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Abstract

This paper demonstrates that institutional factors influence the subjective well-being of individuals differently in rich versus poor countries. A lower level of corruption, a more democratic government and better civil rights increase the well-being of individuals in rich countries, whereas an increase in per capita income has no impact. On the contrary, in poor countries the extent of corruption, democracy and civil rights have no influence on happiness, but an increase in per capita income impacts happiness positively. This stark contrast may be due to the difference of preferences over income and institutional factors.

JEL Codes: D60, I31, H10, D73

I. Introduction

In the past decade, economists have been increasingly involved in the analysis of the determinants of individuals' subjective well-being which is usually referred to as "happiness." If one accepts the notion that the ultimate goal of an individual is the pursuit of happiness, then economists' sudden invasion of a field which has been usually regarded as psychologists' territory is by no means surprising. In fact, the study of happiness can not only shed light on the utility theory[1], but it may also provide information that can help guide public policy[2].

Most research in the happiness literature finds that age, employment, marital status and gender are highly correlated with an individual's level of happiness. Macroeconomic variables such as the unemployment rate and the inflation rate also influence happiness (Di Tella, MacCulloch and Oswald 2001, 2003; Di Tella and MacCulloch 2005; Alesina, Di Tella and MacCulloch 2004; Luttmer 2005; Mary Daly et al. 2009; Blanchflower and Oswald 2007). However, studies that investigate the impact of national income on happiness report conflicting findings. When cross-sectional data sets are used, a positive correlation is detected between GDP and measures of happiness, but the analysis within a country over time reveals that an increase in the level of GDP does not influence (or influences only slightly) the happiness levels of the residents in that country. This is especially true in wealthier countries. This stylized fact is known as the Easterlin Paradox. (Easterlin1974, 1995, 2001b; Oswald 1997).

A variety of explanations have been proposed for the Easterlin Paradox. For example, the relative income hypothesis states that an individual's happiness depends on his/her relative income rather than the absolute level of income (Ferrer-i-Carbonell 2005, Clark et al. 2007, Easterlin 1994). This may help explain why an increase in incomes of all individuals does not result in an increase in the average happiness level[3]. Another explanation by Easterlin (2001)

stresses the role of individuals' aspirations and expectations in determination of happiness levels. He suggests that individuals' aspirations and expectations (regarding the goods and services) rise with income level. Therefore, even though the individual's income level rises over time which helps her satisfy her previous aspirations, she wants to consume more to be as happy as she thought she would be when her previous expectations were satisfied. This explanation is supported by the evidence provided by Di Tella, Haisken-DeNew and MacCulloch (2007) and Di Tella and McCulloch (2008) who report "that once 'basic needs' are satisfied, there is happiness adaptation to further gains in income."

In this paper, we find evidence supporting the idea that once a certain income threshold is reached, individuals' preferences shift to more non-materialistic goods and services. This shift of preferences idea is originated in the psychology literature. For example, Maslow (1943) suggested that individuals have to satisfy their physiological and safety needs first in order to derive utility from satisfying higher order needs such as love, belonging, esteem and actualization. In this hierarchy of needs scheme, lower level needs, such as physiological and safety needs, can generally be satisfied with materialistic goods and satiating these needs require a certain level of income. For example, a given level of income or wealth is necessary to rent/buy a house or to eat food. Once these lower-ordered needs are satisfied the individual seeks to pursue higher-order needs which are generally non-materialistic such as love, belonging and self actualization.

Borrowing the idea of shift in preferences from psychology literature, we propose that non-materialistic goods contribute to the happiness of individuals in rich countries but the materialistic goods don't. Similarly, materialistic goods should have an influence on happiness of poor countries' residents while non-materialistic goods should not. In the context of non-

materialistic goods (and higher order needs), we analyze the institutional characteristics of a country such as the extent of *democracy* and *civil rights* and lack of *corruption*. The democracy and civil rights indices we employ measure the extent to which citizens of a country are involved in decision making and the degree of personal liberties in the country, respectively. Corruption index is determined by the degree of misuse of entrusted power for private gain in a country.

Rich and poor countries have dissimilarities in these institutional characteristics and the preferences of individuals over these characteristics in rich and poor countries may be different. For example, people in rich countries may value institutional characteristics (such as the prevalence and protection of civil rights) of the country more than they value the level of development or GDP, and for individuals in poor countries the opposite may be true. In that case, an increase in a rich country's GDP may not affect the happiness of its citizens, but a poor country's residents would be happier when that country's GDP increases.

The hypothesis of different preferences of individuals in rich versus poor countries is also consistent with the findings in both political science and economics literature. For example, it is well known that people in both the ancient Athens and the industrial era England in 18^{th} century experienced rapid economic development along with democratization and an increase in the magnitude of civil rights (Midlarsky 1992). Furthermore, Schemeil (2000) suggests that in ancient Egypt and Mesopotamia, which were amongst the most developed regions of their time, politics relied on public debate and detailed voting procedures in public assemblies; the justice system allowed appeal rights and opposing parties could question the leaders' policies. Acemoglu et.al (2008), Barro (1999) and Acemoglu and Robinson (2000) report a positive correlation between high economic development and more democratic governments. Treisman (2000) and Mocan (2008) suggest that individuals in developing countries suffer from corruption

more than their counterparts in the developed countries do. All of this evidence indicates that some institutional characteristics are common to more developed countries but not to their poor counterparts. This difference may be observed due to individuals' changing preferences over institutions and governance as the countries develop economically and get wealthier.

This is the first paper to analyze the impact of both GDP and institutional factor on happiness. The only study that is similar to ours in design is Veenhoven (2000) who finds that political freedom contributes to happiness, particularly in rich countries. However, his study analyzed happiness level across countries using a cross-section of 30 countries. Frey and Stutzer (2000a, 2000b) report that the degree of direct democracy influences individual well-being positively based on data only from Switzerland, one of the richest countries in the world. Luechinger, Meier and Stutzer (2008), in their study of country level happiness differentials between public and private sector employees in 42 European and Latin American countries, suggest that corruption generates a happiness premium for bureaucrats through the acquisition of rents, but they do not report the impact of corruption on well-being of overall population.

Our empirical strategy involves using repeated cross-sections of individuals from around the world to analyze the impacts of democracy, civil rights and corruption on individual subjective well being in different samples differentiated by the income level of the country. That is, one of our samples is composed of individuals who live in rich countries and the other sample consists of individuals who live in poor countries. To investigate the possibility that preferences over GDP versus institutional characteristics differ between residents of rich and poor countries, (besides the commonly used control variables in the happiness research) we include measures of both GDP and institutional characteristics and compare their impacts on the happiness levels of the individuals in these countries.

We contribute to the happiness literature by demonstrating that institutional factors such as a more democratic regime, more civil rights and less corruption in a country are positively related to the subjective well-being of individuals and that the impacts of these characteristics are different for residents of rich and poor countries. Our second contribution is that we provide an alternative explanation to the Easterlin Paradox. Specifically, our results suggest that the existence (lack of existence) of a positive relationship between happiness and desirable institutional attributes (per capita GDP) in developed countries may be an indication for stronger preferences for institutional quality in developed countries. On the other hand, the fact that per capita GDP impacts happiness positively while desirable institutional characteristics do not have an influence on happiness in poor countries may indicate stronger preferences for income over institutional quality in these countries. We also show for the residents of rich countries that GDP growth in last 20, 25 or 30 years do not contribute to the happiness of the individuals, holding constant the institutional variables and per capita income 20, 25 and 30 years ago. This regularity may be evidence for the existence of a threshold living standard (high enough to satisfy the basic needs) over which individuals' preferences shift towards satisfying higher order needs such as pursuit of a more democratic environment with greater level of civil rights and less corruption.

The remaining parts of the paper are organized as follows: Section 2 describes the data. Empirical framework is explained in Section 3. Section 4 presents the results. Section 5 concludes.

II. Data

The data set is obtained from the four waves of World Values Survey[4] conducted on random sample of individuals living in 80 different countries between years 1981 and 2004. The

sample on which the empirical analysis is conducted includes more than 200,000 individuals and it is determined mainly by the availability of aggregate-level variables[5]. Some of the countries have held the surveys for more than once. The measure of individuals' subjective well-being is based on the question "All things considered, how satisfied are you with your life as a whole these days?" Possible answers range from "Most dissatisfied" (represented by 1) and "Most satisfied" (represented by 10). This happiness measure is similar to those used by previous research (Di Tella and MacCulloch 2008, Oswald 1997).

Individual characteristics as well as country-level variables are employed as explanatory variables. Individual-level control variables include gender, age, income, education level, employment and marital status and the number of children[5]. The source of all the individual-level variables is the World Values Survey. The country-level control variables used are GDP, inflation and unemployment rates, carbon dioxide emission per capita and the birth rate of the country. These controls are used to capture various aspects of the country, such as development level, pollution, and health condition of the overall population. They are obtained from various sources, such as World Bank's World Development Indicators, Penn World Tables and International Labour Organization's KILM Database. Detailed definitions, descriptions and sources of the variables are given in Table 1.

The key explanatory variables are corruption, the extent of civil rights and degree of democracy exercised in the countries. The corruption level in the country is measured by the corruption perceptions index that is provided by the Transparency International. The corruption perceptions index (TI) measures the degree to which corruption is perceived to exist among public officials and politicians. Ratings range from "10" (least corrupt) to "0" (most corrupt). The survey measures public sector corruption or the abuse of public office for private gain. It

only focuses on corruption of local and national governments. The TI is a composite index compiled from surveys originating from different independent institutions. The surveys measure the perceptions of local residents, expatriates, business people, academics and risk analysts. Each survey is standardized so that its scaling system matches the TI's index of 0-10. Survey results are combined in three-year periods to reduce abrupt variations that could potentially be caused by errors. For some of the countries in our study, corruption information was not available from the source. In order not to lose observations, for each country, we constructed our corruption measure by taking the average of the country's corruption score from the available information. This does not constitute a problem, since it has been documented that corruption level in a country do not vary much over time (Mauro 1995 and Mocan 2008).

The Civil Liberties index (CLI) measures freedom of expression, assembly, association, and religion. The Freedom House rates civil liberties on a scale of 1 to 7, one representing the most free and seven representing the least free. We recoded this index such that "1" is the score for the least degree of civil rights and "7" is for the highest degree. Countries with a rating of 7 generally have an established and equitable rule of law with free economic activity, and their citizens enjoy a full range of civil liberties. A rating of 6 indicates some deficiencies, but these countries are still relatively free. A rating of 3, 4, or 5 may indicate partial compliance with all of the elements of civil liberties; it may also indicate complete freedom in some areas coupled with complete denial in others. Countries with these ratings experience varying degrees of censorship, political terror, and prevention of free association. Countries with a rating of 2 enjoy partial rights and a few social and religious freedoms with some restricted business activity. In general, however, these citizens experience severely restricted expression and association coupled with political terror (e.g. political prisoners). A rating of 1 indicates virtually no freedom. The source

distinguishes between constitutional guarantees of rights and those in practice. Therefore, the CLI does not rate governments or government performance per se, but rather the real-world rights and freedoms enjoyed by individuals. Thus, the survey ratings generally reflect the interplay of a variety of actors, both governmental and nongovernmental. For the very small amount of missing information from the source for some of the countries in our data set, we used the value in the index that is closest in time to the missing information for a country. For example, if the information is missing in 1985 for a country but available for 1983, we used the value of 1983 for 1985.

From Polity IV, we obtained Democracy variable, which ranges between -10 and 10. While a "-10" indicates the regime is an autocracy, a "10" means a democratic government is in the office. When assigning values to the regimes of the countries, Polity IV considers three essential elements: degree of competition in political participation, institutionalization of constraints on executive power and availability of civil liberties to citizens in their daily lives and political participation. A fully democratic government grants civil liberties to all citizens in their daily lives and in political participation, allows fully competitive political participation and opposition. On the other hand, a fully autocratic system sharply restricts or suppresses competitive political participation. The chief executives are chosen by an elite group and exercise power with few institutionalized constraints.

Finally, the purposes of our study, we divided our sample into two parts: the rich and the poor countries. We employ the definition of World Bank which uses $11,500 GDP per capita level as the threshold to separate the rich countries from the poor ones. Ireland and Argentina belong to different categories in different years according to World Bank's definition. Otherwise, all of the countries belong to either rich or poor group throughout all the survey years.

III. Empirical Framework

Following the literature (Di Tella, McCulloch and Oswald 2003, Alesina, Di Tella and MacCulloch 2004, Blanchflower and Oswald 2007), happiness is determined by the equation presented below:

(1) $$Satisfaction_{i,c,t} = f\{Z_{i,c,t}, K_{c,t}, GDP_{c,t}, S_{c,t}\}$$

We created the outcome variable, *Satisfaction*, from the answers of the individuals to the question "All things considered, how satisfied are you with your life as a whole these days?" The answer is chosen from a scale between one and ten, with "Most dissatisfied" and "Most satisfied" are represented by "1" and "10", respectively. It is obvious that *Satisfaction* is an ordinal variable and it reflects the subjective well-being of individuals. Therefore, we can assume that people rate their well-being according to a continuous latent variable which can be viewed as a value of happiness. The greater this latent variable is for an individual given his or her personal characteristics and environmental factors, the higher satisfaction level he or she will report. Thus, it is relatively straightforward to use an ordered probit model to identify the determinants of subjective well-being. In addition, we provide OLS estimates in the Appendix Tables 1 and 2.[6]

In Equation (1), $Satisfaction_{i,c,t}$ is the level of subjective well-being reported by the individual i , in country c in year t. $GDP_{c,t}$ represents the per capita real income in country c in year t. Institutional variables, such as corruption, civil rights and democracy make up the vector $S_{c,t}$. The vectors $Z_{i,c,t}$ and $K_{c,t}$ include individual-level characteristics and country-level controls[7], respectively. We estimate equation (1) using the samples of individuals from rich and poor countries. We hypothize that variables in vector $S_{c,t}$ (corruption, democracy and civil

rights) and $GDP_{c,t}$ impact happiness of individuals in rich countries differently than they affect happiness of those in poor countries.

Following Di Tella and McCulloch (2008), we also estimate the equation (2) below:

(2) $$Satisfaction_{i,c,t} = f\{Z_{i,c,t}\ , K_{c,t}\ , GDP_{c,t-k}\ , Growth_{c,t-k}, S_{c,t}\}$$

In equation (2), $Growth_{c,t-k}$ denotes the growth rate of the GDP per capita between years *t-k* and *t* in country *c*. We use 20, 25 and 30 for *k*. Using these large lags in equation (2), we analyze whether economic growth over the last *k* years improves well-being, holding constant the institutional factors and GDP per capita *k* years ago. The countries which used to be categorized as rich *k* years ago are still in the "rich" sample. Similarly, categorization of the "poor" countries has not changed over time, either. Therefore, with this specification, we will be able to analyze differences in preferences over (a proxy for) living standards *k* years ago, growth in living standards and institutional characteristics of the countries between the individuals in rich and poor countries.

IV. Results

Impact on Happiness of Institutional Factors versus Current GDP per capita

We estimate equation (1) using ordered probit over the whole sample and also over the rich and poor countries' residents separately to investigate the potentially-different effects on happiness of the institutional factors and GDP per capita between these groups. The estimates are presented in Table 2. In the first three columns, equation (1) is estimated including only individual characteristics and country and year fixed effects. Columns 4 to 6 report the estimates of equation (1) excluding only the vector $S_{c,t}$, the institutional characteristics of the country. Finally in the last three columns of Table 2, equation (1) is estimated with the whole set of

explanatory variables. All regressions include year dummies. Standard errors are clustered at country-year level. That is, we assume that the unobservables are correlated between residents of a country and that these correlations may change from year to year.

The results in Table 2 indicate that the coefficients of the individual level characteristics are similar in both magnitude and significance in all three variants of equation (1): fixed effects, country characteristics excluding institutional factors and the whole set of controls. The estimates of gender, age, personal income, education, personal employment and marital status are significant determinants of happiness in all specifications. That is, females, the wealthy, the well-educated and the employed are happier than males, the poor, the poorly-educated and the unemployed. Furthermore, individuals' happiness is U-shaped in age. This finding is in line with the previous happiness research.

From columns 4 to 6 of Table 2, we can infer that the coefficient of GDP per capita is significant in both rich and poor countries when institutional characteristics are not accounted for. However, including democracy, civil rights and corruption into the specification reduces the significance of GDP per capita in rich countries. These estimates are reported in columns 7-9 of Table 2. It is interesting to note that for residents of the rich countries GDP per capita does not have a significant influence on happiness but democracy, civil rights and corruption have a positive impact on happiness. The opposite is true for the residents of the poor countries.

In Table 3, we present the marginal effects for the country-level variables. Given the large number of categories of the dependent variable, we only provide the marginal effects for the highest and the lowest category. The two panels of Table 3 display the marginal effect estimates for two different specifications. The first panel is based on the model that includes all covariates but Democracy, corruption and civil rights. Thus, this panel corresponds to the results

reported in columns 4-6 of Table 2. The second panel of Table 3 reports the marginal effect estimates for the model that includes all covariates.

As demonstrated in Panel 1 of Table 3, when democracy, civil rights and corruption in the country are not controlled for, GDP per capita has a positive impact on the probability of being most satisfied and a negative impact on the probability of being most dissatisfied in *both* rich and poor countries. However, when democracy, civil rights and corruption are included in the specification (presented in Panel 2 of Table 3), the impact of GDP per capita *disappears in rich countries* sample. The marginal effects in the second panel indicate that a lower level of corruption, better civil rights and a more democratic government increase the probability of being in the most satisfied category by 1.79%, 4.90% and 4.66%, respectively. These attributes of the institutions in a rich country decrease the probability of being in the most dissatisfied category by 0.20%, 0.58% and 0.55%, respectively. On the other hand, the probability of being in the highest or in the lowest categories of happiness for the individuals in poor countries are affected by GDP per capita, but not by the institutional factors. An increase of $1,000 in GDP per capita in a poor country increases the probability that the individual is in the most satisfied category by 1.05% and it reduces the probability of being in the most dissatisfied category by 0.64%.

The analysis in this section suggests that when institutional factors are accounted for, GDP per capita does not influence the individuals' well-being in rich countries, but instead better civil rights, less corruption and a more democratic government impact the happiness of people in rich countries. The opposite is true for the individuals living in poor countries.

<u>Impact on Happiness of Institutional Factors versus Growth in GDP per capita</u>

Di Tella and Mac Culloch (2008) estimate a model which attempts to explain average happiness level in rich and poor countries as a function of GDP per capita 45 years ago and with the growth rate of GDP per capita during the last 45 years. They find that the average level of happiness in a poor country is determined by both past GDP per capita and GDP growth, but only the level of past GDP per capita in a rich country impacts average happiness. They conclude that per capita GDP growth over some threshold level of GDP per capita (such as a level enough to satisfy basic needs) do not contribute to the happiness.

We estimate a similar model by running the regression specified by equation (2) using ordered probit. Instead of considering a 45-year period, we use shorter lags (20,25 and 30 years), because employing a 45-year lag reduces the sample size sharply due to absence of GDP data 45 years ago for many countries in the sample. Table 4 provides the coefficients of the variables of interest. Columns 1-3, 4-6 and 7-9 of Table 4 corresponds to 30, 25 and 20-year lags respectively. Table 5 presents the marginal effects for the highest and lowest categories.

Regardless of the length of the lag used, the coefficients of democracy, civil rights and corruption are significant in rich countries sample. However both past levels of GDP per capita and the growth in GDP per capita do not impact happiness in rich countries. On the other hand, the opposite is true in the sample of poor countries. Table 5 shows that a $1,000 increase in GDP per capita of 30 years ago decreases the probability of being in the most dissatisfied category by 1.37% and increases the probability of being in the most satisfied category by 3.42% in poor countries. However, a $1,000 rise in the GDP per capita of 30 years ago does not significantly affect the probability of being in the highest or the lowest category of happiness in rich countries. Moreover, experiencing one percentage point extra GDP growth in the last 30 years reduces the probability of being in the most dissatisfied category by 1.46% and increases the probability of

being in the highest category by 3.64% for the individuals in the poor countries. The same change in the growth rate does not affect the happiness of rich countries' residents significantly. As reported in columns 4-9 of Table 5, we find similar results for 25 and 20 year lags.

The findings in this section indicate that neither the level of past GDP per capita nor the growth rate in GDP per capita significantly impact the well being of individuals in rich countries, when institutional factors are controlled for. On the other hand, in poor countries higher levels of past GDP per capita and GDP growth are associated with more happiness. Since most of the rich countries today used to be rich 30 (or 25 or 20) years ago, we conclude that after reaching some level of living standards, experiencing rapid growth does not increase the happiness levels of the individuals. As explained by Di Tella and MacCulloch (2008), funds beyond the amount needed to satisfy the basic needs do not seem to buy happiness. We suggest that after this threshold, individual's preferences shift towards satisfying higher order needs, such as living in a more democratic country with a greater extent of civil rights and less corruption.

V. Conclusion

Using data on 200,000 individuals from 80 different countries, we find that (after controlling for commonly used determinants of happiness such as age, education, personal income, employment and marital status) institutional factors such as the extent of democracy, civil rights, and corruption have a systematic influence on reported well-being of individuals who live in *rich countries.* Per capita income has no effect. On the other hand, the happiness levels of the individuals living in *poor countries* are not affected by these institutional factors, but instead an increase in income per capita improves happiness. This may be evidence of a change in preferences over living standards (as proxied by GDP per capita) and improved

institutional factors as a country develops economically. Our results are in line with Frey and Stutzer (2000a, 2000b), who report that direct democratic institutions in Switzerland (one of the wealthiest countries in the world) contribute positively to the happiness of the Swiss.

We obtain the same results when we employ past GDP per capita and the GDP growth rate in the models instead of current GDP. In those countries that were already rich in the past, the happiness levels of the individuals do not improve as GDP per capita increases further over and above the past GDP per capita. In contrast, both economic development in the last decades and the level of past GDP per capita have a positive impact on the happiness of the poor countries' residents. In other words, poor countries' residents enjoy the benefit of economic development and report greater happiness levels but they do not get happier as institutions improve (such as a more democratic government, better civil rights or less corruption). The results suggest that after a certain standard of living is reached, additional economic development does not improve happiness, but instead individuals favor a more democratic system with more civil rights and less corruption.

This hypothesis is consistent with the findings of Di Tella and MacCulloch (2008) that set forth the adaptation hypothesis of happiness to income after a certain threshold. However, our results show that there is still room for improvement in happiness of rich country residents through improvement of institutional characteristics of the country.

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End Notes

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[1] We do have to be aware of the fact that happiness is not the same as utility. A very good review of the link between these two can be found in Clark et al.(2007).

[2] For example, Gruber and Mullainathan (2005) used happiness data to evaluate the effect of taxation of cigarette on smokers in Canada and the United States.

[3] This is also consistent with results of Layard, Mayraz and Nickell (2008) who have shown that marginal utility of income decreases faster than the rate of increase in income.

[4] http://www.worldvaluessurvey.org/

[5] We also include dummy variables for each of these categories that take the value of 1 when the information about a individual characteristic is missing.

[6] Specifically, we excluded the observations from countries for which information about GDP, the unemployment rate, the inflation rate, democracy, corruption and civil rights index is missing. See Table 1 for the full set of aggregate-level variables.

[7] Ferrer-i-Carbonell and Frijters (2004) argue that estimating Happiness equations with OLS fixed effects models produce results similar to those obtained from ordered probit. Supporting evidence can be found in Kohler, Behrman and Skytte (2005) and Frijters, Shields and Haisken-DeNew (2004).

[8] Individual-level variables considered are individual's gender, age, income, education level, employment and marital status and the number of children the individual has. Country-level

controls include the inflation and unemployment rates, carbon dioxide emission per capita and birth rate. See Table 1 and section 2 for more detailed descriptions of the variables used.

Table 1
Descriptive Statistics, Definitions and Sources

		Whole Sample		Poor Countries		Rich Countries	
Variable	Descriptions and (Sources)	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Female	Dummy for females. (A)	0.517	0.500	0.510	0.500	0.527	0.499
Gender Missing	Dummy for missing gender information	0.001	0.025	0.001	0.023	0.001	0.029
Age	Individual's age, scaled by 0.1. (A)	4.131	1.630	3.947	1.542	4.400	1.716
Middle Income	Dummy that takes the value 1 if the individual is in the middle income group in his country. (A)	0.318	0.466	0.321	0.467	0.313	0.464
Upper Income	Dummy that takes the value 1 if the individual is in the upper income group in his country. (A)	0.258	0.437	0.264	0.441	0.248	0.432
Income Missing	Dummy for missing individual income information. (A)	0.130	0.336	0.102	0.303	0.171	0.376
Low-Educated	Dummy that takes value 1 if the individual has not completed schooling beyond primary school. (A)	0.205	0.404	0.256	0.437	0.130	0.336
Education Missing	Dummy for missing education information. (A)	0.233	0.423	0.092	0.288	0.440	0.496
Part-time worker	Dummy for part time working individual. (A)	0.073	0.259	0.065	0.246	0.084	0.277
Self Employed	Dummy for a self-employed individual. (A)	0.084	0.277	0.104	0.305	0.054	0.227
Retired	Dummy for a retired individual. (A)	0.140	0.347	0.114	0.317	0.178	0.382
Housewife	Dummy that takes the value 1 if the individual is dealing with home production. (A)	0.135	0.341	0.143	0.350	0.122	0.328
Student	Dummy for not working individual attending school. (A)	0.068	0.252	0.074	0.261	0.060	0.237
Unemployed	Dummy for an unemployed individual. (A)	0.080	0.271	0.098	0.297	0.053	0.224
Other work	Dummy for other types of individual employment status.	0.019	0.135	0.020	0.141	0.016	0.126
Employment Missing	Dummy for missing employment information. (A)	0.029	0.168	0.043	0.204	0.008	0.089
Married	Dummy that takes the value of 1 if the individual is married. (A)	0.586	0.492	0.588	0.492	0.584	0.493
Cohabiting	Dummy that takes the value of 1 if the individual is cohabiting with a partner. (A)	0.044	0.205	0.042	0.201	0.047	0.211
Divorced	Dummy that takes the value of 1 if the individual is divorced. (A)	0.037	0.189	0.029	0.168	0.049	0.216

Table 1 Continued

		Whole Sample		Poor Countries		Rich Countries	
Variable	Description	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Separated	Dummy that takes the value of 1 if the individual is separated. (A)	0.015	0.123	0.015	0.122	0.016	0.124
Widowed	Dummy that takes the value of 1 if the individual's spouse is deceased. (A)	0.066	0.249	0.063	0.243	0.072	0.258
Other Marita Status	Dummy for other types of marital status. (A)	0.001	0.024	0.000	0.000	0.001	0.038
Marital Status Missing	Dummy for missing marital status information. (A)	0.017	0.128	0.026	0.159	0.004	0.060
1 Child	Dummy that takes the value of 1 if the individual has one child. (A)	0.266	0.442	0.250	0.433	0.289	0.453
2 Children	Dummy that takes the value of 1 if the individual has two children. (A)	0.137	0.344	0.136	0.343	0.139	0.346
3 Children	Dummy that takes the value of 1 if the individual has three children. (A)	0.064	0.245	0.071	0.257	0.054	0.226
4+ Children	Dummy that takes the value of 1 if the individual has more than three children. (A)	0.134	0.340	0.156	0.363	0.101	0.301
Children Missing	Dummy for missing children information. (A)	0.064	0.245	0.070	0.255	0.056	0.229
GDP per cap.	Real GDP per capita, scaled by 0.001. (B)	11.988	8.317	5.774	2.624	21.078	4.600
Inflation	The Inflation rate in the country. (B)	0.004	0.123	-0.010	0.136	0.023	0.098
Unemployment Rate	The unemployment rate of the country. (C, D)	9.928	6.883	11.382	7.990	7.801	3.958
CO_2 Emission	Carbon dioxide emission per capita. (C)	0.593	0.415	0.714	0.483	0.417	0.175
Low Corruption	Corruption index, ranges from 1 to 10, 10 being the least corrupt. (E)	5.047	2.314	3.487	1.234	7.330	1.480
Civil Rights	The degree of civil liberties, 1 to 7, 7 being the most free. (F)	5.142	1.551	4.282	1.267	6.399	0.957
Democracy	Democracy-Autocracy index, -10 to 10, -10 for full autocracy and 10 for full democracy. (G)	6.457	5.125	4.487	5.329	9.339	3.029
Birth Rate	Number of births per 1,000 women in country. (C)	16.782	7.788	19.903	8.485	12.217	2.998
N		212948		126478		86470	

(A) World Values Survey, (B) Penn World Tables 6.2, (C) World Development Indictors, (D) International Labour Organization, (E) Transparency International, (F) Freedom House, (G) Polity IV.

Table 2
Ordered Probit Estimates of Satisfaction with Life

	Whole	Poor	Rich	Whole	Poor	Rich	Whole	Poor	Rich
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Female	0.03***	0.02	0.06***	0.03***	0.01	0.06***	0.03***	0.01	0.06***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)	(0.02)	(0.01)
Age	-0.28***	-0.25***	-0.30***	-0.26***	-0.22***	-0.29***	-0.26***	-0.22***	-0.30***
	(0.02)	(0.03)	(0.02)	(0.02)	(0.03)	(0.02)	(0.02)	(0.03)	(0.02)
Age^2	0.03***	0.03***	0.03***	0.028***	0.02***	0.03***	0.03***	0.02***	0.03***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Middle Income	0.19***	0.21***	0.14***	0.20***	0.22***	0.15***	0.20***	0.22***	0.15***
	(0.02)	(0.03)	(0.01)	(0.02)	(0.03)	(0.01)	(0.02)	(0.03)	(0.01)
Upper Income	0.36***	0.43***	0.24***	0.36***	0.42***	0.25***	0.36***	0.42***	0.25***
	(0.03)	(0.04)	(0.02)	(0.03)	(0.04)	(0.02)	(0.03)	(0.04)	(0.02)
Low–educated	-0.11***	-0.10***	-0.09***	-0.09***	-0.08**	-0.09***	-0.10***	-0.09**	-0.08***
	(0.03)	(0.03)	(0.02)	(0.03)	(0.04)	(0.03)	(0.03)	(0.04)	(0.03)
Part-time worker	-0.02	-0.03	-0.03	0.00	0.03	-0.038*	0.01	0.02	-0.03
	(0.01)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Self Employed	0.01	0.01	0.03	0.03	0.049*	0.02	0.04*	0.05*	0.02
	(0.02)	(0.02)	(0.02)	(0.02)	(0.03)	(0.03)	(0.02)	(0.03)	(0.02)
Retired	-0.02	-0.07	0.01	-0.05**	-0.13***	0.02	-0.05**	-0.13***	0.02
	(0.02)	(0.02)	(0.02)	(0.02)	(0.03)	(0.03)	(0.02)	(0.03)	(0.02)
Housewife	0.04**	0.07**	-0.02	0.05*	0.08**	-0.04*	0.05*	0.07**	-0.03*
	(0.02)	(0.03)	(0.02)	(0.03)	(0.04)	(0.02)	(0.03)	(0.04)	(0.02)
Student	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
	(0.02)	(0.03)	(0.02)	(0.03)	(0.04)	(0.02)	(0.03)	(0.04)	(0.02)
Unemployed	-0.29***	-0.25***	-0.41***	-0.29***	-0.25***	-0.40***	-0.29***	-0.26***	-0.41***
	(0.02)	(0.02)	(0.04)	(0.02)	(0.03)	(0.04)	(0.02)	(0.03)	(0.04)

Table 2 Continued

	Whole	Poor	Rich	Whole	Poor	Rich	Whole	Poor	Rich
Other work	-0.06**	-0.02	-0.15	-0.04	0.03	-0.13	-0.03	0.03	-0.13
	(0.02)	(0.03)	(0.03)	(0.05)	(0.07)	(0.04)	(0.05)	(0.07)	(0.04)
Married	0.16***	0.11***	0.25	0.11***	0.07***	0.24***	0.11***	0.06**	0.24***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.03)	(0.02)
Cohabiting	0.03	-0.01	0.13***	0.14***	0.14**	0.17***	0.12**	0.14*	0.13***
	(0.02)	(0.03)	(0.03)	(0.05)	(0.07)	(0.04)	(0.05)	(0.07)	(0.03)
Divorced	-0.09***	-0.11***	-0.08***	-0.14***	-0.21***	-0.07**	-0.14***	-0.21***	-0.08***
	(0.02)	(0.03)	(0.02)	(0.02)	(0.03)	(0.03)	(0.03)	(0.03)	(0.02)
Separated	-0.22***	-0.17***	-0.30***	-0.18***	-0.14***	-0.29***	-0.19***	-0.15***	-0.30***
	(0.03)	(0.03)	(0.04)	(0.03)	(0.04)	(0.04)	(0.03)	(0.04)	(0.04)
Widowed	-0.08***	-0.07***	-0.09***	-0.13***	-0.13***	-0.10***	-0.13***	-0.13***	-0.10***
	(0.02)	(0.03)	(0.02)	(0.02)	(0.03)	(0.02)	(0.02)	(0.03)	(0.02)
1 Child	-0.01*	-0.02	-0.01	-0.01	-0.02	-0.01	-0.01	-0.020*	-0.02
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)	(0.01)
2 Children	-0.01	-0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01
	(0.01)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
3 Children	0.02	0.02	0.04*	0.05***	0.05**	0.06**	0.05***	0.05**	0.04*
	(0.02)	(0.02)	(0.03)	(0.02)	(0.02)	(0.03)	(0.02)	(0.02)	(0.03)
4+ Children	0.02	0.03	0.04	0.08***	0.08***	0.07**	0.08***	0.08***	0.05
	(0.02)	(0.03)	(0.03)	(0.03)	(0.03)	(0.04)	(0.02)	(0.03)	(0.03)
GDP per cap.				0.04***	0.07***	0.02**	0.02***	0.06***	0.01
				(0.00)	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)
Democracy							0.01	0.01	0.21***
							(0.01)	(0.01)	(0.03)
Civil Rights							0.01	-0.04	0.22***
							(0.04)	(0.04)	(0.05)

Table 2 Concluded

	Whole	Poor	Rich	Whole	Poor	Rich	Whole	Poor	Rich
Low Corruption							0.06***	0.04	0.08***
							(0.02)	(0.04)	(0.02)
Inflation				-0.31	-0.23	-0.20	-0.22	-0.17	0.05
				(0.25)	(0.29)	(0.52)	(0.24)	(0.28)	(0.45)
				0.00	-0.01*	0.00	-0.01	-0.01*	0.01
Unemployment Rate				(0.00)	(0.00)	(0.01)	0.00	0.00	(0.01)
CO_2 Emission				-0.21***	-0.14**	-0.12	-0.21***	-0.15***	-0.05
				(0.06)	(0.05)	(0.19)	(0.06)	(0.06)	(0.12)
Birth Rate				0.03***	0.03***	0.05***	0.03***	0.03***	0.02
				(0.01)	(0.01)	(0.02)	(0.01)	(0.01)	(0.02)
Country Dummies	Yes	Yes	Yes	No	No	No	No	No	No
Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	212948	126478	86470	212948	126478	86470	212948	126478	86470

Dependent variable is the answer to the question "*All things considered, how satisfied are you with your life as a whole these days?*" scaled between 1 (the lowest) to 10 (the highest). ***, ** and * indicate significance at 1%, 5% and 10% levels, respectively. The sample used for the estimation is listed at the top of each column. All regressions include year dummies. The first three columns also have country fixed effects. Standard errors are clustered at country-year level. See Table 1 for the descriptions of the variables.

Table 3
Marginal Effects of the Country-level Variables for the Highest and the Lowest Categories

Panel 1

	Most Dissatisfied			Most Satisfied		
	Whole	Poor	Rich	Whole	Poor	Rich
GDP per cap.	-0.27***	-0.77***	-0.04**	0.72***	1.26***	0.38**
	(0.03)	(0.15)	(0.02)	(0.07)	(0.24)	(0.18)
Inflation	2.20	2.63	0.52	-5.98	-4.33	-4.47
	(1.79)	(3.23)	(1.35)	(4.86)	(5.32)	(11.49)
Unemployment Rate	0.03	0.08*	0.00	-0.08	-0.12*	-0.02
	(0.03)	(0.04)	(0.02)	(0.08)	(0.07)	(0.14)
CO_2 Emission	1.48***	1.52***	0.32	-4.02***	-2.51***	-2.69
	(0.45)	(0.62)	(0.50)	(1.22)	(1.00)	(4.33)
Birth Rate	-0.19***	-0.33***	-0.12***	0.52***	0.54***	1.04***
	(0.04)	(0.07)	(0.04)	(0.11)	(0.13)	(0.38)

Panel 2

	Most Dissatisfied			Most Satisfied		
	Whole	Poor	Rich	Whole	Poor	Rich
GDP per cap.	-0.14***	-0.64***	-0.01	0.37***	1.05***	0.07
	(0.04)	(0.22)	(0.02)	(0.12)	(0.37)	(0.16)
Democracy	-0.05	-0.11	-0.55***	0.13	0.17	4.66***
	(0.07)	(0.10)	(0.10)	(0.18)	(0.16)	(0.79)
Civil Rights	0.03	0.41	-0.58***	-0.07	-0.67	4.90***
	(0.26)	(0.44)	(0.13)	(0.71)	(0.73)	(1.03)
Low Corruption	-0.45***	-0.42	-0.20***	1.22***	0.69	1.79***
	(0.16)	(0.42)	(0.05)	(0.44)	(0.68)	(0.44)
Inflation	1.56	1.91	-0.13	-4.25	-3.15	1.13
	(1.69)	(3.09)	(1.13)	(4.61)	(5.11)	(9.89)
Unemployment Rate	0.04	0.08**	-0.01	-0.11	-0.13**	0.09
	(0.03)	(0.04)	(0.02)	(0.07)	(0.07)	(0.13)
CO_2 Emission	1.52***	1.73***	0.13	-4.15***	-2.85***	-1.11
	(0.44)	(0.67)	(0.31)	(1.24)	(1.10)	(2.70)
Birth Rate	-0.19***	-0.32***	-0.05	0.51***	0.52***	0.40
	(0.03)	(0.07)	(0.04)	(0.11)	(0.13)	(0.33)

Dependent variable is the answer to the question "*All things considered, how satisfied are you with your life as a whole these days?*" scaled between 1 (the lowest) to 10 (the highest). ***, ** and * indicate significance at 1%, 5% and 10% levels, respectively. The sample used for the estimation is listed at the top of each column. All regressions include year dummies. The first three columns also have country fixed effects. Full set of control variables are included in estimations, but only the marginal effects of the country level variables are presented. Marginal effects are calculated at the means. Panel 1 and Panel 2 correspond to the regressions in columns 4-6 and 7-9 of Table 2. Standard errors are clustered at country-year level. See Table 1 for the descriptions of the independent variables.

Table 4
Ordered Probit Estimates of Satisfaction with Life, Growth in last 20,25 and 30 years, Dependent Variable Satisfaction

	30 Year Lag			25 Year Lag			20 Year Lag		
	Whole	Poor	Rich	Whole	Poor	Rich	Whole	Poor	Rich
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
GDP_{t-30}	0.05***	0.14***	0.00						
	(0.02)	(0.05)	(0.02)						
$Growth_{30}$	4.36	15.34**	-11.03						
	(4.33)	(6.29)	(8.12)						
GDP_{t-25}				0.04***	0.10***	0.01			
				(0.01)	(0.04)	(0.02)			
$Growth_{25}$				4.76	11.40**	-3.75			
				(3.48)	(4.60)	(7.57)			
GDP_{t-20}							0.03***	0.09***	0.01
							(0.01)	(0.03)	(0.01)
$Growth_{20}$							4.22	9.09**	-1.79
							(2.77)	(3.55)	(5.08)
Democracy	0.01	0.02	0.14**	0.01	0.02	0.17***	0.01	0.02	0.18***
	(0.01)	(0.01)	(0.06)	(0.01)	(0.01)	(0.06)	(0.01)	(0.01)	(0.05)
Civil Rights	-0.03	-0.06	0.23***	-0.04	-0.06	0.20***	-0.03	-0.07	0.24***
	(0.05)	(0.05)	(0.07)	(0.04)	(0.05)	(0.06)	(0.04)	(0.05)	(0.05)
Low Corruption	0.02	-0.04	0.06***	0.03	-0.04	0.07***	0.03	-0.03	0.07***
	(0.02)	(0.04)	(0.02)	(0.02)	(0.04)	(0.02)	(0.02)	(0.04)	(0.02)
Inflation	0.11	0.36	0.31	0.19	0.26	0.35	0.00	0.02	0.26
	(0.43)	(0.50)	(0.43)	(0.40)	(0.48)	(0.48)	(0.36)	(0.45)	(0.50)
Unemployment	0.00	0.01	-0.01	0.00	0.01	0.00	0.00	0.01	0.00
Rate	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
CO_2 Emission	-0.05	-0.18	0.06	-0.07	-0.21	0.07	-0.10	-0.23	-0.08
	(0.17)	(0.19)	(0.13)	(0.16)	(0.17)	(0.12)	(0.14)	(0.16)	(0.13)
Birth Rate	0.01	0.02	0.00	0.02*	0.02	0.01	0.02**	0.01	0.02
	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)	(0.01)
Observations	150135	79263	70872	158037	83129	74908	164905	86584	78321

Dependent variable is the answer to the question "*All things considered, how satisfied are you with your life as a whole these days?*" scaled between 1 (the lowest) to 10 (the highest). ***, ** and * indicate significance at 1%, 5% and 10% levels, respectively. The sample used for the estimation is listed at the top of each column. All regressions include year dummies. Full set of explanatory variables are included in all regressions, but only the coefficients of country level variables are reported. The first three columns also have country fixed effects. Standard errors are clustered at country-year level. See Table 1 for the descriptions of the variables.

Table 5
Marginal Effects
Panel 1: Most Dissatisfied

	30 Year Lag			25 Year Lag			20 Year Lag		
	Whole	Poor	Rich	Whole	Poor	Rich	Whole	Poor	Rich
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
GDP_{t-30}	-0.28***	-1.37***	0.01						
	(0.10)	(0.45)	(0.05)						
$Growth_{30}$	-26.33	-146.31***	27.17						
	(26.38)	(62.45)	(19.60)						
GDP_{t-25}				-0.23***	-0.97***	-0.02			
				(0.07)	(0.35)	(0.04)			
$Growth_{25}$				-28.66	-109.05***	9.18			
				(21.31)	(46.01)	(18.46)			
GDP_{t-20}							-0.02***	-0.09***	0.00
							(0.01)	(0.03)	(0.00)
$Growth_{20}$							-25.31	-86.69***	4.37
							(16.74)	(34.74)	(12.36)
Democracy	-0.06	-0.17	-0.34***	-0.08	-0.18	-0.42***	-0.06	-0.15	-0.44***
	(0.07)	(0.11)	(0.15)	(0.07)	(0.12)	(0.15)	(0.07)	(0.11)	(0.13)
Civil Rights	0.20	0.60	-0.58***	0.25	0.57	-0.50***	0.18	0.62	-0.57***
	(0.29)	(0.51)	(0.16)	(0.26)	(0.47)	(0.14)	(0.24)	(0.43)	(0.12)
Low Corruption	-0.09	0.42	-0.15***	-0.15	0.34	-0.18***	-0.16	0.24	-0.17***
	(0.14)	(0.35)	(0.06)	(0.13)	(0.36)	(0.06)	(0.13)	(0.34)	(0.05)

Table 5 Concluded
Panel 2: Most Satisfied

	30 Year Lag			25 Year Lag			20 Year Lag		
	Whole	Poor	Rich	Whole	Poor	Rich	Whole	Poor	Rich
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
GDP_{t-30}	1.09***	3.42***	-0.07						
	(0.35)	(1.07)	(0.47)						
$Growth_{30}$	102.42	363.88***	-258.18						
	(102.22)	(148.03)	(189.00)						
GDP_{t-25}				0.88***	2.39***	0.22			
				(0.25)	(0.84)	(0.37)			
$Growth_{25}$				110.34	268.05***	-86.29			
				(81.52)	(108.71)	(173.66)			
GDP_{t-20}							0.08***	0.21***	0.02
							(0.02)	(0.07)	(0.03)
$Growth_{20}$							96.94	212.32***	-40.66
							(63.73)	(82.69)	(115.28)
Democracy	0.23	0.41	3.21***	0.30	0.43	3.94***	0.22	0.36	4.06***
	(0.27)	(0.27)	(1.36)	(0.28)	(0.29)	(1.41)	(0.27)	(0.27)	(1.20)
Civil Rights	-0.77	-1.48	5.48***	-0.95	-1.40	4.65***	-0.69	-1.51	5.34***
	(1.12)	(1.25)	(1.58)	(1.00)	(1.16)	(1.34)	(0.93)	(1.06)	(1.12)
Low Corruption	0.36	-1.03	1.46***	0.58	-0.83	1.68***	0.60	-0.60	1.57***
	(0.54)	(0.85)	(0.57)	(0.52)	(0.85)	(0.51)	(0.51)	(0.82)	(0.47)

Dependent variable is the answer to the question "*All things considered, how satisfied are you with your life as a whole these days?*" scaled between 1 (the lowest) to 10 (the highest). ***, ** and * indicate significance at 1%, 5% and 10% levels, respectively. The sample used for the estimation is listed at the top of each column. All regressions include year dummies. The first three columns also have country fixed effects. Full set of control variables are included in estimation, but only the marginal effects of the country level variables that are in the paper's interest are presented. The corresponding coefficients obtained from ordered probit regressions are presented in Table 4. Marginal effects are calculated at the means. Standard errors are clustered at country-year level. See Table 1 for the descriptions of the independent variables.

Appendix Table 1
OLS Estimates of Satisfaction with Life,
Dependent Variable Satisfaction

	Whole	Poor	Rich	Whole	Poor	Rich
GDP per cap.	0.08***	0.09**	0.06***	0.05***	0.14***	0.01
	(0.01)	(0.04)	(0.01)	(0.01)	(0.05)	(0.01)
Democracy				0.02	0.02	0.39***
				(0.02)	(0.02)	(0.06)
Civil Rights				-0.01	-0.09	0.396***
				(0.08)	(0.10)	(0.08)
Low Corruption				0.14***	0.09	0.16***
				(0.05)	(0.09)	(0.03)
Inflation	-0.96	-1.11	-0.89	-0.47	-0.39	-0.02
	(0.93)	(1.06)	(1.04)	(0.56)	(0.68)	(0.80)
Unemployment Rate	-0.01	-0.02	0.01	-0.01	-0.017*	0.01
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
CO_2 Emission				-0.51***	-0.37**	-0.05
				(0.15)	(0.15)	(0.21)
Birth Rate				0.06***	0.07***	0.03
				(0.01)	(0.02)	(0.03)
Observations	212948	126478	86470	212948	126478	86470

Dependent variable is the answer to the question "*All things considered, how satisfied are you with your life as a whole these days?*" scaled between 1 (the lowest) to 10 (the highest). ***, ** and * indicate significance at 1%, 5% and 10% levels, respectively. The sample used for the estimation is listed at the top of each column. All regressions include year dummies and individual level variables as in Table 2. Standard errors are clustered at country-year level. See Table 1 for the descriptions of the independent variables.

Appendix Table 2
OLS Estimates of Satisfaction with Life, Growth in last 20, 25, 30 years
Dependent Variable Satisfaction

	30 Year Lag			25 Year Lag			20 Year Lag		
	Whole	Poor	Rich	Whole	Poor	Rich	Whole	Poor	Rich
GDP_{t-30}	0.11***	0.35***	-0.01						
	(0.03)	(0.11)	(0.03)						
$Growth_{30}$	10.58	37.029**	-19.60						
	(9.94)	(15.47)	(13.94)						
GDP_{t-25}				0.09***	0.24***	0.02			
				(0.02)	(0.09)	(0.03)			
Growth25				10.85	27.059**	-6.46			
				(7.97)	(11.30)	(12.78)			
GDP_{t-20}							0.078***	0.220***	0.02
							(0.02)	(0.07)	(0.02)
$Growth_{20}$							10.372*	22.264**	-2.81
							(6.21)	(8.69)	(8.29)
Democracy	0.03	0.05	0.258**	0.03	0.05	0.32***	0.03	0.04	0.34***
	(0.03)	(0.03)	(0.10)	(0.03)	(0.03)	(0.10)	(0.03)	(0.03)	(0.09)
Civil Rights	-0.09	-0.17	0.43***	-0.10	-0.16	0.36***	-0.08	-0.17	0.42***
	(0.11)	(0.14)	(0.11)	(0.10)	(0.13)	(0.10)	(0.09)	(0.12)	(0.08)
Low Corruption	0.04	-0.11	0.12***	0.06	-0.09	0.14***	0.06	-0.07	0.14***
	(0.05)	(0.09)	(0.04)	(0.05)	(0.09)	(0.04)	(0.05)	(0.09)	(0.04)
Inflation	0.38	1.05	0.47	0.54	0.78	0.52	0.08	0.18	0.35
	(1.01)	(1.29)	(0.78)	(0.93)	(1.24)	(0.87)	(0.84)	(1.14)	(0.90)
Unemployment	0.00	0.02	-0.01	0.00	0.03	0.00	0.01	0.02	0.01
Rate	(0.02)	(0.02)	(0.01)	(0.02)	(0.02)	(0.01)	(0.02)	(0.02)	(0.01)
CO_2 Emission	-0.16	-0.47	0.11	-0.19	-0.52	0.14	-0.27	-0.57	-0.12
	(0.39)	(0.47)	(0.22)	(0.36)	(0.42)	(0.21)	(0.33)	(0.40)	(0.23)
Birth Rate	0.02	0.04	0.00	0.030*	0.04	0.01	0.030*	0.03	0.03
	(0.02)	(0.04)	(0.03)	(0.02)	(0.03)	(0.03)	(0.02)	(0.03)	(0.02)
Observations	150135	79263	70872	158037	83129	74908	164905	86584	78321

Dependent variable is the answer to the question "*All things considered, how satisfied are you with your life as a whole these days?*" scaled between 1 (the lowest) to 10 (the highest). ***, ** and * indicate significance at 1%, 5% and 10% levels, respectively. The sample used for the estimation is listed at the top of each column. All regressions include year dummies and individual level variables as in Table 2. Standard errors are clustered at country-year level. See Table 1 for the descriptions of the independent variables.