the egalitarian credo is stronger, and these are the countries in Eastern Europe.

As shown by Logit (1.a), the coefficients of the general effects (first column) and those of the additional effects for Eastern Europe (second column) always exhibit opposite signs, although the latter are not statistically significant. This suggests that there might be systematic East-West differences with respect to how the single explanatory forces considered hitherto affect the individuals' preferences for redistribution. In order to see whether this is true, we have run separate regressions for the two groups of countries.

Logit (1.b) in Table 6 presents the estimation results for the western countries. They basically confirm the impression delivered by the previous regressions, i.e. the success of the various approaches in explaining the phenomenon at stake. Based on the estimated coefficients for the national dummy variables in Tables 5 and 6, one can identify an almost

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stable ranking of countries according to their preferences for redistribution. The country-effect against governmental redistribution is strongest in the U.S.A.. It follows Australia, then Canada, New Zealand, and West Germany. The western country with the strongest fixed effect in favor of redistribution is Norway.[10]

Estimation results for the eastern european countries are provided by Logit (1.c). Comparing the results with those obtained for the western countries yields the following picture. The HOE retains a strong explanatory power in both groups of countries. With respect to the PVE, the estimated coefficient of the variable *"Hard work is key"* for Eastern Europe keeps the right sign but is not statistically significant at the five-percent level.[11] The SRE completely loses statistical significance in the eastern european countries.

One can try to figure out a number of potential reasons as to why the SRE fails to explain individual attitudes toward political redistribution in the formerly socialist countries. The first potential reason is the greater job insecurity and job turnover in the East. If the probability to change job and perform "status mobility" is high, there is less a reason for caring about the status position one is currently associated with. The second one refers to the alledgedly wider amount of income tax evasion in the East. To the extent that opportunities for tax evasion are not uniform across occupations, it is not clear how one's social environment would be altered through an attempt by the government to increase the amount of redistributive taxation. The third one concerns the cultural heritage of socialism, which may include "class altruism", i.e. the willingness to provide some special support to blue-collar workers as a class.[12] Finally, one might doubt that the international occupational prestige scores provide a good approximation of the national prestige assessments in the former socialist countries. The three aspects mentioned above might explain why. Large random components in determining one's

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[10]It is worthwhile noting that the same ranking obtains with respect to actual redistribution. In 1990, social tranfers as a percentage of GDP in the various countries were as follows: U.S.A., 12.2; Australia, 12.6; Canada, 16.7; New Zealand, 19.7; West Germany, 25.3; Norway, 27.1. See Lindert (1996, Table 1).

[11]Variable *"Hard work is key"* remains however strongly significant if the specification of Logit (2) is applied to the eastern european data. The intergenerational mobility variable turns out to lose significance in the specification of Logit (3) and it remains statistically not significant also when used in Logit (2) instead of *"Hard work is key"*. The lack of significance of *"Better off than father"* can easily be explained. According to the theory, intergenerational mobility delivers a learning experience to update one's beliefs about the contribution of one's effort in generating income, and thus about the true incentive costs of redistributive taxation. However, for a respondent in a formerly socialist country, the comparison standard lies within the period of the socialist economic system. Hence, the mobility experience does not tell much about the contribution of personal effort to becoming a rich person in the new economic system.

[12]This may help explaining the fact that, when used in a specification like Logit (4), the DVD variable retains in Eastern Europe a positive, rather than negative, coefficient. Since blue collars are endowed with low prestige scores, individuals with a large DVD tend to have many blue collars in their social neighborhood.

occupation - the high-school teacher ending up as a taxi driver - may induce occupational status assessments which deviate from stable ones. Occupations perceived as including a large fraction of tax evaders - or even outright criminals - will suffer special status losses. Working-class ideologies may provide blue collars with more occupational prestige than in countries where such ideologies do not play a major role.

Using the estimated coefficients for the national dummy variables in Tables 5 and 6 one can identify an almost perfectly stable ranking of the eastern countries according to their support for governmental redistribution. The country-effect in favor of redistribution is strongest in East Germany. The remaining countries are ordered as follows: Bulgaria comes second, then Poland, Hungary, Czechoslovakia, and Russia.

The final step of our investigation consists of trying to gain some insight about which effects contribute more to explaining the observed international differences in attitudes towards redistribution. In Table 7 we provide comparative post-regression accounting for the four largest countries in our sample, viz. the U.S.A., West Germany, Australia, and Russia. These countries are compared to a base country, namely Canada.

<div align="center">

Table 7 about here

</div>

The cells of Table 7 have been calculated as follows. In a first step we computed the means of all explanatory variables, say $\bar{x}_i^j$, where i denotes one of the regressors in Logit (1) and j denotes one of the four countries above. We next took the difference between those means and the mean in our base country, $\bar{x}_i^j - \bar{x}_i^{CAN}$. That difference was then multiplied by the regression slope, $\hat{\beta}_i$, so as to yield the product $\hat{\beta}_i \left(\bar{x}_i^j - \bar{x}_i^{CAN} \right)$.[13] These produts, multiplied by one hundred, appear in the cells of all but the last two rows of Table 7.

The product $\hat{\beta}_i \left(\bar{x}_i^j - \bar{x}_i^{CAN} \right)$ provides a linear approximation of the contribution by an exogenous variable to explaining the average cross-country difference in political attitudes. As one can easily verify from the two bottom rows of Table 7, the sum of the individual effects derived by this method accurately predicts the actual difference in the proportions of individuals who favor redistribution.

In order to interpret Table 7, let us examine the case of West Germany. There, 65 percent of the respondents in the sample favors governmental redistribution, as compared to 47 percent in Canada. The 18 percent difference corresponds to the number in the bottom row and the column "West Germany" of Table 7. The fixed country effect accounts for about 11 out of those 18 percentage points, the SRE accounts for 5 points of the total difference, and the remaining difference can be attributed to the other variables.

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[13] The slope is computed as β_i, the coefficient in Logit (1), times the density function of the error term evaluated at the canadian sample means.

Table 7 also allows one to compare the four selected countries with each other. Take the case of the U.S.A. and West Germany. Americans are more conservative than Westgermans as the difference with respect to favoring a reduction of inequality amounts to 25 points, which corresponds to the difference between the cells in the bottom row and the columns "West Germany" and "USA". The fixed country effect accounts for about 20 out of those 25 points. In explaining the rest, our three competing explanatory forces perform as follows. Surprisingly, the HOE would lead Americans to be *less* conservative than Westgermans. According to the first row of Table 7, in the U.S.A. there would be 2 percentage points more people favoring redistribution than in West Germany. The fact that Americans eventually are more conservative than Westgermans is due to the SRE and, to a lesser extent, to the PVE. The SRE accounts for 6 and the PVE for 1 of the remaining 7 points separating the two countries. From these numbers one might infer that social rivalry does contribute to politically sustain a larger degree of inequality in the U.S.A. as compared to West Germany.

Overall, the post-regression accounting provided by Table 7 suggests two main insights. First, social rivalry and public values seem to explain at least as much of the observed international differences as the standard pecuniary motives. Second, fixed country effects tend to explain most of the international differences in attitudes towards redistribution.

5   Concluding remarks

Mainstream politico-economic analysis is based on the assumption that individual attitudes about redistributive issues can satisfactorily be explained by the individual pecuniary incentives involved. Our analysis contributes to the empirical assessment of this key hypothesis. Its results indicate that conventional economic motivation is only one of the factors that drive individual preferences for governmental redistribution. In some countries, the desire to act in accordance with public values and the desire to obtain high social standing largely shape individual preferences for redistribution.

The skeptical reader might object that while proxies of pecuniary incentives turned out to be strongly significant regressors in all estimations, results concerning the proxies of the other two motivations were somewhat less striking. We find it actually remarkable that the very imperfect measures of the public values effect and the social rivalry effect we had to employ did exhibit an independent explanatory power of self-reported preferences. In our eyes this finding should encourage further empirical research based on alternative proxies. In particular, experimental data may help one to gain additional insights about the role of social incentives in politico-economic behavior.

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TABLE 1: Responses to question V57

"It is the responsibility of the government to reduce the differences in income between people with high incomes and those with low incomes." (in percent)

Country	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree
Australia	9.8	32.8	20.4	29.1	8.0
Germany (West)	20.0	45.5	14.6	14.7	5.2
Germany (East)	42.4	46.8	5.0	5.5	0.2
United States	9.5	28.8	19.8	29.3	12.7
Hungary	32.5	42.1	13.8	9.0	2.6
Norway	16.8	43.2	16.3	17.8	5.8
Czechoslovakia	23.5	43.5	11.1	17.8	4.2
Poland	30.5	46.9	9.5	10.6	2.5
Bulgaria	60.7	20.7	8.2	2.8	7.6
Russia	35.5	29.2	9.6	16.9	8.9
New Zealand	16.2	36.9	16.2	22.8	7.9
Canada	16.1	31.8	21.2	21.3	9.6

TABLE 2: Responses to question V84

"If income became more equal in (country of the respondent), some people would get higher incomes and some would get lower incomes. Do you think your income:" (in percent)

Country	would definitely go up	would probably go up	would stay the same	would probably go down	would definitely go down
Australia	7.7	29.5	50.6	11.0	1.3
Germany (West)	13.1	32.8	46.8	6.4	0.8
Germany (East)	40.7	45.1	13.1	0.9	0.1
United States	22.5	37.2	34.5	5.2	0.7
Hungary	20.4	48.5	26.7	3.6	0.9
Norway	7.8	32.4	49.3	8.6	1.9
Czechoslovakia	18.3	40.7	32.4	6.7	2.0
Poland	22.9	50.9	22.1	3.1	1.0
Bulgaria	15.0	43.9	33.2	6.1	1.8
Russia	12.3	34.2	31.0	13.8	8.7
New Zealand	12.9	27.9	47.9	9.7	1.6
Canada	15.8	35.3	39.0	8.1	1.8

TABLE 3: Responses to question V9

"How important is hard work for getting ahead in life?" (in percent)

Country	essential	very important	fairly important	not very important	not important at all
Australia	32.5	47.7	18.0	1.7	0.1
Germany (West)	13.9	38.4	35.7	10.1	2.0
Germany (East)	20.1	51.1	22.7	5.0	1.0
United States	37.7	50.4	10.7	1.3	0
Hungary	20.0	34.0	33.1	11.4	1.5
Norway	23.7	48.2	23.0	3.8	1.2
Czechoslovakia	33.3	37.8	23.9	3.9	1.1
Poland	26.1	56.0	13.5	2.9	1.5
Bulgaria	41.6	29.1	21.6	6.3	1.3
Russia	12.3	34.2	31.0	13.8	8.7
New Zealand	42.2	42.1	13,7	1.8	0.2
Canada	35.5	44.0	17.3	2.9	0.3

TABLE 4: Responses to question V75

"Compared with your father when he was about your age,
are you better or worse off in your income and standard of living generally?" (in percent)

Country	much better off than your father	better off	about equal	worse off	much worse off than your father
Australia	30.3	50.9	10.3	7.0	1.5
Germany (West)	25.9	45.2	18.8	7.8	2.3
Germany (East)	22.5	53.6	15.8	7.2	0.9
United States	22.6	37.0	21.4	15.9	3.1
Hungary	8.7	42.3	26.0	17.9	5.1
Norway	27.0	44.8	17.2	9.0	2.0
Czechoslovakia	14.6	43.1	19.4	16.3	6.6
Poland	13.6	37.3	23.0	20.8	5.2
Bulgaria	12.3	41.8	24.9	16.6	4.3
Russia	7.8	41.7	20.4	22.8	7.4
New Zealand	22.4	37.7	21.1	16.4	2.3
Canada	23.9	37.3	22.7	13.5	2.6

TABLE 5: Logit for question V57 (Government should reduce inequality)

Variable	Coefficient Logit (1)	Coefficient Logit (2)	Coefficient Logit (3)	Coefficient Logit (4)
"I would gain"	0.4531**		0.4503**	0.4530**
	(0.0531)		(0.0539)	(0.0531)
Income		-0.6187**		
		0.0739		
"Hard work is key"	-0.4366**	-0.4027**		-0.4351**
	(0.1122)	(0.1112)		(0.1122)
"Better off than father"			-0.1470**	
			(0.0567)	
SRE	-0.0437**	-0.0304*	-0.0432**	
	(0.0122)	(0.0130)	(0.0124)	
DVD				-0.0502**
				(0.0184)
UVD				0.0381*
				(0.0170)
Australia	-0.5469**	-0.4295**	-0.4904**	-0.5500**
	(0.1090)	(0.1079)	(0.1107)	(0.1092)
Bulgaria	0.8655**	1.2609**	0.8736**	0.8635**
	(0.1556)	(0.1555)	(0.1551)	(0.1557)
Canada	-0.4000**	-0.2663	-0.3661**	-0.4115**
	(0.1379)	(0.1366)	(0.1384)	(0.1401)
Czechoslovakia	0.3836**	0.5382**	0.4067**	0.3592**
	(0.1157)	(0.1110)	(0.1171)	(0.1266)
East Germany	1.6895**	1.8091**	1.7855**	1.7137**
	(0.1619)	(0.1700)	(0.1676)	(0.1698)
Hungary	0.6446**	0.9470**	0.6900**	0.6673**
	(0.1278)	(0.1257)	(0.1294)	(0.1365)
Norway	0.2465*	0.3542**	0.3195**	0.2472*
	(0.1135)	(0.1117)	(0.1152)	(0.1135)
Poland	0.7944**	0.8811**	0.8192**	0.7825**
	(0.1309)	(0.1256)	(0.1338)	(0.1332)
Russia	0.2908*	0.1733	0.3738*	0.2717
	(0.1435)	(0.1309)	(0.1495)	(0.1491)
USA	-0.7646**	-0.7444**	-0.7565**	-0.7708**
	(0.1261)	(0.1314)	(0.1272)	(0.1268)
West Germany	0.0734	0.3862**	0.1457	0.0781
	(0.1190)	(0.1289)	(0.1211)	(0.1195)

TABLE 5: Continued

Variable	Coefficient Logit (1)	Coefficient Logit (2)	Coefficient Logit (3)	Coefficient Logit (4)
Married	-0.0428	-0.0115	0.0034	-0.0423
	(0.573)	(0.575)	(0.582)	(0.0573)
Employed	-0.0880	0.1084	-0.0968	-0.0843
	(0.0661)	(0.0690)	(0.0671)	(0.0665)
Female	0.1742**	0.0894	0.1657**	0.1727**
	(0.0528)	(0.0536)	(0.0535)	(0.0529)
Age	0.0053**	0.0088**	0.0049*	0.0054**
	(0.0020)	(0.0020)	(0.0020)	(0.0020)
Observations	7272	7313	7080	7272
-2 Log-lik.:	8899.353	8946.719	8672.170	8899.129

Note: asymptotic standard errors in parenthesis.

* = Significantly different from zero at the 5% level.
** = Significantly different from zero at the 1% level.

TABLE 6: Logit for question V57 - East-West Comparison

Variable	Logit (1.a)		Logit (1.b)	Logit (1.c)
"I would gain"	0.4900**	-0.1107	0.4777**	0.3933**
	(0.0658)	(0.9874)	(0.0659)	(0.0906)
"Hard work is key"	-0.61114**	0.3662	-0.6064**	-0.2404
	(0.1580)	(0.2234)	(0.1580)	(0.1586
SRE	-0.0570**	0.0413	-0.0572**	-0.0151
	(0.0151)	(0.0262)	(0.0152)	(0.0215)
Australia	-0.5407**		-0.5328**	
	(0.1093)		(0.1098)	
Bulgaria	0.4857**			0.4738**
	(0.1813)			(0.1823)
Canada	-0.4179**		-0.4241**	
	(0.1387)		(0.1389)	
Czechoslovakia	0.0676			0.0560
	(0.1446)			(0.1452)
East Europe		0.0289		
		(0.2505)		
East Germany	1.3485**			1.3333**
	(0.1854)			(0.1863)
Hungary	0.3191*			0.2918
	(0.1541)			(0.1553)
Norway	0.2478*		0.2515*	
	(0.1139)		(0.1141)	
Poland	0.4737**			0.4723**
	(0.1575)			(0.1590)
USA	-0.7680**		-0.7805**	
	(0.1268)		(0.1272)	
West Germany	-0.0101		-0.0180	
	(0.1285)		(0.1287)	
Married	-0.0409		-0.0979	0.0724
	(0.0573)		(0.0702)	(0.0983)
Employed	-0.0820		-0.0952	-0.0564
	(0.0662)		(0.0792)	(0.1227)
Female	0.1733**		0.1594*	0.1949*
	(0.0528)		(0.0668)	(0.0868)
Age	0.0055**		0.0026	0.0125**
	(0.0020)		(0.0024)	(0.0037)
Observations	7272		4274	2998
-2 Log-lik.:	8893.042		5589.078	3295.216

Note: asymptotic standard errors in parenthesis.

* = Significantly different from zero at the 5% level.

** = Significantly different from zero at the 1% level.

TABLE 7: Post-regression accounting for Logit (1)

Variable	Country Australia	Russia	USA	West Germany
"I would gain"	-0.68	1.02	2.82	0.56
"Hard work is key"	-0.33	1.74	-0.33	0.65
SRE	-2.15	-1.73	-1.69	4.85
Married	-0.07	0.01	0.14	0.15
Employed	-0.09	-0.02	-0.09	0.50
Female	-0.43	0.69	0.48	0.09
Age	0.52	-0.07	-0.20	0.46
Fixed country effect	-3.66	17.21	-9.08	11.79
$\sum$	-6.89	18,86	-7.94	19.07
$\Delta V 57$	-6	18	-7	18

Norway

SIOPS

Figure 1:

New Zealand

SIOPS

Figure 2:

22

Figure 3:

Figure 4:

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Figure 5:

Figure 6:

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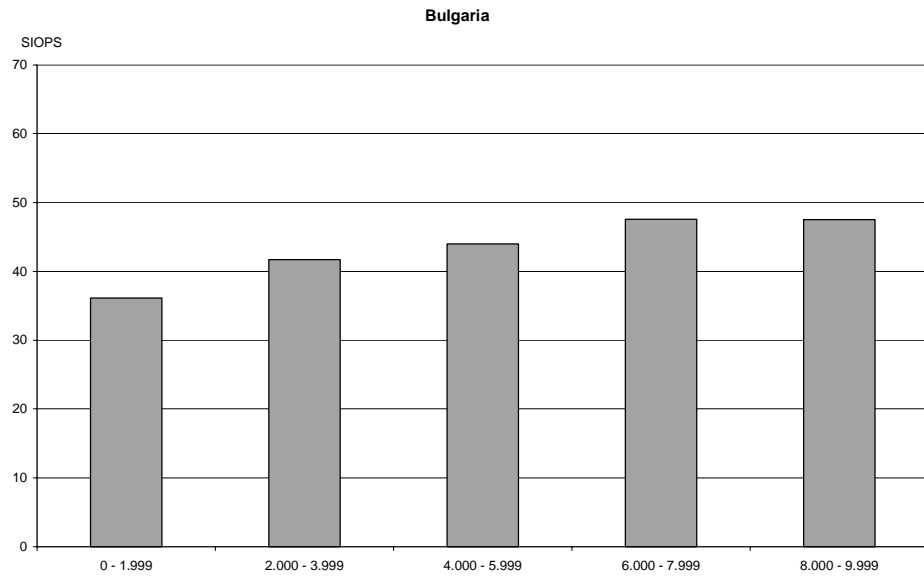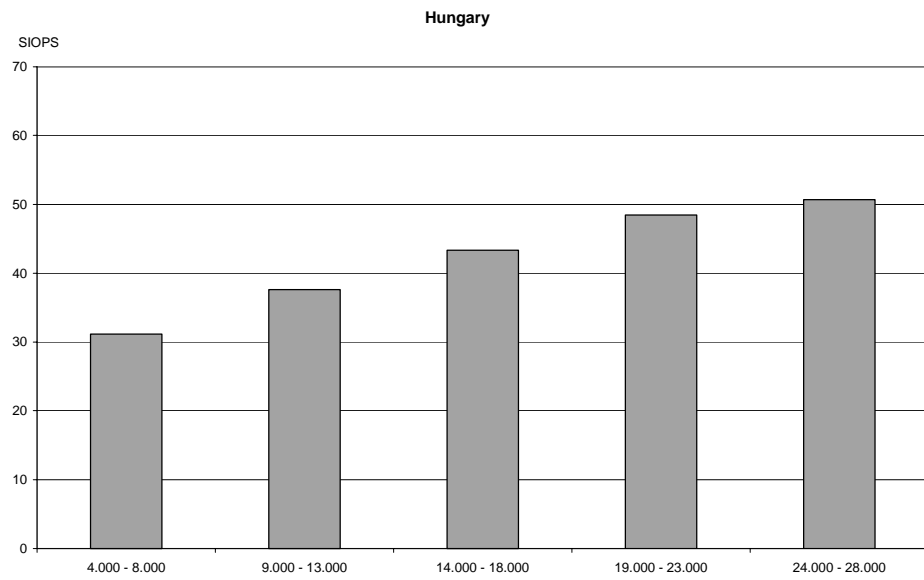**East Germany**

SIOPS

Figure 7:

Russia

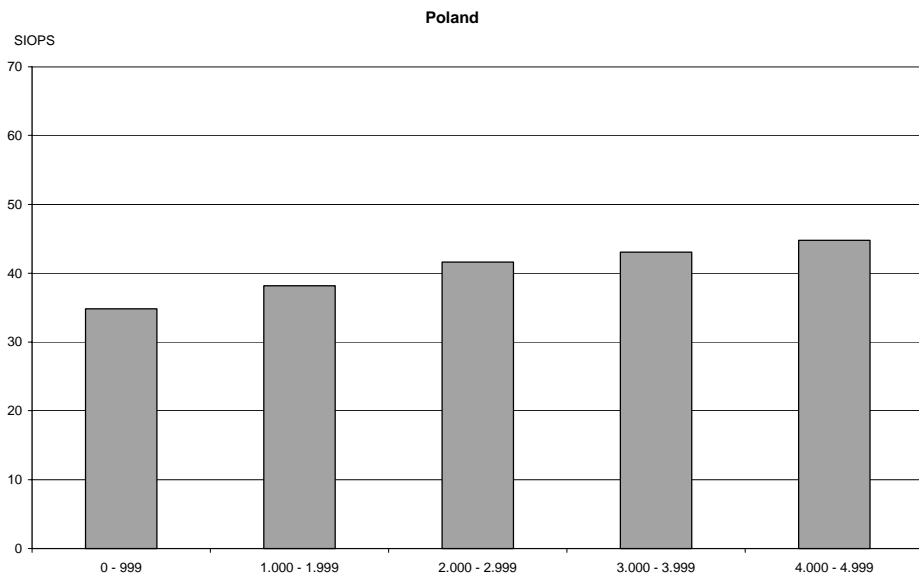SIOPS

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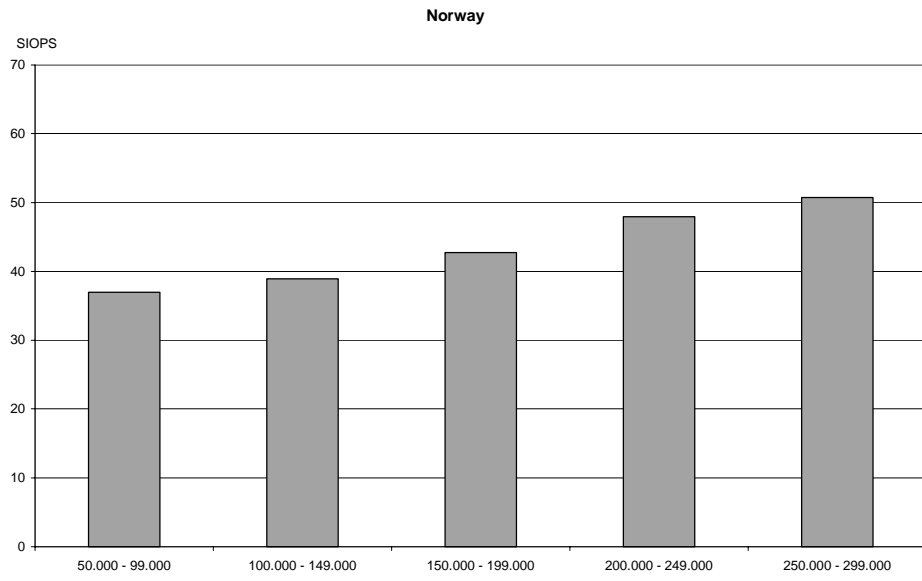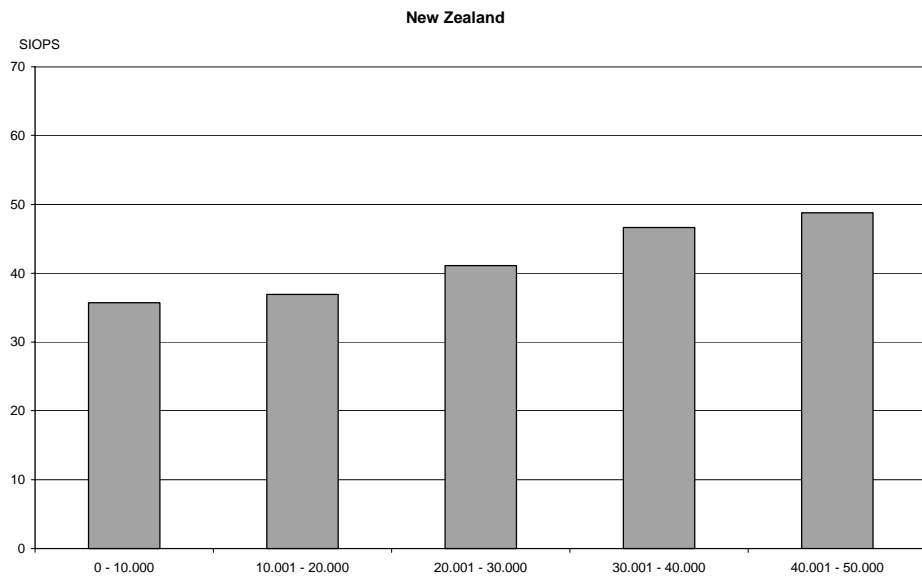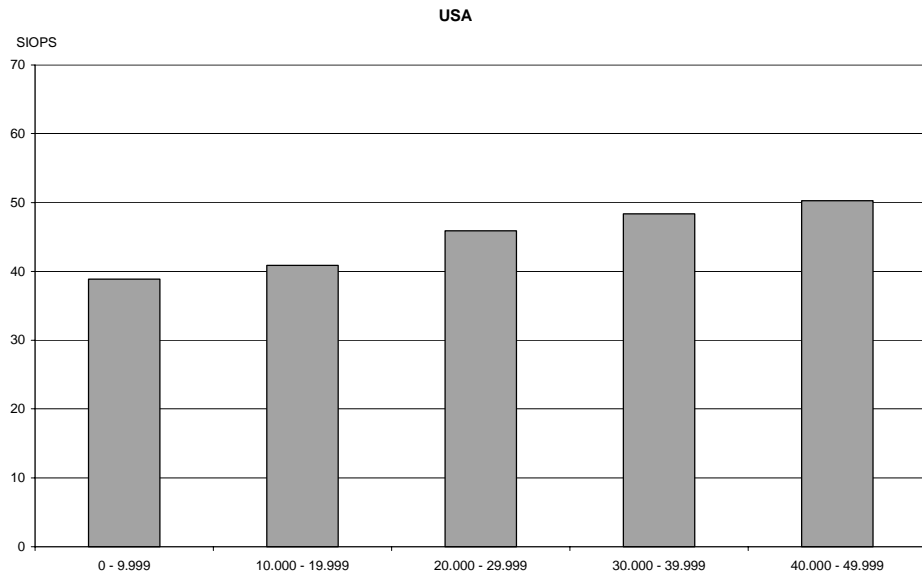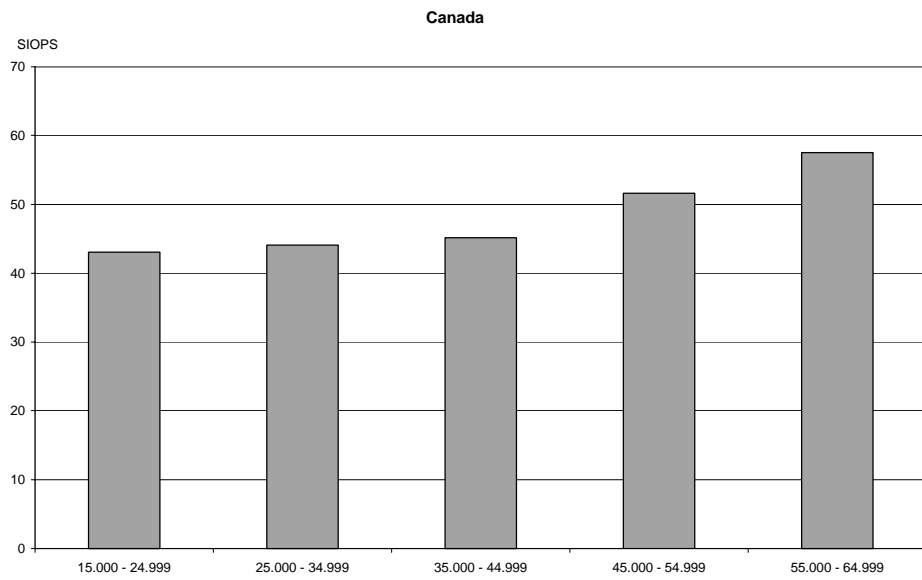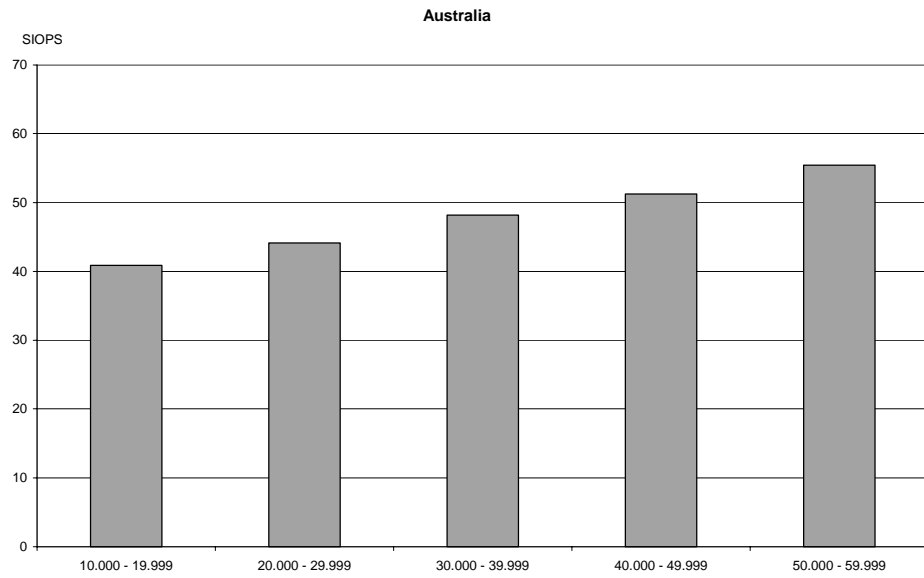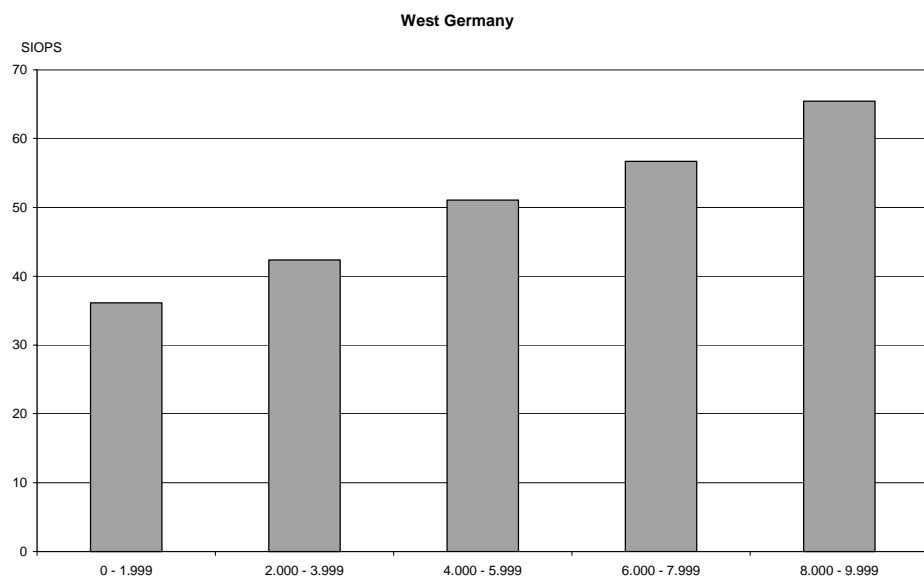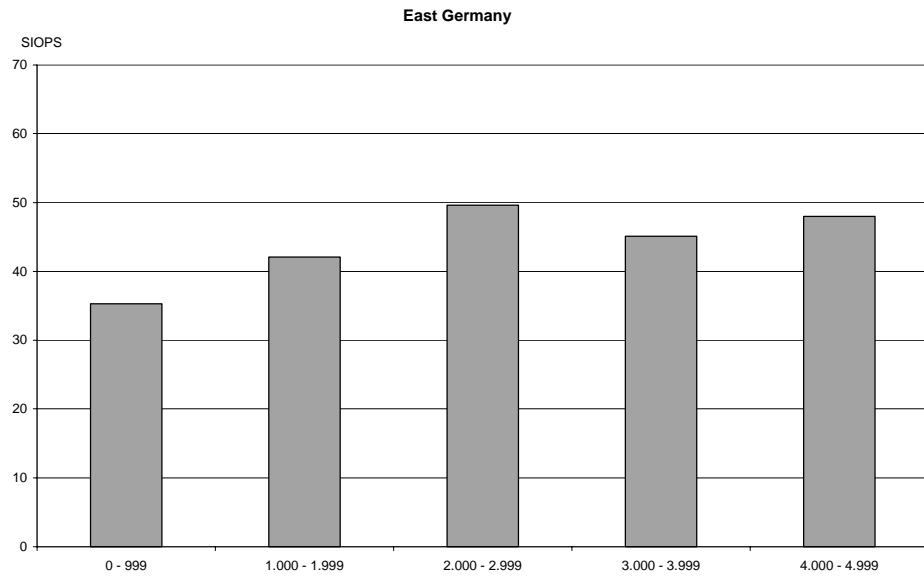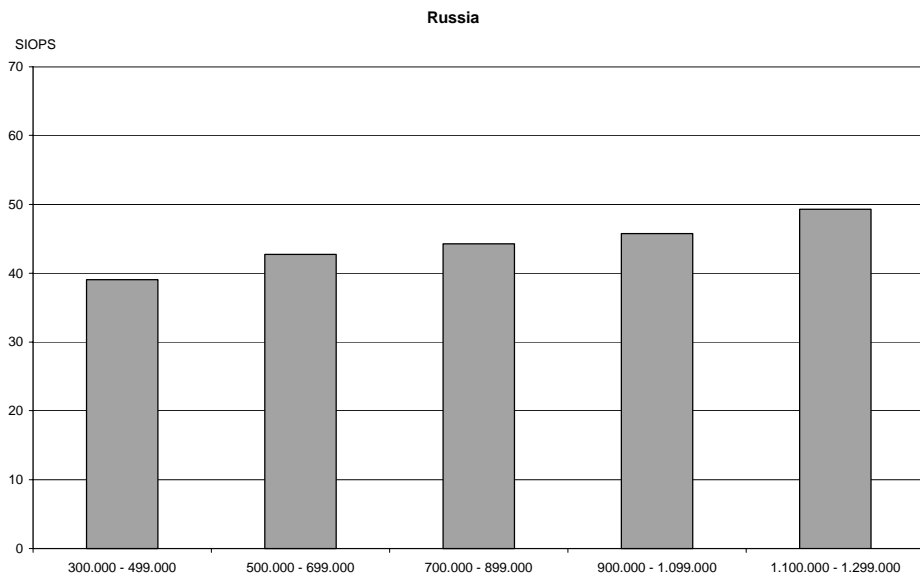
Figure 9:

Figure 10:

Figure 11:

Figure 12: