Education and Democratic Preferences

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Abstract

We contribute to the understanding of the causal link between education and democracy. Motivated by a model whereby educated individuals are in a better position to assess the effects of public policies and hence favor democracy where their opinions matter, our empirical analysis uses World Values Surveys to study the link between education and democratic attitudes. Controlling for a variety of characteristics, we find that higher education levels result in pro-democracy views. These results hold universally across countries with different levels of democracy, thus rejecting the theory that indoctrination through education is an effective tool in non-democratic countries.

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1. Introduction

Education, by fostering civic attitudes and cultivating rational informed opinions, has been commonly believed to promote pro-democracy views (Mann, 1846, Dewey, 1916). More recently, Lipset's, 1959, stipulation that education is a prerequisite of a democratic society, was echoed by Milton Friedman, "A stable and democratic society is impossible without a minimum degree of literacy and knowledge on the part of most citizens and without widespread acceptance of some common set of values. Education can contribute to both. (Friedman, 1962, 86). This link is often assumed in theoretical models of economic development as well. For example, Bourguignon and Verdier, 2000, stipulate that education tends to make people more critical of the prevailing autocratic regime, thus implying that investment in education by such regime is counterproductive.

Empirical work, mostly in a cross-country context, documents positive association between education and democratic institutions as well (Barro, 1999, Glaeser et al., 2004, 2007). This literature, however, has difficulties addressing endogeneity and reverse causality. Also, there is evidence that education is positively related to measures of civic participation (Campante and Chor, 2008, Dee, 2004, Glaeser et al., 2007, Milligan et al., 2004).[1] A dissenting view is presented in Acemoglu et al., 2005, where, when controlling for fixed effects, education turns out to be unrelated to democracy; see, however, Bobba and Coviello, 2007, for qualifications in regard to the econometric technique used.

Another important observation, in Lott, 1999, is that totalitarian regimes tend to make substantial investments in education, presumably as the means of indoctrination. A theory on

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[1] An issue here is that civic participation cannot be readily interpreted as being necessarily pro-democratic – think of neo-Nazi rallies, for example.

which this is based, more fully exposed in Lott, 1990, provides a link between indoctrination through the provision of public schooling and regime legitimacy. Spilimbergo, 2008, finds that education acquired in foreign countries promotes democracy domestically, provided that the foreign country is democratic; when the foreign country is non-democratic, no effect is detected.

In this paper, we make use of survey data to revisit the relationship between education and pro-democracy opinions. To shape ideas, consider the following two views that emerge from the above literature. One, indoctrinating view holds that education is the means of promoting attitudes. Then the ultimate effect on democratic disposition depends on instilled values and may well differ between democracies and non-democracies: while the former may promote pro-democratic views, the latter may indoctrinate against such views. An alternative theory, formally developed in the paper, is that education reduces the cost of acquiring an informed opinion. In this case, its effect on pro-democracy views is positive independently of the regime type. Thus, while both theories generate a positive effect of education on pro-democracy attitudes under democracies, their predictions on this relationship in non-democratic regimes differ.

We contribute to the understanding of these issues by, first, providing a formal framework where better judgmental capacity, assumed to be correlated with education, leads to better policy choices. Consequently, better educated individuals have a comparative advantage in a democracy, where popular voice plays a role. This mechanism ensures in the model that education leads to pro-democracy attitudes. We then examine the World Values surveys data, which contains detailed questions about democratic preferences. We find that education is strongly correlated with these preferences even after controlling for a variety of personal characteristics. Although reverse causality is much less of an issue here than in

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cross country settings, and despite employing a relatively rich set of personal characteristics as controls, we also use instrumental variables to primarily address possibly omitted variables. The results reaffirm the positive effect of education on pro-democratic attitudes. Further, we find that this relationship holds both across democracies and non-democracies. In other words, a country's level of democracy, when interacted with the level of schooling, turns out to be statistically insignificant – contrary to Lott's, 1990, theory that educated individuals in non-democratic countries, being subject to intense indoctrination, may be less supportive of democracy than less educated ones.

The next section presents our analytical framework. The data and empirical strategy are discussed in Section 3. Our main empirical results are contained in Section 4, and Section 5 concludes.

2. Analytical Framework

2.1. The Model

Consider an economy populated with a continuum of citizens of a unit measure, and a ruler; the role of the latter is to implement public projects. The population of individual citizens forms a legislature. The citizens are initially endowed with identical incomes normalized to zero.[2] A potent ruler expropriates the individuals' income and provides a public good. We let e denote the amount of expropriation and b the net benefit from the public good accrued to every citizen.[3] The benefit is assumed to be ex ante unknown and distributed according to the distribution $F(b)$ and lies in the interval $[0,\infty)$.

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[2] We will discuss extensions to heterogeneous agents later.
[3] This refers both to pure public goods and to private goods that for a variety of reasons are state provided, such as education. We will refer to all these cases, slightly abusing the terminology, as public goods or public projects.

The status quo refers to the situation where there is no public good, no expropriation, b=e=0. We assume for analytical simplicity that the utilities are linear. The utilities of the citizens and the ruler can then respectively be written as follows:

$$U = (-e + b)\Delta \tag{1}$$

and

$$R = e\,\Delta \tag{2}$$

where $\Delta=1$ if the ruler is potent, and $\Delta=0$ if she is blocked and the status quo prevails. Note that under the first best and without strategic distortions, the public good is provided, and the aggregate surplus is b.

The level of democracy, denoted v, is the probability of holding the ruler accountable; 1-v is the probability with which the ruler acts autonomously. In the latter case, the public project is implemented and expropriation takes place. In the former case, the ruler submits a proposal as to whether or not to carry the project out and on the amount of expropriation. It goes through if approved by the legislature, but if it is blocked then the status quo prevails.

Maintaining accountability is assumed costly for the citizens, and this cost differs in relation to their education levels. The idea is that more accountability requires maintaining and processing of diverse sources of information as well as a high level of public discourse, the costs of which are smaller for educated people.

In particular, the accountability cost function is $C(h_i,v) = c(h_i)v^2/2$, $c'<0$, $0 \leq v \leq 1$, where h_i is individual i's education, and the assumption on c ensures that better educated individuals incur a lower cost for a given level of accountability.

In the first stage, the individuals set the level of accountability v. Then, with the probability 1-v the ruler's proposal is implemented, whereas with the probability v it

undergoes a review by the legislature, and can be either approved or blocked. We study the subgame perfect equilibria of the resulting game.

2.2. Analysis

Proceeding backwards, we first examine when the ruler's proposal gets approved. This will be the case when the citizens' utility under the proposal exceeds the status quo level, or when $-e + b > 0$. It then follows that the realization of the value of the public project that makes the citizens just indifferent between approving the proposal and rejecting it is $b = e$, and the resulting probabilities of its rejection and approval, respectively, are $F(e)$ and $1-F(e)$.

For a given level of accountability, the ruler's expected utility is

$$ER = (1\text{-}v)e + v \int_{e}^{\infty} e \, dF(b) = e \text{ - } veF(e)$$

and its maximization with respect to e yields the first order condition,

$$1 - v[F + eF'] = 0$$

that determines the amount of expropriation proposed by the ruler; differentiation reveals that it decreases in v.

We then write the citizens' expected utility as follows:

$$EU_i(v) = \text{ - } c(h_i) \, v^2/2 \; + (1\text{-}v) \int_{0}^{\infty} (b-e) dF(b) \; + v \int_{e}^{\infty} (b-e) dF(b) \tag{3}$$

Its differentiation yields the first order condition for the favored level of political

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accountability by citizen i:[4]

$$- c(h_i)v - \int\limits_0^\infty (b-e)dF(b) + \int\limits_e^\infty (b-e)dF(b) - [1\text{-}v+v(1\text{-}F(e)]de/dv =$$

$$- c(h_i)v + \int\limits_0^e (e-b)dF(b) = - c(h_i)v + F(e) - [1\text{-}vF(e)]de/dv = 0 \qquad (4)$$

and the second order condition is assumed to hold.

Equation (4) implicitly determines v(h_i), and its total differentiation reveals that $\partial v(h_i)/\partial h_i > 0$, implying that higher education implies increased preference for political accountability.

Suppose now that a reduced form version of a political process is used to determine

accountability, whereby a weighted function of individual utilities, $\int \omega(h_i)U_i di$, is

maximized. We then let h_d denoted the education level of the decisive individual and the first

order condition is

$$- c(h_d)v + F(e) - [1\text{-}vF(e)]de/dv = 0$$

and total differentiation yields that the more educated the decisive individual the higher is the

equilibrium level of accountability.

Summarizing,

Proposition 1. Education is positively associated with individual pro-democracy views and

with collective support for democracy.

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[4] Internal solutions are assumed throughout.

2.3. Education, policy assessment, and pro-democracy attitudes

Rulers often use deception, manipulating information to influence citizens' attitudes in order, for example, to affect their voting behavior. This phenomenon may exist in both democratic and non-democratic setting, although Lott, 1990, 1999, suggests that it may be particularly powerful in the latter. To illustrate how this may work, suppose now that the population is divided into educated and uneducated citizenry, and let μ denote the fraction of the former. The public good is parametrized with q, its quality, so that the distribution of benefits, $F(q,b)$, $F_q > 0$, shifts rightwards with an increase in q. q is assumed to be privately known to the ruler.

In the first stage, the ruler sends a message m(q) about the true value q, bearing a cost of deception that increases in the deviation from the true value, $\phi(m-q)^2/2$, $\phi > 0$.[5] This cost results, in particular, from social disapproval in case deception is revealed. The difference between the educated and the uneducated individuals is that, while the former behave in a Bayesian manner, critically evaluating the message and forming posterior beliefs about the true value, the latter individuals are naïve and simply believe the message. To focus on this difference, we now assume that all individuals share equally in the cost of maintaining accountability, $c(h_i) = 1$. To further simplify, we assume that the amount of ruler's expropriation, e, is given.[6]

We will employ the fact that the above game is a special case of the one studied in Kartik et al., 2007. As in that paper, we focus on separating perfect Bayesian Nash equilibria. Adopted to this context, such an equilibrium is defined by educated individuals' beliefs formed under Bayes' rule and the ruler's message that maximizes her utility given

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[5] This assumption is stronger than needed.
[6] This does not affect any of the qualitative results.

these beliefs and correctly anticipating the individuals' decisions.

The analysis proceeds backwards. The approval rule of the ruler's proposal by the citizens is as before, and it is approved when b>e. We then write the individual utilities as follows:

$$EU_i(v) = -v + (1\text{-}v)\int_0^\infty (b-e)dF_i(Q_i(m),b) + v\int_e^\infty (b-e)dF(Q_i(m),b) \qquad (5)$$

where $Q_i(m)$ are individual i's beliefs and $F(Q_i(m),b)$ is individual i's assessment of the distribution of benefits under these beliefs. Differentiating we obtain the first order condition for the preferred level of accountability by individual i:

$$-v - \int_0^\infty (b-e)dF(Q_i(m),b) + \int_e^\infty (b-e)dF(Q_i(m),b) = 0 \qquad (6)$$

Recall that uneducated individuals naively believe the message m; Kartik et al., 2007, show that in equilibrium, Bayesian individuals correctly invert the message deducing the true value q. Thus, $Q_i(m(q))$=m if i is uneducated, and $Q_i(m(q))$=q if i is educated. Further, differentiation of (6) reveals that the preferred level of accountability is a decreasing function of the perceived quality of the public good, $dv/dQ_i < 0$.

Letting $\omega(\mu)$ be the relative weight of the fraction of educated individuals, an increasing function, we write the first order condition for the collective choice of accountability:

$$-v + \omega(\mu)[-\int_0^\infty (b-e)dF(q,b) + \int_e^\infty (b-e)dF(q,b)] +$$

$$(1-\omega(\mu)) \left[-\int_0^\infty (b-e)dF(m,b) + \int_e^\infty (b-e)dF(m,b) \right] = 0 \qquad (7)$$

and total differentiation reveals that $dv/dm < 0$ and that $dv^2/dmd\mu > 0$. Thus, accountability decreases with the level of the message, but less so the greater is the fraction of educated individuals.

We now employ the fact (see Theorem 1 in Kartik et al., 2007) that there is a unique separating equilibrium, with m(q) strictly increasing; we then write the utility of the ruler when issuing a message m whereas the true value is q as follows:

$$ER(m,q) = -\phi(m-q)^2/2 + \omega(\mu) \left[(1-v(q))e + v(q)\int_e^\infty edF(q,b) \right] +$$

$$(1- \omega(\mu))[(1-v(m))e + v(m)\int_e^\infty edF(q,b)] = -\phi(m-q)^2 + e - \omega(\mu) v(q)eF(q,e) -$$

$$(1- \omega(\mu))v(m)(1-F(q,e)) \qquad (8)$$

where $\omega(\mu)$ is the relative weight of the fraction of educated individuals, which is an increasing function.

The first order condition for the equilibrium message is

$$-\phi(m-q) - (1- \omega(\mu))(dv(m)/dm)(1-F(q,b)) = 0 \qquad (9)$$

and the second order condition holds. Note that, since $dv(m)/dm < 0$, m>q, so that the ruler's message is always exaggerated. Further, totally differentiating (8) we obtain that $dm/d\mu < 0$, so that the extent of exaggeration is a declining function of the fraction of educated individuals.

Summarizing these results,

Proposition 2. In equilibrium, the ruler's message about the public good quality is exaggerated, with the extent of exaggeration decreasing in the fraction of educated individuals. Educated individuals favor a higher level of accountability than do uneducated ones, so that the equilibrium level of accountability is an increasing function of the fraction of educated individuals.

3. Data and empirical strategy

In order to test the empirical implications of the theoretical model, we use the following benchmark specification:

$$Democracy_{ij} = \beta Schooling_{ij} + \gamma X_{ij} + \lambda Z_j + u_{ij} \tag{10}$$

In this equation, *Democracy* is the dependent variable and represents the preference for democracy by individual *i* in country *j*. According to the model presented above, we focus on education of individuals as our main variable of interest (*Schooling*). We also include vector *X* that represents additional individual-level explanatory variables, vector *Z* that represents country and year dummies, and u_{ij} that represents the error term. Thus, we estimate the coefficients β, γ, and λ where the latter two are vectors.

The data come from the World Value Survey (WVS), which is a worldwide survey carried out by the Inter-University Consortium for Political and Social Research (ICPSR) that comprises individual cross national questions on a wide variety of topics, such as the economy, politics, foreign policy, identity, as well as on socio-economic background of individual respondents and his or her attitudes on several topics. Data come from face to face

interviews to a sampling universe of adult citizens 15 years old and older from different developed and developing countries around the world. For our purposes, as we need specific variables related to democracy, our sample is composed of around 240,000 individuals (from 85 countries) that were surveyed during the so-called third, fourth and fifth waves, between 1994 and 2008.[7]

As measures of our dependent variable, democracy, we use a broad set of proxies. The first one is included in the three waves and is regarded as our preferred measure. It answers the question: "Would you say having a democratic political system is a very good, fairly good, fairly bad or very bad way of governing this country?" The other three proxies considered are included in the third and fourth waves, only. It shows the individuals' agreement -in a scale from 1 to 4- with the following statements: (i) "In democracy economic system does not run badly"; (ii) "Democracies are good at maintaining order", and (iii) "Democracy may have problems but is better". For the sake of completeness we use another proxy that is included in the fifth wave, only. On a scale from one to ten, this variable answers the question: "How important is it for you to live in a country that is governed democratically?" The five proxies used are described in detail in Table 1. They are all categorical variables and as a consequence the coefficients are estimated using ordered probits.[8]

INSERT TABLE 1 HERE

As mentioned above, the most important explanatory variable is years of schooling of the individuals. We transform the available categorical variable in pseudo years of education

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[7] The countries along with their respective samples and the wave in which was executed the survey are presented in Appendix 1.
[8] Ordinary least squares were also estimated, and results are analogous.

according to each level attained. Along with our variable of interest the other explanatory variables included in the benchmark specification are: age, a dummy variable for gender that equals one for women, a dummy variable for marital status that equals one for being single, two dummy variables for employment status: employed, and unemployed; a dummy variable that equals one when the individuals live with their parents, and a scale of income in which the individuals' household falls into according to their perception.[9]

We also use other control variables that are not included in the benchmark specification because they significantly reduce the sample. These variables are the following: a categorical variable that represents the size of the town of residence, how much respect for individual human rights do the individuals perceived in their country, and self positioning in a political scale (from left to right). In other regressions we add to the benchmark specification variables related to the individuals satisfaction with democracy in their own countries. One variable ask directly about the no satisfaction with the way democracy develops in the individuals' country (third and fourth wave), and the other asks how democratically is the individuals' country being governed (fifth wave). The summary statistics of all these variables, and the ones described lines above, is presented in Table 2.

INSERT TABLE 2 HERE

Additionally, all estimations include country and year dummies, have robust standard errors, and are clustered by the country and wave in which the survey was executed. Table 3 presents a correlation matrix between all our proxies of *Democracy* and the explanatory variables, with corresponding *p*-values of the coefficients.

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[9] For more details about the definition of these and the following variables presented in this section, see Table 1.

INSERT TABLE 3 HERE

Additionally, for illustrative purposes Figure 1 presents the average years of schooling of people that approve and disapprove democracy, using our five proxies, by region (as classified by the World Bank). It appears that, across the regions, less educated people favor less democracy.

INSERT FIGURE 1 HERE

4. Regression results

In Table 4, we present the results of ordered probit regressions using the approval of a democratic system as our dependent variable. The first column presents our main results using the benchmark specification, and the other columns use the additional explanatory variables mentioned above. In the four regressions presented, schooling yields a statistically significant coefficient at one percent as well as a positive link with respect to approval of democracy. Additionally, being older, male, employed and unemployed (compared to students, retired and housewives) seems to have a robust negative and statistically significant effect on the dependent variable. In the second column, results show that residents of large towns and individuals maintaining that human rights are respected in their country are more likely to approve of democracy. In the last four columns we evaluate the effects of the perception of democracy and its interaction with education on the preference for democracy. Individuals not satisfied with the way democracy develops in their country approve less

democracy (columns 3 and 4), and those who think that their government is more democratic approve it more than otherwise (columns 5 and 6). We also add interactive terms between education and democracy, and they yield coefficients that are not statistically significant at conventional levels. This result implies that the effect on pro-democracy views is positive independently of the type of regime. This is fully consistent with our theoretical model that argues that the informative benefits of education are universal across the regimes and is not consistent with Lott's, 1990, implication that totalitarian regimes successfully use education to indoctrinate citizens into supporting the regime.

INSERT TABLE 4 HERE

The corresponding marginal effects of the coefficients of Table 4 are presented in Table 5. For the sake of economy we only show the change of an average individual in the sample who believes that it is fairly good to have a democratic system.[10] In the first column, one more year of schooling implies that the probability of perceiving a democratic system as good (not just fairly good) is estimated to increase by 1.2 percentage points. This effect results very similar in the other columns –between 1.1 and 1.4 percentage points increase.

INSERT TABLE 5 HERE

The coefficients resulting from the regressions using the other four *Democracy* proxies available are presented in Table 6. The marginal effects are presented in Appendix 2. The coefficients for our variable of interest are again positive and statistically significant at one percent. With respect to the other explanatory variables, we find that older individuals

[10] Summary statistics presented in Table 2 show that the mean of the variable "Approval of a democratic political system" is 3.

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tend to agree with the idea that democracy may have problems but it is better (column 3) and that living in a country governed democratically is important (column 4); but they tend to disagree about democracies being good maintaining order (column 2). As in Table 4, being a male or belonging to a higher scale of income have a positive and statistically significant effect on pro-democracy preferences.

INSERT TABLE 6 HERE

With respect to the town size, we find that the corresponding coefficient yields a positive and statistically significant effect in two of the four regressions presented in Table 6. Living in countries where individuals perceive that there is more respect of human rights or that democracy is developed in a satisfactory way, have again a statistically significant and positive effect.

Endogeneity may be an issue of concern, primarily because of potentially omitted variables. (Notice that, as we deal with democratic attitudes, reverse causality is unlikely here.) To address it, Table 7 and Table 8 present our findings using instrumental variables (IV). In both tables we use the (i) savings of the respondent's family during the previous year and (ii) the respondent's number of children as instrumental variables. These instruments appear to be sensible ones. Income and thus savings are typically positively correlated with education, however, there is no reason to expect that level of savings may be linked in a consistent way with democratic perceptions. Similarly, while one would expect a negative correlation between the number of children and the individual's education level, the former is unlikely to be directly correlated with democratic perceptions[11].

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[11] China may be considered an outlier. When excluding this country from our sample our results do not change.

INSERT TABLE 7 HERE

In Table 7 we present the benchmark specification of Table 4 as well as an additional specification that includes additional explanatory variables (that reduce the sample size dramatically though). This table also includes the marginal effects of a change from the mean, in this case, the probability increase of being in category 4. In both regressions the effect of schooling over the preference for democracy is the same as before: a coefficient that is positive and statistically significant at conventional levels. The marginal effect of education is somewhat smaller than the one without instrumental variables. The probability of the belief that having a democratic political system is good, not just fairly good, increases in 1.3 and 1.2 percentage points, in columns 2 and 4, respectively. From the last row of this table which presents corresponding p-value significance of both instruments, it is seen that they are statistically significant[12].

INSERT TABLE 8 HERE

In Table 8 we present the results of the benchmark specification using the other four proxies of *Democracy*. We also include in this table the marginal effects. The education coefficient is positive and statistically significant, and the marginal effects are smaller but also result statistically significant. The first stage regressions of Table 7 and 8 are presented in Appendix 3. In those regressions the corresponding coefficients are as expected: less educated individuals have a larger number of children than more educated ones; and families

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[12] Also, corresponding tests of exclusion restrictions show that the instruments employed are good ones.

of less educated individuals just get by or spend savings.

5. Concluding remarks

The relationship between education and democracy has been a long standing subject of interest, both theoretically and empirically. Influential commentators have suggested mechanisms through which education may promote democracy, and the link between the two has been well documented in the recent literature. Discerning the causal impact of education – as suggested by prominent observers – has proved difficult, however, because of endogeneity issues. Further, suggestions have been made that education may promote democracy under democratic regimes only, whereas in non-democratic setting the effect might reverse itself.

In this paper, therefore, we purport to make a twofold contribution. Using rich survey data we study whether education promotes pro-democratic preferences; and whether this effect differs across countries with different levels of democracy. Our theoretical model suggests that educated individuals have a comparative advantage under democracy in translating their (better) judgment of public policies into action. This informative advantage emerges even when the ruler uses deception to misinform the population in order to tilt outcomes to own advantage. Consequently, the educated favor democracy more than less educated individuals.

The empirical part employs tests the main implications of our analysis using individual level data from across the globe. We find a robust effect of education on pro-democratic attitudes, using a variety of proxies for the latter, personal characteristics as controls, and also addressing endogeneity issues. Specifically, one more year of schooling

implies an increase in the likelihood of perceiving a democratic system as good, as opposed to fairly good, by more than one percentage point. Moreover, the effect exists regardless of a country's level of democracy, suggesting that the possible use of education for indoctrination purposes in non-democratic environments may have limited consequences.

Based on survey data, this research complements previous efforts that find a positive effect of education on measures of civic participation. Whereas the latter are often interpreted as being correlated with democracy, the relationship is not straightforward as one could imagine social activities whose nature is anti-democratic. In this sense, findings presented here offer perhaps more direct evidence on how education may affect democracy. Additionally, this study rejects the view that education promotes democratic views only under democracies as the effect identified here holds universally.

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Figure 1
Schooling and Approval of Democracy

Approval of a democratic political system

Years of schooling

High income: OECD — Very bad (1): ~9.9, Very good (4): ~11.5
High income: nonOECD — ~9.8, ~11.0
Low income — ~8.0, ~9.1
Lower middle income — ~10.3, ~10.5
Upper middle income — ~10.2, ~10.9

"Having a democratic political system" is

■ Very bad (1) ■ Very good (4)

Agreement with "In democracy, economic system does not run badly"

Years of schooling

High income: OECD — ~9.7, ~11.6
High income: nonOECD — ~10.7, ~12.3
Low income — ~8.5, ~10.0
Lower middle income — ~10.4, ~10.6
Upper middle income — ~10.0, ~11.0

■ Strongly disagree (1) ■ Strongly agree (4)

Agreement with "Democracies are good at maintaining order"

Years of schooling

High income: OECD — ~9.5, ~11.5
High income: nonOECD — ~10.9, ~12.2
Low income — ~9.0, ~10.2
Lower middle income — ~10.4, ~10.8
Upper middle income — ~10.0, ~11.0

■ Strongly disagree (1) ■ Strongly agree (4)

Agreement with "Democracy may have problems but is better"

Years of schooling

High income: OECD — ~9.9, ~11.2
High income: nonOECD — ~12.0, ~11.8
Low income — ~9.0, ~10.0
Lower middle income — ~10.9, ~10.4
Upper middle income — ~9.9, ~10.8

■ Strongly disagree (1) ■ Strongly agree (4)

Importance of living in a country that is governed democratically

Years of schooling

High income: OECD — ~10.4, ~11.8
High income: nonOECD — ~9.9, ~10.8
Low income — ~6.6, ~8.2
Lower middle income — ~9.5, ~10.4
Upper middle income — ~9.3, ~10.6

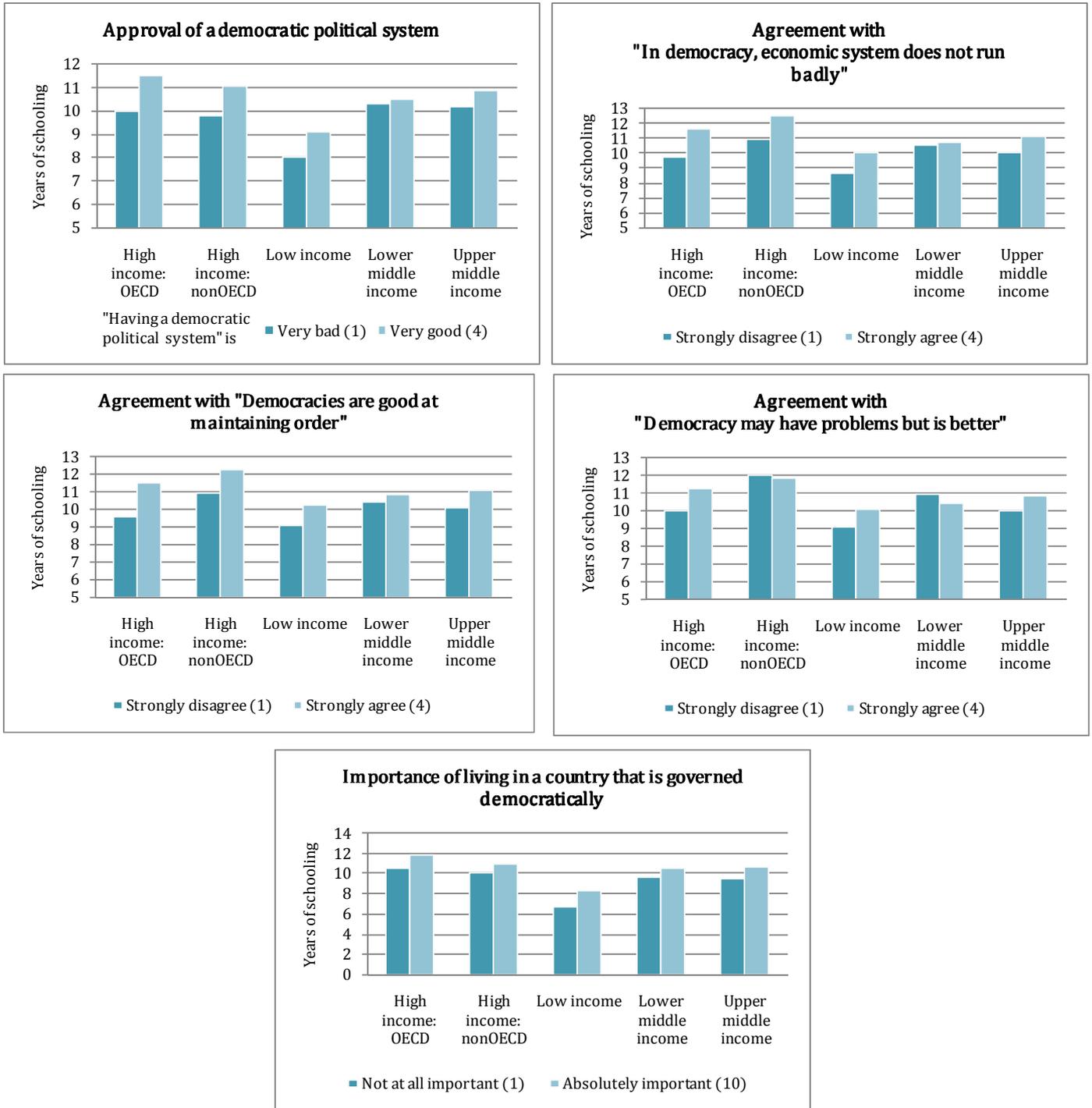■ Not at all important (1) ■ Absolutely important (10)

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Table 1
Variables Description

Variable	Description
Approval of a democratic political system	The question in the survey is as follows: Would you say it is a (1) very good, (2) fairly good, (3) bad or (4) very bad way of governing this country having a democratic political system. This variable scale was changed to: (1) very bad – (4) very good. Source: World Value Surveys (Third, Fourth and Fifth Waves).
Agreement with opinion that says that in democracy economic system does not run badly	The question in the survey is: Could you please tell me if you (1) agree strongly, (2) agree, (3) disagree or (4) strongly disagree with this statement "In democracy economic system runs badly". Source: World Value Surveys (Third and Fourth Waves).
Agreement with opinion that says that democracies are good at maintaining order	The question in the survey is: Could you please tell me if you (1) agree strongly, (2) agree, (3) disagree or (4) strongly disagree whit this statement "Democracies aren't good at maintaining order". Source: World Value Surveys (Third and Fourth Waves).
Agreement with the opinion that says that democracy may have problems but is better	The question in the survey is: Could you please tell me if you (1) agree strongly, (2) agree, (3) disagree or (4) strongly disagree whit this statement "Democracy may have problems but is better than any other form of government". This variable scale was changed to: (1) strongly disagree – (4) agree strongly. Source: World Value Surveys (Third and Fourth Waves).
Importance of living in a country that is governed democratically	The question in the survey is: How important is it for you to live in a country that is governed democratically? On this scale where 1 means "it is not important at all" and 10 means "absolutely important". Source: World Value Surveys (Fifth Wave).
Schooling	The exact question in the survey is: What is the highest educational level that you have attained? (1) Inadequately completed elementary education, (2) Completed (compulsory) elementary education, (3) Incomplete secondary school: technical/vocational type, (4) Complete secondary school: technical/vocational type, (5) Incomplete secondary: university-preparatory, (6) Complete secondary: university-preparatory, (7) Some university without degree/higher education, (8) University with degree/higher education. This variable was changed to one with pseudo years of education, according to each level: To (1) we assigned 3 years of schooling; to (2), 6; to (3), 8.5; to (4), 11; to (5), 12.5; to (6), 14; to (7), 13.5; and to (8), 16. Source: World Value Surveys (Third, Fourth and Fifth Waves).
Age	Respondent's age. Source: World Value Surveys (Third, Fourth and Fifth Waves).
Gender	Gender of the respondent. (1) Female and (0) Male. Source: World Value Surveys (Third, Fourth and Fifth Waves).
Marital status	2 dummies: (1) Married, living together as married, divorced, separated or widowed, and (2) Single. In all the regressions (1) is the omitted dummy. Source: World Value Surveys (Third, Fourth and Fifth Waves).
Employment status	Employment status composed of 3 dummies: (1) Employed (Part or full time) and Self-employed; (2) Retired/pensioned, Housewife not otherwise employed, and Student; and (3) Unemployed. In all the regressions, dummy (2) is omitted. Source: World Value Surveys (Third, Fourth and Fifth Waves).
Scale of income	A scale of incomes in which the household falls into, before taxes and other deductions. This variable takes values from 1 to 10, 1 being the lowest decile and 10 the highest. The data is recollected in local currency, scaled and then aggregated so the deciles represent a country level income ranking. Source: World Value Surveys (Third, Fourth and Fifth Waves).
Size of town	Categorical variable: (1) Under 2,000; (2) 2-5,000; (3) 5-10,000; (4) 10-20,000; (5) 20-50,000; (6) 50-100,000; (7) 100-500,000; and (8) 500,000 and more. Source: World Value Surveys (Third, Fourth and Fifth Waves).
Respect of human rights in	The question in the survey is: How much respect is there for individual human rights

Variable	Description
own country	nowadays in this country? Do you feel there is: (1) A great deal of respect for individual rights, (2) Fairly much respect, (3) Not much respect, and (4) No respect at all. This variable scale was changed to: (1) No respect at all – (4) A great deal of respect (...). Source: World Value Surveys (Third, Fourth and Fifth Waves).
Self positioning in political scale	How the respondent place his/her views on the scale from (1) Left to (10) Right. Source: World Value Surveys (Third, Fourth and Fifth Waves).
No satisfaction with the way democracy develops	The question in the survey is: On the whole are you very satisfied, not very satisfied or not at all satisfied with the way democracy is developing in our country? (1) Very satisfied, (2) Rather satisfied, (3) Not very satisfied, and (4) Not at all satisfied. Source: World Value Surveys (Third and Fourth Waves).
Democracy in own country	The question in the survey is: How democratically is this country being governed today? Again using a scale from 1 to 10, where 1 means it is "not at all democratic" and 10 means that it is "completely democratic", what position you use? Source: World Value Surveys (Fifth Wave).
Number of children	Number of children, where 0 means no children. Source: World Value Surveys (Third, Fourth and Fifth Waves).
Savings	4 dummies that answer to the question: During the past year, did your family: (1) Save money, (2) Just get by, (3) Spent some savings, and (4) Spent savings and borrowed money. The omitted category is the first one. Source: World Value Surveys (Third, Fourth and Fifth Waves).

Table 2
Summary Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Individual-Level Data					
Approval of a democratic political system	168,542	3.3660	0.7219	1	4
Agreement with opinion that says that in democracy economic system does not run badly	99,476	2.7430	0.7914	1	4
Agreement with opinion that says that democracies are good at maintaining order	101,648	2.7352	0.8124	1	4
Agreement with the opinion that says that democracy may have problems but is better	103,346	3.2669	0.7353	1	4
Importance of living in a country that is governed democratically	49,204	8.6028	1.9138	1	10
Schooling	168,542	10.6126	4.1992	3	16
Age	168,542	40.7457	15.8711	15	99
Gender: Female	168,542	0.5026	0.5000	0	1
Marital Status: Single	168,542	0.2485	0.4321	0	1
Living with her parents	168,542	0.2727	0.4453	0	1
Employment status: Employed	168,542	0.5428	0.4982	0	1
Employment status: Unemployed	168,542	0.0924	0.2896	0	1
Scale of income	168,542	4.6327	2.4031	1	10
Size of town	118,529	4.9526	2.4838	1	8
Respect of human rights in own country	125,978	2.5779	0.8752	1	4
Self-positioning in political scale	129,160	5.6894	2.3777	1	10
Satisfaction with the way democracy develops	71,819	2.4111	0.8322	1	4
Democracy in own country	45,647	6.4195	2.4270	1	10
Savings: Family saved money	132,582	0.2388	0.4264	0	1
Savings: Family just get by	132,582	0.4910	0.4999	0	1
Savings: Family spend some savings	132,582	0.1469	0.3540	0	1
Savings: Family spend savings and borrowed money	132,582	0.1234	0.3288	0	1
Number of children	162,544	1.9154	1.7958	0	20

Table 3
Correlation between Individual-Level Variables and Preference for Democracy

	Approval of a democratic political system	Agreement with opinion that says that in democracy economic system does not run badly	Agreement with opinion that says that democracies are good at maintaining order	Agreement with the opinion that says that democracy may have problems but is better	Importance of living in a country that is governed democratically
Schooling	0.038	0.0857	0.0802	0.026	0.0733
	0.000	0.000	0.000	0.000	0.000
Age	-0.0067	-0.0097	-0.0393	0.0342	0.0521
	0.006	0.002	0.000	0.000	0.000
Gender: Female	-0.0386	-0.0437	-0.026	-0.0254	-0.0111
	0.000	0.000	0.000	0.000	0.013
Marital Status: Single	0.0239	0.0168	0.028	-0.0085	-0.0111
	0.000	0.000	0.000	0.006	0.014
Living with her parents	0.0074	-0.017	-0.0027	-0.0159	-0.0534
	0.002	0.000	0.382	0.000	0.000
Employment status: Employed	0.0164	0.0491	0.047	0.014	0.0145
	0.000	0.000	0.000	0.000	0.001
Employment status: Unemployed	-0.0174	-0.0423	-0.0245	-0.0228	-0.035
	0.000	0.000	0.000	0.000	0.000
Scale of income	0.0693	0.1213	0.1033	0.0508	0.0624
	0.000	0.000	0.000	0.000	0.000
Size of town	0.0173	0.0185	0.0206	0.0138	0.0654
	0.000	0.000	0.000	0.000	0.000
Respect of human rights in own country	0.1371	0.1282	0.1389	0.1208	0.0988
	0.000	0.000	0.000	0.000	0.000
Self-positioning in political scale	0.0041	0.0115	-0.006	0.0296	0.0389
	0.138	0.001	0.087	0.000	0.000
Satisfaction with the way democracy develops	0.2169	0.1581	0.1657	0.1632	-
	0.000	0.000	0.000	0.000	
Democracy in own country	0.1024	-	-	-	0.2332
	0.000				0.000

Table 4
Approval of a Democratic Political System and Education (Coefficients)

	Ordered Probit Regressions (Coefficients)					
	Dependent variable: Approval of a democratic political system					
	(1)	(2)	(3)	(4)	(5)	(6)
Schooling	0.030***	0.036***	0.035***	0.048***	0.026***	0.020***
	(0.002)	(0.003)	(0.004)	(0.014)	(0.004)	(0.006)
Age	0.004***	0.004***	0.003***	0.003***	0.004***	0.004***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Gender: Female	-	-	-	-	-	
	0.068***	0.069***	0.081***	0.082***	0.044***	-0.043***
	(0.009)	(0.012)	(0.015)	(0.015)	(0.014)	(0.014)
Marital Status: Single	0.023*	0.022	0.017	0.017	0.008	0.008
	(0.012)	(0.017)	(0.017)	(0.017)	(0.022)	(0.022)
Living with her parents	-0.007	-0.023	-0.009	-0.009	0.005	0.005
	(0.013)	(0.018)	(0.020)	(0.021)	(0.024)	(0.024)
Employment status: Employed		-				
	-0.008	0.043***	-0.031**	-0.032**	-0.016	-0.016
	(0.011)	(0.016)	(0.016)	(0.016)	(0.020)	(0.020)
Employment status: Unemployed		-	-	-		
	-0.042**	0.076***	0.084***	0.084***	-0.000	-0.000
	(0.017)	(0.023)	(0.023)	(0.023)	(0.027)	(0.027)
Scale of income	0.017***	0.017***	0.017***	0.017***	0.005	0.005
	(0.004)	(0.004)	(0.004)	(0.004)	(0.007)	(0.007)
Size of town		0.009**				
		(0.004)				
Respect of human rights in own country		0.153***				
		(0.019)				
Self-positioning in political scale		0.006				
		(0.007)				
Satisfaction with the way democracy develops			0.213***	0.271***		
			(0.027)	(0.067)		
Satisfaction with the way democracy develops * Schooling				-0.006		
				(0.005)		
Democracy in own country					0.049***	0.038***
					(0.009)	(0.014)
Democracy in own country * Schooling						0.001
						(0.001)
Country dummies	Yes	Yes	Yes	Yes	Yes	Yes
Region dummies	No	No	No	No	No	No
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes
Waves	3, 4, 5	3, 4, 5	3,4	3,4	5	5
Observations	168,542	66,661	71,819	71,819	45,647	45,647
Number of Country Waves	140	80	67	67	37	37
Pseudo R2	0.0642	0.0776	0.0780	0.0781	0.0581	0.0581

Robust standard errors are presented in parentheses. They are clustered by country and corresponding survey wave *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table 5
Approval of a Democratic Political System and Education (Marginal Effects)

	Ordered Probit Regressions (Marginal Effects, =4)			
	Dependent variable: Approval of a democratic political system			
	(1)	(2)	(3)	(5)
Schooling	0.012***	0.014***	0.014***	0.011***
	(0.001)	(0.001)	(0.002)	(0.001)
Age	0.002***	0.002***	0.001***	0.002***
	(0.000)	(0.000)	(0.000)	(0.000)
Gender: Female	-0.027***	-0.027***	-0.032***	-0.017***
	(0.003)	(0.005)	(0.006)	(0.006)
Marital Status: Single	0.009*	0.009	0.007	0.003
	(0.005)	(0.007)	(0.007)	(0.009)
Living with her parents	-0.003	-0.009	-0.004	0.002
	(0.005)	(0.007)	(0.008)	(0.010)
Employment status: Employed	-0.003	-0.017***	-0.013**	-0.006
	(0.004)	(0.006)	(0.006)	(0.008)
Employment status: Unemployed	-0.017**	-0.030***	-0.033***	-0.000
	(0.007)	(0.009)	(0.009)	(0.011)
Scale of income	0.007***	0.007***	0.007***	0.002
	(0.001)	(0.002)	(0.002)	(0.003)
Size of town		0.004**		
		(0.002)		
Respect of human rights in own country		0.061***		
		(0.008)		
Self-positioning in political scale		0.002		
		(0.003)		
Satisfaction with the way democracy develops			0.085***	
			(0.011)	
Democracy in own country				0.019***
				(0.004)
Waves	3, 4, 5	3, 4, 5	3, 4	5
Observations	168,542	66,661	71,819	45,647

Marginal effects measure the change in the probability of chose the fourth category. Column (4) corresponds to the marginal effects of column (5) in Table 4. Robust standard errors are presented in parentheses. They are clustered by country and corresponding survey wave. *** p<0.01, ** p<0.05, * p<0.1

Table 6
Measures of Preference for Democracy and Education (Coefficients)

	Ordered Probit Regressions (Coefficients)							
	Dependent variable:							
	Agree with "In democracy, economic system does not run badly"		Agree with "Democracies are good at maintining order"		Agree with "Democracy may have problems but is better"		Importance of living in a country that is governed democratically	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Schooling	0.027***	0.033***	0.027***	0.031***	0.027***	0.030***	0.031***	0.039***
	(0.003)	(0.004)	(0.003)	(0.004)	(0.003)	(0.006)	(0.003)	(0.005)
Age	0.001	0.000	-0.001***	-0.002***	0.004***	0.004***	0.005***	0.006***
	(0.001)	(0.001)	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)
Gender: Female	-0.086***	-0.092***	-0.044***	-0.031**	-0.046***	-0.049***	-0.030*	-0.033
	(0.011)	(0.014)	(0.009)	(0.013)	(0.010)	(0.013)	(0.016)	(0.025)
Marital Status: Single	0.040**	0.035*	0.018	-0.001	-0.014	-0.035	-0.003	-0.019
	(0.016)	(0.020)	(0.013)	(0.019)	(0.014)	(0.022)	(0.017)	(0.031)
Living with her parents	-0.044***	-0.057***	-0.039***	-0.045**	0.008	0.025	0.000	-0.003
	(0.015)	(0.021)	(0.012)	(0.018)	(0.014)	(0.020)	(0.016)	(0.024)
Employment status: Employed	0.010	0.003	0.016	0.020	0.002	-0.017	0.003	-0.014
	(0.011)	(0.018)	(0.010)	(0.015)	(0.012)	(0.017)	(0.018)	(0.028)
Employment status: Unemployed	-0.076***	-0.079**	-0.038**	-0.048*	-0.029	-0.047	-0.023	-0.071
	(0.017)	(0.031)	(0.016)	(0.028)	(0.022)	(0.032)	(0.036)	(0.054)
Scale of income	0.032***	0.032***	0.026***	0.023***	0.018***	0.018***	0.008	-0.003
	(0.004)	(0.004)	(0.004)	(0.004)	(0.005)	(0.005)	(0.008)	(0.010)
Size of town		0.005		0.010**		0.012***		0.014
		(0.005)		(0.005)		(0.004)		(0.009)
Respect of human rights in own country		0.090***		0.083***		0.100***		0.028
		(0.022)		(0.020)		(0.022)		(0.031)
Self-positioning in political scale		0.014*		-0.004		0.020**		0.018
		(0.007)		(0.009)		(0.010)		(0.013)
Satisfaction with the way democracy develops		0.135***		0.123***		0.156***		
		(0.026)		(0.021)		(0.027)		
Democracy in own country								0.099***
								(0.015)
Country dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Waves	3,4	3,4	3,4	3,4	3,4	3,4	5	5
Observations	105,417	42,415	107,692	42,914	108,941	43,520	52,766	23,310
Number of Country Waves	97	54	98	54	97	54	39	26
Pseudo R2	0.0433	0.0548	0.0424	0.0595	0.0621	0.0966	0.0295	0.0436

Robust standard errors are presented in parentheses. They are clustered by country and corresponding survey wave. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table 7
Approval of a Democratic Political System and Education using IV

| | Ordered Probit Regressions and Instrumental Variables | | | |
| | Dependent variable: Approval of a democratic political system | | | |
	(1) Coefficient	(2) Marginal Effect (=4)	(3) Coefficient	(4) Marginal Effect (=10)
Schooling	0.032***	0.013***	0.030*	0.012*
	(0.007)	(0.003)	(0.016)	(0.006)
Age	0.004***	0.002***	0.004**	0.002**
	(0.001)	(0.000)	(0.002)	(0.001)
Gender: Female	-0.064***	-0.026***	-0.064***	-0.025***
	(0.011)	(0.004)	(0.017)	(0.007)
Marital Status: Single	0.023	0.009	0.032	0.013
	(0.015)	(0.006)	(0.025)	(0.010)
Living with her parents	-0.006	-0.002	-0.029	-0.011
	(0.015)	(0.006)	(0.023)	(0.009)
Employment status: Employed	-0.013	-0.005	-0.056*	-0.022*
	(0.015)	(0.006)	(0.029)	(0.012)
Employment status: Unemployed	-0.042**	-0.017**	-0.110***	-0.044***
	(0.019)	(0.008)	(0.030)	(0.012)
Scale of income	0.011**	0.004**	0.010	0.004
	(0.005)	(0.002)	(0.009)	(0.004)
Size of town			0.007	0.003
			(0.006)	(0.002)
Respect of human rights in own country			0.102***	0.041***
			(0.023)	(0.009)
Self-positioning in political scale			-0.000	-0.000
			(0.008)	(0.003)
Country dummies	Yes	Yes	No	No
Year dummies	Yes	Yes	Yes	Yes
Waves	3, 4, 5	3, 4, 5	3, 4, 5	3, 4, 5
Observations	129,506	129,506	39,224	39,224
Number of Country Waves	112		50	
Pseudo R2	0.0576		0.0634	
Instruments Significance (1st stage, P-value)	0.000		0.000	

Robust standard errors are presented in parentheses. They are clustered by country and corresponding survey wave. These are the results of the second stage regressions. In the first stages, education is explained by all the other controls presented here and the excluded instruments: family savings and number of children. The results of the first stages are presented in Appendix 3. Marginal effects measure the change in the probability of chose the fourth category. *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table 8
Measures of Preference for Democracy and Education using IV

	Ordered Probit Regressions and Instrumental Variables							
	Dependent variable:							
	Agree with "In democracy, economic system does not run badly"		Agree with "Democracies are good at maintaining order"		Agree with "Democracy may have problems but is better"		Importance of living in a country that is governed democratically	
	(1) Coefficient	(2) Marginal Effect (=4)	(3) Coefficient	(4) Marginal Effect (=4)	(5) Coefficient	(6) Marginal Effect (=4)	(7) Coefficient	(8) Marginal Effect (=4)
Schooling	0.019*	0.004*	0.023***	0.005***	0.020*	0.008*	0.036***	0.014***
	(0.011)	(0.003)	(0.009)	(0.002)	(0.010)	(0.004)	(0.013)	(0.005)
Age	0.000	0.000	-0.001	-0.000	0.004***	0.002***	0.005***	0.002***
	(0.001)	(0.000)	(0.001)	(0.000)	(0.001)	(0.000)	(0.002)	(0.001)
Gender: Female	-0.080***	-0.018***	-0.055***	-0.013***	-0.036***	-0.014***	-0.032*	-0.013*
	(0.013)	(0.003)	(0.011)	(0.002)	(0.013)	(0.005)	(0.018)	(0.007)
Marital Status: Single	0.049**	0.011**	0.029*	0.007*	-0.010	-0.004	-0.018	-0.007
	(0.020)	(0.004)	(0.015)	(0.004)	(0.019)	(0.007)	(0.022)	(0.009)
Living with her parents	-0.038**	-0.008**	-0.031**	-0.007**	0.017	0.007	-0.011	-0.004
	(0.017)	(0.004)	(0.015)	(0.003)	(0.017)	(0.006)	(0.018)	(0.007)
Employment status: Employed	0.016	0.004	0.012	0.003	-0.006	-0.002	0.006	0.002
	(0.015)	(0.003)	(0.013)	(0.003)	(0.016)	(0.006)	(0.024)	(0.010)
Employment status: Unemployed	-0.067***	-0.015***	-0.040**	-0.009**	-0.017	-0.006	-0.017	-0.007
	(0.019)	(0.004)	(0.019)	(0.004)	(0.023)	(0.009)	(0.039)	(0.016)
Scale of income	0.030***	0.007***	0.022***	0.005***	0.016**	0.006**	0.004	0.002
	(0.007)	(0.001)	(0.006)	(0.001)	(0.006)	(0.003)	(0.010)	(0.004)
Country dummies	Yes	Yes	No	No	Yes	Yes	No	No
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Waves	3, 4	3, 4	3, 4	3, 4	3, 4	3, 4	5	5
Observations	74,299	74,299	75,837	75,837	76,248	76,248	46,795	46,795
Number of Country Waves	71		72		71		37	
Pseudo R2	0.0395		0.0334		0.0571		0.0274	
Instruments Signficance (1st stage, P-value)	0.000		0.000		0.000		0.000	

Robust standard errors are presented in parentheses. They are clustered by country and corresponding survey wave. These are the results of the second stage regressions. In the first stages, education is explained by all the other controls presented here and the excluded instruments: family savings and number of children. The results of the first stages are presented in Appendix 3. Marginal effects measure the change in the probability of chose the fourth category, for columns (1) to (6), and the 10th category, for columns (7) and (8). *** p<0.01, ** p<0.05, * p<0.1

Appendix 1
Country Sample by Survey Wave

Country	Wave 1994-1999	Wave 1999-2004	Wave 2005-2008	Total	Country	Wave 1994-1999	Wave 1999-2004	Wave 2005-2008	Total
Albania	999	1,000	0	1,999	Korea, Rep.	1,249	1,200	1,200	3,649
Algeria	0	1,282	0	1,282	Latvia	1,200	1,013	0	2,213
Argentina	1,079	1,280	1,002	3,361	Lithuania	1,009	1,018	0	2,027
Armenia	2,000	0	0	2,000	Luxembourg	0	1,211	0	1,211
Australia	2,048	0	1,421	3,469	Malaysia	0	0	1,201	1,201
Austria	0	1,522	0	1,522	Mali	0	0	1,534	1,534
Azerbaijan	2,002	0	0	2,002	Malta	0	1,002	0	1,002
Bangladesh	1,525	1,500	0	3,025	Mexico	2,364	1,535	1,560	5,459
Belarus	2,092	1,000	0	3,092	Moldova	984	1,008	1,046	3,038
Belgium	0	1,912	0	1,912	Morocco	0	2,264	1,200	3,464
Brazil	1,149	0	1,500	2,649	Netherlands	0	1,003	1,050	2,053
Bulgaria	1,072	1,000	1,001	3,073	New Zealand	1,201	0	954	2,155
Burkina Faso	0	0	1,534	1,534	Nigeria	1,996	2,022	0	4,018
Canada	0	1,931	0	1,931	Norway	1,127	0	0	1,127
Chile	1,000	1,200	1,000	3,200	Pakistan	733	2,000	0	2,733
China	2,280	1,000	3,242	6,522	Peru	1,211	1,501	1,500	4,212
Colombia	6,025	0	3,025	9,050	Philippines	1,200	1,200	0	2,400
Croatia	1,196	1,003	0	2,199	Poland	1,153	1,095	1,000	3,248
Cyprus	0	0	1,050	1,050	Portugal	0	1,000	0	1,000
Czech Republic	1,147	1,908	0	3,055	Romania	1,239	1,146	1,776	4,161
Denmark	0	1,023	0	1,023	Russian Federation	2,040	2,500	2,033	6,573
Dominican Republic	417	0	0	417	Saudi Arabia	0	1,502	0	1,502
Egypt, Arab Rep.	0	3,000	3,051	6,051	Singapore	0	1,512	0	1,512
El Salvador	1,254	0	0	1,254	Slovak Republic	1,095	1,331	0	2,426
Estonia	1,021	1,005	0	2,026	Slovenia	1,007	1,006	1,037	3,050
Ethiopia	0	0	1,500	1,500	South Africa	2,935	3,000	2,988	8,923
Finland	987	1,038	1,014	3,039	Spain	1,211	2,409	1,200	4,820
France	0	1,615	1,001	2,616	Sweden	1,009	1,015	1,003	3,027
Germany	2,026	2,036	2,064	6,126	Switzerland	1,212	0	1,241	2,453
Ghana	0	0	1,534	1,534	Tanzania	0	1,171	0	1,171
Greece	0	1,142	0	1,142	Thailand	0	0	1,534	1,534
Hong Kong, China	0	0	1,252	1,252	Trinidad and Tobago	0	0	1,002	1,002
Hungary	650	1,000	0	1,650	Turkey	1,907	4,607	1,346	7,860
Iceland	0	968	0	968	Uganda	0	1,002	0	1,002
India	2,040	2,002	2,001	6,043	Ukraine	2,811	1,195	1,000	5,006
Indonesia	0	1,004	2,015	3,019	United Kingdom	1,093	2,000	1,041	4,134
Iran, Islamic Rep.	0	2,532	2,667	5,199	United States	1,542	1,200	1,249	3,991
Iraq	0	2,325	2,701	5,026	Uruguay	1,000	0	0	1,000
Ireland	0	1,012	0	1,012	Venezuela, RB	1,200	1,200	0	2,400
Israel	0	1,199	0	1,199	Vietnam	0	1,000	1,495	2,495
Italy	0	2,000	1,012	3,012	Zambia	0	0	1,500	1,500
Japan	1,054	1,362	1,096	3,512	Zimbabwe	0	1,002	0	1,002
Jordan	0	1,223	1,200	2,423	Total	71,791	94,894	72,573	239,258

Appendix 2
Measures of Preference for Democracy and Education (Marginal Effects)

	Ordered Probit Regressions (Marginal Effects)							
	Dependent variable:							
	Agreem. with "In democracy, economic system does not run badly" (=4)		Agreem. with "Democracies are good at maintining order" (=4)		Agreem. with "Democracy may have problems but is better" (=4)		Importance of living in a country that is governed democratically (=10)	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Schooling	0.006***	0.007***	0.006***	0.007***	0.010***	0.012***	0.012***	0.016***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.002)
Age	0.000	0.000	-0.000***	-0.000***	0.002***	0.002***	0.002***	0.003***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)
Gender: Female	-0.018***	-0.019***	-0.010***	-0.007**	-0.018***	-0.019***	-0.012*	-0.013
	(0.002)	(0.003)	(0.002)	(0.003)	(0.004)	(0.005)	(0.006)	(0.010)
Marital Status: Single	0.009**	0.007*	0.004	-0.000	-0.005	-0.013	-0.001	-0.008
	(0.003)	(0.004)	(0.003)	(0.004)	(0.006)	(0.009)	(0.007)	(0.012)
Living with her parents	-0.009***	-0.011***	-0.009***	-0.010**	0.003	0.010	0.000	-0.001
	(0.003)	(0.004)	(0.003)	(0.004)	(0.005)	(0.008)	(0.006)	(.)
Employment status: Employed	0.002	0.001	0.004	0.004	0.001	-0.007	0.001	-0.006
	(0.002)	(0.004)	(0.002)	(0.003)	(0.005)	(0.007)	(0.007)	(0.011)
Employment status: Unemployed	-0.015***	-0.015***	-0.008**	-0.010*	-0.011	-0.018	-0.009	-0.028
	(0.003)	(0.006)	(0.003)	(0.006)	(0.008)	(0.012)	(0.014)	(0.022)
Scale of income	0.007***	0.007***	0.006***	0.005***	0.007***	0.007***	0.003	-0.001
	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.003)	(0.004)
Size of town		0.001		0.002**		0.005***		0.005
		(0.001)		(0.001)		(0.002)		(0.003)
Respect of human rights in own country		0.018***		0.019***		0.039***		0.011
		(0.004)		(0.004)		(0.009)		(0.012)
Self-positioning in political scale		0.003*		-0.001		0.008**		0.007
		(0.002)		(0.002)		(0.004)		(0.005)
Satisfaction with the way democracy develops		0.027***		0.027***		0.060***		
		(0.005)		(0.004)		(0.010)		
Democracy in own country								0.039***
								(0.006)
Waves	3,4	3,4	3,4	3,4	3,4	3,4	5	5
Observations	105,417	42,415	107,692	42,914	108,941	43,520	52,766	23,310

Marginal effects measure the change in the probability of chose the fourth category, for columns (1) to (6), and the 10th category, for columns (7) and (8). Robust standard errors are presented in parentheses. They are clustered by country and wave. *** p<0.01, ** p<0.05, * p<0.1.

Appendix 3
First stages of Tables 7 and 8

	OLS regressions					
	Dependent variable: Pseudo years of schooling					
	Table 7		Table (8)			
	(1)	(3)	(1)	(3)	(5)	(7)
Age	-0.038***	-0.041***	-0.035***	-0.035***	-0.036***	-0.044***
	(0.004)	(0.007)	(0.005)	(0.005)	(0.005)	(0.006)
Gender: Female	-0.144**	-0.044	-0.044	-0.061	-0.076	-0.256**
	(0.058)	(0.083)	(0.065)	(0.065)	(0.067)	(0.114)
Marital Status: Single	0.111	0.119	0.006	-0.014	0.013	0.093
	(0.084)	(0.130)	(0.120)	(0.116)	(0.118)	(0.132)
Living with her parents	-0.015	-0.008	-0.040	-0.015	-0.023	0.082
	(0.056)	(0.074)	(0.078)	(0.077)	(0.074)	(0.087)
Employment status: Employed	0.861***	0.792***	0.850***	0.817***	0.828***	0.820***
	(0.095)	(0.117)	(0.126)	(0.125)	(0.133)	(0.122)
Employment status: Unemployed	0.143	-0.031	0.243*	0.204	0.229*	0.064
	(0.111)	(0.166)	(0.128)	(0.124)	(0.134)	(0.212)
Scale of income	0.459***	0.350***	0.445***	0.453***	0.454***	0.461***
	(0.029)	(0.033)	(0.036)	(0.036)	(0.037)	(0.039)
Number of children	-0.456***	-0.389***	-0.410***	-0.420***	-0.414***	-0.514***
	(0.029)	(0.040)	(0.033)	(0.033)	(0.034)	(0.052)
Savings: Family just got by	-0.646***	-0.787***	-0.531***	-0.519***	-0.534***	-0.748***
	(0.056)	(0.088)	(0.063)	(0.067)	(0.068)	(0.099)
Savings: Family spent some savings	-0.352***	-0.576***	-0.321***	-0.349***	-0.323***	-0.359**
	(0.087)	(0.127)	(0.103)	(0.105)	(0.106)	(0.160)
Savings: Family spent savings and borrowed money	-0.659***	-0.776***	-0.622***	-0.587***	-0.628***	-0.752***
	(0.091)	(0.131)	(0.123)	(0.120)	(0.127)	(0.169)
Constant	9.078***	8.094***	11.766***	11.551***	11.778***	12.901***
	(1.026)	(0.401)	(0.606)	(0.634)	(0.632)	(0.412)
Observations	127,011	39,090	72,215	73,745	74,076	46,566
R-squared	0.329	0.330	0.305	0.307	0.317	0.365

Robust standard errors are presented in parentheses. They are clustered by country and corresponding survey wave. These are the results of the first stage regressions of Tables 7 and 8 (using IV). Education is explained by all the other controls presented here and the excluded instruments: family savings and number of children. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$