

Online Appendix for:
“Democracy by demand? Reinvestigating the effect of self-expression values on political regime type”

In the A-sections of this Online Appendix we provide discussions and tests of the multiple imputation model used in the paper, as well as alternative regression models illuminating whether our results are driven by problems with the multiple imputation or not. Thereafter, in the B-sections, we present a number of tables and brief discussions on other robustness tests and extensions of the empirical analysis conducted in the paper.

To be more specific, section A.I describes the key characteristics of the imputation model, for instance specifying the variables that are included. In A.II, we discuss more closely the assumptions underlying the multiple imputation model, focusing on how our specification tries to alleviate concerns that the data may not be missing at random. In A.III, we present and discuss the structure of the missing data, and provide a more specific list for which countries and years there were available data for the different value questions from the regional barometers. In A.IV, we discuss and compare the densities of the observed and imputed data for a number of key variables, notably including the self-expression values index (SEI), before we, in A.V., show and evaluate time series plots for SEI for different countries. We present over-imputation tests and discuss the performance of our imputation model in A.VI. A.VII contains correlation tables, VIF-tests, and sensitivity analysis of our core regression models. These tests pertain to the question of whether the results in the paper are driven by particular variables strongly predicting SEI in the imputation model, and that subsequent multi-collinearity in the regression models using imputed data may induce the null-results.

A.VIII reports our regression models run for specifications where the imputed data are treated *as if* they were observed, thus leaving out the additional uncertainty associated with these being predicted rather than actual data points. Further, it contains models run on restricted time-series samples, to check whether potentially problematic imputed values from the early years – where we have less information on important predictors and fewer actual SEI values – drive the results. Finally, in A.IX, we report our baseline regression models run on a sample constructed from another multiple imputation model, used for a previous working paper version of this paper.

In sum, the discussions and results from the various A-sections lead to the conclusion that our multiple imputation model is performing well, and that potential problems with the imputation do not seem to impinge upon the results in the paper.

Section B.I presents expanded discussion and a table with the results for the analysis described under the section “Extension I: Separating between democratization and democratic stability” in the paper, whereas Section B.II includes longer discussions and results for the section “Extension II: Components of self-expression values”. Section B.III contains a large number of tables with robustness checks and a couple of discussed extensions of the results reported in the paper’s core empirical analysis, from the section “Do self-expression values cause democracy?”. B.IV provides robustness tests for the analysis in the section “The endogeneity issue revisited: Does experience with democracy affect values?”.

The large number of robustness tests clearly point in the same direction as the results in the paper. There is little evidence that self-expression values has any systematic effect on democracy, but there is more evidence that current levels of democracy, and historical experiences with democracy, affect popular values towards self-expression values. The results reported in B.I and B.II also show that the null-finding on self-expression values’ effect on democracy carries over both to the more specific effects of self-expression values on, respectively, democratization and democratic survival, and that, when disaggregating, there is no clear effect of any of the sub-components of SEI on democracy either.

A.I Specification of the imputation model

We employ the Amelia II software (Honaker and King 2010; Honaker et al. 2012) – which accounts for the time-series–cross-section structure of our data – when constructing our imputation model. We ran this model to produce 5 different data sets that were subsequently used in the empirical analysis of the paper. The R-script used for generating the imputation model and the imputation model diagnostics are available at [WEBPAGE REMOVED FOR ANONYMITY](#), and so are the 5 imputed datasets. This webpage also contains the stata do file with replication code for the empirical analysis.

Regarding the technical specifications of our imputation model, it allows for country-specific, second-order polynomial time trends (see Honaker et al. 2012, 20-21). Furthermore, we specify that indexes, fractions and other restricted variables have their theoretical minimum and maximum values as bounds. Variables that are not clearly restricted theoretically, such as GDP per capita, have their empirically observed minimum and maximum values as bounds to avoid potential extreme predictions unduly influencing our results.

As we will discuss also in Section A.II, we included a wide range of relevant variables to improve the predictive power of our multiple imputation model. Table A.1 shows all variables included and their data source. When it comes to the variables from the World Values Survey and the regional surveys, we have drawn data from every wave in which the relevant question was included. We refer to Table A.2 below for an overview over what specific questions were included for different country-years from the different regional barometers, and how these overlap with the different WVS waves in which countries were included. Observations from the five European Values Survey (EVS) waves, which were integrated into the original WVS dataset and are used in addition to WVS observations for constructing SEI scores, are not included in Table A.2. For overlaps between EVS and WVS waves for particular countries, see this [link](#). For more details of these survey questions, we refer to the various online appendices of World Values Survey, Afrobarometer, Latinobarometer, Asia Barometer and Arab Barometer.

Table A.1. Variables included in the imputation model.

| Source | Variable name | Description |
|---|---|--|
| Cingranelli-Richards (CIRI) Human Rights Dataset | ciri_assn ciri_disap ciri_dommov ciri_formov ciri_kill ciri_physint ciri_polpris ciri_tort | Freedom of Assembly and Association Disappearance Freedom of Domestic Movement Freedom of Foreign Movement Extrajudicial Killing Physical Integrity Rights Index Political Imprisonment Torture |
| Freedom House | Fh_cl Fh_pr Fh_rol Fh_status | Civil liberties Political Rights Rule of Law Freedom House status |
| Banks Cross-National Time-Series (CNTS) Data Archive data set | BanksTVs Banksradios Bankspapers BanksPhone BanksPCs Banksmediascale | Per capita TVs 1975-2003 Per capita Radios 1975-2003 Per capita newspaper circulation 1946-1999 Per capita telephone users, inc cellular Per capita personal computers (Limited years, missing data) Media access scale (summed BanksTVs, Banksradios, Bankspapers, ITUInternet)/4) |
| Banks Cross-National Time-Series (CNTS) Data Archive data set | Assasin Strikes Crisis Purges Riots Revol Demos Conflict | Assassinations (Banks) General Strikes (Banks) Government Crises (Banks) Purges (Banks) Riots (Banks) Revolutions (Banks) Anti-Government Demonstrations (Banks) Weighted Conflict Index (Banks) |
| World Bank Governance Indicators | wbgi_cce wbgi_rle | Control of Corruption - Estimate Rule of Law - Estimate |
| World Development Indicators | wdi_exp wdi_fe wdi_gdp wdi_gdpc wdi_gini wdi_oame lp_muslim80 lp_protmg80 ms_mil_xpnd_zs se_xpd_totl_g~s sh_xpd_publ_gs | Exports (% of GDP) Fuel Exports (% of Merchandise Exports) GDP, PPP (Constant International USD) GDP per Capita, PPP (Constant International USD) Gini Index Ores and Metals Exports (% of Merchandise Exports) Muslims (in % of population) Protestants (in % of population) Public spending on military, total (% of gov expend) Public Spending on education, total (% of gov expenditure) Health expenditure, public (% of government expenditure) |
| Polity IV | p_polity p_polity2 | Polity Democracy score Revised Polity Democracy schore |
| Transparency International | ti_cpi | Corruption Perception index |
| World Values Survey (some observations drawn from European Values Survey) | s001 s002 s002evs s003 | Study Wave Wave (EVS) Country/region |

| | | |
|----------------|--|---|
| | s025 a008 a029 a030 a039 a040 a042 a165 a170 e001 e002 e003 e004 e005 e006 e007 e008 e009 e010 e018 e025 e025b e026 e026b e027 e028 e045 e061 e198 e221b f063 f118 f119 f120 g006 g007_01 y001 y002 y003 | Country-year Happiness Independence is important Hard work is important Determinant and perseverance is important Religious faith is important Obedience is important Most people can be trusted Life satisfaction Aims of country (1 st) Aims of country (2 nd) Aims of respondent (1 st) Aims of respondent (2 nd) Most important (1 st) Most important (2 nd) National goals: Maintaining order in nation National goals: Giving people more say National goals: Fighting rising prices National goals: free speech Respect for authority Have signed petition Have recently signed petition Have joined boycott Have recently joined boycott Have attended peaceful demonstration Have joined strike Welcomes major changes Political reform is too rapid Using violence for political goals not justified Recently attended demonstration Importance of God Justifiable: homosexuality Justifiable: Prostitution Justifiable: Abortion National pride Trust (national) Post-materialist index (12-item) Post-materialist index (4-item) Autonomy index |
| Afrobarometer | demsatAf trustAf prideAf issueAf demosAf authorityAf trust_nationa~f | Democratic satisfaction General trust Pride Important political issue Participated in demonstrations View on authority National trust |
| Asia Barometer | trustAs happinessAs authorityAs petitionAs godAs homoAs abortionAs | Trust Happiness View on authority Participated in petitions Believe in god Attitude towards homosexuality Attitude towards abortion |
| Arab Barometer | trustAsAr petitionAsAr demosAsAr | Trust Participated in petition Participated in demonstration |

| | | |
|-----------------|--|---|
| Latinobarometro | prideL nationalgoal_1L trustL nationalgoal_2L satisfactionL petitionL authorityL godL homoL abortionL | Pride What should national goal be (1 st priority) Trust What should national goal be (2 nd priority) Life satisfaction Participated in petition View on authority Believe in god Attitude towards homosexuality Attitude towards abortion |
|-----------------|--|---|

A.II A discussion of the assumptions underlying our multiple imputation model

When conducting multiple imputation, we make the assumption that the data are *missing at random* (MAR). This means that the pattern of missingness only depends on the observed data included in our imputation model, and not on unobserved variables or features with the data (see Honaker and King 2010). This is a less strict assumption than the *missing completely at random* (MCAR) assumption, which requires that the pattern of missingness is not dependent on any systematic features with the data at all. Observations are *not missing at random* (NMAR) if the missingness depends either on predictors which are not included in the model, or if the missingness depends on the value of the missing variable itself. If so, the data-generating process is *non-ignorable* (NI) (see Rubin 1987; King et al. 2001).

The missingness structure of our data here is clearly not MCAR. The missingness of the World Values Survey (WVS) response items – which is our main concern when constructing the imputation model, as also outlined in the paper – is likely to depend on a number of other factors. For instance, the extent to which governments will allow WVS teams to convey surveys in their country is likely to be lower in strictly authoritarian regimes, as authoritarian leaders may fear the consequences of mapping and subsequently publishing citizen’s preferences and attitudes. Moreover, poorer countries are less likely to have participated often in the World Values Survey, and this may be associated both with the difficulties of organizing the required capacity for conducting surveys, but probably also with other selection criteria for those working with the (early) WVS waves. Indeed, the countries that have participated in four or five survey rounds of WVS are predominantly Western, rich democracies. Hence, poorer non-Western countries will have more missing values on the WVS survey items.

As noted, for instance, by King et al (2001), this problem is made less acute by including these factors, or at least decent proxies for them, in the multiple imputation model. NMAR missingness that depends on (initially) unobserved predictors can be turned into MAR if these predictors are included in the imputation model. In our model we have incorporated a wide range of factors to improve the imputation algorithm, in addition to those that we use as control variables in our regression models. As noted by Honaker et al. (2012, 10), since “imputation is predictive, any variables that would increase predictive power should be included in the model, even if including them in the analysis model would produce bias in estimating a causal effect (such as for post-treatment variables) or collinearity would preclude determining which variable had a relationship with the dependent variable”.

In our case, we have, for example, included indicators of repression drawn from the CIRI dataset (Cingranelli and Richards 2008) such as physical integrity rights, torture, and political imprisonment to capture the overall level of how closed and repressive a society is (in addition to the different measures of democracy that we use in the regression models). We did this because we expected these variables to proxy for the extent to which authoritarian leaders fear opposition and is hesitant to allow opinion polls. Hence, they carry information on the easiness with which WVS can obtain access to and organize survey waves in the country in question. We also include a wide range of indicators of level of socio-economic development such as inequality, resource dependence and indicators of access to mass media drawn from the Banks (2011) dataset.

Finally, as noted in the paper, we include various survey questions from regional barometers, more or less directly reflecting the different sub-components of SEI. Despite these surveys having more extensive coverage for some regions and for the later years of the sample (see Table A.2), we think they constitute a very important source of information for imputing the WVS items of interest, and thus improve the performance of our imputation model for the most critical variables. For previous working paper versions of this paper we ran different imputation model specifications, without including information from the regional barometers. Although these variables make the imputation model more computationally intensive (because of the large number of missing; see missingness map in Figure A.1), their inclusion improves our predictions for SEI (see below for different diagnostic tests and discussions).

Yet, there are reasons to expect that the data may still not be missing at random. Not only could there be predictors excluded from the model that determine the missingness, although we have tried to include the ones we think is theoretically the most relevant (and computational requirements mean that we cannot simply throw in every available variable we can think of). It could also be that the missingness depends on the values of the missing variable itself. Still, given that we do add, and thus “factor out” the influence from, proxies of repression and authoritarianism (see our discussion in the paper on why autocrats might employ more repression in case self-expression values are widespread, which could affect the organization of WVS waves), we cannot think of any theoretical reason for why the probability of missing should systematically depend on particular scores on the self-expression index itself. It might, of course, still be the case; one can never guard completely against such features of the data violating the MAR condition. However, we are fairly optimistic that our specification at least ensures that the assumption is not grossly violated.

A.III Patterns of missingness in the data

The missingness map in Figure A.1 allows for a quick summary of the patterns of missingness in the data (although to read the variable names along the x-axis, one must zoom in). All observations in the dataset are plotted on the Y-axis (by country code), and all variables included in the imputation algorithms are plotted on the X-axis. The variables are in decreasing order of missingness from left to right. The red sections represent observed values in the original dataset, while the white sections represent imputed values.

The variables with the most missing values, which, as noted, are located on the far left side of the missingness map, are the variables drawn from the regional values surveys such as the Latinobarometer and the Afrobarometer. The main reason for the extensive missingness of these variables, which together make up almost $\frac{1}{4}$ of the variables in the dataset, is, quite naturally, that each of these barometers only cover a smaller number of countries from specific regions. However, as is also clear from Table A.2 below, these surveys have far better coverage for later years of the time series, and some countries – such as Jordan and Algeria from the Arab-Barometer with data for only one year – have been measured less frequently. Also, questions pertaining to some SEI sub-components, such as generalized trust, have been measured more frequently than others. Despite this, the regional barometer coverage is quite extensive for some countries, particularly for the Latinobarometer. To take one well-documented example from the top of Table A.2, Argentina's level of trust was measured every year, except for 1999, from 1996 to 2009 in the Latinobarometer. Comparing the exact years the different regional barometers and WVS conduct surveys for the different countries also indicate a modest, but not large, overlap. This is positive for us, as pieces of information on levels of values are particularly important for predictive purposes in years where the WVS scores are lacking. However, the time series set-up of the imputation model still means that the prediction of, say, WVS-measured trust in Argentina in 1995 or 1999, or even in the 1980s, is also improved because of the existence of regional barometer scores on trust for 1996-98 and 2000-9.

The next (around) 35-40 percent of the variables represented on the missingness map are WVS items. We included not only those directly related to sub-components of the SEI, but also other items that are theoretically relevant for predicting SEI and SEI sub-component scores. As we mention in the paper, not all countries have full coverage on the SEI sub-components despite having participated in a WVS wave. Having a set of relevant WVS

predictors thus helps us to reconstruct more appropriate SEI scores (which, in turn, helps us to better predict SEI scores for later or earlier years, given the cross-section–time-series features of the imputation model). Although it is clear from the missingness map that they have far less missing than the regional survey items, they still have extensive missingness. This is mainly related to the feature of the WVS that waves do not occur annually, but with fairly regular intervals. However, as discussed, this is also due to most countries not being included in all waves.

The final set of variables (with the exception of the very right-most variables which are country-codes, year variable, etc.) are mainly macro-measures of different social, economic and political characteristics. Among those towards the left on the missingness map of these variables (those with poorer coverage), we, for instance, find the measures of corruption and military expenditure (see Table A.1). Thereafter comes, for example, the group of variables from the Banks data set, e.g. measuring purges, revolutions and riots, before the large group of variables proxying for repression and other regime characteristics from the CIRI dataset. The democracy measures (except EDI) and the measures of religious composition are those with least missing among the macro variables.

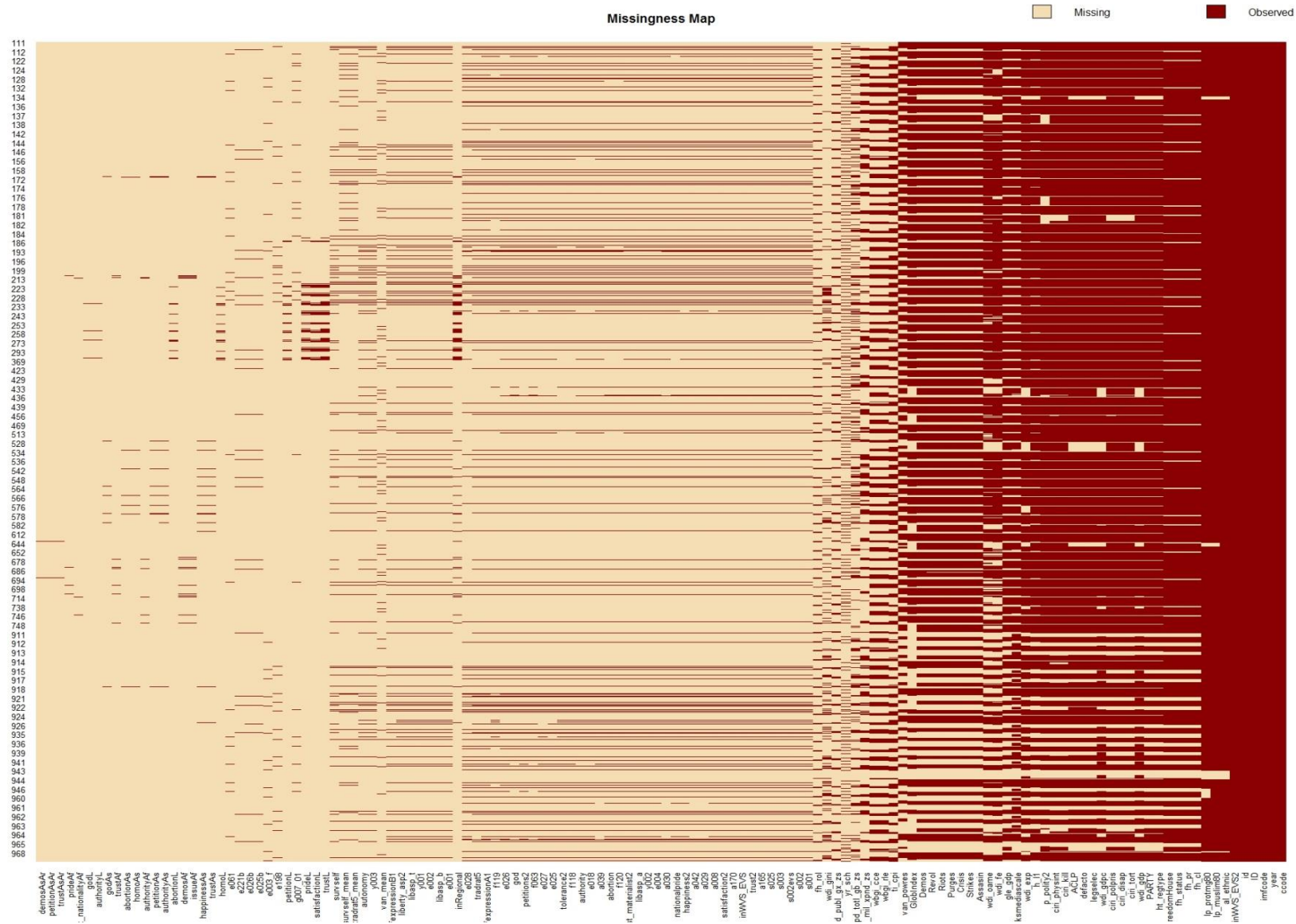


Figure A.1. Missingness map.

Table A.2. Time series coverage, by country, for the questions included in the various regional barometers.

| Time-series coverage for indicators from Latinobarometer | | | | | | | | | |
|--|------------------------------|-------|-------|---------------------------|---------------------|-------------------|-----------------|-----------------------|------------------|
| Country | Self-expression values (WVS) | Pride | Trust | Satisfaction w/ democracy | Engaged in petition | Vie won authority | Believes in God | Vie won homosexuality | Vie won abortion |
| Argentina | 1984 | 1996 | 1996 | 1997 | 2002 | 2002 | 2002 | 2002 | 2002 |
| | 1991 | 1997 | 1997 | 2000 | 2005 | | | 2004 | 2004 |
| | 1995 | 2000 | 1998 | 2001 | 2006 | | | 2008 | 2007 |
| | 1999 | 2001 | 2000 | 2003 | 2007 | | | 2009 | |
| | 2006 | 2002 | 2001 | 2004 | 2008 | | | | |
| | | 2003 | 2002 | 2005 | | | | | |
| | | 2004 | 2003 | 2006 | | | | | |
| | | 2005 | 2004 | 2007 | | | | | |
| | | 2006 | 2005 | 2008 | | | | | |
| | | 2009 | 2006 | 2009 | | | | | |
| | | | 2007 | | | | | | |
| | | | 2008 | | | | | | |
| | | | 2009 | | | | | | |
| Brazil | 1991 | 1996 | 1996 | 1997 | 2002 | 2002 | 2002 | 2002 | 2002 |
| | 1997 | 1997 | 1997 | 2000 | 2005 | | | 2004 | 2004 |
| | 2006 | 2000 | 1998 | 2001 | 2006 | | | 2008 | 2007 |
| | | 2001 | 2000 | 2003 | 2007 | | | 2009 | |
| | | 2002 | 2001 | 2004 | 2008 | | | | |
| | | 2003 | 2002 | 2005 | | | | | |
| | | 2004 | 2003 | 2006 | | | | | |
| | | 2005 | 2004 | 2007 | | | | | |
| | | 2006 | 2005 | 2008 | | | | | |
| | | 2009 | 2006 | 2009 | | | | | |
| | | | 2007 | | | | | | |
| | | | 2008 | | | | | | |
| | | | 2009 | | | | | | |
| Chile | 1990 | 1996 | 1996 | 1997 | 2002 | 2002 | 2002 | 2002 | 2002 |
| | 1996 | 1997 | 1997 | 2000 | 2005 | | | 2004 | 2004 |
| | 2000 | 2000 | 1998 | 2001 | 2006 | | | 2008 | 2007 |
| | 2006 | 2001 | 2000 | 2003 | 2007 | | | 2009 | |
| | | 2002 | 2001 | 2004 | 2008 | | | | |
| | | 2003 | 2002 | 2005 | | | | | |
| | | 2004 | 2003 | 2006 | | | | | |
| | | 2005 | 2004 | 2007 | | | | | |
| | | 2006 | 2005 | 2008 | | | | | |
| | | 2009 | 2006 | 2009 | | | | | |
| | | | 2007 | | | | | | |
| | | | 2008 | | | | | | |
| | | | 2009 | | | | | | |
| Colombia | 1998 | 1996 | 1996 | 1997 | 2002 | 2002 | 2002 | 2002 | 2002 |
| | 2005 | 1997 | 1997 | 2000 | 2005 | | | 2004 | 2004 |
| | | 2000 | 1998 | 2001 | 2006 | | | 2008 | 2007 |
| | | 2001 | 2000 | 2003 | 2007 | | | 2009 | |
| | | 2002 | 2001 | 2004 | 2008 | | | | |
| | | 2003 | 2002 | 2005 | | | | | |
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| | | | | | | | | | |
|---------------------------|--------------------------------------|--|--|--|--------------------------------------|------|------|------------------------------|----------------------|
| | | 2004 2005 2006 2009 | 2003 2004 2005 2006 2007 2008 2009 | 2006 2007 2008 2009 | | | | | |
| Dominican Republic | 1996 | 2004 2005 2006 2009 | 2004 2005 2006 2007 2008 2009 | 2004 2005 2006 2007 2008 2009 | 2005 2006 2007 2008 | | | 2004 2008 2009 | 2002 2004 2007 |
| Guatemala | 2004 | 1996 1997 2000 2001 2002 2003 2004 2005 2006 2009 | 1996 1997 1998 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 | 1997 2000 2001 2003 2004 2005 2006 2007 2008 2009 | 2002 2005 2006 2007 2008 | 2002 | 2002 | 2002 2004 2008 2009 | 2002 2004 2007 |
| Mexico | 1981 1990 1996 2000 2005 | 1996 1997 2000 2001 2002 2003 2004 2005 2006 2009 | 1996 1997 1998 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 | 1997 2000 2001 2003 2004 2005 2006 2007 2008 2009 | 2002 2005 2006 2007 2008 | 2002 | 2002 | 2002 2004 2008 2009 | 2002 2004 2007 |
| Peru | 1996 2001 | 1996 1997 2000 2001 2002 2003 2004 2005 2006 2009 | 1996 1997 1998 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 | 1997 2000 2001 2003 2004 2005 2006 2007 2008 2009 | 2002 2005 2006 2007 2008 | 2002 | 2002 | 2002 2004 2008 2009 | 2002 2004 2007 |
| Uruguay | 1996 2000 | 1996 1997 2000 2001 2002 | 1996 1997 1998 2000 2001 | 1997 2000 2001 2003 2004 | 2002 2005 2006 2007 2008 | 2002 | 2002 | 2002 2004 2008 2009 | 2002 2004 2007 |

| | | | | | | | | | |
|------------------|--------------|--|--|--|--------------------------------------|----------------------|------|------------------------------|----------------------|
| | | 2003 2004 2005 2006 2009 | 2002 2003 2004 2005 2006 2007 2008 2009 | 2005 2006 2007 2008 2009 | | | | | |
| Venezuela | 1996 2000 | 1996 1997 2000 2001 2002 2003 2004 2005 2006 2009 | 1996 1997 1998 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 | 1997 2000 2001 2003 2004 2005 2006 2007 2008 2009 | 2002 2005 2006 2007 2008 | 2002 | 2002 | 2002 2004 2008 2009 | 2002 2004 2007 |
| Spain | | 1996 1997 2006 2009 | 1996 1997 2006 2009 | 1997 2006 2007 2008 2009 | 2006 2007 2008 | 2006 2007 2008 | - | - | |

Time series coverage for Afrobarometer

| Country | Self-expressi on values (WVS) | Trust (inter-personal) | Pride | Have raised an issue | Have attended demonstrati on | View on authori ty | Trust (in other national s) | | |
|-----------------|--------------------------------------|-------------------------------|--------------|------------------------------|-------------------------------------|---------------------------|------------------------------------|--|--|
| Algeria | 2002 | | | | | | | | |
| Ghana | 2007 | 2005 | | 1999 2002 2005 2008 | 1999 2002 2005 2008 | 2005 2008 | 2008 | | |
| Mali | 2007 | 2001 2005 | 2001 | 2001 2002 2005 2008 | 2001 2002 2005 2008 | 2005 2008 | 2008 | | |
| Nigeria | 1990 1995 2000 | 2000 2005 | 2000 | 2000 2003 2005 2008 | 2000 2003 2005 2008 | 2005 2008 | 2008 | | |
| Zimbabwe | 2001 | 1999 | 1999 | 1999 2004 2005 2009 | 1999 2004 2005 2009 | 2009 | 2009 | | |
| Rwanda | 2007 | | | | | | | | |
| Tanzania | 2001 | 2001 2005 | 2001 | 2001 2003 2005 2008 | 2001 2003 2005 2008 | 2005 2008 | 2008 | | |

| | | | | | | | | | |
|---------------------|--------------------------------------|--------------|------|------------------------------|------------------------------|--------------|------|--|--|
| Uganda | 2001 | 2000 2005 | | 2002 2005 2008 | 2002 2005 2008 | 2005 2008 | 2008 | | |
| Burkina Faso | 2007 | | | 2008 | 2008 | 2008 | 2008 | | |
| South Africa | 1982 1990 1996 2001 2006 | 2000 2006 | 2000 | 2000 2002 2006 2008 | 2000 2002 2006 2008 | 2006 2008 | 2008 | | |

Time series coverage for Asiabarameter

| | Self-expressi on values (WVS) | Trust | Happine ss | View on authority | Have attended petition | Believe in god | View on homo-sexualit y | View on abortio n | Attended demonstrati on |
|--------------------|--------------------------------------|----------------------|----------------------|--------------------------|-------------------------------|-----------------------|--------------------------------|--------------------------|--------------------------------|
| Bangladesh | 2002 | 2005 | 2005 | 2005 | 2005 | 2005 | | 2006 | |
| China | 2007 | 2003 2006 | 2003 2006 | 2006 | 2006 | | 2006 | | |
| Taiwan | 1994 2006 | | 2006 | 2006 | 2006 | | 2006 | 2006 | |
| India | 1990 1995 2001 2006 | 2003 2005 | 2003 2005 | 2005 | 2005 | 2005 | 2005 | 2005 | |
| Indonesia | 2001 2006 | 2003 2005 | 2004 2007 | 2004 2007 | 2004 2007 | 2004 | 2007 | 2007 | |
| Japan | 1981 1990 1995 2000 2005 | 2003 2004 2006 | 2003 2004 2006 | 2004 2006 | 2004 2006 | 2004 | 2006 | 2006 | |
| South Korea | 1990 1996 2001 2005 | 2003 2004 2006 | 2003 2004 2006 | 2004 2006 | 2004 2006 | 2004 | 2006 | 2006 | |
| Malaysia | 2006 | 2003 2004 2007 | 2003 2004 2007 | 2004 2007 | 2004 2007 | 2004 | 2007 | 2007 | |
| Pakistan | 2001 | 2005 | 2005 | 2005 | 2005 | 2005 | 2005 | 2005 | |
| Philippines | 1996 2001 | 2004 2007 | 2004 2007 | 2004 2007 | 2004 | 2004 | 2007 | 2007 | |
| Singapore | 2002 | 2005 2006 | 2004 2006 | 2004 2006 | 2007 | 2004 | 2006 | 2006 | |
| Thailand | 2007 | 2003 2004 2007 | 2003 2004 2007 | 2004 2007 | 2007 | 2004 | 2007 | 2007 | |
| Vietnam | 2001 2006 | 2003 2004 | 2003 2004 | 2004 2006 | | 2004 | 2006 | 2006 | |
| Kyrgyzstan | 2003 | 2005 | 2005 | 2005 | 2005 | 2005 | 2005 | 2005 | |

| Time series coverage for Arab-barometer | | | | | | | | | |
|--|-------------------------------------|-----------------------------|----------------------|--------------|--|--|--|--|--|
| Country | Self-expression values (WVS) | Attend demonstration | Join petition | Trust | | | | | |
| Jordan | 2001 2007 | 2006 | 2006 | 2006 | | | | | |
| Algeria | 2002 | 2006 | 2006 | 2006 | | | | | |

A.IV. Comparing densities

One way to describe the outputs from the imputation model in a condensed manner, which can potentially also be used as a check on the plausibility of the imputation model, is mapping the distribution of imputed values and the distribution of observed values for particular variables. We present figures plotting such distributions for SEI (Figure A.2) and the sub-components of SEI (Figures A.3–A.7). For illustration, we also include figures for two control variables with, respectively, little missing (GDP per capita in Figure A.8) and substantial missing (years of schooling in Figure A.9), and for an additional variable entered into the imputation model that is not included in the regression models (Banks' Media Scale in Figure A.10).

While very large discrepancies between the observed and imputed distributions may provide warning signs that something may be wrong with the imputation model, one should not necessarily expect the distributions of the missing values to be completely identical to the distributions of the observed values. In fact, the main reason why we impute to begin with is based on the assumption that observed and missing values may differ systematically, and correcting for this may alleviate selection biases affecting the regression results. Yet, imputations with very deviant, or otherwise strange distributions, may indicate problems, and we inspect whether this is the case for our model.

Thus, the first graph below plots the observed values and the imputed values on our main measure of popular values, the SEI. The red line represents the density of the mean of each imputed observation across all 5 datasets, while the black line gives the density of the observed values. We can see that the shape of the two distributions follow a roughly similar pattern, but deviate somewhat, especially when it comes to lower levels of self-expression values, where there are higher relative frequencies for the imputed data. This is a plausible result; as noted above there are reasons to expect that poorer countries and autocracies will have more missing values on the WVS survey items than rich democracies. As self-expression values is correlated with indicators of development such as income and education, as well as democracy, countries with low SEI scores are likely more often missing from the original data set. Hence, the distribution of the imputed values for SEI may suggest that the imputation procedure solves some of the selection biases discussed above.

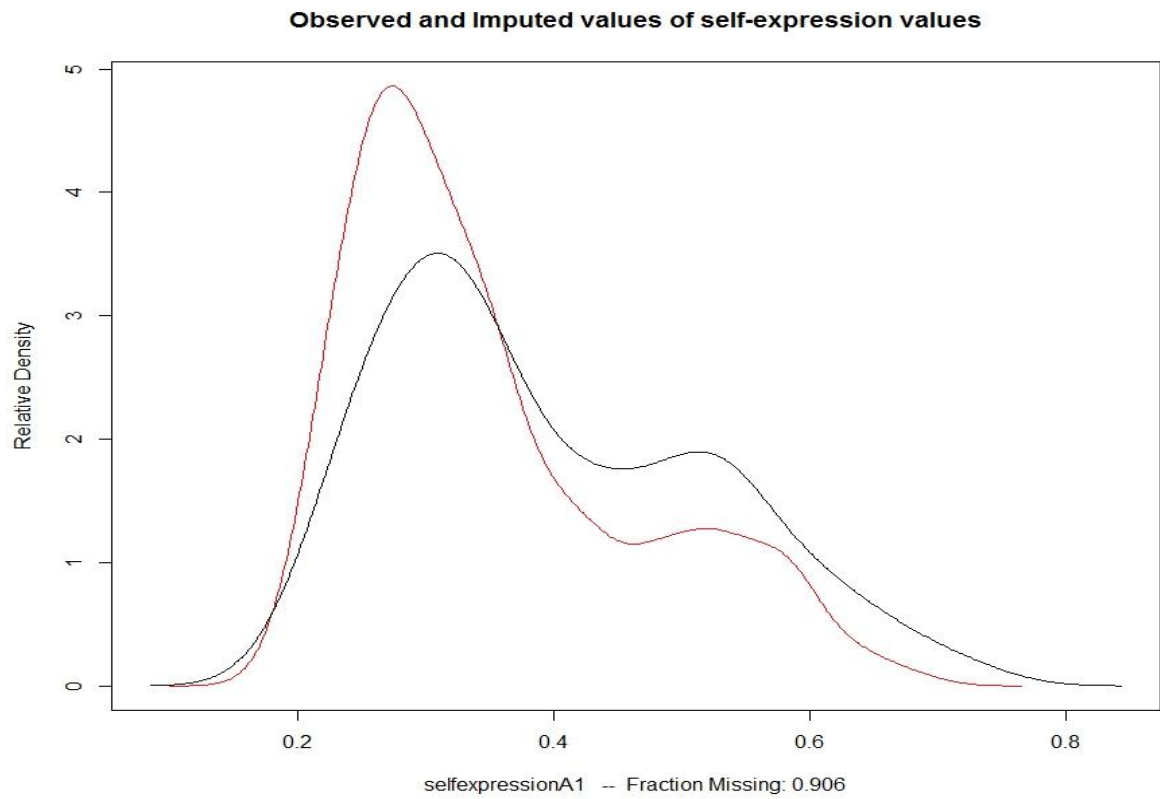


Figure A.2. Observed (black line) and mean imputed values (red line) for Self-Expression Values Index (SEI).

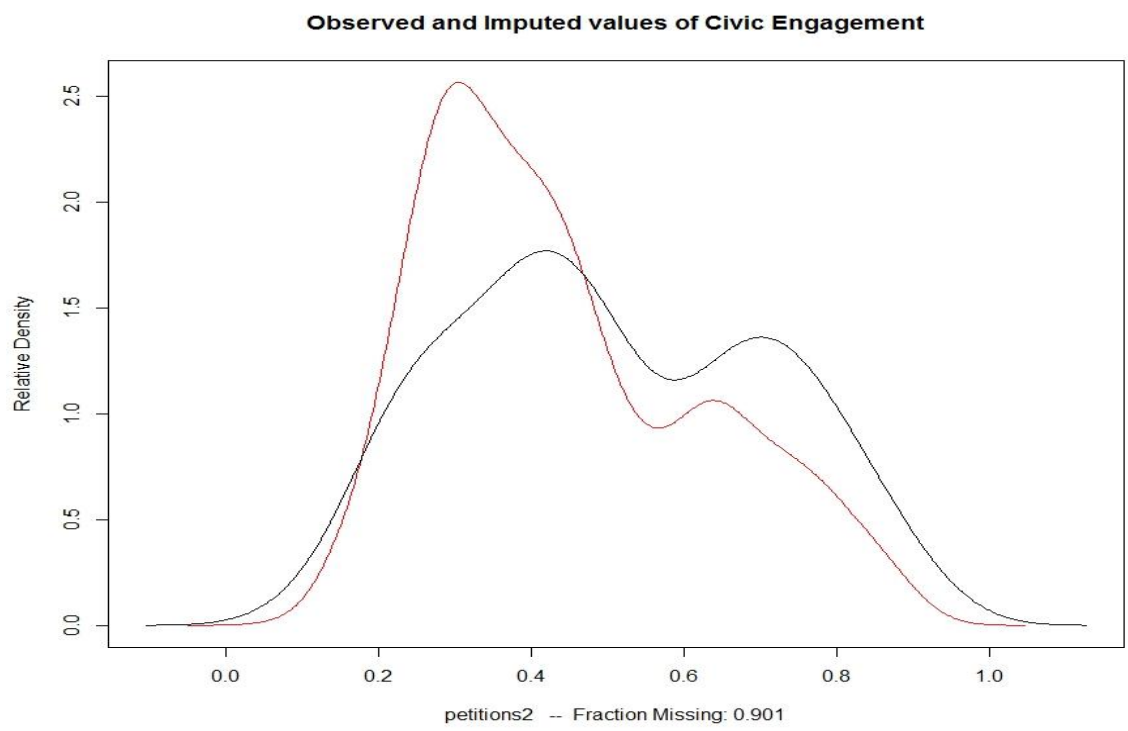


Figure A.3. Observed (black line) and mean imputed values (red line) for Civic Engagement sub-component of SEI.

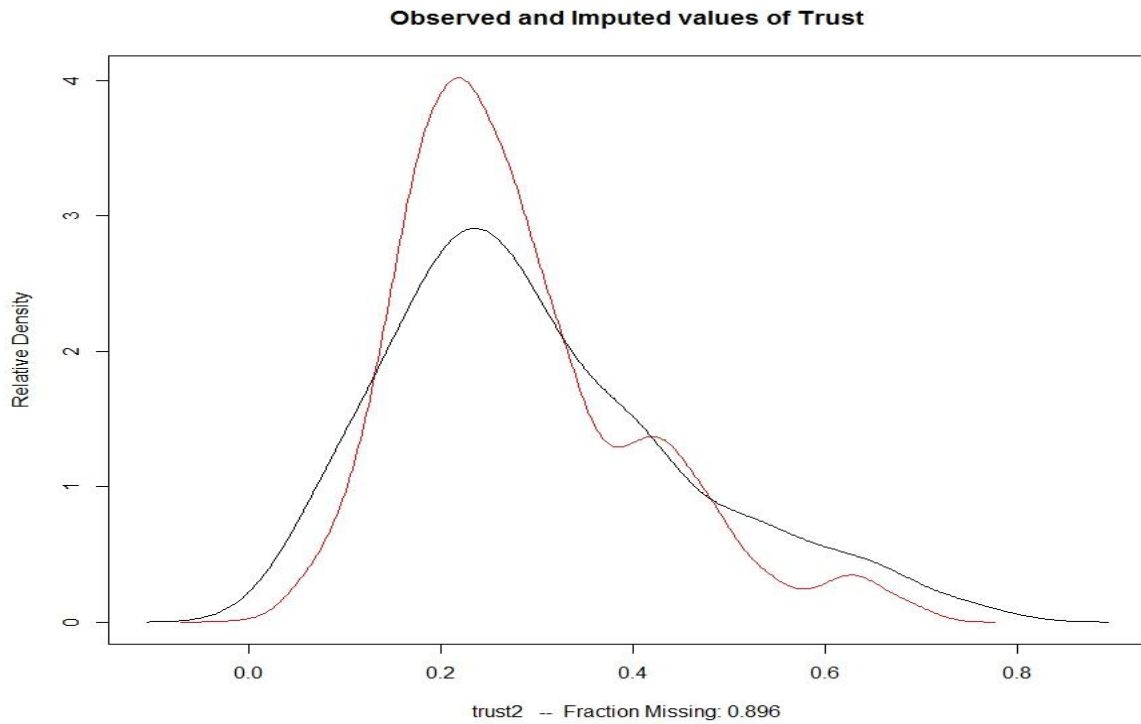


Figure A.4. Observed (black line) and mean imputed values (red line) for Generalized Trust sub-component of SEI.

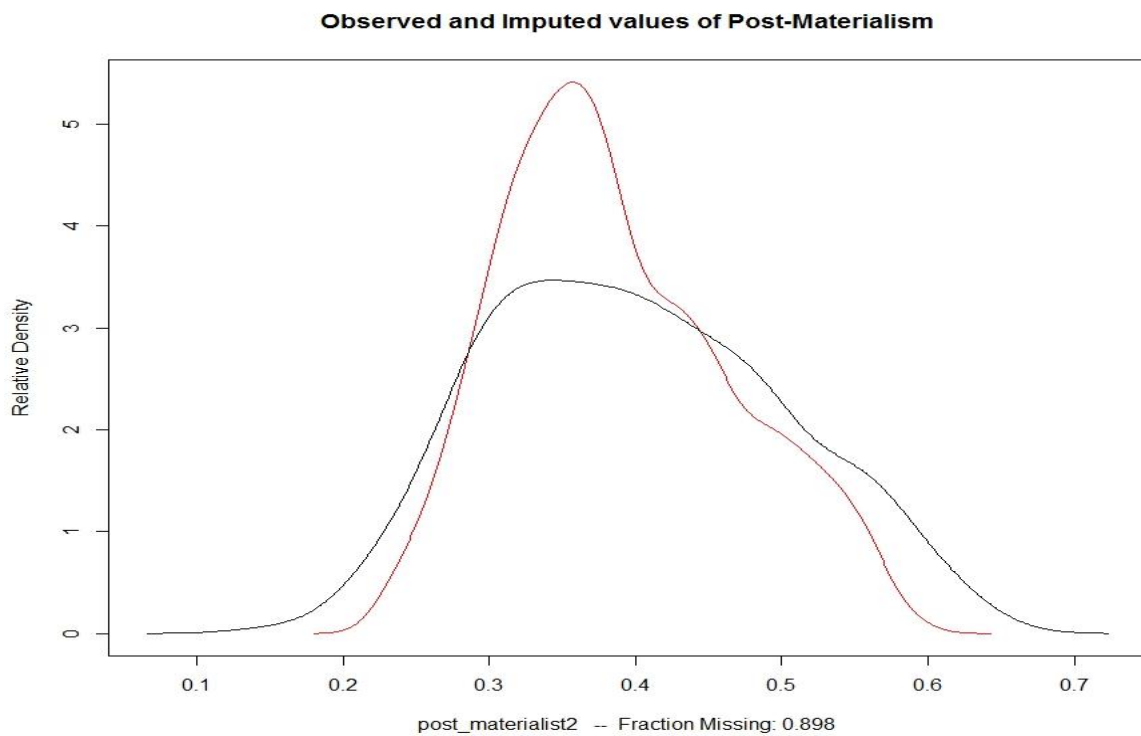


Figure A.5. Observed (black line) and mean imputed values (red line) for Post-Materialism sub-component of SEI.

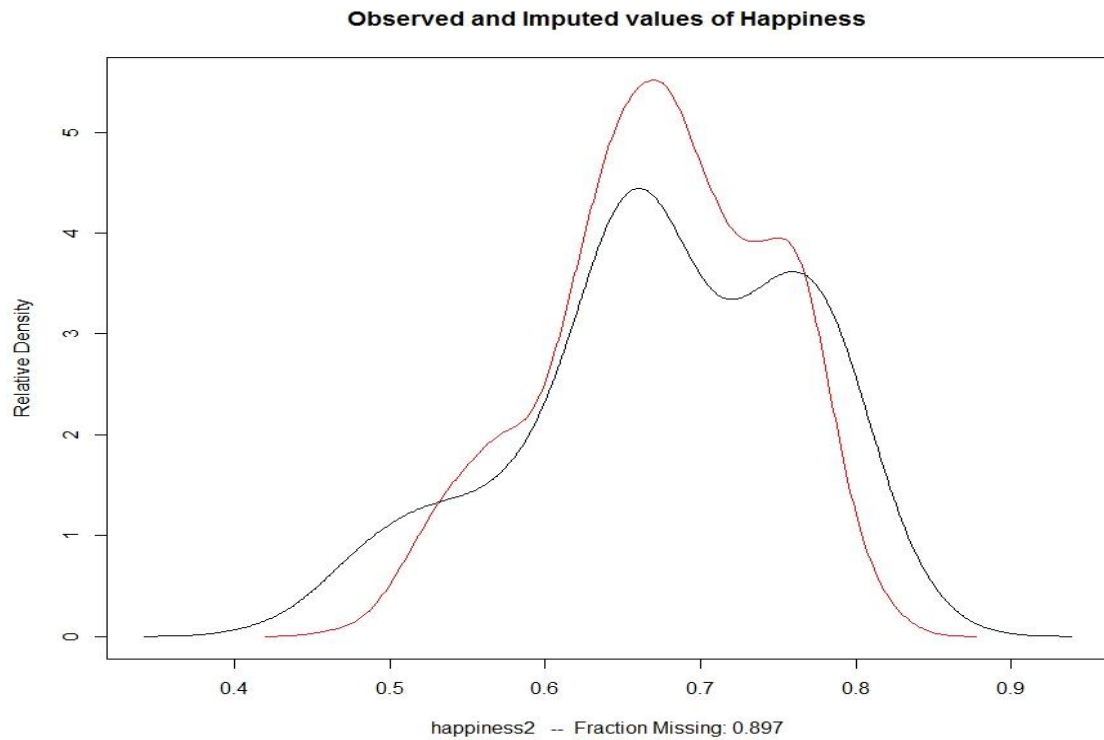


Figure A.6. Observed (black line) and mean imputed values (red line) for Happiness sub-component of SEI.

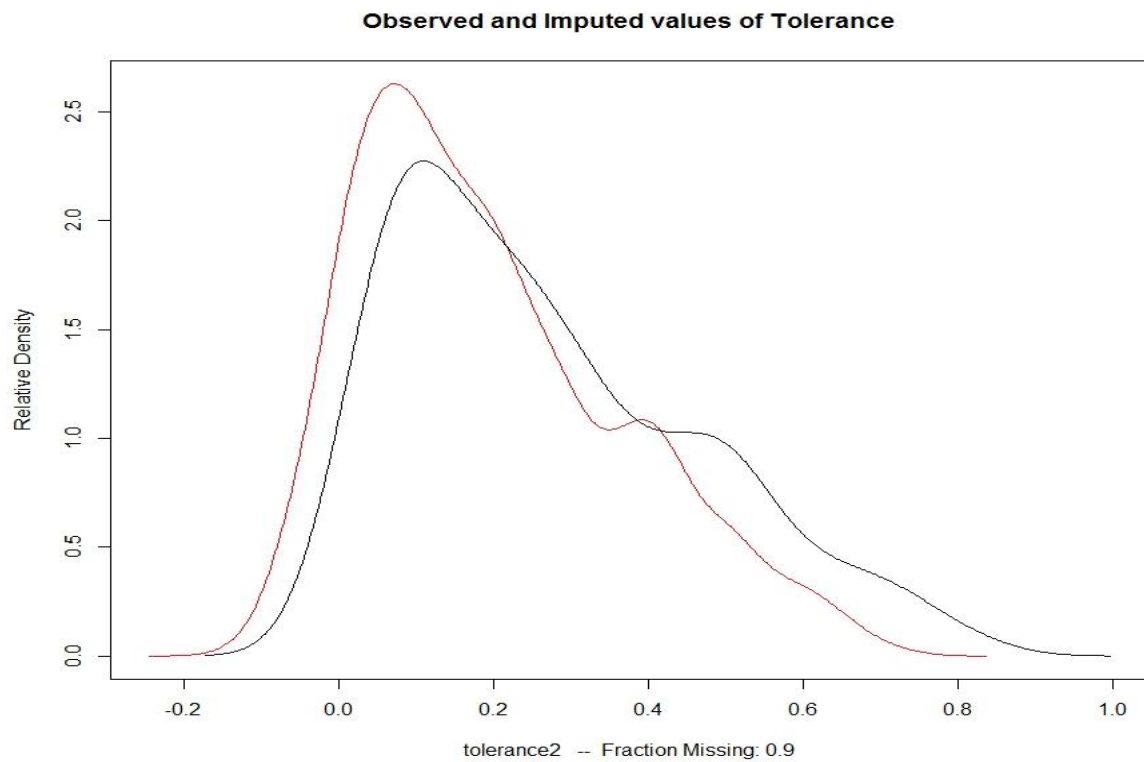


Figure A.7. Observed (black line) and mean imputed values (red line) for Tolerance sub-component of SEI.

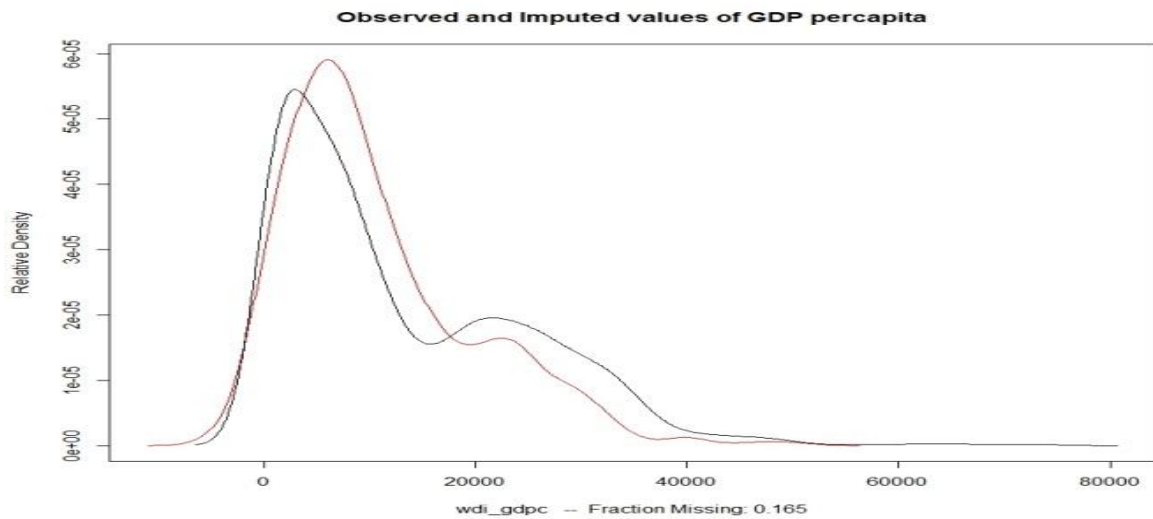


Figure A.8. Observed (black line) and mean imputed values (red line) for GDP per capita.

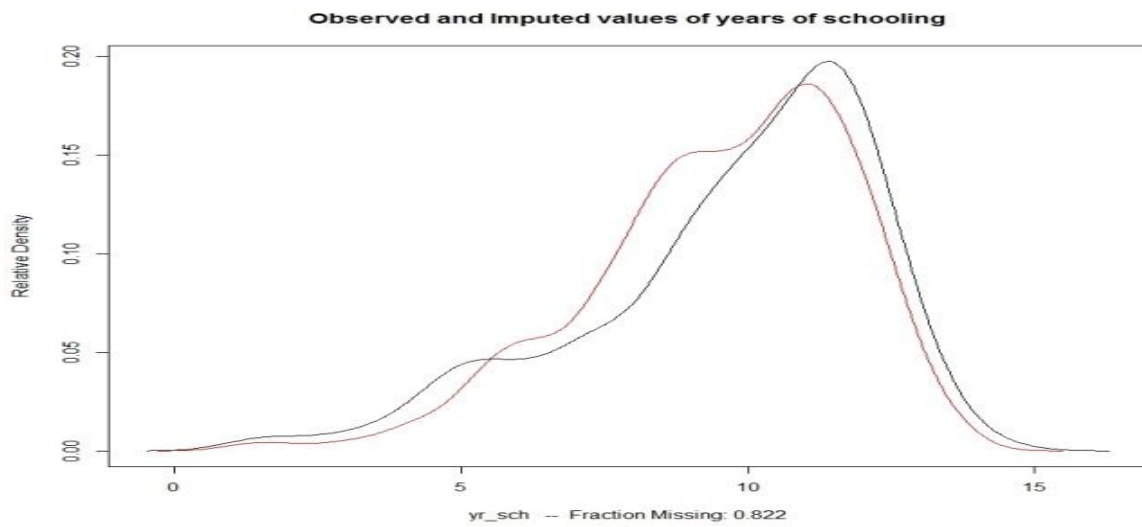


Figure A.9. Observed (black line) and mean imputed values (red line) for GDP per capita

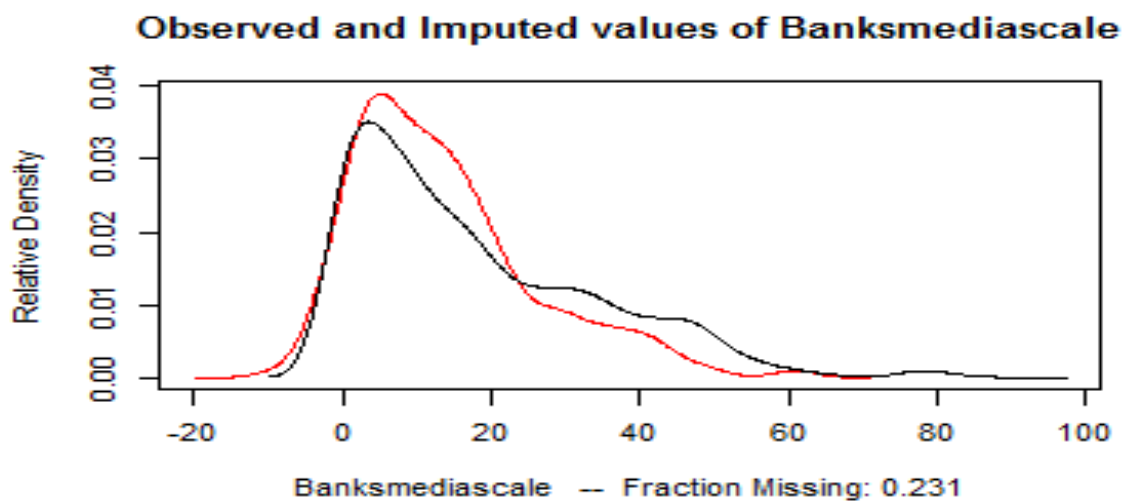


Figure A.10. Observed (black line) and mean imputed values (red line) for Banks media scale.

A.V. Time series plots.

Below we report a number of time series plots for SEI. We do not provide a plot for every single country (although all are available on request), but select a modest number of such time series plots to showcase different types of countries and potential issues with the imputation model. These plots do not only allow us to gauge whether the time series *seem* reasonable, by looking for stable patterns vs short-term variability and trends for the different countries. Even more important, they allow us to judge whether the *imputation model actually predicts well*, since they include imputation-model-predicted scores also for years where there are actual scores. Simply put, the imputation model performs well if the predicted scores are close to the observed – we return to more stringent (overimputation) tests based on this logic in Section A.VI.

In the time series plots below, the observed scores are marked in red color, whereas the imputed scores are marked in blue. For years where the blue dot cannot be spotted (see, e.g., Egypt in 2000 below), this means that the predicted value from the imputation model is almost exactly the same as the actual value (the dots are overlaid).

We have investigated a very large number of time series plots, and they clearly indicate that the imputation model performs well. The distances between the observed and the imputed/predicted scores on the SEI variables are, generally, small. However, there are some predictions that are off the target for particular countries, and our impression is that these happen more often at the beginning of the time series. This is not surprising, given the discussion conducted in the paper and above on the higher relative frequency of missing, also for other variables than the SEI, early in the time period, with less information available for making precise predictions.

An example of early predictions that are – relatively speaking, compared to our other predictions – far off (by more than 0.05 on SEI but less than 0.1) is provided by the Argentina time series in Figure A.11. Here, the level of SEI is under-predicted in 1982, and over-predicted in 1986. Later in the time series, the predictions are far closer to the observed values. One of the decidedly worst predictions that we observe, however, is for Hungary (Figure A.12) early in the time series. In 1981, the imputation model under-predicts Hungarian SEI with more than 0.1.

However, this is not the norm. Most countries have decent predictions also early in the time series (see Figure A.13; Japan), and some show very accurate predictions (see Figure A.14;

Mexico). Another (and surprisingly) well-performing type of predictions made by the model are those for countries with only 1-2 actual SEI observations, as the plots for China (Figure A.15) and Egypt (A.16) illustrate.

Finally, we showcase a couple of other interesting examples – namely two economically fairly developed democratizers from the third wave (Portugal and South Korea) that still have comparatively low SEI values, and could thus perhaps be difficult to predict, but where our imputation model predicts very well indeed. However, these cases are representative in one sense – they illustrate the general capabilities of the imputation model in accurately “recreating” observed values with its predictions.

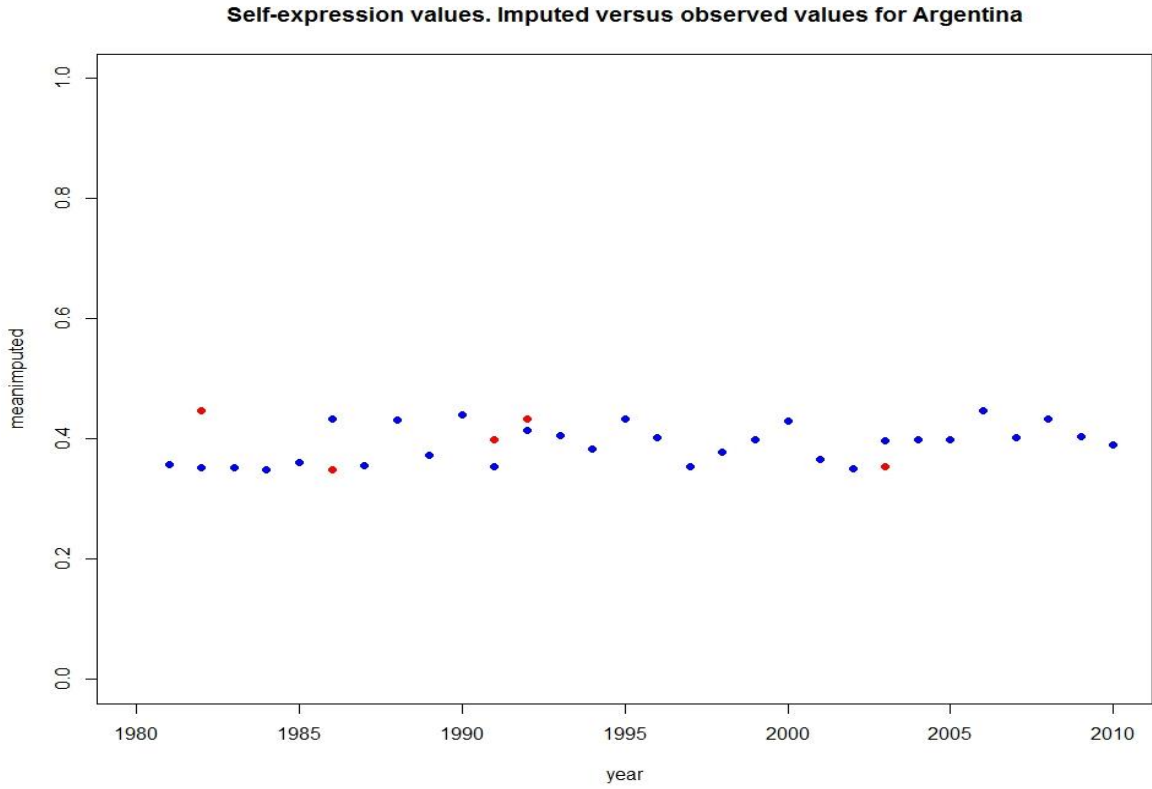


Figure A.11. Time series plot for SEI, for Argentina, with observed (red) and imputed (blue) values.

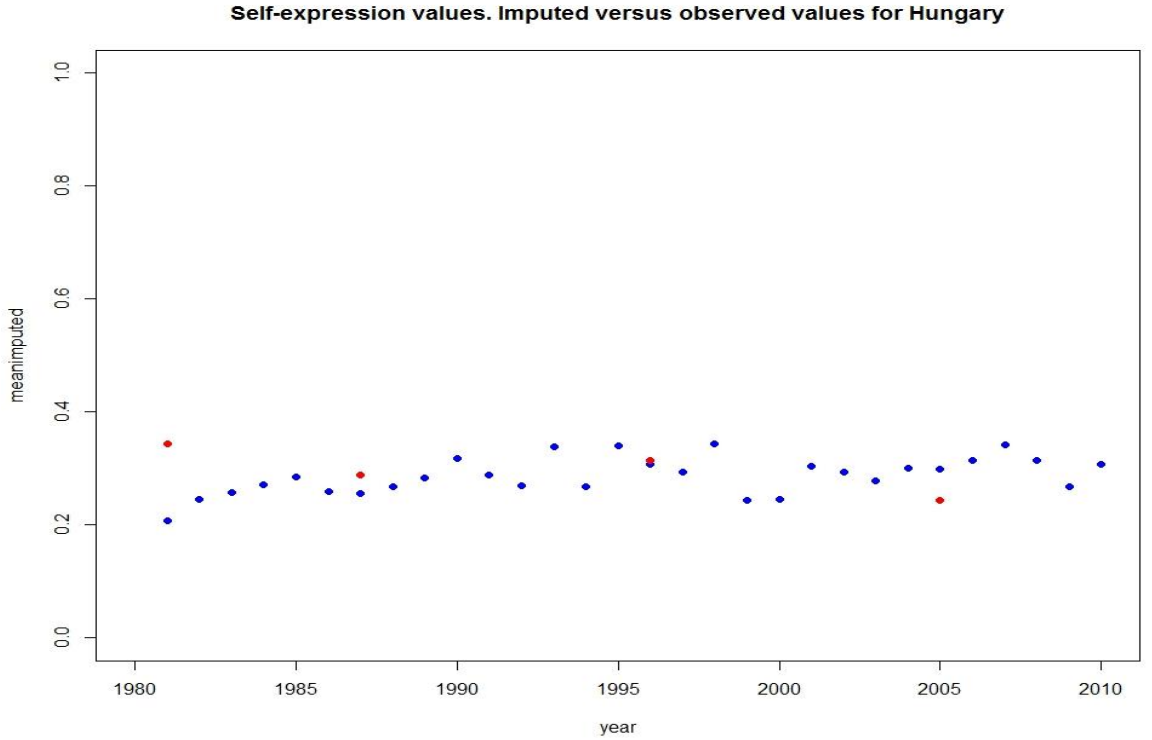


Figure A.12. Time series plot for SEI, for Hungary, with observed (red) and imputed (blue) values.

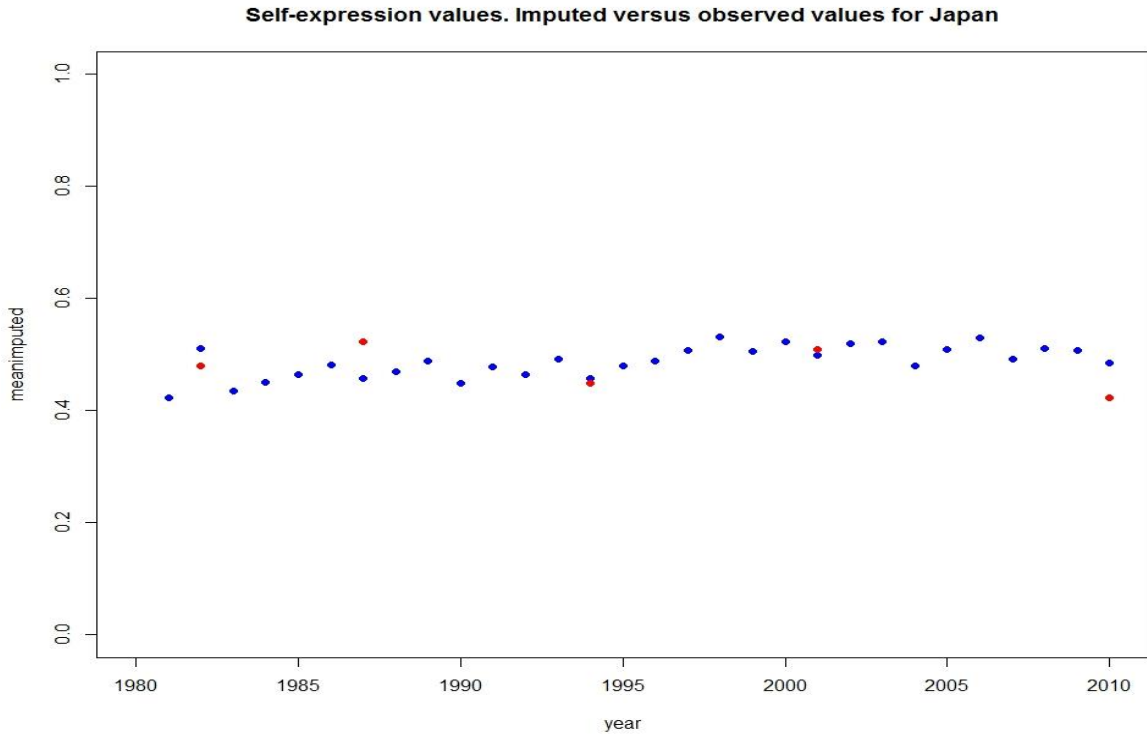


Figure A.13. Time series plot for SEI, for Japan, with observed (red) and imputed (blue) values.

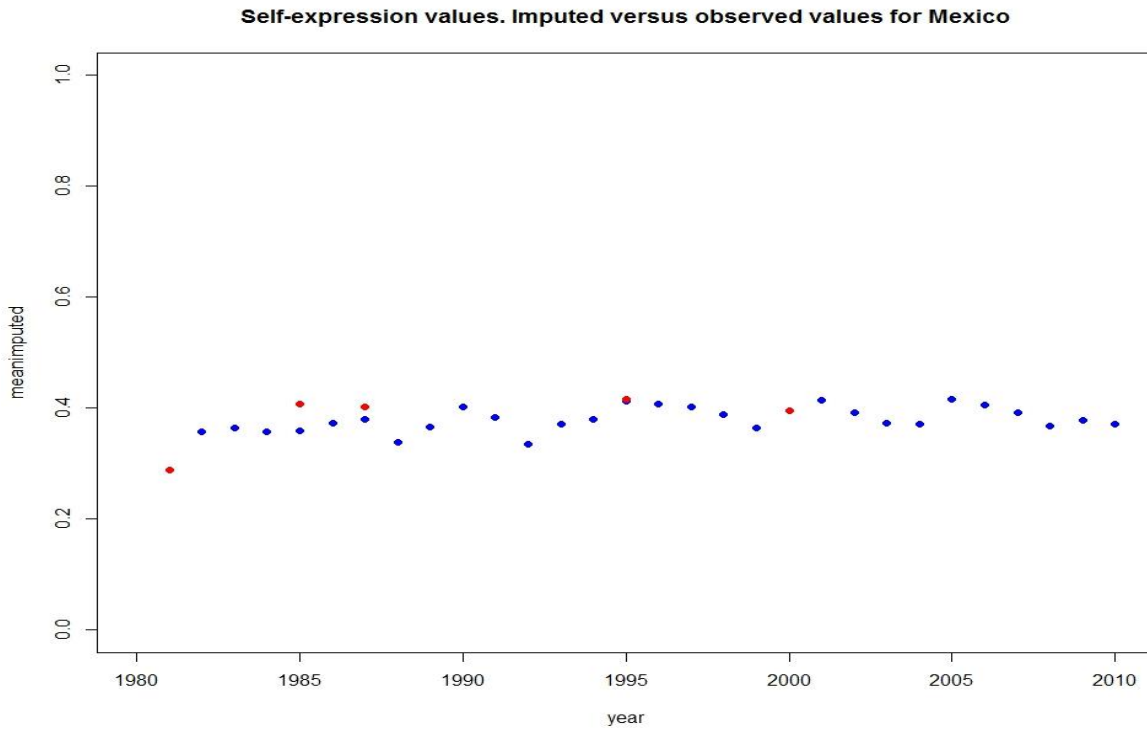


Figure A.14. Time series plot for SEI, for Mexico, with observed (red) and imputed (blue) values.

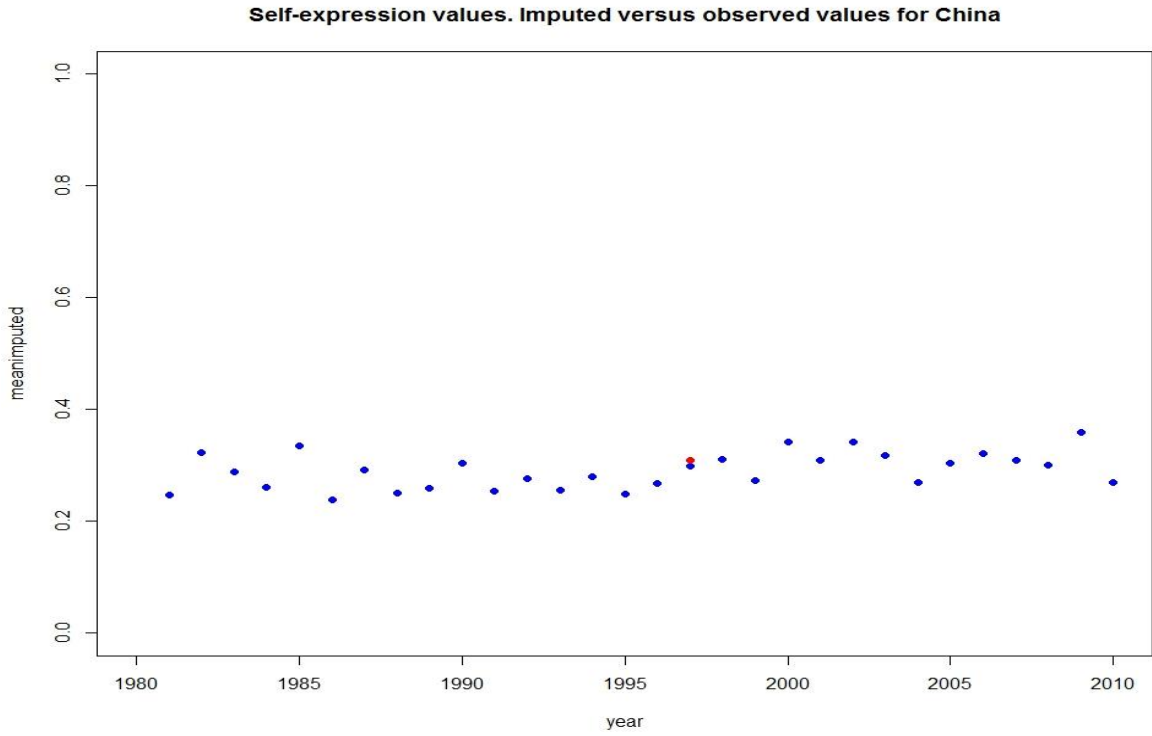


Figure A.15. Time series plot for SEI, for China, with observed (red) and imputed (blue) values.

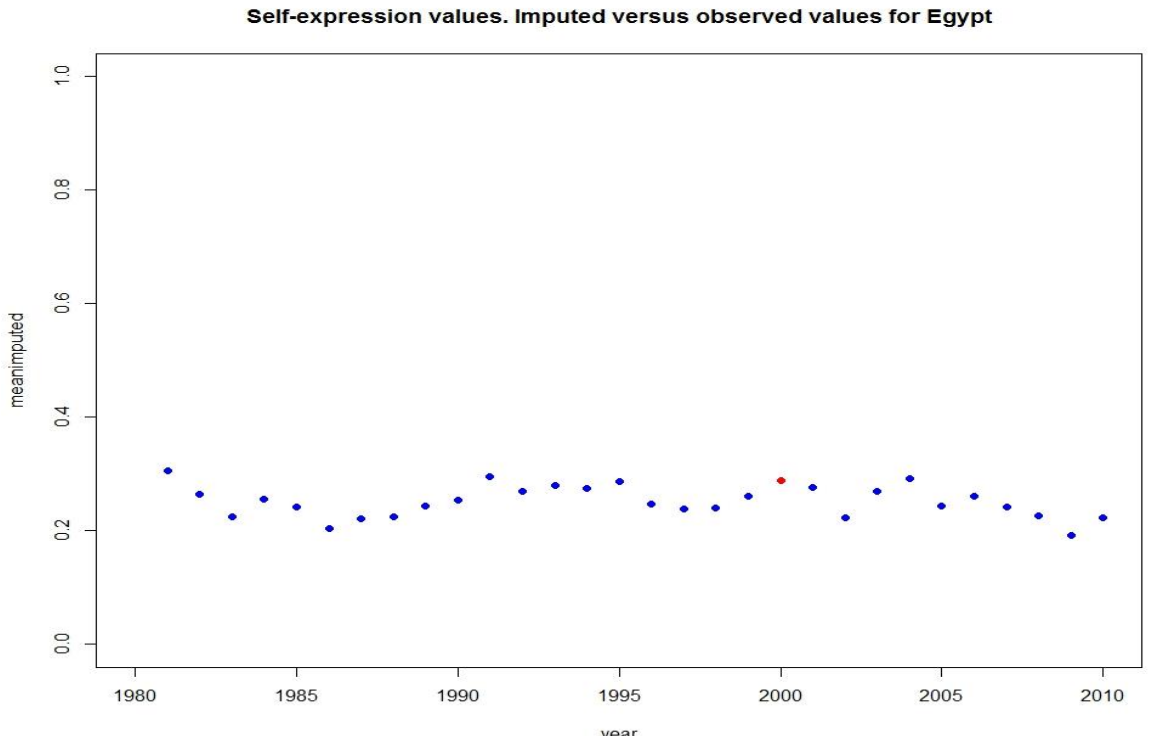


Figure A.16. Time series plot for SEI, for Egypt, with observed (red) and imputed (blue) values.

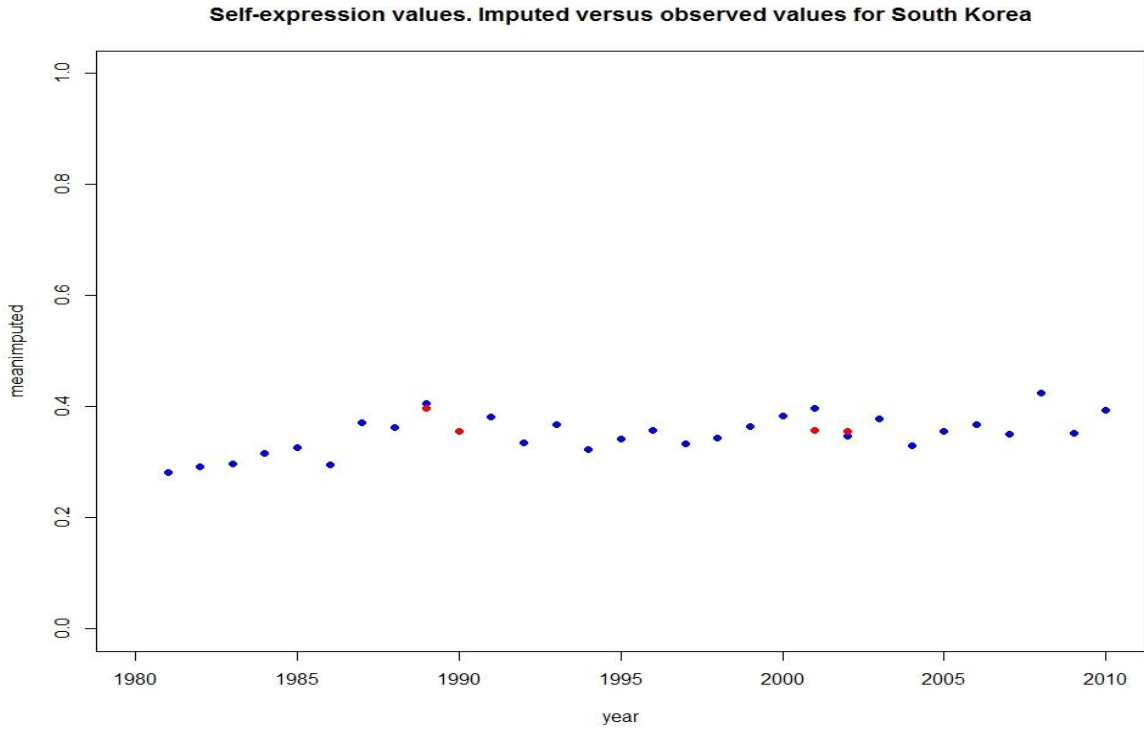


Figure A.17. Time series plot for SEI, for South Korea, with observed (red) and imputed (blue) values.

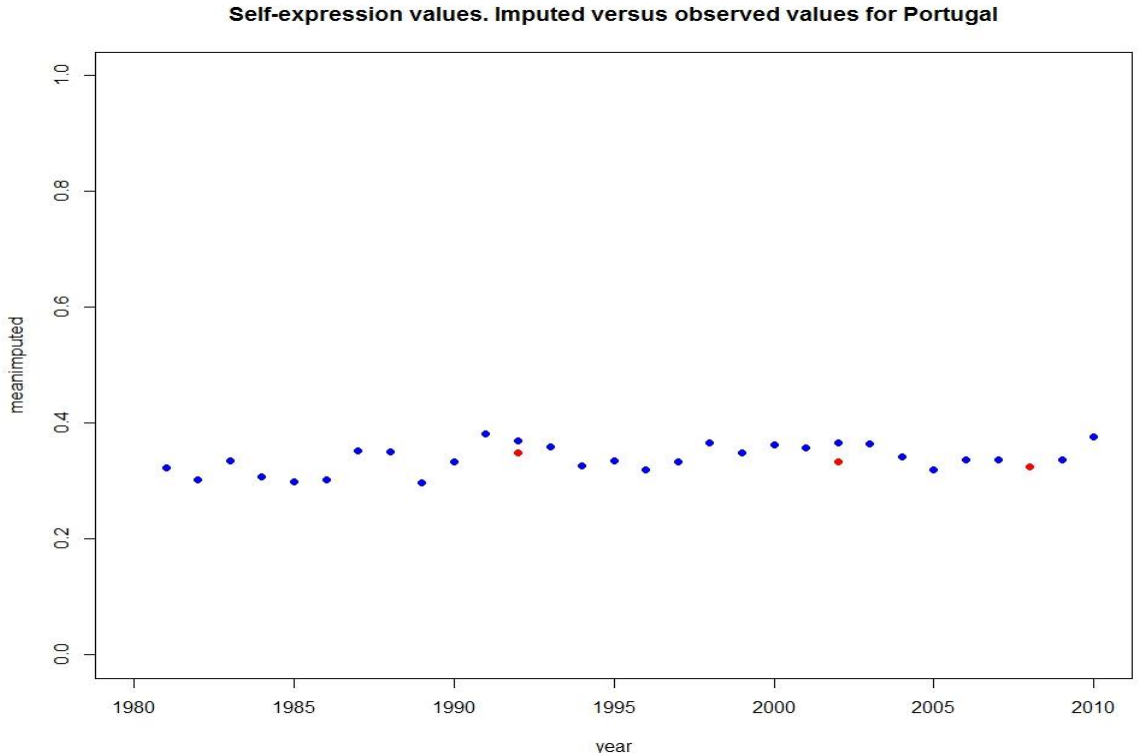


Figure A.18. Time series plot for SEI, for Portugal, with observed (red) and imputed (blue) values.

A.VI. Overimputing

Overimputing refers to one way of assessing the performance of the imputation model (see also, e.g. Honaker et al. 2012, 30-33). Due to the fact that missing data are unobservable *per se*, it is impossible to tell whether each imputed value is close to the unobserved value that one attempts to predict. An overimputation test is a diagnostics test that attempts to solve this problem by (sequentially) treating each observed value as if it is actually missing, and then generate a large number of imputed values for it. After we have this large set of imputed values, we can then construct a confidence interval, and the final step is then assessing whether the actually observed value falls within this interval. If it does, our imputation model performs well in the sense that it is accurately able to predict this “fictive missing” data point (that we *know* the actual score of). This is the type of evaluation we discussed for selected single data points for the time series plots above (comparing the red and blue dots). However, we want to do this more systematically for all observed values.

The Amelia II software provides this diagnostics test and a simple way of graphically inspecting whether our observed data tends to fall within the region where it would have been imputed had it been missing. Figure A.19 plots the results for the overimputation test for SEI. The observed SEI scores are plotted against the mean of the imputed scores for the very same observation on this index (when the observed SEI score is treated as missing). The 90 % confidence intervals – plotted for each imputed value – allow us to visually inspect the imputation model’s performance. As noted by Honaker et al. (2012, 30), by “checking how many of the confidence intervals cover the $y = x$ line, we can tell how often the imputation model can confidently predict the true value of the observation.”

As we can see from Figure A.19, our imputation model performs very well when it comes to “predicting” the observed values. Indeed, every single confidence interval covers the 45 degree line. Further, we were more concerned with whether the imputation model was able to predict fairly well for early years where there was far less information on some important covariates – notably the regional barometers – than later in the period when there is more data available. Although this cannot be judged directly from the figure, one observation at least provides indirect evidence that this is not a big problem: The line colors on the confidence intervals tell the fraction of missing observations for all covariates/other variables entered in the imputation model for that particular observation. There are quite a few orange lines where between 60 and 80% of observations on the covariates are missing. These will, very often, be

for the early years, where the regional values surveys and some of the economic and political macro-level measures do not have data. There is no discernable patter from the figure that the SEI predictions are clearly worse for these observations than for the many green observations with only 20-40% missing on the covariates.

We also ran overimputation tests also for some selected other variables, and the model performs very well across the board according to these tests.

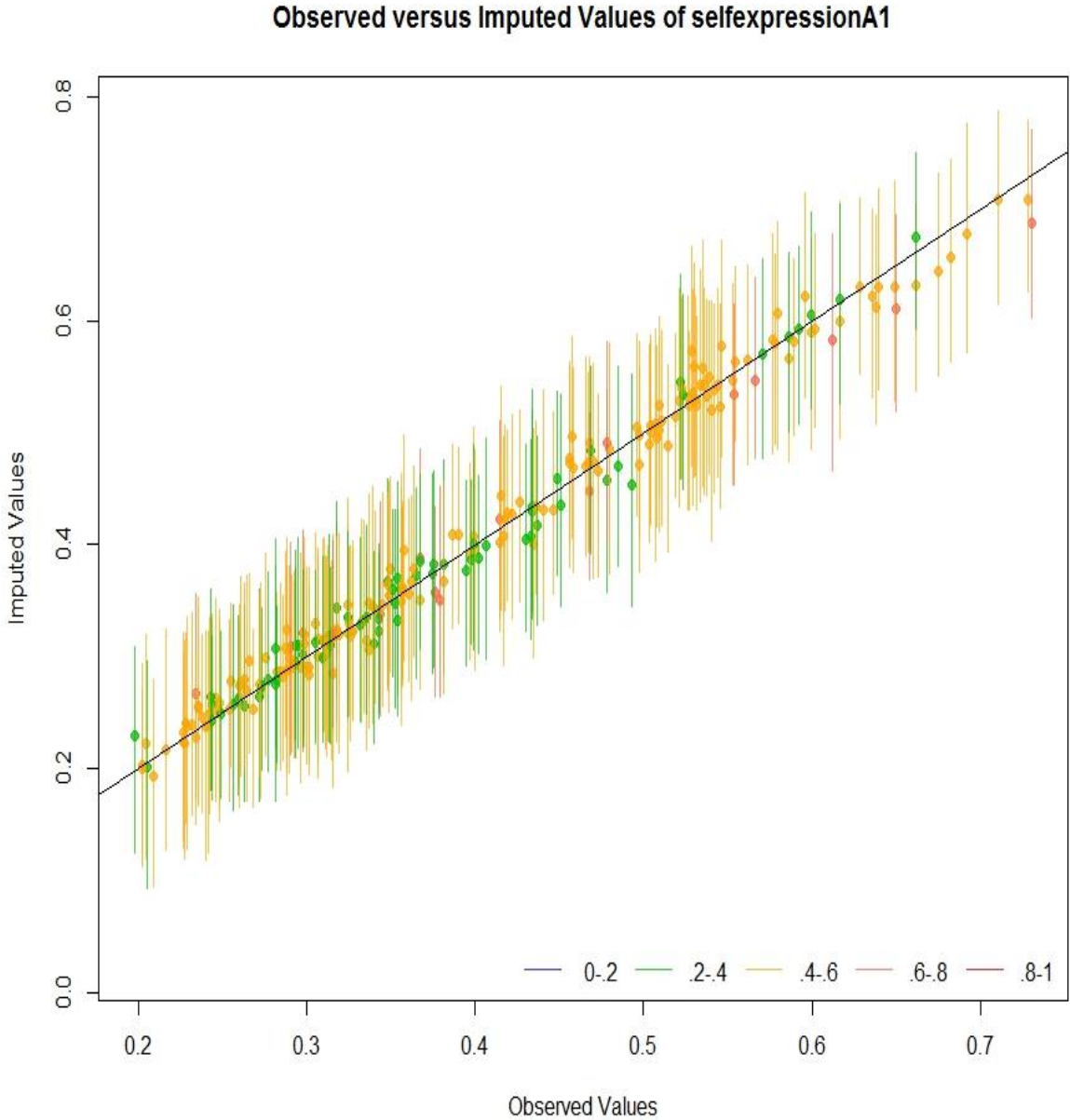


Figure A.19. Overimputation test plot for SEI, with observed plotted against imputed values for all observations with data on SEI. The bars represent 90% confidence intervals, and the colors represent the fraction of missing observations for all the covariates in the imputation model for that particular observation.

A.VII. Correlation between SEI and other variables in the imputation model, and potential collinearity issues for the regressions

One concern is that there are particular other variables that correlate highly with SEI, which has a large fraction of missing, and thus drive the predictions on the imputed SEI scores. If this variable then later is controlled for in our regression models, our “null-results” on SEI could thus be due to high multi-collinearity. However, this does not seem to be the case. Table A.3 first shows the bivariate correlations between all the variables included in our models in Table 2 of the paper, but only for actual data. Table A.4 also shows bivariate correlations, but these report the correlation when including imputed observations. Generally, the correlation coefficients in Table A.3 do not change much when including imputed data, and are thus quite similar to the coefficients in A.4.

As expected, Socio-economic resources is the variable that is most highly correlated with SEI, at .79 when including imputed data (.81 for actual data). However, this is not exceedingly high, and does not indicate that we should be greatly concerned with the issue noted above. Democratic tradition and the Protestants—Muslims measure (“Religion”) both correlate more than .5 with SEI when including imputed data.

Further, we have included a large number of variables in our imputation model, in addition to those in the regression models, and these variables contribute to predict SEI. Thus, SEI should thus not be too driven, e.g., by socio-economic resources, or even a linear combination of all the regressors in the model. To check this, we calculated Variance Inflation Factor (VIF) value for SEI (in Model B2, Table 2). The VIF value for SEI is 3.03, and this is far lower than the critical value suggested by the standard rule of thumb (10). This indicates that multi-collinearity in the regression model is not a very big problem, and thus that our null-results are likely not driven by this feature of the data (i.e. we have sufficient independent information about self-expression value scores to form fairly certain estimates about the effect).

Finally, in order to investigate more closely whether our null results are sensitive to the inclusion of any particular control, we run sensitivity analysis on Model B9 from Table 2, dropping one control variable at the time. As seen from Table A.5, the results from the regressions are very stable to making such adjustments, and SEI is never statistically significant even at the weak 10 percent level for any of these specifications.

Table A.3. Bivariate correlation coefficients (Pearson's r) between variables included in Table 2 (only actual data)

| | Self-Expression Values Index | Socio-economic resources | Democr. tradition | Religion (prot.-muslim) | Years of schooling | Ethnic fract. | Gini | Public spending | Exports |
|-------------------------|------------------------------|--------------------------|-------------------|-------------------------|--------------------|---------------|---------|-----------------|---------|
| Self-Expr. Values Index | 1.0000 | | | | | | | | |
| Socio-ec. resources | 0.8114 | 1.0000 | | | | | | | |
| Dem. tradition | 0.5079 | 0.5530 | 1.0000 | | | | | | |
| Religion | 0.5799 | 0.5731 | 0.3749 | 1.0000 | | | | | |
| Schooling | 0.4910 | 0.6040 | 0.2129 | 0.4690 | 1.0000 | | | | |
| Ethnic fraction. | 0.3548 | -0.4064 | -0.2740 | -0.2699 | -0.3844 | 1.0000 | | | |
| Gini | -0.1712 | 0.0767 | -0.0.1769 | 0.0482 | -0.3129 | 0.3179 | 1.0000 | | |
| Public spending | 0.4373 | 0.0.8306 | 0.3856 | 0.4682 | 0.4067 | -0.1048 | 0.0826 | 1.0000 | |
| Exports | 0.1093 | 0.2171 | 0.0796 | 0.1032 | 0.3762 | -0.0658 | -0.4039 | 0.3838 | 1.0000 |

Table A.4. Bivariate correlation coefficients (Pearson's r) between variables included in Table 2 (actual and imputed data)

| | Self-Expression Values Index | Socio-economic resources | Democr. tradition | Religion (prot.-muslim) | Years of schooling | Ethnic fract. | Gini | Public spending | Exports |
|-------------------------|------------------------------|--------------------------|-------------------|-------------------------|--------------------|---------------|---------|-----------------|---------|
| Self-Expr. Values Index | 1.0000 | | | | | | | | |
| Socio-ec. resources | 0.7904 | 1.0000 | | | | | | | |
| Dem. tradition | 0.5067 | 0.5518 | 1.0000 | | | | | | |
| Religion | 0.5779 | 0.5532 | 0.3716 | 1.0000 | | | | | |
| Schooling | 0.4908 | 0.5706 | 0.2906 | 0.4770 | 1.0000 | | | | |
| Ethnic fraction. | -0.3537 | -0.4009 | -0.2731 | -0.2746 | -0.3894 | 1.0000 | | | |
| Gini | -0.1725 | -0.1562 | -0.0653 | -0.1035 | -0.2749 | 0.3388 | 1.0000 | | |
| Public spending | 0.4374 | 0.4002 | 0.2882 | 0.4040 | 0.3478 | -0.0596 | -0.0221 | 1.0000 | |
| Exports | 0.1102 | 0.1503 | 0.0231 | 0.1058 | 0.3346 | -0.0674 | -0.1390 | 0.0733 | 1.0000 |

TABLE A.5. Sensitivity analysis: Dropping controls in sequence from Model B9, Table 2 in the paper (System GMM model).

| Dep. Variable: | EDI | EDI | EDI | EDI | EDI | EDI | EDI | EDI |
|------------------|-------------------------------------|-------------------------------------|-------------------------|--------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------|
| SEI | 0.0807 (0.0830) | 0.137 (0.0901) | 0.0812 (0.0768) | 0.0862 (0.0966) | 0.0798 (0.0835) | 0.0815 (0.0851) | 0.0806 (0.0835) | 0.0959 (0.0844) |
| Resources index | 0.00246*** (0.000671) | | 0.00251** (0.000845) | 0.00236*** (0.000595) | 0.00247*** (0.000660) | 0.00256*** (0.000685) | 0.00245*** (0.000679) | 0.00279*** (0.000587) |
| Schooling | 0.00357 (0.00228) | 0.00492 ⁺ (0.00276) | | 0.00362 (0.00258) | 0.00353 (0.00230) | 0.00367 (0.00235) | 0.00383 ⁺ (0.00230) | 0.00391 (0.00238) |
| Public spending | 0.000912 ⁺ (0.000492) | 0.00125* (0.000636) | 0.00113* (0.000531) | | 0.000903 ⁺ (0.000497) | 0.000812 ⁺ (0.000479) | 0.000940 ⁺ (0.000489) | 0.00100* (0.000501) |
| Religion | 0.000898* (0.000378) | 0.000968 ⁺ (0.000499) | 0.00105** (0.000364) | 0.00112* (0.000477) | 0.000887* (0.000369) | 0.000948** (0.000326) | 0.000896* (0.000370) | 0.000874* (0.000388) |
| Gini index | 0.000200 (0.000520) | 0.000398 (0.000564) | 0.000255 (0.000684) | 0.000248 (0.000569) | | 0.000148 (0.000516) | 0.000167 (0.000519) | 0.000267 (0.000542) |
| Ethnic fract. | -0.0628 (0.0583) | -0.0989 (0.0835) | -0.0653 (0.0669) | -0.0555 (0.0595) | -0.0607 (0.0593) | | -0.0595 (0.0565) | -0.0720 (0.0569) |
| Exports | 0.000204 (0.000236) | 0.000194 (0.000300) | 0.000286 (0.000266) | 0.000136 (0.000234) | 0.000187 (0.000242) | 0.000161 (0.000241) | | 0.000268 (0.000225) |
| Democratic trad. | 0.00106 ⁺ (0.000605) | 0.00167** (0.000510) | 0.00108 (0.000669) | 0.00155* (0.000615) | 0.00107 ⁺ (0.000620) | 0.00110 ⁺ (0.000618) | 0.00110 ⁺ (0.000587) | |
| Lagged dep. var | 0.542*** (0.0253) | 0.580*** (0.0312) | 0.525*** (0.0278) | 0.523*** (0.0268) | 0.543*** (0.0254) | 0.550*** (0.0254) | 0.545*** (0.0250) | 0.543*** (0.0257) |
| Constant | 0.0874* (0.0345) | 0.0823* (0.0380) | 0.122*** (0.0345) | 0.104* (0.0440) | 0.0947** (0.0323) | 0.0642* (0.0285) | 0.0904** (0.0337) | 0.0765* (0.0342) |
| Observations | 1468 | 1468 | 1468 | 1468 | 1468 | 1468 | 1468 | 1468 |

Notes: ⁺ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Standard errors in parentheses. All explanatory variables are lagged by 7 years. See Table 2 in the paper for further specifications.

A.VIII Further testing whether characteristics of the imputation model influence results

First, in Tables A.6 and A.7, we present the models from Tables 1 and 2 in the paper that contain imputed data, but we here also report the standard errors for the SEI coefficients when they do not take into account the additional uncertainty related to the imputation of missing values. In other words, we report errors that are not imputation corrected, treating the imputed data as if they were observed with no errors (which could thus be considered a lower bound on the standard error). We also report the percentage increase in errors when imputation-correcting. The average increase in the SEI standard errors as a result of the imputation correction is 44.3% across the 16 models presented in the two tables.

While it is not advisable to trust these errors, because they are likely downward biased because of not accounting for the extra uncertainty, they do provide a sense of how much of our uncertainty concerning the potential effect of SEI on democracy that is driven by the imputation of missing values. Thus, it is interesting to note that while the percentage increases in errors vary quite a lot between the model specifications, the imputation corrections do not qualitatively influence results (on standard hypothesis tests) in any of the models in Table A.6, except that the coefficient for the cross-section OLS model using EDI now turns weakly significant at the 10 percent level. Further, it only influences hypothesis tests for conventional levels in two of the models in A.7; the random effects and system GMM models report statistically significant coefficients at the 5 percent level when ignoring the additional uncertainty stemming from the imputation. However, this is only the case when using EDI as democracy measure. Even when treating the imputed data as observed, and thus deflating the standard errors, none of the models using the more conventional FHI measure of democracy (or none of the fixed effects or Arellano-Bond specifications, for that matter) report any significant coefficients.

In Tables A.8—A.12, we treat the imputed data as if they were actual observations, in the sense that we ignore the uncertainty associated with the imputation procedure, and run our regressions without imputation corrected errors separately on the five different imputed data sets. The models are otherwise equivalent to those in Table 2 in the paper. The results from this exercise show that our null finding in the paper on SEI and democracy is not simply a result of the imputed data being associated with large uncertainty and thus inflating the standard errors of the regression coefficients. Coefficients are not robust for any model or data set, and although some models

(e.g. Model B.9 using EDI) show positive significant coefficients in more than one data set, other models even show a negative significant effect of SEI.

Further, in Tables A.13—A.15., which are run on shorter time series, we address another concern that we discussed above, namely whether poor performance of the imputation model early in the sample drive our null results. This does not seem to be the case either, as e.g. Table A.14 reports models (otherwise similar to in Table 2 in the paper) that leave out observations from the 1980s. In other words, these models are run on samples including data from 1990 to 2009. We also tested models setting the sample cut-off date to 1985 (A.13) and to 1995 (A.15), but this does not change the results: Our null finding on SEI and democracy is stable for adjusting the time frame of the sample.

TABLE A.6. Table 1 from the paper with non-adjusted standard errors and % increase in standard errors when imputation-correcting

| Estim. techn. (dep. var.): | OLS (EDI) | OLS (FHI) | PCSE (EDI) | PCSE (FHI) | PCSE (EDI) | PCSE (FHI) |
|----------------------------------|--|--------------------------------------|--------------------------------------|------------------------------------|--------------------------------------|-----------------------------------|
| SEI | 0.330 | 0.442 | 0.346 ^{***} | 0.584 | 0.359 ^{***} | 0.790 |
| <i>Imp.-corrected st. errors</i> | (0.288) | (2.697) | (0.0967) | (1.004) | (0.100) | (0.800) |
| <i>Non-adjusted st. errors</i> | (0.186) | (1.775) | (0,0916) | (0.933) | (0.098) | (0.795) |
| <i>% increase in st. errors</i> | 54.52 | 51.98 | 5.59 | 7.61 | 2.04 | 0.66 |
| Resources index | 0.00175 ^{***} (0.000333) | 0.00585 ⁺ (0.00323) | 0.00935 ^{***} (0.00104) | 0.0362 ^{***} (0.00950) | 0.00874 ^{***} (0.00107) | 0.0302 ^{**} (0.00893) |
| Democratic tradition | -0.000182 (0.000276) | 0.00183 (0.00262) | -0.000195 (0.000871) | 0.00851 (0.00766) | -0.000721 (0.000858) | 0.00235 (0.00560) |
| Religion | 0.000286 ^{***} (0.0000657) | 0.00246 ^{***} (0.000621) | 0.00137 ^{***} (0.000268) | 0.0106 ^{**} (0.00323) | 0.00148 ^{***} (0.000312) | 0.00654 [*] (0.00260) |
| Schooling | 0.00168 (0.00149) | 0.0258 ⁺ (0.0139) | 0.0117 [*] (0.00572) | 0.141 [*] (0.0583) | 0.0182 ^{**} (0.00662) | 0.181 ^{**} (0.0650) |
| Ethnic fractionalization | -0.00529 (0.0107) | 0.0430 (0.100) | -0.0631 (0.0528) | -0.0634 (0.498) | -0.107 (0.0670) | -0.504 (0.470) |
| Constant | 0.0456 (0.103) | 3.011 ^{**} (1.006) | 0.0461 (0.0652) | 3.033 ^{***} (0.707) | 0.0157 (0.0800) | 3.051 ^{***} (0.783) |
| Observations | 92 | 92 | 2105 | 2105 | 1468 | 1468 |

Notes: ⁺ $p < 0.10$, ^{*} $p < 0.05$, ^{**} $p < 0.01$, ^{***} $p < 0.001$. Standard errors in parentheses. All explanatory variables are lagged by 7 years. See Table 2 in the paper for further specifications. If nothing else is noted, the errors are imputation corrected, as in Table 1 of the paper. For SEI, the non-adjusted standard errors ignore uncertainty stemming from the fact that some data points are imputed, and treat these as observed values measured without error. The % increase in errors reported is the % increase when going from non-adjusted to imputation-corrected errors for SEI.

TABLE A.7. Table 2 from the paper with non-adjusted standard errors and % increase in standard errors when imputation-correcting

| Dep. variable: Estimation technique: | EDI OLS PCSE | FHI OLS PCSE | EDI Fixed effects | FHI Fixed effects | EDI Random effects | FHI Random effects | EDI Ar.-Bond | FHI Ar.-Bond | EDI Syst. GMM | FHI Syst. GMM |
|--|--------------------------|-----------------------|--------------------------|-------------------------|--------------------------|--------------------------|--------------------------|-----------------------|--------------------------|-----------------------|
| SEI | 0.317*** (0.0908) | 0.520 (0.816) | 0.0385 (0.0634) | 0.109 (0.515) | 0.0842 (0.0623) | 0.235 (0.495) | -0.0565 (0.169) | -0.128 (0.471) | 0.0807 (0.0830) | -0.0620 (0.425) |
| <i>Imp.-corrected st. errors</i> | | | | | | | | | | |
| <i>Non-adjusted st. errors</i> | (0.0888) | (0.814) | (0.0385) | (0.494) | (0.0389) | (0.393) | (0.071) | (0.277) | (0.0359) | (0.253) |
| <i>% increase in st. errors</i> | 2.29 | 0.23 | 64.72 | 27.34 | 60.43 | 25.86 | 137.28 | 69.95 | 131.10 | 67.66 |
| Res. index | 0.00867*** (0.000946) | 0.0277** (0.00817) | 0.00176* (0.000745) | 0.0189** (0.00730) | 0.00367*** (0.000660) | 0.0241*** (0.00581) | 0.000271 (0.000924) | 0.00424 (0.00483) | 0.00246*** (0.000671) | 0.00509 (0.00452) |
| Democr. trad. | -0.000752 (0.000794) | 0.00159 (0.00558) | 0.00244*** (0.000499) | 0.0119* (0.00563) | 0.00167*** (0.000468) | 0.00781 (0.00485) | 0.00323*** (0.000854) | 0.0129** (0.00398) | 0.00106+ (0.000605) | 0.00834* (0.00342) |
| Religion | 0.00136*** (0.000295) | 0.00557* (0.00271) | 0.000862 (0.00250) | 0.00477 (0.0228) | 0.00283*** (0.000393) | 0.00860** (0.00289) | -0.000332 (0.00229) | -0.00396 (0.0147) | 0.000898* (0.000378) | 0.00323 (0.00206) |
| Schooling | 0.0107 (0.00694) | 0.147* (0.0632) | 0.00451 (0.00357) | 0.0331 (0.0269) | 0.00527 (0.00341) | 0.0495+ (0.0262) | 0.00142 (0.00624) | 0.00859 (0.0195) | 0.00357 (0.00228) | 0.0142 (0.0180) |
| Ethnic fract. | -0.140* (0.0658) | -0.857+ (0.437) | -0.408 (0.794) | -0.372 (5.237) | -0.248*** (0.0633) | -1.085* (0.470) | -0.196 (0.901) | -0.0223 (3.496) | -0.0628 (0.0583) | -0.122 (0.368) |
| Gini index | -0.000141 (0.00148) | 0.00635 (0.00868) | 0.000730 (0.000990) | 0.00810 (0.00795) | 0.000536 (0.000962) | 0.00695 (0.00752) | 0.000304 (0.000702) | 0.00225 (0.00496) | 0.000200 (0.000520) | 0.000711 (0.00333) |
| Public spending | 0.00263+ (0.00148) | 0.0230+ (0.0126) | 0.00149** (0.000572) | 0.0153* (0.00597) | 0.00168** (0.000538) | 0.0167** (0.00560) | 0.00142 (0.00134) | 0.00408 (0.00388) | 0.000912+ (0.000492) | 0.00236 (0.00437) |
| Exports | 0.00155*** (0.000415) | 0.00665* (0.00311) | 0.000460 (0.000303) | 0.00823* (0.00360) | 0.000574* (0.000268) | 0.00828** (0.00300) | 0.0000898 (0.000441) | 0.00260 (0.00267) | 0.000204 (0.000236) | 0.00282 (0.00222) |
| Lag EDI | | | | | | | 0.267*** (0.0508) | | 0.542*** (0.0253) | |
| Lag FHI | | | | | | | | 0.718*** (0.0203) | | 0.744*** (0.0183) |
| Constant | 0.0275 (0.0941) | 2.837** (0.836) | 0.444 (0.285) | 4.120* (1.777) | 0.316*** (0.0479) | 4.044*** (0.385) | 0.374 (0.247) | 1.210 (1.139) | 0.0874* (0.0345) | 1.058*** (0.283) |
| Observations | 1468 | 1468 | 1468 | 1468 | 1468 | 1468 | 1404 | 1404 | 1468 | 1468 |

Notes: + $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Standard errors in parentheses. All explanatory variables are lagged by 7 years. See Table 2 in the paper for further specifications. If nothing else is noted, the errors are imputation corrected, as in Table 2 of the paper. For SEI, the non-adjusted standard errors ignore uncertainty stemming from the fact that some data points are imputed, and treat these as observed values measured without error. The % increase in errors reported is the % increase when going from non-adjusted to imputation-corrected errors for SEI.

Table A.8. Treating imputed as actual observations. Models in Table 2 of the paper run (only) on imputed data set number 1.

| Dep. variable: | EDI | FHI | EDI | FHI | EDI | FHI | EDI | FHI | EDI | FHI |
|-----------------------|--------------------------|------------------------|--------------------------|------------------------|--------------------------|------------------------|--------------------------|------------------------|--------------------------|------------------------|
| Estimation technique: | OLS | PCSE | Fixed effects | Fixed effects | Random Eff. | Random Eff. | Ar.-Bond | Ar.-Bond | Syst. GMM | Syst. GMM |
| SEI | 0.299** (0.0891) | 0.451 (0.706) | 0.0770* (0.0384) | 0.389 (0.403) | 0.122** (0.0387) | 0.482 (0.392) | 0.0834* (0.0369) | 0.0940 (0.276) | 0.177*** (0.0353) | 0.0261 (0.257) |
| Resources index | 0.00877*** (0.000970) | 0.0286*** (0.00804) | 0.00205*** (0.000540) | 0.0206*** (0.00567) | 0.00380*** (0.000499) | 0.0248*** (0.00474) | 0.000609 (0.000501) | 0.00764* (0.00380) | 0.00207*** (0.000384) | 0.00432 (0.00279) |
| Democr. tradition | -0.000862 (0.000767) | 0.00152 (0.00572) | 0.00244*** (0.000495) | 0.0108* (0.00519) | 0.00165*** (0.000469) | 0.00672 (0.00452) | 0.00190*** (0.000465) | 0.0103*** (0.00346) | 0.00115** (0.000364) | 0.00849** (0.00266) |
| Religion | 0.00132*** (0.000276) | 0.00559* (0.00270) | -0.000237 (0.00156) | -0.00274 (0.0163) | 0.00259*** (0.000362) | 0.00772** (0.00278) | -0.000785 (0.00131) | 0.000967 (0.00982) | 0.000681** (0.000225) | 0.00301* (0.00151) |
| Schooling | 0.0100 (0.00616) | 0.144* (0.0631) | 0.00266 (0.00201) | 0.0214 (0.0211) | 0.00360+ (0.00201) | 0.0388+ (0.0202) | 0.00188 (0.00194) | 0.0265+ (0.0145) | 0.00139 (0.00172) | 0.0245* (0.0124) |
| Ethnic fraction. | -0.127* (0.0627) | -0.707 (0.428) | -1.261* (0.531) | -2.783 (5.567) | -0.247*** (0.0618) | -1.027* (0.463) | -0.980* (0.464) | -0.421 (3.499) | -0.0543 (0.0357) | 0.162 (0.232) |
| Gini index | -0.000914 (0.00140) | 0.00123 (0.00839) | -0.000153 (0.000495) | 0.00299 (0.00519) | -0.000339 (0.000490) | 0.00176 (0.00489) | 0.000167 (0.000420) | 0.00311 (0.00315) | 0.000409 (0.000376) | 0.00190 (0.00273) |
| Public spending | 0.00235+ (0.00137) | 0.0200+ (0.0116) | 0.00133** (0.000423) | 0.0167*** (0.00444) | 0.00152*** (0.000424) | 0.0177*** (0.00426) | 0.000629 (0.000426) | 0.00244 (0.00315) | 0.000947* (0.000403) | 0.0000409 (0.00285) |
| Exports | 0.00147*** (0.000425) | 0.00570+ (0.00329) | 0.000579* (0.000265) | 0.00647* (0.00277) | 0.000621* (0.000250) | 0.00673** (0.00241) | 0.000310 (0.000244) | 0.000807 (0.00184) | 0.000140 (0.000194) | 0.00127 (0.00142) |
| Lag EDI | | | | | | | 0.460*** (0.0297) | | 0.532*** (0.0227) | |
| Lag FHI | | | | | | | | 0.717*** (0.0198) | | 0.747*** (0.0177) |
| Constant | 0.0737 (0.0894) | 3.102*** (0.836) | 0.754*** (0.173) | 5.157** (1.813) | 0.351*** (0.0386) | 4.270*** (0.350) | 0.489** (0.153) | 1.049 (1.152) | 0.0800** (0.0285) | 0.881*** (0.209) |
| Observations | 1468 | 1468 | 1468 | 1468 | 1468 | 1468 | 1404 | 1404 | 1468 | 1468 |
| R ² | 0.794 | 0.491 | 0.0960 | 0.0563 | | | | | | |

Notes: + $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Standard errors in parentheses. All explanatory variables are lagged by 7 years.

Table A.9. Treating imputed as actual observations. Models in Table 2 of the paper run (only) on imputed data set number 2.

| Dep. variable: | EDI | FHI | EDI | FHI | EDI | FHI | EDI | FHI | EDI | FHI |
|-----------------------|--------------------------|-----------------------|--------------------------|-------------------------|--------------------------|-------------------------|--------------------------|------------------------|--------------------------|------------------------|
| Estimation technique: | OLS | PCSE | Fixed effects | Fixed effects | Random Eff. | Random Eff. | Ar.-Bond | Ar.-Bond | Syst. GMM | Syst. GMM |
| SEI | 0.316*** (0.0847) | 0.583 (0.762) | -0.0266 (0.0382) | -0.367 (0.399) | 0.0174 (0.0386) | -0.219 (0.390) | -0.0610 (0.0383) | -0.230 (0.277) | 0.0202 (0.0358) | -0.0399 (0.253) |
| Resources index | 0.00854*** (0.000953) | 0.0263** (0.00780) | 0.00234*** (0.000551) | 0.0247*** (0.00575) | 0.00422*** (0.000503) | 0.0281*** (0.00474) | 0.000850 (0.000531) | 0.00627 (0.00388) | 0.00261*** (0.000407) | 0.00454 (0.00282) |
| Democr. tradition | -0.000642 (0.000771) | 0.00186 (0.00533) | 0.00242*** (0.000484) | 0.0106* (0.00505) | 0.00172*** (0.000458) | 0.00724 (0.00440) | 0.00185*** (0.000464) | 0.0146*** (0.00337) | 0.000998** (0.000377) | 0.0106*** (0.00264) |
| Religion | 0.00130*** (0.000279) | 0.00518* (0.00252) | 0.00217 (0.00157) | 0.0105 (0.0164) | 0.00287*** (0.000353) | 0.00862** (0.00272) | -0.000904 (0.00159) | -0.00471 (0.0117) | 0.00129*** (0.000244) | 0.00409* (0.00162) |
| Schooling | 0.0146** (0.00535) | 0.177** (0.0535) | 0.00812*** (0.00198) | 0.0537** (0.0207) | 0.00845*** (0.00198) | 0.0706*** (0.0198) | 0.00520* (0.00205) | -0.00599 (0.0151) | 0.00463* (0.00187) | 0.00191 (0.0132) |
| Ethnic fraction. | -0.140* (0.0629) | -0.825* (0.404) | 0.299 (0.392) | 0.228 (4.098) | -0.227*** (0.0594) | -1.001* (0.447) | 0.477 (0.346) | -0.411 (2.545) | -0.0737* (0.0332) | -0.449* (0.215) |
| Gini index | 0.000428 (0.00128) | 0.00898 (0.00701) | 0.00113* (0.000481) | 0.00887+ (0.00503) | 0.000968* (0.000477) | 0.00783+ (0.00472) | 0.000744+ (0.000429) | 0.00471 (0.00314) | 0.000417 (0.000390) | 0.00179 (0.00275) |
| Public spending | 0.00250+ (0.00149) | 0.0222+ (0.0131) | 0.000964* (0.000459) | 0.0121* (0.00480) | 0.00126** (0.000459) | 0.0142** (0.00459) | 0.0000938 (0.000470) | 0.00673+ (0.00346) | 0.000629 (0.000437) | 0.00327 (0.00310) |
| Exports | 0.00151*** (0.000387) | 0.00651* (0.00279) | 0.000437 (0.000272) | 0.00947*** (0.00284) | 0.000550* (0.000255) | 0.00912*** (0.00244) | 0.000177 (0.000257) | 0.00106 (0.00189) | 0.000330 (0.000202) | 0.00110 (0.00143) |
| Lag EDI | | | | | | | 0.502*** (0.0288) | | 0.543*** (0.0230) | |
| Lag FHI | | | | | | | | 0.722*** (0.0193) | | 0.736*** (0.0172) |
| Constant | -0.0294 (0.0807) | 2.448** (0.758) | 0.175 (0.131) | 3.719** (1.372) | 0.279*** (0.0380) | 3.866*** (0.344) | 0.00681 (0.116) | 1.370 (0.855) | 0.0882** (0.0298) | 1.325*** (0.217) |
| Observations | 1468 | 1468 | 1468 | 1468 | 1468 | 1468 | 1404 | 1404 | 1468 | 1468 |
| R ² | 0.796 | 0.500 | 0.0977 | 0.0668 | | | | | | |

Notes: + $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Standard errors in parentheses. All explanatory variables are lagged by 7 years.

Table A.10. Treating imputed as actual observations. Models in Table 2 of the paper run (only) on imputed data set number 3.

| Dep. variable: Estimation technique: | EDI OLS PCSE | FHI OLS PCSE | EDI Fixed effects | FHI Fixed effects | EDI Random Eff. | FHI Random Eff. | EDI Ar.-Bond | FHI Ar.-Bond | EDI Syst. GMM | FHI Syst. GMM |
|--|--------------------------|------------------------|--------------------------|------------------------|--------------------------|------------------------|--------------------------|------------------------|---------------------------|-------------------------|
| SEI | 0.318*** (0.0862) | 0.496 (0.810) | 0.0492 (0.0389) | 0.0581 (0.409) | 0.0972* (0.0392) | 0.188 (0.397) | -0.0308 (0.0370) | -0.554* (0.274) | 0.0630+ (0.0362) | -0.480+ (0.252) |
| Resources index | 0.00880*** (0.000867) | 0.0292*** (0.00752) | 0.00179** (0.000548) | 0.0190*** (0.00575) | 0.00375*** (0.000503) | 0.0252*** (0.00479) | 0.000263 (0.000516) | 0.00129 (0.00386) | 0.00319*** (0.000415) | 0.0101*** (0.00287) |
| Democr. tradition | -0.000633 (0.000818) | 0.00151 (0.00564) | 0.00255*** (0.000486) | 0.0109* (0.00510) | 0.00176*** (0.000461) | 0.00711 (0.00445) | 0.00241*** (0.000456) | 0.0128*** (0.00333) | 0.000605+ (0.000362) | 0.00541* (0.00254) |
| Religion | 0.00129*** (0.000285) | 0.00559* (0.00276) | 0.00168 (0.00242) | 0.00387 (0.0254) | 0.00283*** (0.000360) | 0.00894** (0.00277) | -0.000213 (0.00226) | -0.00795 (0.0168) | 0.000910*** (0.000200) | 0.00491*** (0.00133) |
| Schooling | 0.00916 (0.00605) | 0.134* (0.0654) | 0.00268 (0.00199) | 0.0163 (0.0209) | 0.00359+ (0.00199) | 0.0337+ (0.0199) | 0.000593 (0.00196) | 0.00913 (0.0147) | 0.00396* (0.00184) | 0.0214+ (0.0130) |
| Ethnic fraction. | -0.150* (0.0664) | -0.922* (0.430) | -0.0333 (0.310) | 2.035 (3.251) | -0.252*** (0.0595) | -1.087* (0.453) | 0.151 (0.279) | 1.607 (2.083) | -0.0212 (0.0359) | 0.130 (0.224) |
| Gini index | -0.000217 (0.00139) | 0.00689 (0.00800) | 0.00110* (0.000472) | 0.00750 (0.00495) | 0.000815+ (0.000467) | 0.00673 (0.00466) | 0.000420 (0.000409) | -0.000105 (0.00304) | -0.0000119 (0.000393) | -0.00134 (0.00272) |
| Public spending | 0.00316* (0.00137) | 0.0242* (0.0108) | 0.00170*** (0.000424) | 0.0156*** (0.00445) | 0.00188*** (0.000424) | 0.0168*** (0.00426) | 0.000856* (0.000425) | 0.00503 (0.00314) | 0.000955* (0.000410) | 0.00566* (0.00282) |
| Exports | 0.00165*** (0.000368) | 0.00787** (0.00271) | 0.000530* (0.000265) | 0.0112*** (0.00279) | 0.000670** (0.000249) | 0.0106*** (0.00240) | 0.0000765 (0.000241) | 0.00432* (0.00182) | 0.000270 (0.000199) | 0.00346* (0.00144) |
| Lag EDI | | | | | | | 0.422*** (0.0297) | | 0.544*** (0.0225) | |
| Lag FHI | | | | | | | | 0.712*** (0.0196) | | 0.744*** (0.0170) |
| Constant | 0.0281 (0.0896) | 2.870** (0.906) | 0.309** (0.103) | 3.451** (1.080) | 0.307*** (0.0378) | 4.115*** (0.345) | 0.194* (0.0935) | 0.980 (0.695) | 0.0656* (0.0298) | 0.963*** (0.211) |
| Observations | 1468 | 1468 | 1468 | 1468 | 1468 | 1468 | 1404 | 1404 | 1468 | 1468 |
| R ² | 0.800 | 0.496 | 0.0909 | 0.0594 | | | | | | |

Notes: + $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Standard errors in parentheses. All explanatory variables are lagged by 7 years.

Table A.11. Treating imputed as actual observations. Models in Table 2 of the paper run (only) on imputed data set number 4.

| Dep. variable: Estimation technique: | EDI OLS PCSE | FHI OLS PCSE | EDI Fixed effects | FHI Fixed effects | EDI Random Eff. | FHI Random Eff. | EDI Ar.-Bond | FHI Ar.-Bond | EDI Syst. GMM | FHI Syst. GMM |
|--|--------------------------|-----------------------|--------------------------|------------------------|--------------------------|-------------------------|--------------------------|------------------------|--------------------------|-------------------------|
| SEI | 0.345*** (0.0941) | 0.547 (0.964) | 0.0819* (0.0380) | 0.213 (0.403) | 0.122** (0.0384) | 0.348 (0.393) | -0.00581 (0.0379) | -0.289 (0.279) | 0.0203 (0.0367) | -0.190 (0.257) |
| Resources index | 0.00878*** (0.000977) | 0.0283** (0.00899) | 0.00138** (0.000528) | 0.0139* (0.00560) | 0.00322*** (0.000491) | 0.0203*** (0.00473) | -0.000172 (0.000510) | 0.00366 (0.00374) | 0.00196*** (0.000395) | 0.00526+ (0.00278) |
| Democr. tradition | -0.000749 (0.000832) | 0.00190 (0.00564) | 0.00229*** (0.000480) | 0.0157** (0.00508) | 0.00161*** (0.000458) | 0.0109* (0.00448) | 0.00239*** (0.000459) | 0.0149*** (0.00330) | 0.00175*** (0.000372) | 0.00966*** (0.00262) |
| Religion | 0.00149*** (0.000285) | 0.00616* (0.00274) | -0.000651 (0.00281) | 0.00351 (0.0298) | 0.00296*** (0.000372) | 0.00963*** (0.00287) | 0.0000867 (0.00247) | -0.00363 (0.0181) | 0.00101*** (0.000208) | 0.00181 (0.00137) |
| Schooling | 0.00627 (0.00566) | 0.125* (0.0560) | 0.00235 (0.00194) | 0.0299 (0.0206) | 0.00314 (0.00195) | 0.0438* (0.0199) | 0.00169 (0.00192) | 0.00995 (0.0141) | 0.00403* (0.00181) | 0.0219+ (0.0129) |
| Ethnic fraction. | -0.151* (0.0667) | -0.973* (0.424) | -0.410 (0.485) | 0.806 (5.136) | -0.272*** (0.0625) | -1.238** (0.477) | -0.744 (0.512) | 1.237 (3.780) | -0.0360 (0.0368) | -0.262 (0.231) |
| Gini index | 0.000261 (0.00136) | 0.00999 (0.00747) | 0.00163*** (0.000461) | 0.0172*** (0.00489) | 0.00142** (0.000458) | 0.0154*** (0.00462) | 0.000977* (0.000402) | 0.00614* (0.00295) | 0.000457 (0.000364) | 0.00239 (0.00255) |
| Public spending | 0.00246+ (0.00142) | 0.0220+ (0.0127) | 0.00169*** (0.000418) | 0.0120** (0.00443) | 0.00183*** (0.000421) | 0.0135** (0.00427) | 0.000901+ (0.000424) | 0.00213 (0.00315) | 0.000765+ (0.000391) | -0.00145 (0.00277) |
| Exports | 0.00164*** (0.000392) | 0.00679* (0.00302) | 0.000254 (0.000276) | 0.00676* (0.00292) | 0.000460+ (0.000260) | 0.00751** (0.00253) | -0.000170 (0.000259) | 0.00230 (0.00190) | 0.0000477 (0.000203) | 0.00404** (0.00153) |
| Lag EDI | | | | | | | 0.488*** (0.0304) | | 0.557*** (0.0231) | |
| Lag FHI | | | | | | | | 0.718*** (0.0200) | | 0.746*** (0.0175) |
| Constant | 0.0506 (0.0766) | 2.962*** (0.712) | 0.444** (0.167) | 3.605* (1.770) | 0.313*** (0.0381) | 3.939*** (0.347) | 0.427* (0.173) | 0.749 (1.274) | 0.0939** (0.0292) | 1.015*** (0.213) |
| Observations | 1468 | 1468 | 1468 | 1468 | 1468 | 1468 | 1404 | 1404 | 1468 | 1468 |
| R ² | 0.794 | 0.478 | 0.0794 | 0.0530 | | | | | | |

Notes: + $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Standard errors in parentheses. All explanatory variables are lagged by 7 years.

Table A.12. Treating imputed as actual observations. Models in Table 2 of the paper run (only) on imputed data set number 5.

| Dep. variable: Estimation technique: | EDI OLS PCSE | FHI OLS PCSE | EDI Fixed effects | FHI Fixed effects | EDI Random Eff. | FHI Random Eff. | EDI Ar.-Bond | FHI Ar.-Bond | EDI Syst. GMM | FHI Syst. GMM |
|--|--------------------------|-----------------------|--------------------------|------------------------|--------------------------|------------------------|--------------------------|------------------------|--------------------------|------------------------|
| SEI | 0.306** (0.0892) | 0.520 (0.806) | 0.0112 (0.0389) | 0.252 (0.408) | 0.0628 (0.0392) | 0.376 (0.395) | 0.0216 (0.0378) | 0.337 (0.279) | 0.123*** (0.0355) | 0.373 (0.250) |
| Resources index | 0.00847*** (0.000881) | 0.0263** (0.00774) | 0.00122* (0.000558) | 0.0163** (0.00585) | 0.00337*** (0.000509) | 0.0221*** (0.00480) | 0.000154 (0.000538) | 0.00232 (0.00393) | 0.00246*** (0.000417) | 0.00121 (0.00292) |
| Democr. tradition | -0.000876 (0.000723) | 0.00114 (0.00553) | 0.00249*** (0.000493) | 0.0115* (0.00516) | 0.00163** (0.000466) | 0.00710 (0.00447) | 0.00194*** (0.000461) | 0.0118*** (0.00337) | 0.000795* (0.000372) | 0.00757** (0.00263) |
| Religion | 0.00139*** (0.000276) | 0.00531+ (0.00266) | 0.00135 (0.00184) | 0.00871 (0.0193) | 0.00287*** (0.000357) | 0.00806** (0.00273) | 0.00186 (0.00181) | -0.00448 (0.0133) | 0.000601* (0.000259) | 0.00231 (0.00169) |
| Schooling | 0.0136* (0.00598) | 0.156** (0.0571) | 0.00674*** (0.00199) | 0.0440* (0.0209) | 0.00758*** (0.00199) | 0.0608** (0.0199) | 0.00226 (0.00197) | 0.00333 (0.0144) | 0.00385* (0.00183) | 0.00150 (0.0128) |
| Ethnic fraction. | -0.133* (0.0652) | -0.857* (0.428) | -0.636 (0.501) | -2.145 (5.256) | -0.243*** (0.0603) | -1.074* (0.452) | -0.658 (0.435) | -2.124 (3.213) | -0.129*** (0.0382) | -0.192 (0.245) |
| Gini index | -0.000263 (0.00137) | 0.00467 (0.00796) | -0.0000614 (0.000467) | 0.00392 (0.00489) | -0.000190 (0.000463) | 0.00300 (0.00460) | -0.000314 (0.000405) | -0.00261 (0.00298) | -0.000269 (0.000373) | -0.00119 (0.00260) |
| Public spending | 0.00269+ (0.00155) | 0.0267* (0.0130) | 0.00174*** (0.000468) | 0.0202*** (0.00491) | 0.00193*** (0.000467) | 0.0214*** (0.00466) | 0.000686 (0.000475) | 0.00408 (0.00347) | 0.00126** (0.000443) | 0.00424 (0.00310) |
| Exports | 0.00146** (0.000435) | 0.00638* (0.00306) | 0.000500+ (0.000267) | 0.00724** (0.00280) | 0.000568* (0.000252) | 0.00738** (0.00241) | 0.000388 (0.000252) | 0.00449* (0.00185) | 0.000232 (0.000212) | 0.00424** (0.00150) |
| Lag EDI | | | | | | | 0.453*** (0.0306) | | 0.534*** (0.0232) | |
| Lag FHI | | | | | | | | 0.722*** (0.0201) | | 0.749*** (0.0178) |
| Constant | 0.0143 (0.0822) | 2.801*** (0.728) | 0.537** (0.164) | 4.669** (1.717) | 0.330*** (0.0374) | 4.027*** (0.337) | 0.414** (0.144) | 1.903+ (1.062) | 0.109*** (0.0303) | 1.104*** (0.213) |
| Observations | 1468 | 1468 | 1468 | 1468 | 1468 | 1468 | 1404 | 1404 | 1468 | 1468 |
| R ² | 0.797 | 0.503 | 0.0840 | 0.0596 | | | | | | |

Notes: + $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Standard errors in parentheses. All explanatory variables are lagged by 7 years.

TABLE A.13. Models run on shorter time series (excluding observations from before 1985).

| Dep. variable: | EDI | FHI | EDI | FHI | EDI | FHI | EDI | FHI | EDI | FHI |
|-----------------------|--------------------------|-----------------------|--------------------------|------------------------|--------------------------|------------------------|--------------------------|------------------------|--------------------------|------------------------|
| Estimation technique: | OLS | PCSE | Fixed effects | Fixed effects | Random Eff. | Random Eff. | Ar.-Bond | Ar.-Bond | Syst. GMM | Syst. GMM |
| SEI | 0.293** (0.0931) | 0.241 (0.846) | 0.0181 (0.0706) | 0.0656 (0.586) | 0.0562 (0.0705) | 0.164 (0.565) | 0.00202 (0.0658) | -0.0417 (0.478) | 0.0612 (0.0828) | -0.0291 (0.420) |
| Resources index | 0.00853*** (0.00101) | 0.0277** (0.00911) | 0.000881 (0.000669) | 0.0115+ (0.00636) | 0.00244*** (0.000579) | 0.0163** (0.00506) | 0.000405 (0.000600) | 0.00563 (0.00496) | 0.00241*** (0.000516) | 0.00675+ (0.00364) |
| Democratic trad. | -0.000432 (0.000924) | 0.00524 (0.00683) | 0.00411*** (0.000600) | 0.0312*** (0.00577) | 0.00339*** (0.000561) | 0.0249*** (0.00503) | 0.00286*** (0.000611) | 0.0214*** (0.00438) | 0.00139* (0.000687) | 0.0127*** (0.00338) |
| Religion | 0.00150*** (0.000322) | 0.00733* (0.00311) | -0.000181 (0.00245) | 0.00674 (0.0281) | 0.00311*** (0.000427) | 0.0107** (0.00330) | -0.000304 (0.00218) | -0.00327 (0.0201) | 0.000864* (0.000364) | 0.00374* (0.00177) |
| Schooling | 0.0128+ (0.00725) | 0.163* (0.0692) | 0.00236 (0.00310) | 0.0162 (0.0258) | 0.00350 (0.00295) | 0.0320 (0.0252) | 0.00209 (0.00264) | 0.00749 (0.0180) | 0.00376+ (0.00220) | 0.0180 (0.0147) |
| Ethnic fract. | -0.131+ (0.0705) | -0.743 (0.491) | -0.654 (1.102) | -1.585 (5.852) | -0.255*** (0.0692) | -1.001+ (0.526) | -0.446 (0.754) | -0.460 (3.929) | -0.0748 (0.0682) | 0.0495 (0.416) |
| Gini index | -0.0000671 (0.00161) | 0.00654 (0.0101) | 0.000503 (0.000698) | 0.00366 (0.00764) | 0.000359 (0.000710) | 0.00312 (0.00746) | 0.000417 (0.000529) | 0.00221 (0.00494) | 0.000239 (0.000521) | 0.000609 (0.00350) |
| Public spending | 0.00230 (0.00161) | 0.0180 (0.0143) | 0.000886 (0.000730) | 0.00948+ (0.00506) | 0.00107 (0.000681) | 0.0107* (0.00485) | 0.000549 (0.000574) | 0.00473 (0.00310) | 0.000766 (0.000514) | 0.00378 (0.00329) |
| Exports | 0.00157*** (0.000428) | 0.00571+ (0.00313) | 0.000159 (0.000351) | 0.00578* (0.00269) | 0.000340 (0.000309) | 0.00663** (0.00240) | 0.000160 (0.000302) | 0.00336 (0.00218) | 0.000336 (0.000244) | 0.00415* (0.00205) |
| Lag EDI | | | | | | | 0.419*** (0.0500) | | 0.546*** (0.0320) | |
| Lag FHI | | | | | | | | 0.586*** (0.0283) | | 0.675*** (0.0243) |
| Constant | 0.00821 (0.0975) | 2.749** (0.913) | 0.591+ (0.349) | 4.965* (1.948) | 0.380*** (0.0504) | 4.469*** (0.492) | 0.355 (0.245) | 1.915 (1.376) | 0.0872* (0.0392) | 1.190*** (0.291) |
| Observations | 1214 | 1214 | 1214 | 1214 | 1214 | 1214 | 1214 | 1214 | 1214 | 1214 |

Notes: + $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Standard errors in parentheses. All explanatory variables are lagged by 7 years. See Table 2 in the paper for further specifications.

TABLE A.14. Models run on shorter time series (excluding observations from before 1990).

| Dep. variable: | EDI | FHI | EDI | FHI | EDI | FHI | EDI | FHI | EDI | FHI |
|-----------------------|--------------------------|-----------------------|--------------------------|------------------------|--------------------------|------------------------|--------------------------|------------------------|--------------------------|------------------------|
| Estimation technique: | OLS | PCSE | Fixed effects | Fixed effects | Random Eff. | Random Eff. | Ar.-Bond | Ar.-Bond | Syst. GMM | Syst. GMM |
| SEI | 0.306** (0.103) | 0.280 (0.927) | 0.00578 (0.0674) | 0.186 (0.561) | 0.0461 (0.0696) | 0.289 (0.553) | 0.00336 (0.0559) | 0.0185 (0.554) | 0.0595 (0.0792) | 0.0102 (0.577) |
| Resources index | 0.00823*** (0.00110) | 0.0255* (0.0103) | 0.000359 (0.00101) | 0.0112 (0.00927) | 0.00259*** (0.000735) | 0.0143* (0.00668) | -0.0000938 (0.000703) | 0.00441 (0.00489) | 0.00228*** (0.000601) | 0.00285 (0.00430) |
| Democratic trad. | -0.000501 (0.00102) | 0.00526 (0.00751) | 0.00401*** (0.000738) | 0.0411*** (0.00655) | 0.00362*** (0.000606) | 0.0303*** (0.00549) | 0.00250*** (0.000584) | 0.0183*** (0.00438) | 0.00116+ (0.000657) | 0.00960** (0.00366) |
| Religion | 0.00149*** (0.000330) | 0.00705* (0.00334) | -0.00234 (0.00430) | -0.00306 (0.0360) | 0.00307*** (0.000464) | 0.00951** (0.00365) | -0.00247 (0.00361) | -0.00504 (0.0259) | 0.000817 (0.000544) | 0.000221 (0.00207) |
| Schooling | 0.0141+ (0.00769) | 0.151* (0.0752) | 0.00193 (0.00299) | 0.00645 (0.0266) | 0.00337 (0.00296) | 0.0247 (0.0263) | 0.00209 (0.00230) | 0.00309 (0.0188) | 0.00391* (0.00187) | 0.00568 (0.0149) |
| Ethnic fract. | -0.0996 (0.0688) | -0.379 (0.501) | -1.407 (10.14) | -23.81 (109.4) | -0.220** (0.0756) | -0.579 (0.580) | 0.958 (3.724) | 0.687 (26.52) | -0.0896 (0.0868) | -0.157 (0.478) |
| Gini index | -0.000479 (0.00180) | 0.00287 (0.0116) | 0.000446 (0.000879) | 0.00225 (0.00827) | 0.000310 (0.000913) | 0.00157 (0.00815) | 0.000400 (0.000628) | 0.000954 (0.00572) | 0.000296 (0.000504) | -0.000511 (0.00417) |
| Public spending | 0.00259 (0.00169) | 0.0203 (0.0156) | 0.000673 (0.000546) | 0.00940+ (0.00539) | 0.000965+ (0.000569) | 0.0114* (0.00560) | 0.000479 (0.000444) | 0.00546 (0.00520) | 0.000759 (0.000547) | 0.00444 (0.00477) |
| Exports | 0.00148** (0.000435) | 0.00400 (0.00336) | 0.000199 (0.000333) | 0.00504+ (0.00283) | 0.000475 (0.000329) | 0.00672** (0.00254) | 0.000184 (0.000249) | 0.00360+ (0.00191) | 0.000386+ (0.000219) | 0.00425* (0.00183) |
| Lag EDI | | | | | | | 0.399*** (0.0364) | | 0.572*** (0.0575) | |
| Lag FHI | | | | | | | | 0.699*** (0.0340) | | 0.771*** (0.0413) |
| Constant | 0.00123 (0.108) | 3.007** (1.022) | 0.881 (3.287) | 12.26 (35.40) | 0.370*** (0.0499) | 4.442*** (0.495) | -0.0523 (1.203) | 1.039 (8.593) | 0.0807+ (0.0419) | 1.020* (0.415) |
| Observations | 894 | 894 | 894 | 894 | 894 | 894 | 894 | 894 | 894 | 894 |

Notes: + $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Standard errors in parentheses. All explanatory variables are lagged by 7 years. See Table 2 in the paper for further specifications.

TABLE A.15. Models run on shorter time series (excluding observations from before 1995).

| Dep. variable: | EDI | FHI | EDI | FHI | EDI | FHI | EDI | FHI | EDI | FHI |
|-----------------------|--------------------------|----------------------|------------------------|-----------------------|--------------------------|------------------------|--------------------------|------------------------|--------------------------|-------------------------|
| Estimation technique: | OLS PCSE | OLS PCSE | Fixed effects | Fixed effects | Random Eff. | Random Eff. | Ar.-Bond | Ar.-Bond | Syst. GMM | Syst. GMM |
| SEI | 0.329** (0.116) | 0.449 (1.116) | -0.0138 (0.0721) | 0.00129 (0.833) | 0.0370 (0.0756) | 0.167 (0.825) | -0.0120 (0.0730) | 0.0143 (0.738) | 0.0264 (0.100) | 0.0434 (0.818) |
| Resources index | 0.00755*** (0.00111) | 0.0219+ (0.0110) | 0.000162 (0.000867) | 0.00890 (0.00947) | 0.00208** (0.000684) | 0.0135* (0.00651) | 0.000121 (0.000704) | 0.00779 (0.00735) | 0.00223*** (0.000602) | 0.00489 (0.00530) |
| Democratic trad. | -0.000100 (0.00106) | 0.00754 (0.00815) | 0.00312** (0.00115) | 0.0475*** (0.0131) | 0.00318*** (0.000839) | 0.0273*** (0.00767) | 0.00359*** (0.000873) | 0.0407*** (0.00889) | 0.00147 (0.00124) | 0.0136+ (0.00745) |
| Religion | 0.00136*** (0.000369) | 0.00532 (0.00370) | 0.000112 (0.00418) | -0.00811 (0.0533) | 0.00316*** (0.000494) | 0.00817* (0.00402) | -0.000892 (0.00381) | -0.0144 (0.0379) | 0.000396 (0.000479) | -0.0000530 (0.00310) |
| Schooling | 0.0160+ (0.00876) | 0.148+ (0.0808) | 0.00115 (0.00303) | 0.00437 (0.0309) | 0.00289 (0.00297) | 0.0293 (0.0303) | 0.00122 (0.00201) | 0.00643 (0.0215) | 0.00317 (0.00235) | 0.0116 (0.0181) |
| Ethnic fract. | -0.0987 (0.0702) | -0.282 (0.520) | 0 (.) | 0 (.) | -0.228** (0.0778) | -0.482 (0.615) | 0 (.) | 0 (.) | -0.0155 (0.0975) | -0.538 (0.894) |
| Gini index | -0.000322 (0.00208) | 0.00334 (0.0132) | 0.000418 (0.000916) | 0.00375 (0.0107) | 0.000282 (0.000954) | 0.00286 (0.0108) | 0.000650 (0.000898) | 0.00371 (0.00798) | 0.000530 (0.000532) | 0.00280 (0.00609) |
| Public spending | 0.00285 (0.00194) | 0.0233 (0.0175) | 0.000341 (0.000864) | 0.00759 (0.00861) | 0.000794 (0.000844) | 0.0117 (0.00817) | 0.000523 (0.000473) | 0.00905 (0.00605) | 0.000562 (0.000671) | 0.00933 (0.00697) |
| Exports | 0.00133** (0.000471) | 0.00249 (0.00369) | 0.00116* (0.000500) | 0.0148** (0.00566) | 0.00137*** (0.000406) | 0.0121** (0.00395) | 0.000558 (0.000369) | 0.0101** (0.00367) | 0.000569+ (0.000300) | 0.00965** (0.00352) |
| Lag EDI | | | | | | | 0.314*** (0.0717) | | 0.665*** (0.0592) | |
| Lag FHI | | | | | | | | 0.333*** (0.0725) | | 0.646*** (0.0829) |
| Constant | -0.0117 (0.125) | 3.100** (1.109) | 0.419*** (0.0536) | 4.347*** (0.728) | 0.374*** (0.0582) | 4.290*** (0.659) | 0.265*** (0.0509) | 2.678*** (0.641) | 0.0204 (0.0503) | 1.323+ (0.734) |
| Observations | 574 | 574 | 574 | 574 | 574 | 574 | 574 | 574 | 574 | 574 |

Notes: + $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Standard errors in parentheses. All explanatory variables are lagged by 7 years. See Table 2 in the paper for further specifications.

A.IX: Robustness testing by employing five other imputed datasets constructed from a different imputation model specification

This multiple imputation model – which, for instance, did not include the regional barometer surveys, but did include a number of other measures of different economic and political factors at the macro level – was the one used for the working paper version of the paper presented at the 2013 Annual ISA Convention in San Francisco; the paper can be downloaded at [WEBPAGE REMOVED FOR ANONYMITY](#).

As seen from Table A.16, the results are very similar to (and actually even weaker than) those reported in Table 2. We have previously tested other (less good) imputation model specifications as well, and the results have been very stable. For the earliest version of this analysis, see [REMOVED FOR ANONYMITY](#).

TABLE A.16. Models run on 5 other imputed datasets, based on different imputation model specification.

| Dep. variable: | EDI | FHI | EDI | FHI | EDI | FHI | EDI | FHI | EDI | FHI |
|-----------------------|--------------------------|------------------------|--------------------------|-----------------------|--------------------------|-------------------------|-------------------------|------------------------|--------------------------|------------------------|
| Estimation technique: | OLS PCSE | OLS PCSE | Fixed effects | Fixed effects | Random effects | Random effects | Ar.-Bond | Ar.-Bond | Syst. GMM | Syst. GMM |
| SEI | 0.222 (0.141) | -0.167 (1.059) | -0.0266 (0.0925) | -0.684 (0.727) | 0.0152 (0.0904) | -0.561 (0.736) | -0.0256 (0.116) | -0.0205 (0.470) | 0.0308 (0.124) | -0.0380 (0.485) |
| Resources index | 0.00752*** (0.00142) | 0.0356** (0.0112) | 0.00154* (0.000628) | 0.0133* (0.00646) | 0.00233*** (0.000660) | 0.0160** (0.00620) | 0.00127* (0.000598) | 0.00413+ (0.00249) | 0.00197*** (0.000530) | 0.00330 (0.00285) |
| Democratic trad. | 0.00133** (0.000410) | 0.00112 (0.00262) | -0.0000253 (0.000832) | 0.000856 (0.00418) | 0.00214*** (0.000452) | 0.00583* (0.00290) | 0.000838 (0.000839) | 0.00150 (0.00220) | 0.000959** (0.000309) | -0.000481 (0.00124) |
| Religion | 0.00157*** (0.000332) | 0.00940** (0.00292) | 0.000651 (0.000798) | 0.00506 (0.00507) | 0.00153* (0.000693) | 0.00829* (0.00413) | -0.000171 (0.000775) | -0.000281 (0.00213) | 0.000546 (0.000473) | 0.00216+ (0.00120) |
| Schooling | 0.00477 (0.00497) | 0.0753 (0.0467) | 0.00384+ (0.00200) | 0.0488* (0.0231) | 0.00293 (0.00220) | 0.0471* (0.0236) | 0.000911 (0.00384) | 0.00264 (0.0151) | 0.0000333 (0.00180) | 0.00674 (0.0129) |
| Ethnic fract. | -0.172* (0.0656) | -1.081* (0.480) | -0.0997 (0.0916) | -0.480 (0.798) | -0.154* (0.0709) | -0.699 (0.599) | -0.0509 (0.0867) | -0.257 (0.336) | -0.143** (0.0532) | -0.287* (0.142) |
| Gini index | -0.00121 (0.00142) | 0.00227 (0.00889) | 0.000118 (0.000838) | 0.000149 (0.00891) | -0.0000639 (0.000816) | -0.0000341 (0.00879) | -0.000463 (0.000625) | -0.00161 (0.00230) | -0.000467 (0.000535) | -0.00232 (0.00196) |
| Public spending | 0.000189 (0.00139) | 0.00576 (0.0100) | 0.00130+ (0.000759) | 0.0118+ (0.00636) | 0.000734 (0.000705) | 0.0101+ (0.00612) | 0.000833 (0.00113) | -0.000218 (0.00248) | 0.0000886 (0.000423) | -0.00118 (0.00251) |
| Exports | 0.00172*** (0.000491) | 0.00569 (0.00397) | 0.000552 (0.000551) | 0.00666* (0.00339) | 0.000602 (0.000522) | 0.00656* (0.00320) | 0.000366 (0.000663) | 0.000766 (0.00234) | 0.000284 (0.000379) | 0.000918 (0.00276) |
| Lag EDI | | | | | | | 0.238*** (0.0501) | | 0.549*** (0.0290) | |
| Lag FHI | | | | | | | | 0.757*** (0.0186) | | 0.802*** (0.0180) |
| Constant | 0.182+ (0.101) | 4.228*** (0.854) | 0.465*** (0.0918) | 5.152*** (0.778) | 0.372*** (0.0809) | 4.893*** (0.725) | 0.367*** (0.0799) | 1.394*** (0.220) | 0.196** (0.0597) | 1.199*** (0.170) |
| Observations | 1152 | 1152 | 1152 | 1152 | 1152 | 1152 | 1092 | 1092 | 1152 | 1152 |

Notes: + $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Standard errors in parentheses. All explanatory variables are lagged by 7 years. See Table 2 in the paper for further specifications.

B.I: Results and longer discussions: “Extension I: Separating between democratization and democratic stability”

We failed to find evidence that self-expression values systematically affect regime type. Nevertheless, while Arellano-Bond and system GMM models account for country-fixed effects and endogeneity of values, self-expression values could affect democratization and democratic survival quite differently. Citizenries with strong self-expression values may, for example, stabilize existing democracies, but have no impact on democratization. Above, we discussed this possibility, arguing that the revised modernization argument relies on more problematic assumptions when it comes to the democratization of currently autocratic regimes.

Thus, we run dynamic probit models, as has previously been done to distinguish between effects on democratization and democratic survival for income level (Boix and Stokes 2003) and inequality (Houle 2009). However, since these models do not account for the endogeneity of liberal values, the results should be interpreted with some caution. To estimate the dynamic probit models, we dichotomize FHI (democracy=1). The choice of cut-off is to some extent arbitrary (Cheibub, Gandhi and Vreeland 2010; Bogaards 2012), and we therefore test two different democracy-thresholds. The highest considers only regimes classified as “Free” by Freedom House as democratic, whereas the lowest considers also “Partly Free” regimes as democratic. Although it operationalizes a minimalist democracy concept – and is therefore not the best fit for testing Inglehart and Welzel’s (2005) hypotheses – we also use the already dichotomous ACLP, or DD, regime measure from Cheibub et al. (2010). The dynamic probit models, reported in Table 3, vitally include lagged democracy and interactions between lagged democracy and all the independent variables. The effect on democratization relates to the linear coefficients, whereas estimating effects on democratic survival involves jointly testing linear and interaction terms.

Although the parameter-estimate measuring the impact of liberal values on democratization hinges somewhat on the choice of democracy-operationalization (see also Hadenius and Teorell 2005), the results in Appendix Table B.1 generally indicate that liberal values do not affect democratization prospects. The point-estimates on democratization are actually negative, but insignificant, for the low FHI-threshold for classifying democracies and for ACLP – both when employing 1-year- (Models D1 and D5) or 7-year lags (D2 and D6). When applying the high-FHI threshold – thus investigating transitions from either Unfree or Partly Free to Free regimes – the

point estimates are positive, but still insignificant (D3 and D4). In sum, there is no evidence that self-expression values induce democratization. This is not very surprising to us, given the above discussion on how factors other than those highlighted by RMT, notably including international political and domestic elite-level factors, have constituted the main drivers of many democratization experiences.

However, and far more surprising, self-expression values do not stabilize existing democracies either. Indeed, three (D2, D5, and D6) of the six models in Appendix Table B.1 show a negative point-estimate, and – although Model D4 using 7-year lags and the high FHI threshold shows a weakly significant association – the relationship between SEI and democratic survival is always insignificant at 5 percent.

Table B.1. Distinguishing democratization from democratic survival; dynamic probit models.

| Model: Dep. variable: Indep. var. lagged by: | D1 FHI (low) 1 year | D2 FHI (low) 7 years | D3 FHI (high) 1 year | D4 FHI (high) 7 years | D5 ACLP 1 year | D6 ACLP 7 years |
|--|--------------------------------|-------------------------------|--------------------------------|--------------------------------|-----------------------|----------------------------------|
| SEI | -0.0355 (3.660) | -3.348 (4.989) | 0.827 (1.314) | 2.040 (1.377) | -1.069 (1.302) | -0.00811 (1.868) |
| SEI*Democracy | 0.743 (5.707) | 2.541 (4.417) | 1.134 (2.121) | 0.311 (2.165) | 0.922 (1.580) | -0.724 (2.057) |
| Joint test: SEI on democ. survival | 0.710 (3.142) | -0.848 (3.116) | 1.907 (1.745) | 2.560 ⁺ (1.347) | -0.172 (0.970) | -0.732 (1.026) |
| Democracy (lagged) | 2.406 (3.005) | 0.568 (3.775) | 1.551 (1.393) | -0.193 (1.569) | 3.210** (1.006) | 0.888 (1.228) |
| Resources | 0.148 (0.139) | 0.350 ⁺ (0.208) | -0.00168 (0.0472) | -0.0129 (0.0792) | -0.0198 (0.0645) | -0.0144 (0.0808) |
| Schooling | -0.00777 (0.00909) | -0.0120 (0.0187) | 0.00231 (0.00502) | 0.00303 (0.00853) | 0.000910 (0.00653) | -0.0116 (0.00752) |
| Exports | -0.00957 (0.0417) | -0.0511 (0.0747) | 0.00484 (0.0123) | -0.0175 (0.0164) | -0.00715 (0.0107) | -0.0265 ⁺ (0.0153) |
| Gini index | -0.0125* (0.00583) | -0.0412** (0.0155) | 0.00574** (0.00175) | 0.0203*** (0.00411) | -0.00312 (0.00258) | 0.00761* (0.00386) |
| Prot.–Muslim (%) | -0.0144 (0.0324) | -0.0262 (0.0372) | 0.00599 (0.00903) | -0.00661 (0.0132) | 0.0146 (0.0135) | 0.0118 (0.0142) |
| Public spending | 0.452 (0.742) | 2.687* (1.059) | -0.845 ⁺ (0.441) | -0.343 (0.658) | -0.594 (0.376) | -0.619 (0.732) |
| Ethnic fract. | 0.0392 (0.0574) | 0.138 (0.138) | 0.0163 (0.0113) | 0.0585** (0.0217) | -0.00805 (0.0108) | 0.00885 (0.0194) |
| Resources*Democracy | 0.0497 (0.0635) | -0.0227 (0.141) | 0.0150 (0.0171) | -0.0142 (0.0227) | 0.0136 (0.0121) | 0.00303 (0.0199) |
| Schooling*Democracy | -0.0695 (0.197) | -0.162 (0.230) | 0.0353 (0.0926) | 0.0684 (0.109) | -0.0438 (0.0721) | -0.0404 (0.0924) |
| Exports*Democracy | 0.000297 (0.0151) | 0.00140 (0.0219) | 0.00618 (0.00904) | 0.00346 (0.00873) | -0.00570 (0.00679) | 0.00884 (0.00775) |
| Gini*Democracy | 0.0445 (0.0609) | 0.107 (0.0753) | -0.0150 (0.0203) | 0.00802 (0.0212) | 0.00426 (0.0128) | 0.0248 (0.0170) |
| Religion*Democracy | 0.0197* (0.00790) | 0.0511** (0.0163) | -0.00429 (0.00453) | -0.00565 (0.00441) | 0.00494 (0.00330) | -0.00539 (0.00405) |
| Pub.spending*Democr. | 0.0430 (0.0385) | 0.0306 (0.0395) | 0.0125 (0.0151) | 0.0251 (0.0173) | -0.0168 (0.0164) | -0.0243 (0.0190) |
| Ethnic frac.*Democr. | -1.975 ⁺ (1.014) | -4.807*** (1.073) | 0.752 (0.799) | -1.598 ⁺ (0.873) | 0.262 (0.449) | 0.0736 (0.901) |
| Constant | -2.011 (2.107) | -1.385 (3.334) | -1.503* (0.710) | -0.456 (1.134) | -0.495 (0.955) | 1.396 (1.063) |
| Observations | 1852 | 1468 | 1852 | 1468 | 1852 | 1468 |
| Pseudo R ² (avg.) | 0.772 | 0.583 | 0.710 | 0.500 | 0.660 | 0.261 |
| ll (avg.) | -77.84 | -104.57 | -317.68 | -442.40 | -391.01 | -635.45 |
| ll_0 (avg.) | -341.90 | -250.60 | -1093.80 | -885.10 | -1152.80 | -855.87 |

Notes: ⁺ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$; standard errors in parentheses. Errors are clustered on country. High FHI-threshold counts only Free regimes as democracies, whereas low threshold also counts Partly Free. All models include imputed data. Maximum time-series (1-year lag models) is 1982–2009.

B.II. Results and longer discussions: “Extension II: Components of self-expressionliberal values”

Despite the lack of any systematic effect of SEI on regime type, it may be that certain SEI-components have an impact, but not others – as Teorell and Hadenius (2006) note the components entering SEI may tap fairly different things, and it could be that, for example, social trust affects democracy whereas life satisfaction does not (see also Muller and Seligson 1994). Yet, we find little evidence for this (see Table B.X—B.X):

We re-ran the models in Table 2 (see the Appendix tables directly below), sequentially substituting the five different indicators for SEI. None of the FE or GMM models show any significant effects. Post-materialism and happiness are actually always unrelated to democracy, whereas tolerance is positively related to democracy in the PCSE (significant 5 percent) and RE (10 percent) models using EDI. However, propensity to engage in civic action – reporting whether people have or would consider signing a petition – is the most strongly related to democracy. Independent of democracy measure used, it is significant at 1 percent in PCSE models and at least 10 percent in RE models. This is interesting in light of our discussion of collective action problems; it is the only indicator relating directly to political actions, and not only values or perceptions. Yet, also the civic-action variable is insignificant in FE and GMM models; we cannot conclude that willingness to sign petitions causally affects democracy. Importantly, signing petitions is likely endogenous to regime type, since such activities carry less risk for citizens in democracies than in autocracies.

Further, generalized trust is actually always negatively signed in models equivalent to those in Table 2, although it is only significant in the PCSE model using FHI. Thus, more trusting citizenries do not induce democracy. This finding is particularly interesting, given the large independent literature on the relationship between generalized trust – and the related concept of ‘social capital’ – and democracy. Whereas some authors have posited that the strong observed correlation comes from citizenries living under democratic institutions building trust, others have contended that it mainly stems from high trust generating democratic improvements, for example through improving citizens capabilities in solving collective action problems and organizing against the regime, or at least to stabilizing democracy (see, e.g., Putnam 1993; Warren 1999; Paxton 2002). Corroborating, for example, the result in Muller and Seligson (1994), we thus find no evidence of more trusting citizens being conducive to higher levels of democracy. When running dynamic probit models we find no evidence that trusting citizens induce democratization or stabilize existing democracies either.

TABLE B.2. Models similar to Table 2 in the paper, but replacing self-expression values with the sub-component generalized trust

| Dep. variable: | EDI | FHI | EDI | FHI | EDI | FHI | EDI | FHI | EDI | FHI |
|-----------------------|--------------------------|-------------------------|--------------------------|-----------------------|--------------------------|-------------------------|--------------------------|------------------------|--------------------------|-----------------------|
| Estimation technique: | OLS PCSE | OLS PCSE | Fixed effects | Fixed effects | Random effects | Random effects | Ar.-Bond | Ar.-Bond | Syst. GMM | Syst. GMM |
| Trust | -0.0246 (0.0955) | -2.271** (0.736) | -0.0387 (0.0425) | -0.402 (0.543) | -0.0220 (0.0413) | -0.649 (0.523) | -0.127 (0.0860) | -0.104 (0.386) | 0.0117 (0.0468) | -0.135 (0.363) |
| Resources index | 0.0102*** (0.000991) | 0.0388*** (0.00727) | 0.00183* (0.000735) | 0.0191** (0.00717) | 0.00379*** (0.000644) | 0.0265*** (0.00565) | 0.000513 (0.000926) | 0.00381 (0.00490) | 0.00277*** (0.000718) | 0.00528 (0.00371) |
| Democratic trad. | -0.000541 (0.000836) | 0.00224 (0.00561) | 0.00250*** (0.000502) | 0.0121* (0.00569) | 0.00184*** (0.000467) | 0.00755 (0.00479) | 0.00280*** (0.000725) | 0.0127*** (0.00362) | 0.00119* (0.000509) | 0.00815* (0.00390) |
| Religion | 0.00163*** (0.000281) | 0.00914*** (0.00230) | 0.000985 (0.00252) | 0.00554 (0.0229) | 0.00298*** (0.000396) | 0.00977*** (0.00271) | -0.0000971 (0.00234) | -0.00347 (0.0150) | 0.000908** (0.000342) | 0.00277 (0.00203) |
| Schooling | 0.0104 (0.00688) | 0.124* (0.0573) | 0.00455 (0.00350) | 0.0333 (0.0264) | 0.00538 (0.00334) | 0.0522* (0.0256) | 0.00311 (0.00620) | 0.00915 (0.0194) | 0.00404* (0.00200) | 0.0153 (0.0181) |
| Ethnic fract. | -0.137* (0.0672) | -0.787+ (0.398) | -0.415 (0.785) | -0.370 (5.195) | -0.253*** (0.0651) | -1.100* (0.430) | -0.198 (0.835) | 0.282 (3.395) | -0.102** (0.0379) | -0.270 (0.392) |
| Gini index | -0.000550 (0.00158) | -0.00537 (0.00902) | 0.000673 (0.000990) | 0.00752 (0.00799) | 0.000501 (0.000986) | 0.00544 (0.00771) | 0.000156 (0.000729) | 0.00235 (0.00462) | 0.0000673 (0.000515) | 0.000608 (0.00358) |
| Public spending | 0.00297* (0.00146) | 0.0195+ (0.0113) | 0.00148* (0.000585) | 0.0151* (0.00612) | 0.00171** (0.000555) | 0.0165** (0.00568) | 0.00163 (0.00145) | 0.00462 (0.00378) | 0.00109* (0.000482) | 0.00178 (0.00387) |
| Exports | 0.00150*** (0.000428) | 0.00599* (0.00279) | 0.000460 (0.000295) | 0.00818* (0.00354) | 0.000562* (0.000264) | 0.00813** (0.00283) | 0.0000685 (0.000440) | 0.00282 (0.00245) | 0.000210 (0.000225) | 0.00312 (0.00234) |
| Lag EDI | | | | | | | 0.276*** (0.0490) | | 0.535*** (0.0325) | |
| Lag FHI | | | | | | | | 0.711*** (0.0221) | | 0.737*** (0.0205) |
| Constant | 0.131 (0.104) | 4.151*** (0.813) | 0.471 (0.287) | 4.295* (1.756) | 0.351*** (0.0528) | 4.307*** (0.441) | 0.369 (0.259) | 1.117 (1.159) | 0.120*** (0.0335) | 1.154*** (0.329) |
| Observations | 1468 | 1468 | 1468 | 1468 | 1468 | 1468 | 1404 | 1404 | 1468 | 1468 |

Notes: + $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Standard errors in parentheses. All explanatory variables are lagged by 7 years. See Table 2 in the paper for further specifications.

TABLE B.3. Models similar to Table 2 in paper, but replacing self-expression values with the sub-component having participated in petition

| Dep. variable: | EDI | FHI | EDI | FHI | EDI | FHI | EDI | FHI | EDI | FHI |
|-----------------------|--------------------------------------|-----------------------------------|--------------------------------------|-----------------------------------|--------------------------------------|------------------------------------|--------------------------------------|------------------------------------|--------------------------------------|-----------------------------------|
| Estimation technique: | OLS PCSE | OLS PCSE | Fixed effects | Fixed effects | Random effects | Random effects | Ar.-Bond | Ar.-Bond | Syst. GMM | Syst. GMM |
| Petition | 0.196 ^{***} (0.0543) | 1.263 ^{**} (0.448) | 0.0495 (0.0399) | 0.402 (0.405) | 0.0781 [*] (0.0387) | 0.572 (0.372) | -0.0139 (0.0721) | -0.0717 (0.231) | 0.0652 ⁺ (0.0345) | -0.0276 (0.228) |
| Resources index | 0.00880 ^{***} (0.000908) | 0.0215 ^{**} (0.00711) | 0.00171 [*] (0.000708) | 0.0181 [*] (0.00704) | 0.00360 ^{***} (0.000611) | 0.0226 ^{***} (0.00555) | 0.000274 (0.000875) | 0.00394 (0.00504) | 0.00241 ^{***} (0.000603) | 0.00510 (0.00440) |
| Democratic trad. | -0.000622 (0.000772) | 0.00140 (0.00515) | 0.00240 ^{***} (0.000508) | 0.0113 [*] (0.00552) | 0.00167 ^{***} (0.000466) | 0.00709 (0.00467) | 0.00318 ^{***} (0.000692) | 0.0135 ^{***} (0.00378) | 0.00120 ^{**} (0.000444) | 0.00868 ⁺ (0.00444) |
| Religion | 0.00143 ^{***} (0.000293) | 0.00490 ⁺ (0.00256) | 0.000863 (0.00245) | 0.00441 (0.0227) | 0.00279 ^{***} (0.000393) | 0.00793 ^{**} (0.00277) | -0.000272 (0.00233) | -0.00309 (0.0145) | 0.000820 [*] (0.000367) | 0.00237 (0.00199) |
| Schooling | 0.00936 (0.00717) | 0.139 [*] (0.0633) | 0.00432 (0.00352) | 0.0311 (0.0262) | 0.00504 (0.00340) | 0.0478 ⁺ (0.0256) | 0.00143 (0.00671) | 0.00685 (0.0208) | 0.00371 (0.00233) | 0.0153 (0.0194) |
| Ethnic fract. | -0.141 [*] (0.0659) | -0.873 [*] (0.426) | -0.398 (0.801) | -0.224 (5.262) | -0.247 ^{***} (0.0632) | -1.068 [*] (0.455) | -0.218 (0.881) | 0.594 (3.682) | -0.0931 ⁺ (0.0534) | -0.281 (0.304) |
| Gini index | -0.000127 (0.00146) | 0.00787 (0.00829) | 0.000746 (0.000989) | 0.00821 (0.00783) | 0.000568 (0.000956) | 0.00717 (0.00737) | 0.000299 (0.000800) | 0.00214 (0.00462) | 0.000181 (0.000435) | 0.000305 (0.00317) |
| Public spending | 0.00249 ⁺ (0.00148) | 0.0202 (0.0125) | 0.00148 [*] (0.000584) | 0.0151 [*] (0.00619) | 0.00169 ^{**} (0.000564) | 0.0164 ^{**} (0.00595) | 0.00138 (0.00149) | 0.00368 (0.00358) | 0.000892 ⁺ (0.000507) | 0.00146 (0.00418) |
| Exports | 0.00170 ^{***} (0.000401) | 0.00778 [*] (0.00313) | 0.000472 (0.000298) | 0.00834 [*] (0.00363) | 0.000599 [*] (0.000264) | 0.00852 ^{**} (0.00300) | 0.0000367 (0.000472) | 0.00243 (0.00266) | 0.000263 (0.000296) | 0.00302 ⁺ (0.00183) |
| Lag EDI | | | | | | | 0.266 ^{***} (0.0452) | | 0.539 ^{***} (0.0270) | |
| Lag FHI | | | | | | | | 0.715 ^{***} (0.0204) | | 0.744 ^{***} (0.0202) |
| Constant | 0.0576 (0.0941) | 2.600 ^{**} (0.865) | 0.433 (0.296) | 3.956 [*] (1.846) | 0.311 ^{***} (0.0532) | 3.895 ^{***} (0.425) | 0.370 (0.285) | 1.043 (1.285) | 0.0950 [*] (0.0414) | 1.111 ^{***} (0.319) |
| Observations | 1468 | 1468 | 1468 | 1468 | 1468 | 1468 | 1404 | 1404 | 1468 | 1468 |

Notes: ⁺ $p < 0.10$, ^{*} $p < 0.05$, ^{**} $p < 0.01$, ^{***} $p < 0.001$. Standard errors in parentheses. All explanatory variables are lagged by 7 years. See Table 2 in the paper for further specifications.

TABLE B.4. Models similar to Table 2 in the paper, but replacing self-expression values with the sub-component happiness.

| Dep. variable: | EDI | FHI | EDI | FHI | EDI | FHI | EDI | FHI | EDI | FHI |
|-----------------------|--------------------------|------------------------|--------------------------|-----------------------|--------------------------|------------------------|--------------------------|-----------------------|--------------------------|-----------------------|
| Estimation technique: | OLS PCSE | OLS PCSE | Fixed effects | Fixed effects | Random effects | Random effects | Ar.-Bond | Ar.-Bond | Syst. GMM | Syst. GMM |
| Happiness | 0.184 (0.182) | -1.207 (1.616) | 0.0245 (0.102) | 0.637 (0.886) | 0.0650 (0.102) | 0.403 (0.852) | -0.0176 (0.201) | 0.252 (0.465) | 0.0476 (0.0988) | 0.259 (0.508) |
| Resources index | 0.00942*** (0.00121) | 0.0347*** (0.00939) | 0.00179* (0.000727) | 0.0185** (0.00708) | 0.00369*** (0.000608) | 0.0241*** (0.00565) | 0.000410 (0.000909) | 0.00538 (0.00442) | 0.00269*** (0.000560) | 0.00488 (0.00362) |
| Democratic trad. | -0.000624 (0.000848) | 0.00242 (0.00570) | 0.00249*** (0.000488) | 0.0116* (0.00574) | 0.00178*** (0.000468) | 0.00777 (0.00493) | 0.00284*** (0.000790) | 0.0120** (0.00400) | 0.00113* (0.000508) | 0.00793* (0.00359) |
| Religion | 0.00161*** (0.000294) | 0.00594* (0.00271) | 0.000956 (0.00245) | 0.00474 (0.0228) | 0.00293*** (0.000400) | 0.00878* (0.00283) | -0.000446 (0.00257) | -0.00423 (0.0149) | 0.000938* (0.000374) | 0.00321+ (0.00182) |
| Schooling | 0.0123+ (0.00728) | 0.134* (0.0602) | 0.00453 (0.00353) | 0.0334 (0.0267) | 0.00544 (0.00338) | 0.0509* (0.0255) | 0.00396 (0.00656) | 0.00765 (0.0203) | 0.00385+ (0.00200) | 0.0156 (0.0211) |
| Ethnic fract. | -0.141* (0.0672) | -0.840+ (0.425) | -0.399 (0.774) | -0.226 (5.122) | -0.253*** (0.0651) | -1.097* (0.465) | -0.211 (0.843) | 0.980 (3.616) | -0.0863 (0.0539) | -0.155 (0.342) |
| Gini index | -0.000877 (0.00163) | 0.00869 (0.0102) | 0.000713 (0.00103) | 0.00777 (0.00825) | 0.000484 (0.00103) | 0.00650 (0.00801) | 0.000365 (0.000777) | 0.00201 (0.00510) | 0.000121 (0.000478) | 0.000575 (0.00383) |
| Public spending | 0.00297* (0.00147) | 0.0240+ (0.0123) | 0.00150* (0.000584) | 0.0149** (0.00576) | 0.00168** (0.000551) | 0.0166** (0.00540) | 0.00213 (0.00150) | 0.00384 (0.00376) | 0.000998* (0.000502) | 0.00189 (0.00442) |
| Exports | 0.00142** (0.000444) | 0.00714* (0.00310) | 0.000449 (0.000284) | 0.00788* (0.00374) | 0.000540* (0.000259) | 0.00811** (0.00309) | 0.0000919 (0.000495) | 0.00305 (0.00257) | 0.000218 (0.000249) | 0.00317 (0.00223) |
| Lag EDI | | | | | | | 0.308*** (0.0550) | | 0.536*** (0.0346) | |
| Lag FHI | | | | | | | | 0.725*** (0.0207) | | 0.745*** (0.0206) |
| Constant | 0.0158 (0.135) | 3.687*** (1.015) | 0.438 (0.269) | 3.729* (1.675) | 0.306*** (0.0632) | 3.877*** (0.480) | 0.310 (0.231) | 0.623 (1.332) | 0.0889+ (0.0528) | 0.861* (0.341) |
| Observations | 1468 | 1468 | 1468 | 1468 | 1468 | 1468 | 1404 | 1404 | 1468 | 1468 |

Notes: + $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Standard errors in parentheses. All explanatory variables are lagged by 7 years. See Table 2 in the paper for further specifications.

TABLE B.5. Models similar to Table 2 in the paper, but replacing self-expression values with the sub-component tolerance.

| Dep. variable: | EDI | FHI | EDI | FHI | EDI | FHI | EDI | FHI | EDI | FHI |
|-----------------------|--------------------------|------------------------|--------------------------|-----------------------|--------------------------|------------------------|---------------------------|-----------------------|--------------------------|-----------------------|
| Estimation technique: | OLS PCSE | OLS PCSE | Fixed effects | Fixed effects | Random effects | Random effects | Ar.-Bond | Ar.-Bond | Syst. GMM | Syst. GMM |
| Tolerance | 0.137* (0.0583) | 0.581 (0.489) | 0.0360 (0.0390) | 0.303 (0.368) | 0.0505 (0.0368) | 0.362 (0.345) | 0.0144 (0.0618) | -0.0518 (0.281) | 0.0399 (0.0357) | -0.0376 (0.279) |
| Resources index | 0.00949*** (0.000973) | 0.0274*** (0.00690) | 0.00173* (0.000725) | 0.0184* (0.00715) | 0.00367*** (0.000627) | 0.0236*** (0.00551) | 0.000177 (0.000900) | 0.00447 (0.00471) | 0.00252*** (0.000558) | 0.00473 (0.00358) |
| Democratic trad. | -0.000745 (0.000813) | 0.00110 (0.00558) | 0.00236*** (0.000495) | 0.0109+ (0.00598) | 0.00164*** (0.000471) | 0.00694 (0.00510) | 0.00295** (0.000935) | 0.0129** (0.00422) | 0.00110* (0.000483) | 0.00793* (0.00378) |
| Religion | 0.00143*** (0.000303) | 0.00524+ (0.00285) | 0.000924 (0.00245) | 0.00466 (0.0226) | 0.00286*** (0.000398) | 0.00834** (0.00288) | -0.000232 (0.00231) | -0.00305 (0.0147) | 0.000846** (0.000308) | 0.00251 (0.00159) |
| Schooling | 0.0102 (0.00691) | 0.145* (0.0630) | 0.00442 (0.00353) | 0.0318 (0.0267) | 0.00518 (0.00337) | 0.0483+ (0.0260) | 0.00209 (0.00601) | 0.00770 (0.0199) | 0.00381 (0.00245) | 0.0173 (0.0190) |
| Ethnic fract. | -0.134* (0.0667) | -0.833+ (0.437) | -0.407 (0.798) | -0.339 (5.247) | -0.249*** (0.0648) | -1.074* (0.469) | -0.203 (0.871) | 0.0962 (3.775) | -0.0915* (0.0393) | -0.192 (0.442) |
| Gini index | -0.000349 (0.00151) | 0.00620 (0.00882) | 0.000739 (0.00100) | 0.00818 (0.00796) | 0.000549 (0.000979) | 0.00701 (0.00756) | 0.000295 (0.000713) | 0.00258 (0.00487) | 0.000175 (0.000453) | 0.000820 (0.00357) |
| Public spending | 0.00264+ (0.00145) | 0.0220+ (0.0123) | 0.00144* (0.000566) | 0.0148* (0.00577) | 0.00163** (0.000531) | 0.0161** (0.00544) | 0.00169 (0.00129) | 0.00428 (0.00368) | 0.000989* (0.000464) | 0.00223 (0.00425) |
| Exports | 0.00141** (0.000415) | 0.00616* (0.00305) | 0.000426 (0.000294) | 0.00792* (0.00350) | 0.000522* (0.000260) | 0.00792** (0.00290) | -0.00000118 (0.000439) | 0.00276 (0.00278) | 0.000188 (0.000240) | 0.00321 (0.00225) |
| Lag EDI | | | | | | | 0.275*** (0.0488) | | 0.533*** (0.0239) | |
| Lag FHI | | | | | | | | 0.711*** (0.0212) | | 0.740*** (0.0189) |
| Constant | 0.112 (0.0983) | 2.957** (0.913) | 0.453 (0.294) | 4.129* (1.806) | 0.339*** (0.0541) | 4.094*** (0.403) | 0.344 (0.277) | 1.152 (1.289) | 0.119*** (0.0327) | 1.059*** (0.319) |
| Observations | 1468 | 1468 | 1468 | 1468 | 1468 | 1468 | 1404 | 1404 | 1468 | 1468 |

Notes: + $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Standard errors in parentheses. All explanatory variables are lagged by 7 years. See Table 2 in the paper for further specifications.

TABLE B.6. Models similar to Table 2 in the paper, but replacing self-expression values with the sub-component post-materialist values.

| Dep. variable: | EDI | FHI | EDI | FHI | EDI | FHI | EDI | FHI | EDI | FHI |
|-----------------------|--------------------------|-----------------------|--------------------------|-----------------------|--------------------------|------------------------|--------------------------|------------------------|--------------------------|-----------------------|
| Estimation technique: | OLS PCSE | OLS PCSE | Fixed effects | Fixed effects | Random effects | Random effects | Ar.-Bond | Ar.-Bond | Syst. GMM | Syst. GMM |
| Post-materialism | 0.200 (0.138) | -0.185 (1.252) | -0.0103 (0.0574) | -0.000388 (0.545) | 0.0332 (0.0571) | 0.0490 (0.521) | -0.0457 (0.167) | 0.107 (0.622) | 0.0509 (0.0741) | 0.0583 (0.601) |
| Resources index | 0.00936*** (0.00103) | 0.0309** (0.00903) | 0.00183* (0.000726) | 0.0190** (0.00703) | 0.00374*** (0.000606) | 0.0246*** (0.00545) | 0.000192 (0.00107) | 0.00485 (0.00477) | 0.00266** (0.000832) | 0.00600 (0.00497) |
| Democratic trad. | -0.000560 (0.000806) | 0.00199 (0.00571) | 0.00252*** (0.000506) | 0.0122* (0.00569) | 0.00181*** (0.000470) | 0.00820+ (0.00486) | 0.00309*** (0.000742) | 0.0131*** (0.00364) | 0.00114* (0.000554) | 0.00756* (0.00380) |
| Religion | 0.00158*** (0.000291) | 0.00591* (0.00273) | 0.000911 (0.00247) | 0.00469 (0.0228) | 0.00292*** (0.000392) | 0.00882** (0.00287) | -0.000443 (0.00232) | -0.00502 (0.0155) | 0.000987** (0.000300) | 0.00264+ (0.00161) |
| Schooling | 0.0115 (0.00696) | 0.145* (0.0620) | 0.00453 (0.00350) | 0.0330 (0.0266) | 0.00539 (0.00334) | 0.0498+ (0.0259) | 0.00271 (0.00701) | 0.00540 (0.0206) | 0.00386* (0.00192) | 0.0168 (0.0189) |
| Ethnic fract. | -0.141* (0.0668) | -0.856+ (0.440) | -0.415 (0.800) | -0.372 (5.238) | -0.252*** (0.0647) | -1.092* (0.470) | -0.207 (0.865) | 0.420 (3.777) | -0.0683 (0.0549) | -0.0987 (0.395) |
| Gini index | -0.000503 (0.00149) | 0.00589 (0.00888) | 0.000723 (0.00101) | 0.00808 (0.00798) | 0.000540 (0.000984) | 0.00692 (0.00756) | 0.000331 (0.000748) | 0.00195 (0.00503) | 0.000206 (0.000500) | 0.000937 (0.00356) |
| Public spending | 0.00279+ (0.00148) | 0.0239+ (0.0124) | 0.00152** (0.000580) | 0.0155* (0.00602) | 0.00173** (0.000546) | 0.0169** (0.00564) | 0.00182 (0.00144) | 0.00409 (0.00397) | 0.000967+ (0.000500) | 0.00170 (0.00434) |
| Exports | 0.00159*** (0.000438) | 0.00655* (0.00324) | 0.000469 (0.000300) | 0.00829* (0.00360) | 0.000579* (0.000267) | 0.00833** (0.00302) | 0.0000113 (0.000482) | 0.00278 (0.00271) | 0.000279 (0.000227) | 0.00349 (0.00220) |
| Lag EDI | | | | | | | 0.279*** (0.0474) | | 0.538*** (0.0310) | |
| Lag FHI | | | | | | | | 0.722*** (0.0213) | | 0.747*** (0.0196) |
| Constant | 0.0511 (0.108) | 3.055*** (0.880) | 0.461 (0.307) | 4.152* (1.852) | 0.330*** (0.0638) | 4.091*** (0.480) | 0.354 (0.285) | 0.979 (1.267) | 0.0886* (0.0439) | 0.932*** (0.239) |
| Observations | 1468 | 1468 | 1468 | 1468 | 1468 | 1468 | 1404 | 1404 | 1468 | 1468 |

Notes: + $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Standard errors in parentheses. All explanatory variables are lagged by 7 years. See Table 2 in the paper for further specifications.

TABLE B.7. Dynamic probit models similar to Appendix Table B, but replacing SEI with generalized trust; investigating how trust relates to democratization and democratic survival

| | FHI (low) 1-yr lag | FHI (low) 7-yr lag | FHI (high). 1-yr lag | FHI(high) 7-yr lag | ACLPL 1-yr lag | ACLPL 7-yr lag |
|------------------------|---------------------|--------------------|----------------------|--------------------|----------------|----------------------|
| Trust | -1.416 | -1.808 | -0.346 | -0.0640 | -0.774 | -0.768 |
| | (1.137) | (1.381) | (0.674) | (1.052) | (0.615) | (0.615) |
| Resources index | 0.0130 | 0.0914 | 0.0149 | 0.0686** | -0.0112 | 0.00856 |
| | (0.0577) | (0.153) | (0.0117) | (0.0245) | (0.0103) | (0.0167) |
| Schooling | 0.122 | 0.340 | -0.00850 | -0.0382 | -0.0238 | -0.0199 |
| | (0.141) | (0.235) | (0.0530) | (0.0780) | (0.0669) | (0.0812) |
| Exports | -0.00415 | -0.0112 | 0.00335 | 0.00410 | 0.00181 | -0.0108 |
| | (0.00863) | (0.0187) | (0.00530) | (0.00828) | (0.00682) | (0.00734) |
| Gini index | -0.0109 | -0.0506 | 0.00701 | -0.0139 | -0.00810 | -0.0276 ⁺ |
| | (0.0402) | (0.0717) | (0.0135) | (0.0170) | (0.0104) | (0.0154) |
| Religion | -0.0141* | -0.0416* | 0.00631*** | 0.0225*** | -0.00367 | 0.00769* |
| | (0.00578) | (0.0181) | (0.00180) | (0.00426) | (0.00253) | (0.00385) |
| Public spending | -0.0124 | -0.0282 | 0.00643 | -0.00474 | 0.0107 | 0.00973 |
| | (0.0330) | (0.0355) | (0.00889) | (0.0136) | (0.0132) | (0.0134) |
| Ethnic fract. | 0.612 | 2.878* | -0.884 ⁺ | -0.351 | -0.560 | -0.600 |
| | (0.744) | (1.192) | (0.459) | (0.675) | (0.365) | (0.740) |
| Democracy*Trust | 0.813 | -0.743 | 1.350 | -0.945 | 0.108 | -0.511 |
| | (3.112) | (3.140) | (1.415) | (1.377) | (0.959) | (1.083) |
| Democracy*Resources | 0.0741 | 0.0190 | 1.847 | 2.539 ⁺ | 0.0195 | 0.00591 |
| | (0.0587) | (0.151) | (1.700) | (1.334) | (0.0125) | (0.0177) |
| Democracy*Schooling | -0.0594 | -0.176 | 0.0236 | -0.0226 | -0.0383 | -0.0299 |
| | (0.195) | (0.245) | (0.0189) | (0.0272) | (0.0729) | (0.0904) |
| Democracy*Exports | -0.00238 | 0.00236 | 0.0348 | 0.0903 | -0.00687 | 0.00789 |
| | (0.0153) | (0.0231) | (0.100) | (0.104) | (0.00711) | (0.00753) |
| Democracy*Gini | 0.0425 | 0.102 | 0.00606 | 0.00345 | 0.000289 | 0.0204 |
| | (0.0600) | (0.0732) | (0.00911) | (0.00882) | (0.0128) | (0.0174) |
| Democracy*Religion | 0.0209* | 0.0513** | -0.0199 | 0.00547 | 0.00662* | -0.00434 |
| | (0.00844) | (0.0179) | (0.0214) | (0.0215) | (0.00326) | (0.00416) |
| Democracy*Spending | 0.0386 | 0.0278 | -0.00521 | -0.00823* | -0.0140 | -0.0235 |
| | (0.0397) | (0.0377) | (0.00471) | (0.00413) | (0.0155) | (0.0178) |
| Democracy*Ethnic | -2.086 ⁺ | -4.927*** | 0.00971 | 0.0219 | 0.267 | 0.0853 |
| | (1.091) | (1.376) | (0.0155) | (0.0193) | (0.451) | (0.893) |
| Lag dep. var. | 2.447 | 1.588 | 1.057 | -1.416 | 3.433*** | 0.812 |
| | (3.024) | (3.889) | (0.816) | (0.916) | (0.936) | (1.162) |
| Constant | -1.468 | -1.595 | -1.200 ⁺ | 0.142 | -0.515 | 1.670 |
| | (2.178) | (3.685) | (0.709) | (1.152) | (0.899) | (1.076) |
| Observations | 1798 | 1426 | 1798 | 1426 | 1798 | 1426 |

⁺ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Standard errors in parentheses. Otherwise, see Appendix Table B1 for specifications.

B.III. Robustness tests and additional analysis from “Do self-expression values cause democracy?”

TABLE B.8. Robustness test: EDI models similar to in Table 2 in paper, but Corruption component of EDI is replaced by Rule of Law (RL) component from WGI.

| Dep. variable: | EDI (RL) | FHI | EDI (RL) | FHI | EDI (RL) | FHI | EDI (RL) | FHI | EDI (RL) | FHI |
|-----------------------|--------------------------------|--------------------------------|--------------------------|-----------------------|--------------------------|------------------------|------------------------|-----------------------|-------------------------|-----------------------|
| Estimation technique: | OLS PCSE | OLS PCSE | Fixed effects | Fixed effects | Random effects | Random effects | Ar.-Bond | Ar.-Bond | Syst. GMM | Syst. GMM |
| SEI | 0.159 (0.145) | 0.520 (0.816) | 0.0319 (0.106) | 0.109 (0.515) | 0.0636 (0.105) | 0.235 (0.495) | 0.0137 (0.142) | -0.128 (0.471) | 0.0834 (0.149) | -0.0620 (0.425) |
| Resources index | 0.00754*** (0.00149) | 0.0277** (0.00817) | 0.00255* (0.00120) | 0.0189** (0.00730) | 0.00397*** (0.00104) | 0.0241*** (0.00581) | 0.000887 (0.00133) | 0.00424 (0.00483) | 0.00255** (0.000852) | 0.00509 (0.00452) |
| Democratic trad. | -0.000303 (0.00103) | 0.00159 (0.00558) | 0.00345*** (0.000986) | 0.0119* (0.00563) | 0.00246** (0.000908) | 0.00781 (0.00485) | 0.00297** (0.00107) | 0.0129** (0.00398) | 0.00161* (0.000808) | 0.00834* (0.00342) |
| Religion | 0.00146** (0.000439) | 0.00557* (0.00271) | 0.00158 (0.00340) | 0.00477 (0.0228) | 0.00257*** (0.000548) | 0.00860** (0.00289) | -0.000172 (0.00388) | -0.00396 (0.0147) | 0.00121* (0.000530) | 0.00323 (0.00206) |
| Schooling | 0.0268** (0.00984) | 0.147* (0.0632) | 0.00692* (0.00327) | 0.0331 (0.0269) | 0.00906** (0.00315) | 0.0495+ (0.0262) | 0.00454 (0.00450) | 0.00859 (0.0195) | 0.00699+ (0.00366) | 0.0142 (0.0180) |
| Ethnic fract. | -0.229** (0.0860) | -0.857+ (0.437) | 0.170 (0.807) | -0.372 (5.237) | -0.322*** (0.0881) | -1.085* (0.470) | 0.0721 (0.963) | -0.0223 (3.496) | -0.139* (0.0613) | -0.122 (0.368) |
| Gini index | -0.000455 (0.00181) | 0.00635 (0.00868) | 0.00116 (0.000937) | 0.00810 (0.00795) | 0.000795 (0.000887) | 0.00695 (0.00752) | 0.000859 (0.000805) | 0.00225 (0.00496) | 0.000370 (0.000729) | 0.000711 (0.00333) |
| Public spending | 0.00344 (0.00227) | 0.0230+ (0.0126) | 0.00240** (0.000911) | 0.0153* (0.00597) | 0.00258** (0.000850) | 0.0167** (0.00560) | 0.00135 (0.000991) | 0.00408 (0.00388) | 0.00172 (0.00111) | 0.00236 (0.00437) |
| Exports | 0.00214*** (0.000603) | 0.00665* (0.00311) | 0.000683 (0.000496) | 0.00823* (0.00360) | 0.000989* (0.000456) | 0.00828** (0.00300) | 0.000412 (0.000553) | 0.00260 (0.00267) | 0.000856+ (0.000492) | 0.00282 (0.00222) |
| Lag EDI | | | | | | | 0.398*** (0.0333) | | 0.440*** (0.0320) | |
| Lag FHI | | | | | | | | 0.718*** (0.0203) | | 0.744*** (0.0183) |
| Constant | 0.0421 (0.128) | 2.837** (0.836) | 0.256 (0.267) | 4.120* (1.777) | 0.349*** (0.0548) | 4.044*** (0.385) | 0.175 (0.297) | 1.210 (1.139) | 0.127* (0.0612) | 1.058*** (0.283) |
| Observations | 1468 | 1468 | 1468 | 1468 | 1468 | 1468 | 1404 | 1404 | 1468 | 1468 |

Notes: + $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Standard errors in parentheses. All explanatory variables are lagged by 7 years. See Table 2 in the paper for further specifications.

TABLE B.9. Robustness test: Models similar to in Table 2 in paper, but run on samples including countries with at least one SEI observation.

| Dependent variable: | EDI | FHI | EDI | FHI | EDI | FHI | EDI | FHI |
|-----------------------|--------------------------|------------------------|--------------------------|------------------------|---------------------------|------------------------|-------------------------|------------------------|
| Estimation technique: | OLS PCSE | OLS PCSE | Fixed effects | Fixed effects | Random Eff. | Random Eff. | Syst. GMM | Syst GMM |
| SEI | 0.316*** (0.0840) | 0.664 (0.871) | 0.0261 (0.0518) | 0.105 (0.440) | 0.0744 (0.0492) | 0.272 (0.427) | 0.0693 (0.0465) | 0.0145 (0.421) |
| Resources index | 0.00936*** (0.000895) | 0.0351*** (0.00861) | 0.00181** (0.000605) | 0.0195** (0.00668) | 0.00408*** (0.000542) | 0.0273*** (0.00555) | 0.00272** (0.000831) | 0.00428 (0.00876) |
| Democratic tradition | -0.000354 (0.000786) | 0.00439 (0.00646) | 0.00211*** (0.000516) | 0.00924 (0.00570) | 0.00156*** (0.000459) | 0.00824+ (0.00500) | 0.00432+ (0.00261) | 0.0268 (0.0192) |
| Religion | 0.00103*** (0.000263) | 0.00396 (0.00307) | 0.000297 (0.00251) | -0.00350 (0.0215) | 0.00241*** (0.000320) | 0.00883** (0.00270) | 0.000999* (0.000428) | 0.00530 (0.00343) |
| Schooling | 0.00550 (0.00558) | 0.116* (0.0545) | 0.00462+ (0.00274) | 0.0382 (0.0260) | 0.00538* (0.00252) | 0.0487* (0.0238) | 0.000753* (0.000295) | 0.00212 (0.00287) |
| Ethnic fractionalize. | -0.0764 (0.0553) | -0.449 (0.460) | -0.0877 (0.337) | 1.004 (3.092) | -0.225*** (0.0509) | -0.966* (0.465) | 0.000119 (0.000681) | -0.000528 (0.00577) |
| Gini index | -0.00201 (0.00131) | -0.00610 (0.00976) | 0.000732 (0.000696) | 0.00742 (0.00623) | 0.000416 (0.000672) | 0.00560 (0.00600) | -0.0231 (0.0495) | 0.183 (0.432) |
| Public spending | 0.00292** (0.00108) | 0.0328*** (0.00923) | 0.00117** (0.000368) | 0.0125** (0.00459) | 0.00137*** (0.000355) | 0.0156*** (0.00448) | 0.000303 (0.000251) | 0.00293 (0.00326) |
| Exports | 0.000831* (0.000366) | 0.000888 (0.00399) | 0.000757** (0.000240) | 0.0115*** (0.00323) | 0.000719*** (0.000215) | 0.00835** (0.00256) | 0.00118* (0.000597) | 0.0119* (0.00518) |
| Lagged dep. variable | | | | | | | 0.543*** (0.0360) | 0.756*** (0.0243) |
| Constant | 0.127+ (0.0743) | 3.187*** (0.734) | 0.294* (0.128) | 3.250** (1.226) | 0.294*** (0.0439) | 3.818*** (0.406) | 0.0579 (0.0391) | 0.712* (0.347) |
| Observations | 1944 | 1944 | 1944 | 1944 | 1944 | 1944 | 1902 | 1902 |

Notes: + $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Standard errors in parentheses. All explanatory variables are lagged by 7 years. See Table 2 in the paper for further specifications.

TABLE B.10. Robustness test: Models similar to in Table 2 in the paper, but run on samples including all WVS participating countries.

| Dependent variable: | EDI | FHI | EDI | FHI | EDI | FHI | EDI | FHI |
|-----------------------|--------------------------|------------------------|--------------------------|-----------------------|--------------------------|------------------------|--------------------------|-----------------------|
| Estimation technique: | OLS PCSE | OLS PCSE | Fixed effects | Fixed effects | Random Eff. | Random Eff. | Syst. GMM | Syst GMM |
| SEI | 0.283** (0.0867) | -0.0383 (0.943) | 0.0268 (0.0557) | 0.152 (0.477) | 0.0741 (0.0533) | 0.265 (0.466) | 0.0598 (0.0502) | 0.0630 (0.512) |
| Resources index | 0.00933*** (0.000892) | 0.0355*** (0.00890) | 0.00146* (0.000644) | 0.0153* (0.00707) | 0.00372*** (0.000569) | 0.0231*** (0.00589) | 0.00228** (0.000728) | 0.00248 (0.00874) |
| Democratic trad. | -0.000169 (0.000821) | 0.00727 (0.00785) | 0.00211*** (0.000517) | 0.00965+ (0.00569) | 0.00157*** (0.000467) | 0.00893+ (0.00508) | 0.00129* (0.000539) | 0.0109* (0.00484) |
| Religion | 0.00128*** (0.000262) | 0.00932** (0.00342) | 0.000301 (0.00249) | -0.00344 (0.0216) | 0.00254*** (0.000282) | 0.0132*** (0.00255) | 0.000857** (0.000320) | 0.00281 (0.00290) |
| Schooling | 0.00471 (0.00558) | 0.111+ (0.0567) | 0.00435+ (0.00251) | 0.0361 (0.0256) | 0.00506* (0.00235) | 0.0455+ (0.0236) | 0.00390 (0.00240) | 0.0200 (0.0151) |
| Ethnic fract. | -0.0716 (0.0532) | -0.248 (0.488) | -0.0918 (0.340) | 0.953 (3.168) | -0.217*** (0.0494) | -0.778+ (0.473) | -0.0237 (0.0491) | 0.117 (0.444) |
| Gini index | -0.00187 (0.00124) | -0.00588 (0.00997) | 0.000612 (0.000678) | 0.00575 (0.00650) | 0.000309 (0.000650) | 0.00429 (0.00631) | -0.0000471 (0.000585) | -0.00235 (0.00467) |
| Public spending | 0.00284** (0.00105) | 0.0290** (0.01000) | 0.00123** (0.000422) | 0.0131* (0.00524) | 0.00141*** (0.000407) | 0.0153** (0.00512) | 0.00106** (0.000388) | 0.00541 (0.00367) |
| Exports | 0.000884* (0.000370) | 0.00155 (0.00419) | 0.000697** (0.000241) | 0.0108** (0.00371) | 0.000674** (0.000217) | 0.00822** (0.00291) | 0.000353 (0.000260) | 0.00354 (0.00373) |
| Lagged dep var | | | | | | | 0.560*** (0.0279) | 0.794*** (0.0292) |
| Constant | 0.135+ (0.0739) | 3.372*** (0.764) | 0.296* (0.127) | 3.299** (1.241) | 0.304*** (0.0414) | 3.884*** (0.401) | 0.0674 (0.0458) | 0.668+ (0.377) |
| Observations | 2105 | 2105 | 2105 | 2105 | 2105 | 2105 | 2105 | 2105 |

Notes: + $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Standard errors in parentheses. All explanatory variables are lagged by 7 years. See Table 2 in the paper for further specifications.

TABLE B.11. Extension: Controlling properly for a country's democratic history. Models similar to in Table 2 in the paper, but including democratic stock as control variable instead of democratic tradition

| Dep. variable: | EDI | FHI | EDI | FHI | EDI | FHI | EDI | FHI | EDI | FHI |
|-----------------------|---------------------------------|--------------------------------|----------------------------|------------------------|----------------------------|------------------------|---------------------------|------------------------|----------------------------|------------------------|
| Estimation technique: | OLS PCSE | OLS PCSE | Fixed effects | Fixed effects | Random effects | Random effects | Ar.-Bond | Ar.-Bond | Syst. GMM | Syst. GMM |
| SEI | 0.144 (0.0894) | 0.202 (0.810) | 0.0514 (0.0651) | 0.257 (0.603) | 0.0646 (0.0644) | 0.291 (0.579) | -0.00310 (0.188) | -0.0485 (0.444) | 0.0567 (0.0840) | 0.0186 (0.420) |
| Resources index | 0.00481*** (0.00120) | 0.0156 (0.0101) | 0.00148+ (0.000823) | 0.0172+ (0.00957) | 0.00219** (0.000743) | 0.0186* (0.00775) | 0.000194 (0.00105) | 0.00327 (0.00492) | 0.000762 (0.000824) | 0.00297 (0.00521) |
| Democr. Stock | 0.000239*** (0.0000522) | 0.000661 (0.000452) | 0.000375*** (0.0000929) | 0.000696 (0.000927) | 0.000347*** (0.0000452) | 0.000610 (0.000401) | 0.000449** (0.000141) | 0.00109* (0.000508) | 0.000211*** (0.0000385) | 0.000255 (0.000281) |
| Religion | 0.00126*** (0.000266) | 0.00603* (0.00264) | 0.000117 (0.00251) | 0.00245 (0.0220) | 0.00185*** (0.000361) | 0.00880** (0.00280) | -0.000509 (0.00227) | -0.00334 (0.0142) | 0.000770 (0.000529) | 0.00405* (0.00165) |
| Schooling | 0.0131* (0.00622) | 0.140* (0.0620) | 0.00423 (0.00369) | 0.0355 (0.0286) | 0.00569 (0.00348) | 0.0524+ (0.0274) | 0.00194 (0.00602) | 0.0132 (0.0199) | 0.00482+ (0.00248) | 0.0182 (0.0178) |
| Ethnic fract. | -0.155* (0.0664) | -0.972* (0.451) | -0.361 (0.808) | -0.142 (4.844) | -0.226*** (0.0564) | -1.103* (0.437) | -0.180 (0.839) | -0.0682 (2.972) | -0.0848+ (0.0449) | -0.0655 (0.268) |
| Gini index | -0.00180 (0.00152) | -0.00154 (0.00856) | 0.000520 (0.000934) | 0.00696 (0.00613) | -0.0000319 (0.000896) | 0.00393 (0.00571) | 0.000214 (0.000561) | 0.000709 (0.00368) | -0.000309 (0.000634) | -0.00107 (0.00380) |
| Public spending | 0.00339* (0.00131) | 0.0294* (0.0117) | 0.00112+ (0.000587) | 0.0112+ (0.00598) | 0.00144* (0.000588) | 0.0143* (0.00560) | 0.000569 (0.00140) | -0.00166 (0.00365) | 0.000751 (0.000528) | -0.00153 (0.00437) |
| Exports | 0.00171*** (0.000380) | 0.00784** (0.00292) | 0.000287 (0.000335) | 0.00477 (0.00367) | 0.000651* (0.000298) | 0.00646* (0.00307) | -0.00000348 (0.000483) | 0.0000757 (0.00234) | 0.000391 (0.000332) | 0.00127 (0.00215) |
| Lag EDI | | | | | | | 0.256*** (0.0518) | | 0.451*** (0.0277) | |
| Lag FHI | | | | | | | | 0.722*** (0.0210) | | 0.744*** (0.0222) |
| Constant | 0.185* (0.0873) | 3.428*** (0.880) | 0.456 (0.298) | 4.277** (1.655) | 0.367*** (0.0532) | 4.335*** (0.406) | 0.373 (0.246) | 1.397 (1.046) | 0.186*** (0.0458) | 1.216*** (0.304) |
| Observations | 1238 | 1238 | 1238 | 1238 | 1238 | 1238 | 1176 | 1176 | 1238 | 1238 |

All explanatory variables are lagged by 7 years. See Table 2 in the paper for further specifications.

TABLE B.12. Extension: Further investigating omitted variable bias: How OLS PCSE coefficients change when controlling for cultural zone

| Estim. (Dep. var.) | PCSE (EDI) | PCSE (FHI) | FE (EDI) | FE (FHI) | PCSE (EDI) | PCSE (FHI) |
|--------------------|--------------------------|-----------------------|--------------------------|-----------------------|--------------------------|-----------------------|
| SEI | 0.317*** (0.0908) | 0.520 (0.816) | 0.0385 (0.0634) | 0.109 (0.515) | 0.149+ (0.0771) | -0.277 (0.632) |
| Protestant zone | | | | | 0.118* (0.0485) | 0.104 (0.348) |
| English zone | | | | | 0.151*** (0.0425) | 0.355 (0.304) |
| Catholic zone | | | | | 0.119* (0.0468) | 0.876** (0.269) |
| Orthodox zone | | | | | -0.0405 (0.0361) | -0.243 (0.233) |
| Confucian zone | | | | | -0.0143 (0.0749) | -0.479 (0.857) |
| Latin zone | | | | | -0.00325 (0.0430) | 0.665** (0.242) |
| Islam zone | | | | | 0.0594 (0.0408) | 0.421 (0.513) |
| Democr. Stock | | | | | | |
| Resources index | 0.00867*** (0.000946) | 0.0277** (0.00817) | 0.00176* (0.000745) | 0.0189** (0.00730) | 0.00690*** (0.000888) | 0.0220** (0.00672) |
| Dem. tradition | -0.000752 (0.000794) | 0.00159 (0.00558) | 0.00244*** (0.000499) | 0.0119* (0.00563) | 0.0000314 (0.000704) | 0.00322 (0.00546) |
| Religion | 0.00136*** (0.000295) | 0.00557* (0.00271) | 0.000862 (0.00250) | 0.00477 (0.0228) | 0.000810+ (0.000421) | 0.00327 (0.00377) |
| Schooling | 0.0107 (0.00694) | 0.147* (0.0632) | 0.00451 (0.00357) | 0.0331 (0.0269) | 0.0112+ (0.00637) | 0.134* (0.0550) |
| Ethnic fract. | -0.140* (0.0658) | -0.857+ (0.437) | -0.408 (0.794) | -0.372 (5.237) | -0.100+ (0.0541) | -0.391 (0.319) |
| Gini index | -0.000141 (0.00148) | 0.00635 (0.00868) | 0.000730 (0.000990) | 0.00810 (0.00795) | 0.00188 (0.00131) | 0.00299 (0.00860) |
| Public spending | 0.00263+ (0.00148) | 0.0230+ (0.0126) | 0.00149** (0.000572) | 0.0153* (0.00597) | 0.00181 (0.00132) | 0.0150 (0.0106) |
| Exports | 0.00155*** (0.000415) | 0.00665* (0.00311) | 0.000460 (0.000303) | 0.00823* (0.00360) | 0.000627 (0.000570) | 0.00121 (0.00326) |
| Constant | 0.0275 (0.0941) | 2.837*** (0.836) | 0.444 (0.285) | 4.120* (1.777) | 0.0979 (0.105) | 4.100*** (0.716) |
| Observations | 1468 | 1468 | 1468 | 1468 | 1426 | 1426 |

Notes: + $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Standard errors in parentheses.

TABLE B.13. Robustness test: Models similar to in Table 2 in the paper, but using Pippa Norris' values index.

| Dependent variable: | EDI | FHI | EDI | FHI | EDI | FHI | EDI | FHI |
|-------------------------|--------------------------|-----------------------|--------------------------|-----------------------|--------------------------|------------------------|--------------------------|------------------------|
| Estimation technique: | OLS PCSE | OLS PCSE | Fixed effects | Fixed effects | Random Eff. | Random Eff. | Syst. GMM | Syst. GMM |
| Liberal values (Norris) | 0.0659** (0.0225) | 0.0453 (0.243) | 0.00580 (0.0110) | 0.0242 (0.176) | 0.0158 (0.0102) | 0.0367 (0.165) | -0.00161 (0.0120) | -0.0335 (0.141) |
| Resources index | 0.00853*** (0.00106) | 0.0287** (0.00977) | 0.00221** (0.000792) | 0.0203* (0.00802) | 0.00416*** (0.000671) | 0.0252*** (0.00662) | 0.000534 (0.000811) | 0.00361 (0.00540) |
| Democratic tradition | -0.000199 (0.000747) | 0.00349 (0.00626) | 0.00231*** (0.000530) | 0.0133* (0.00582) | 0.00163*** (0.000482) | 0.00949+ (0.00502) | 0.00203*** (0.000486) | 0.0143*** (0.00374) |
| Religion | 0.00145*** (0.000286) | 0.00579* (0.00266) | 0.000876 (0.00246) | 0.00422 (0.0228) | 0.00277*** (0.000380) | 0.00834** (0.00287) | -0.000339 (0.00236) | -0.00387 (0.0146) |
| Schooling | 0.0113 (0.00682) | 0.154* (0.0639) | 0.00458 (0.00326) | 0.0352 (0.0270) | 0.00518+ (0.00311) | 0.0526* (0.0263) | 0.00217 (0.00254) | 0.00839 (0.0188) |
| Ethnic fractionaliz. | -0.134* (0.0658) | -0.795+ (0.440) | -0.412 (0.806) | -0.373 (5.303) | -0.228*** (0.0624) | -0.996* (0.471) | -0.285 (0.785) | 0.466 (3.872) |
| Gini index | -0.000486 (0.00155) | 0.00620 (0.00936) | 0.000702 (0.000907) | 0.00894 (0.00889) | 0.000516 (0.000905) | 0.00762 (0.00829) | 0.000420 (0.000608) | 0.00319 (0.00543) |
| Public spending | 0.00272+ (0.00151) | 0.0232+ (0.0128) | 0.00162** (0.000499) | 0.0164* (0.00649) | 0.00178*** (0.000484) | 0.0176** (0.00604) | 0.000854+ (0.000468) | 0.00353 (0.00377) |
| Exports | 0.00162*** (0.000410) | 0.00710* (0.00305) | 0.000503+ (0.000305) | 0.00810* (0.00383) | 0.000594* (0.000266) | 0.00831** (0.00307) | 0.0000992 (0.000337) | 0.00262 (0.00258) |
| Lagged dep. var. | | | | | | | 0.464*** (0.0457) | 0.706*** (0.0212) |
| Constant | 0.150 (0.101) | 2.883** (0.997) | 0.450 (0.287) | 4.058* (1.823) | 0.334*** (0.0479) | 3.992*** (0.410) | 0.286 (0.257) | 1.056 (1.316) |
| Observations | 1426 | 1426 | 1426 | 1426 | 1426 | 1426 | 1364 | 1364 |

Notes: + $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Standard errors in parentheses. All explanatory variables are lagged by 7 years. See Table 2 in the paper for further specifications.

TABLE B.14. Robustness test: Models similar to in Table 2 in the paper, but with all independent variables lagged by 1 year

| Dependent variable: | EDI | FHI | EDI | FHI | EDI | FHI | EDI | FHI |
|-----------------------|--------------------------------------|-----------------------------------|--------------------------------------|------------------------------------|--------------------------------------|------------------------------------|--------------------------------------|------------------------------------|
| Estimation technique: | OLS PCSE | OLS PCSE | Fixed effects | Fixed effects | Random Eff. | Random Eff. | Syst. GMM | Syst. GMM |
| SEI | 0.414 ^{***} (0.106) | 1.278 (0.923) | 0.117 (0.0993) | 0.640 (0.875) | 0.168 ⁺ (0.0911) | 0.763 (0.813) | 0.0955 (0.0718) | 0.659 (0.607) |
| Resources index | 0.00762 ^{***} (0.000935) | 0.0198 [*] (0.00785) | 0.00278 ^{***} (0.000727) | 0.0219 ^{**} (0.00697) | 0.00438 ^{***} (0.000648) | 0.0236 ^{***} (0.00617) | 0.00307 ^{***} (0.000737) | 0.0170 ^{***} (0.00490) |
| Democratic tradition | -0.000100 (0.000677) | 0.00276 (0.00465) | 0.000807 ⁺ (0.000449) | -0.00519 (0.00392) | 0.000576 (0.000447) | -0.00356 (0.00353) | 0.000375 (0.000411) | -0.00401 (0.00280) |
| Religion | 0.00110 ^{***} (0.000268) | 0.00295 (0.00240) | 0.000301 (0.00268) | -0.00494 (0.0262) | 0.00226 ^{***} (0.000360) | 0.00466 ⁺ (0.00271) | 0.00101 ^{***} (0.000299) | 0.00263 (0.00239) |
| Schooling | 0.0124 ⁺ (0.00661) | 0.153 [*] (0.0607) | 0.00919 ⁺ (0.00472) | 0.0800 ⁺ (0.0482) | 0.00949 [*] (0.00457) | 0.0910 [*] (0.0453) | 0.00548 [*] (0.00222) | 0.0589 [*] (0.0275) |
| Ethnic fractionaliz. | -0.115 ⁺ (0.0603) | -0.701 ⁺ (0.393) | 0.0158 (0.790) | 1.012 (6.313) | -0.210 ^{***} (0.0561) | -0.955 [*] (0.427) | -0.0782 (0.0490) | -0.282 (0.320) |
| Gini index | -0.0000283 (0.00135) | 0.00626 (0.00949) | 0.00130 (0.000964) | 0.0125 (0.0105) | 0.00110 (0.000921) | 0.0109 (0.00964) | 0.000601 (0.000709) | 0.00411 (0.00442) |
| Public spending | 0.00359 [*] (0.00140) | 0.0355 ^{**} (0.0119) | 0.00344 ^{***} (0.000516) | 0.0366 ^{***} (0.00796) | 0.00354 ^{***} (0.000500) | 0.0367 ^{***} (0.00729) | 0.00232 ^{***} (0.000515) | 0.0251 ^{***} (0.00612) |
| Exports | 0.00141 ^{***} (0.000360) | 0.00593 ⁺ (0.00316) | 0.00104 ^{**} (0.000384) | 0.0101 [*] (0.00409) | 0.00102 ^{**} (0.000341) | 0.00860 ^{**} (0.00327) | 0.000529 [*] (0.000239) | 0.00737 ^{**} (0.00236) |
| Lagged dep. var. | | | | | | | 0.510 ^{***} (0.0363) | 0.669 ^{***} (0.0217) |
| Constant | -0.0462 (0.100) | 2.411 ^{**} (0.851) | 0.137 (0.265) | 2.544 (2.187) | 0.145 [*] (0.0579) | 3.013 ^{***} (0.565) | 0.0174 (0.0380) | -0.0363 (0.300) |
| Observations | 1852 | 1852 | 1852 | 1852 | 1852 | 1852 | 1852 | 1852 |

Notes: ⁺ $p < 0.10$, ^{*} $p < 0.05$, ^{**} $p < 0.01$, ^{***} $p < 0.001$. Standard errors in parentheses. See Table 2 in the paper for further specifications.

TABLE B.15. Robustness test: Models similar to in Table 2 in the paper, but with all independent variables lagged by 5 years

| Dependent variable: Estimation technique: | EDI | FHI | EDI | FHI | EDI | FHI | EDI | FHI |
|---|--------------------------|-----------------------|--------------------------|------------------------|--------------------------|------------------------|--------------------------|------------------------|
| | OLS PCSE | OLS PCSE | Fixed effects | Fixed effects | Random Eff. | Random Eff. | Syst. GMM | Syst. GMM |
| SEI | 0.335** (0.101) | 0.772 (0.854) | 0.0349 (0.0527) | 0.188 (0.569) | 0.0841 (0.0533) | 0.313 (0.526) | 0.0556 (0.0401) | -0.180 (0.279) |
| Resources index | 0.00833*** (0.000901) | 0.0246** (0.00781) | 0.00229** (0.000776) | 0.0212* (0.00986) | 0.00413*** (0.000681) | 0.0249*** (0.00700) | 0.00268*** (0.000623) | 0.00468 (0.00551) |
| Democratic tradition | -0.000277 (0.000750) | 0.00390 (0.00538) | 0.00231*** (0.000577) | 0.00777 (0.00577) | 0.00169*** (0.000502) | 0.00612 (0.00468) | 0.000796+ (0.000447) | 0.00480+ (0.00285) |
| Religion | 0.00127*** (0.000275) | 0.00435+ (0.00254) | 0.00281 (0.00395) | 0.00514 (0.0268) | 0.00262*** (0.000380) | 0.00667* (0.00281) | 0.000808** (0.000307) | 0.00122 (0.00285) |
| Schooling | 0.0110+ (0.00642) | 0.153* (0.0632) | 0.00490 (0.00370) | 0.0526 (0.0357) | 0.00568 (0.00349) | 0.0678+ (0.0346) | 0.00373 (0.00256) | 0.0103 (0.0190) |
| Ethnic fractionalize. | -0.131* (0.0626) | -0.813+ (0.416) | 0.0446 (0.786) | 0.0803 (5.409) | -0.230*** (0.0613) | -1.009* (0.462) | -0.0856+ (0.0456) | -0.167 (0.274) |
| Gini index | -0.000176 (0.00136) | 0.00625 (0.00825) | 0.000747 (0.000839) | 0.00659 (0.00815) | 0.000573 (0.000794) | 0.00615 (0.00751) | 0.000409 (0.000658) | -0.000494 (0.00449) |
| Public spending | 0.00310* (0.00143) | 0.0289* (0.0125) | 0.00234** (0.000845) | 0.0241** (0.00830) | 0.00253** (0.000793) | 0.0252** (0.00769) | 0.00121+ (0.000702) | -0.000507 (0.00382) |
| Exports | 0.00157*** (0.000395) | 0.00723* (0.00306) | 0.000930* (0.000367) | 0.0127*** (0.00350) | 0.00100** (0.000348) | 0.0112*** (0.00288) | 0.000503* (0.000245) | 0.00404* (0.00166) |
| Lagged dep. var. | | | | | | | 0.545*** (0.0264) | 0.805*** (0.0209) |
| Constant | 0.00559 (0.0946) | 2.583** (0.853) | 0.233 (0.258) | 3.449+ (1.925) | 0.259*** (0.0542) | 3.569*** (0.506) | 0.0723* (0.0300) | 0.904** (0.334) |
| Observations | 1596 | 1596 | 1596 | 1596 | 1596 | 1596 | 1596 | 1596 |

Notes: + $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Standard errors in parentheses. See Table 2 in the paper for further specifications.

TABLE B.16. Robustness test: Models similar to in Table 2 in the paper, but with Polity index as democracy measure

| \Estimation technique | OLS PCSE | Fixed Effects | Random Effects | System GMM |
|-----------------------|---------------------------------|----------------------------------|-----------------------------------|----------------------------------|
| SEI | -1.183 (3.230) | 0.163 (1.528) | 0.132 (1.453) | 0.0702 (0.966) |
| Resources index | 0.0628 ⁺ (0.0340) | 0.0748 ^{**} (0.0240) | 0.0775 ^{***} (0.0206) | 0.00536 (0.0139) |
| Democratic trad. | 0.0165 (0.0246) | -0.0245 (0.0164) | -0.0203 (0.0150) | -0.0134 (0.0124) |
| Religion | 0.0243 (0.0173) | -0.00192 (0.0619) | 0.0307 ^{**} (0.0112) | -0.00303 (0.0445) |
| Schooling | 0.496 ⁺ (0.248) | 0.129 (0.0904) | 0.144 ⁺ (0.0871) | 0.0386 (0.0455) |
| Ethnic fract. | -2.128 (1.864) | -0.0151 (13.18) | -2.346 (1.855) | -0.699 (9.425) |
| Gini index | 0.0586 [*] (0.0291) | 0.0270 (0.0231) | 0.0288 (0.0221) | 0.00384 (0.0122) |
| Public spending | 0.0682 (0.0490) | 0.0257 (0.0172) | 0.0290 ⁺ (0.0166) | -0.00974 (0.0146) |
| Exports | -0.00865 (0.0141) | 0.00818 (0.00892) | 0.00544 (0.00825) | 0.000288 (0.00601) |
| Lagged Polity index | | | | 0.686 ^{***} (0.0341) |
| Constant | -1.541 (3.204) | 2.500 (4.431) | 2.763 ⁺ (1.481) | 2.110 (3.202) |
| Observations | 1426 | 1426 | 1426 | 1364 |

Notes: ⁺ $p < 0.10$, ^{*} $p < 0.05$, ^{**} $p < 0.01$, ^{***} $p < 0.001$. Standard errors in parentheses. All explanatory variables are lagged by 7 years. See Table 2 in the paper for further specifications.

TABLE B.17. Robustness test: System GMM models similar to in Table 2 in the paper, but with restrictions on lags used for instrumentation (see Roodman 2009).

| Dep variable | EDI | FHI | EDI | FHI | EDI | FHI | EDI | FHI |
|---|--------------------------------------|-----------------------------------|------------------------------------|-----------------------------------|------------------------------------|----------------------------------|------------------------------------|----------------------------------|
| Restrictions on lags used for instruments | no lag restrictions | no lag restrictions | max 4 lags | max 4 lags | max 3 lags | max 3 lags | max 2 lags | max 2 lags |
| SEI | 0.0807 (0.0830) | -0.0620 (0.425) | 0.141 (0.147) | -0.333 (0.715) | 0.163 (0.159) | -0.285 (0.677) | 0.181 (0.209) | -0.252 (1.098) |
| Resources index | 0.00246 ^{***} (0.000671) | 0.00509 (0.00452) | 0.00351 ^{**} (0.00112) | 0.00655 (0.00745) | 0.00349 ^{**} (0.00107) | 0.00556 (0.00774) | 0.00362 ^{**} (0.00117) | 0.00416 (0.00886) |
| Schooling | 0.00357 (0.00228) | 0.0142 (0.0180) | 0.00597 (0.00518) | 0.0307 (0.0281) | 0.00648 (0.00615) | 0.0351 (0.0329) | 0.00806 (0.00785) | 0.0481 (0.0357) |
| Public spending | 0.000912 ⁺ (0.000492) | 0.00236 (0.00437) | 0.00182 ⁺ (0.000976) | 0.00359 (0.00843) | 0.00205 [*] (0.00104) | 0.00394 (0.00894) | 0.00219 ⁺ (0.00116) | 0.00222 (0.00864) |
| Religion | 0.000898 [*] (0.000378) | 0.00323 (0.00206) | 0.000687 (0.000455) | 0.00251 (0.00210) | 0.000651 (0.000481) | 0.00252 (0.00206) | 0.000573 (0.000464) | 0.00214 (0.00203) |
| Gini index | 0.000200 (0.000520) | 0.000711 (0.00333) | 0.000124 (0.000542) | -0.0000189 (0.00401) | 0.000114 (0.000520) | 0.0000986 (0.00388) | 0.0000811 (0.000523) | -0.0000147 (0.00391) |
| Ethnic fract. | -0.0628 (0.0583) | -0.122 (0.368) | -0.0596 (0.0674) | -0.0484 (0.388) | -0.0603 (0.0691) | -0.0653 (0.406) | -0.0559 (0.0704) | -0.00412 (0.356) |
| Exports | 0.000204 (0.000236) | 0.00282 (0.00222) | 0.000298 (0.000340) | 0.00247 (0.00282) | 0.000275 (0.000352) | 0.00224 (0.00286) | 0.000210 (0.000366) | 0.00157 (0.00275) |
| Democratic trad. | 0.00106 ⁺ (0.000605) | 0.00834 [*] (0.00342) | 0.000577 (0.000834) | 0.00969 [*] (0.00458) | 0.000468 (0.000843) | 0.0100 [*] (0.00470) | 0.000254 (0.000862) | 0.0109 [*] (0.00447) |
| Lag EDI | 0.542 ^{***} (0.0253) | | 0.483 ^{***} (0.0350) | | 0.479 ^{***} (0.0345) | | 0.477 ^{***} (0.0353) | |
| Lag FHI | | 0.744 ^{***} (0.0183) | | 0.759 ^{***} (0.0308) | | 0.756 ^{***} (0.0329) | | 0.772 ^{***} (0.0356) |
| Constant | 0.0874 [*] (0.0345) | 1.058 ^{***} (0.283) | 0.0345 (0.0529) | 0.865 [*] (0.369) | 0.0222 (0.0623) | 0.840 ⁺ (0.435) | 0.000186 (0.0687) | 0.670 (0.411) |
| Observations | 1468 | 1468 | 1468 | 1468 | 1468 | 1468 | 1468 | 1468 |

Notes: ⁺ $p < 0.10$, ^{*} $p < 0.05$, ^{**} $p < 0.01$, ^{***} $p < 0.001$. Standard errors in parentheses. All explanatory variables are lagged by 7 years. See Table 2 in the paper for further specifications.

TABLE B.18. Testing alternative determinants of democracy; fuel exports

| Dep. variable: | EDI | FHI | EDI | FHI | EDI | FHI | EDI (RL) | FHI | EDI (RL) | FHI |
|-----------------------|--|---------------------------------------|---------------------------------------|--------------------------------------|--|---------------------------------------|---------------------------------------|-------------------------------------|---------------------------------------|-------------------------------------|
| Estimation technique: | OLS PCSE | OLS PCSE | Fixed effects | Fixed effects | Random effects | Random effects | Ar.-Bond | Ar.-Bond | Syst. GMM | Syst. GMM |
| SEI | 0.338*** (0.0959) | 0.790 (0.780) | 0.0397 (0.0673) | 0.104 (0.557) | 0.0869 (0.0664) | 0.249 (0.526) | -0.0621 (0.170) | -0.113 (0.532) | 0.0954 (0.0758) | -0.0268 (0.419) |
| Fuel | -0.00148** (0.000440) | -0.0169*** (0.00346) | -0.00148* (0.000675) | -0.0162** (0.00579) | -0.00153** (0.000567) | -0.0169*** (0.00438) | 0.0000143 (0.000794) | 0.000860 (0.00329) | -0.000542 (0.000395) | -0.00346 (0.00246) |
| Resources index | 0.00820*** (0.000918) | 0.0223** (0.00779) | 0.00197* (0.000831) | 0.0180* (0.00816) | 0.00391*** (0.000729) | 0.0223*** (0.00620) | 0.000364 (0.00100) | 0.00349 (0.00520) | 0.00253*** (0.000656) | 0.00376 (0.00412) |
| Democratic trad. | 0.0000841 (0.000655) | 0.00766 (0.00499) | 0.00225*** (0.000505) | 0.0129* (0.00586) | 0.00163*** (0.000472) | 0.0102* (0.00499) | 0.00303*** (0.000917) | 0.0142*** (0.00429) | 0.00110+ (0.000637) | 0.0108** (0.00375) |
| Religion | 0.00132*** (0.000267) | 0.00502* (0.00234) | 0.000706 (0.00257) | 0.00293 (0.0231) | 0.00268*** (0.000377) | 0.00764** (0.00269) | -0.000439 (0.00235) | -0.00401 (0.0151) | 0.000961** (0.000298) | 0.00354+ (0.00200) |
| Schooling | 0.00810 (0.00631) | 0.130* (0.0587) | 0.00406 (0.00339) | 0.0299 (0.0288) | 0.00445 (0.00323) | 0.0453+ (0.0274) | 0.00196 (0.00529) | 0.0110 (0.0177) | 0.00267 (0.00250) | 0.0127 (0.0173) |
| Ethnic fract. | -0.111+ (0.0642) | -0.575 (0.396) | -0.423 (0.848) | -0.527 (5.647) | -0.206*** (0.0597) | -0.769+ (0.436) | -0.221 (0.929) | 0.00368 (3.449) | -0.0583 (0.0509) | -0.0789 (0.395) |
| Gini index | -0.0000413 (0.00141) | 0.00609 (0.00798) | 0.000644 (0.000887) | 0.00828 (0.00866) | 0.000478 (0.000864) | 0.00697 (0.00799) | 0.000342 (0.000615) | 0.00335 (0.00558) | 0.000311 (0.000552) | 0.00183 (0.00396) |
| Public spending | 0.00229 (0.00144) | 0.0196 (0.0118) | 0.00149** (0.000481) | 0.0151* (0.00628) | 0.00164*** (0.000473) | 0.0160** (0.00578) | 0.00153 (0.00144) | 0.00333 (0.00392) | 0.000920* (0.000432) | 0.00130 (0.00410) |
| Exports | 0.00159*** (0.000399) | 0.00682* (0.00298) | 0.000489 (0.000315) | 0.00788* (0.00397) | 0.000576* (0.000279) | 0.00789* (0.00319) | 0.0000716 (0.000404) | 0.00234 (0.00261) | 0.000237 (0.000235) | 0.00244 (0.00219) |
| Lagged EDI | | | | | | | 0.302*** (0.0524) | | 0.532*** (0.0333) | |
| Lagged FHI | | | | | | | | 0.714*** (0.0204) | | 0.734*** (0.0181) |
| Constant | 0.0584 (0.0903) | 3.129*** (0.805) | 0.472 (0.303) | 4.426* (1.962) | 0.329*** (0.0503) | 4.221*** (0.438) | 0.362 (0.273) | 1.183 (1.121) | 0.0946** (0.0345) | 1.148*** (0.262) |
| Observations | 1426 | 1426 | 1426 | 1426 | 1426 | 1426 | 1364 | 1364 | 1426 | 1426 |

Notes: + $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Standard errors in parentheses. All explanatory variables are lagged by 7 years. See Table 2 in the paper for further specifications.

TABLE B.19. Testing alternative determinants of democracy; waves of democratization

| Dep. variable: | EDI | FHI | EDI | FHI | EDI | FHI | EDI (RL) | FHI | EDI (RL) | FHI |
|-----------------------|-----------------------------------|---------------------------------|-------------------------------------|-----------------------------------|----------------------------------|-----------------------------------|--|------------------------------------|-----------------------------------|------------------------------------|
| Estimation technique: | OLS PCSE | OLS PCSE | Fixed effects | Fixed effects | Random effects | Random effects | Ar.-Bond | Ar.-Bond | Syst. GMM | Syst. GMM |
| SEI | 0.300** (0.103) | 0.305 (0.890) | 0.0455 (0.0740) | 0.128 (0.659) | 0.0840 (0.0710) | 0.201 (0.633) | -0.00604 (0.169) | -0.175 (0.609) | 0.0920 (0.0930) | -0.227 (0.567) |
| Waves | 0.0288 (0.0309) | 0.353 (0.225) | 0.0170 (0.0146) | 0.418*** (0.124) | 0.0172 (0.0153) | 0.404*** (0.119) | 0.0371⁺ (0.0200) | 0.441*** (0.0799) | 0.0187 (0.0226) | 0.377*** (0.0792) |
| Resources index | 0.00876*** (0.00104) | 0.0312** (0.00908) | 0.00248** (0.000788) | 0.0274*** (0.00680) | 0.00419*** (0.000707) | 0.0300*** (0.00609) | 0.000853 (0.00106) | 0.00511 (0.00427) | 0.00267*** (0.000626) | 0.00123 (0.00341) |
| Democratic trad. | -0.00106 (0.000754) | -0.000842 (0.00692) | 0.00193*** (0.000585) | 0.00881 (0.00571) | 0.00129* (0.000551) | 0.00690 (0.00519) | 0.00226* (0.00112) | 0.00909* (0.00399) | 0.000546 (0.000719) | 0.00709* (0.00302) |
| Religion | 0.00146*** (0.000307) | 0.00614* (0.00259) | 0.00187 (0.00261) | 0.00681 (0.0228) | 0.00287*** (0.000456) | 0.00930* (0.00362) | 0.000170 (0.00297) | -0.00362 (0.0148) | 0.000931** (0.000306) | 0.00344 ⁺ (0.00192) |
| Schooling | 0.00940 (0.00711) | 0.139* (0.0683) | 0.00575 ⁺ (0.00314) | 0.0501 ⁺ (0.0271) | 0.00612* (0.00302) | 0.0577* (0.0260) | 0.00424 (0.00761) | 0.0107 (0.0209) | 0.00417 ⁺ (0.00230) | 0.0165 (0.0169) |
| Ethnic fract. | -0.139 ⁺ (0.0734) | -0.875 ⁺ (0.478) | -0.397 (0.802) | -0.339 (4.938) | -0.213** (0.0697) | -0.828 (0.562) | -0.198 (0.917) | -0.122 (3.097) | -0.0838 (0.0519) | -0.380 (0.331) |
| Gini index | -0.000177 (0.00172) | 0.00737 (0.0102) | 0.000810 (0.00102) | 0.00959 (0.00915) | 0.000626 (0.00102) | 0.00882 (0.00885) | 0.0000853 (0.000853) | 0.00299 (0.00605) | 0.000412 (0.000612) | 0.00265 (0.00354) |
| Public spending | 0.00316 ⁺ (0.00165) | 0.0285 ⁺ (0.0152) | 0.00178*** (0.000495) | 0.0189* (0.00662) | 0.00193*** (0.000500) | 0.0198** (0.00652) | 0.00177 ⁺ (0.000925) | 0.00320 (0.00448) | 0.00108* (0.000494) | 0.00191 (0.00433) |
| Exports | 0.00175*** (0.000486) | 0.00544 (0.00379) | 0.000694 ⁺ (0.000420) | 0.0109*** (0.00313) | 0.000781* (0.000367) | 0.0104*** (0.00279) | 0.000367 (0.000455) | 0.00527* (0.00208) | 0.000463 (0.000346) | 0.00470* (0.00191) |
| Lag EDI | | | | | | | 0.258*** (0.0667) | | 0.549*** (0.0346) | |
| Lag FHI | | | | | | | | 0.753*** (0.0255) | | 0.786*** (0.0222) |
| Constant | 0.0386 (0.103) | 2.824** (0.926) | 0.402 (0.275) | 3.490* (1.647) | 0.275*** (0.0507) | 3.511*** (0.504) | 0.323 (0.249) | 0.922 (0.981) | 0.0636 ⁺ (0.0360) | 0.904** (0.282) |
| Observations | 1232 | 1232 | 1232 | 1232 | 1232 | 1232 | 1171 | 1171 | 1232 | 1232 |

Notes: ⁺ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Standard errors in parentheses. All explanatory variables are lagged by 7 years. See Table 2 in the paper for further specifications.

B.IV. Robustness tests from “*The endogeneity issue revisited: Does experience with democracy affect values?*”

TABLE B.20. Robustness testing Table 3: System GMM models with SEI as Dependent Variable, but altering number of lags used for instrumentation.

| Lags used for instrumentation | max 3 lags | max 3 lags | max 3 lags | max 3 lags | max 3 lags | max 3 lags | max 3 lags | max 3 lags |
|-------------------------------|---------------------------|----------------------------|---------------------------|----------------------------|---------------------------|----------------------------|--------------------------|----------------------------|
| FHI | 0.00434 (0.00301) | 0.00391 (0.00360) | | | 0.00429 (0.00346) | 0.00370 (0.00412) | | |
| EDI | | | 0.101** (0.0355) | 0.0360 (0.0368) | | | 0.105** (0.0347) | 0.0428 (0.0419) |
| Democratic trad. | 0.000739* (0.000312) | | 0.000580+ (0.000302) | | 0.000689* (0.000321) | | 0.000534+ (0.000314) | |
| Democracy Stock | | 0.000156*** (0.0000439) | | 0.000154*** (0.0000420) | | 0.000154*** (0.0000453) | | 0.000149*** (0.0000395) |
| Resources index | 0.00344*** (0.000648) | 0.00187** (0.000717) | 0.00292*** (0.000723) | 0.00160* (0.000764) | 0.00353*** (0.000662) | 0.00190** (0.000711) | 0.00297*** (0.000772) | 0.00161* (0.000777) |
| Schooling | 0.00185 (0.00210) | 0.00276 (0.00278) | 0.00111 (0.00246) | 0.00272 (0.00275) | 0.00184 (0.00278) | 0.00251 (0.00313) | 0.000938 (0.00278) | 0.00218 (0.00295) |
| Public spending | 0.00120+ (0.000641) | 0.000587 (0.000815) | 0.000764 (0.000587) | 0.000426 (0.000748) | 0.00140* (0.000599) | 0.000668 (0.000865) | 0.000914 (0.000578) | 0.000491 (0.000816) |
| Religion | 0.000813*** (0.000200) | 0.000342 (0.000303) | 0.000700*** (0.000208) | 0.000408 (0.000355) | 0.000757*** (0.000195) | 0.000339 (0.000304) | 0.000646** (0.000209) | 0.000392 (0.000377) |
| Gini index | -0.000351 (0.000342) | -0.000866* (0.000420) | -0.000360 (0.000367) | -0.000860+ (0.000440) | -0.000364 (0.000358) | -0.000872* (0.000413) | -0.000357 (0.000418) | -0.000853+ (0.000445) |
| Ethnic fract. | -0.0244 (0.0270) | -0.0146 (0.0272) | -0.0212 (0.0376) | -0.0166 (0.0327) | -0.0223 (0.0268) | -0.0149 (0.0276) | -0.0185 (0.0355) | -0.0164 (0.0327) |
| Exports | -0.000314 (0.000234) | -0.0000218 (0.000230) | -0.000189 (0.000205) | -0.0000553 (0.000222) | -0.000304 (0.000267) | -0.0000117 (0.000237) | -0.000195 (0.000218) | -0.0000534 (0.000236) |
| Lagged DV | 0.0673** (0.0234) | 0.0189 (0.0454) | 0.0547* (0.0245) | 0.0141 (0.0515) | 0.0701** (0.0240) | 0.0240 (0.0478) | 0.0550* (0.0257) | 0.0153 (0.0550) |
| Constant | 0.238*** (0.0268) | 0.301*** (0.0351) | 0.241*** (0.0364) | 0.318*** (0.0410) | 0.232*** (0.0285) | 0.301*** (0.0377) | 0.237*** (0.0412) | 0.318*** (0.0427) |
| Observations | 1852 | 1238 | 1852 | 1238 | 1852 | 1238 | 1852 | 1238 |

Standard errors in parentheses. All explanatory variables are lagged by 1 year. See Table 3 in the paper for further specifications. + $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

TABLE B.21. Robustness testing Table 3: System GMM models with SEI as Dependent Variable on entire sample in WVS

| | | | | |
|---------------------------|---------------------------------------|--|---------------------------------------|--|
| FHI | 0.00224 ⁺ (0.00130) | 0.00249 (0.00157) | | |
| EDI | | | 0.0779 ^{***} (0.0184) | 0.0646 ^{***} (0.0187) |
| Democratic tradition | 0.000611 ^{***} (0.000167) | | 0.000504 ^{**} (0.000185) | |
| Democracy Stock | | 0.000151 ^{***} (0.0000286) | | 0.000128 ^{***} (0.0000287) |
| Resources index | 0.00244 ^{***} (0.000320) | 0.00166 ^{***} (0.000473) | 0.00223 ^{***} (0.000268) | 0.00163 ^{**} (0.000576) |
| Schooling | 0.00227 (0.00166) | 0.00186 (0.00155) | 0.00148 (0.00138) | 0.00131 (0.00133) |
| Public spending | 0.000461 (0.000425) | 0.000610 (0.000410) | 0.000327 (0.000450) | 0.000526 (0.000402) |
| Religion | 0.00104 ^{***} (0.000216) | 0.000384 [*] (0.000156) | 0.000835 ^{***} (0.000200) | 0.000289 (0.000180) |
| Gini index | -0.0000189 (0.000384) | -0.000370 (0.000392) | -0.0000755 (0.000366) | -0.000386 (0.000398) |
| Ethnic fractionalization | -0.0922 ^{***} (0.0246) | -0.0327 (0.0274) | -0.0723 [*] (0.0317) | -0.0120 (0.0310) |
| Exports | -0.0000486 (0.000208) | 0.0000707 (0.000217) | -0.00000458 (0.000209) | 0.0000412 (0.000212) |
| Lagged dependent variable | 0.0733 ^{**} (0.0233) | 0.0514 [*] (0.0232) | 0.0610 [*] (0.0244) | 0.0449 ⁺ (0.0231) |
| Constant | 0.283 ^{***} (0.0274) | 0.291 ^{***} (0.0254) | 0.273 ^{***} (0.0287) | 0.280 ^{***} (0.0271) |
| Observations | 2663 | 2030 | 2663 | 2030 |

Notes: ⁺ $p < 0.10$, ^{*} $p < 0.05$, ^{**} $p < 0.01$, ^{***} $p < 0.001$; standard errors in parentheses. All explanatory variables are lagged by 1 year. See Table 3 in the paper for further specifications.

TABLE B.22. Robustness testing Table 3: System GMM models with SEI with alternative lag structure (7 years)

| | | | | |
|------------------|--------------------------|----------------------------|--------------------------|----------------------------|
| FHI | 0.000911 (0.00193) | -0.000374 (0.00205) | | |
| EDI | | | 0.0602** (0.0201) | 0.0116 (0.0266) |
| Democratic trad. | 0.000874* (0.000393) | | 0.000783+ (0.000445) | |
| Democracy Stock | | 0.000193*** (0.0000341) | | 0.000203*** (0.0000271) |
| Resources index | 0.00273*** (0.000647) | 0.000965 (0.000962) | 0.00221*** (0.000628) | 0.000547 (0.000863) |
| Schooling | -0.000576 (0.00212) | 0.000795 (0.00346) | -0.000734 (0.00248) | 0.000395 (0.00342) |
| Public spending | 0.000147 (0.000600) | -0.0000602 (0.000651) | -0.000105 (0.000501) | -0.0000779 (0.000579) |
| Religion | 0.00129*** (0.000356) | 0.000753+ (0.000443) | 0.00115** (0.000377) | 0.000761+ (0.000418) |
| Gini index | -0.000181 (0.000436) | -0.000749+ (0.000403) | -0.000246 (0.000409) | -0.000780+ (0.000404) |
| Ethnic fract. | -0.0466 (0.0570) | -0.0357 (0.0574) | -0.0536 (0.0435) | -0.0352 (0.0484) |
| Exports | -0.000430+ (0.000237) | 0.0000967 (0.000281) | -0.000453+ (0.000237) | 0.0000592 (0.000290) |
| Lagged dep. Var. | 0.116*** (0.0324) | 0.0600* (0.0267) | 0.108*** (0.0286) | 0.0544+ (0.0308) |
| Constant | 0.305*** (0.0386) | 0.364*** (0.0468) | 0.309*** (0.0330) | 0.374*** (0.0417) |
| Observations | 1468 | 1238 | 1468 | 1238 |

Notes: + $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$; standard errors in parentheses. All explanatory variables are lagged by 7 years. See Table 3 in the paper for further specifications.

TABLE B.23. Robustness testing Table 3: Random Effects models with SEI as Dependent Variable

| | | | | |
|------------------|--------------------------------------|--|--------------------------------------|--|
| FHI | 0.00268 (0.00258) | 0.00325 (0.00293) | | |
| EDI | | | 0.0581 ⁺ (0.0305) | 0.0378 (0.0366) |
| Democratic trad. | 0.00103 ^{**} (0.000338) | | 0.000959 ^{**} (0.000329) | |
| Democracy Stock | | 0.000164 ^{***} (0.0000323) | | 0.000154 ^{***} (0.0000359) |
| Resources index | 0.00224 ^{***} (0.000303) | 0.00170 ^{***} (0.000479) | 0.00208 ^{***} (0.000322) | 0.00162 ^{***} (0.000453) |
| Schooling | 0.00191 (0.00144) | 0.00163 (0.00159) | 0.00153 (0.00145) | 0.00162 (0.00162) |
| Public spending | 0.000513 (0.000539) | 0.000539 (0.000600) | 0.000409 (0.000556) | 0.000520 (0.000612) |
| Religion | 0.00123 ^{***} (0.000186) | 0.000619 ^{**} (0.000222) | 0.00110 ^{***} (0.000182) | 0.000585 ^{**} (0.000209) |
| Gini index | -0.000246 (0.000313) | -0.000623 ⁺ (0.000352) | -0.000258 (0.000314) | -0.000602 ⁺ (0.000353) |
| Ethnic fract. | -0.0309 (0.0311) | -0.0263 (0.0292) | -0.0209 (0.0305) | -0.0227 (0.0294) |
| Exports | 0.0000911 (0.000224) | 0.0000625 (0.000321) | 0.0000350 (0.000233) | 0.0000320 (0.000332) |
| Constant | 0.289 ^{***} (0.0271) | 0.317 ^{***} (0.0290) | 0.286 ^{***} (0.0266) | 0.320 ^{***} (0.0282) |
| Observations | 1852 | 1238 | 1852 | 1238 |

Notes: ⁺ $p < 0.10$, ^{*} $p < 0.05$, ^{**} $p < 0.01$, ^{***} $p < 0.001$; standard errors in parentheses. All explanatory variables are lagged by 1 year. See Table 3 in the paper for further specifications

TABLE B.24. Robustness testing Table 3: Fixed Effects models with SEI as Dependent Variable

| | | | | |
|------------------|-------------------------|---------------------------|-------------------------|---------------------------|
| FHI | 0.00234 (0.00264) | 0.00290 (0.00307) | | |
| EDI | | | 0.0332 (0.0328) | 0.0270 (0.0391) |
| Democratic trad. | 0.00110** (0.000366) | | 0.00106** (0.000349) | |
| Democracy Stock | | 0.000221** (0.0000818) | | 0.000212** (0.0000798) |
| Resources index | 0.00110** (0.000366) | 0.00124* (0.000618) | 0.00105** (0.000376) | 0.00121* (0.000616) |
| Schooling | 0.00222 (0.00153) | 0.00115 (0.00186) | 0.00211 (0.00154) | 0.00122 (0.00188) |
| Public spending | 0.000392 (0.000559) | 0.000386 (0.000643) | 0.000360 (0.000578) | 0.000392 (0.000665) |
| Religion | -0.0000143 (0.00274) | -0.000134 (0.00296) | -0.0000409 (0.00273) | -0.000144 (0.00294) |
| Gini index | -0.000191 (0.000340) | -0.000341 (0.000430) | -0.000186 (0.000335) | -0.000324 (0.000424) |
| Ethnic fract. | 0.0309 (0.857) | 0.0414 (0.855) | 0.0459 (0.876) | 0.0575 (0.873) |
| Exports | 0.000225 (0.000270) | 0.0000622 (0.000442) | 0.000202 (0.000287) | 0.0000499 (0.000459) |
| Constant | 0.297 (0.292) | 0.307 (0.288) | 0.294 (0.299) | 0.306 (0.294) |
| Observations | 1852 | 1238 | 1852 | 1238 |

Notes: ⁺ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$; standard errors in parentheses. All explanatory variables are lagged by 1 year. See Table 3 in the paper for further specifications

TABLE B.25. Robustness testing Table 3: Arellano-Bond models with SEI as Dependent Variable

| | | | | |
|------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| FHI | 0.00231 (0.00261) | 0.00282 (0.00284) | | |
| EDI | | | 0.0270 (0.0405) | 0.0234 (0.0426) |
| Democratic trad. | 0.00108** (0.000360) | | 0.00105** (0.000352) | |
| Democracy Stock | | 0.000209* (0.0000996) | | 0.000204* (0.0000944) |
| Resources index | 0.000980** (0.000352) | 0.00133+ (0.000737) | 0.000976** (0.000355) | 0.00134* (0.000602) |
| Schooling | 0.00244 (0.00189) | 0.00131 (0.00233) | 0.00228 (0.00192) | 0.00130 (0.00224) |
| Public spending | 0.000324 (0.000600) | 0.000292 (0.000593) | 0.000309 (0.000681) | 0.000267 (0.000681) |
| Religion | -0.000707 (0.00260) | -0.000805 (0.00285) | -0.000891 (0.00266) | -0.000994 (0.00282) |
| Gini index | -0.000190 (0.000335) | -0.000347 (0.000450) | -0.000210 (0.000323) | -0.000360 (0.000454) |
| Ethnic fract. | 0.0920 (0.940) | 0.122 (0.930) | 0.110 (0.978) | 0.119 (0.960) |
| Exports | 0.000164 (0.000264) | -0.0000127 (0.000436) | 0.000135 (0.000294) | -0.0000453 (0.000485) |
| Lagged dep. var. | 0.0246 (0.0295) | -0.0116 (0.0413) | 0.0212 (0.0308) | -0.0120 (0.0421) |
| Constant | 0.277 (0.318) | 0.292 (0.315) | 0.278 (0.331) | 0.301 (0.330) |
| Observations | 1788 | 1176 | 1788 | 1176 |

Notes: + $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$; standard errors in parentheses. All explanatory variables are lagged by 1 year. See Table 3 in the paper for further specifications

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