

Democracy by demand?

Reinvestigating the effect of self-expression values on political regime type*

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ABSTRACT

The notion that cultural characteristics influence political regimes remains popular, despite mixed supporting evidence. In particular, democracy is argued to emerge and thrive in countries where liberal or freedom-oriented values (so-called self-expression values) are widespread. Inglehart and Welzel (2005), for instance, report such an effect, mainly drawing inferences from cross-country comparisons. Yet, cross-country correlations between self-expression values and democracy could stem from different processes. Reinvestigating this relationship, we find no empirical support when employing models accounting for sample-selection bias, country-specific effects, and the endogeneity of values to democracy. Self-expression values do not enhance democracy levels or democratization chances, and neither do they stabilize existing democracies. In contrast, we find indications that a country's experience with democracy enhances self-expression values.

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Introduction

Does democratization or democratic stability critically depend on certain cultural characteristics, i.e. that the citizenry holds particular values and beliefs? The literature counts several “culturalist” explanations of democracy, or lack thereof. German, Italian and Japanese cultural characteristics were previously argued to inhibit well-functioning democratic regimes;¹ but, following decades of democratic consolidation after WWII, these arguments have lost in popularity. Likewise, some scholars have argued that cultural characteristics of different African, Middle Eastern and East Asian countries do not square easily with democracy.² Yet, such culturalist explanations are often drawn from quite limited or selective observations, and fare poorly when evaluated against more systematic evidence.³ Still, there exists a more refined cultural explanation of democracy that relates not to some stable national or religious characteristic, but rather, more universally, to the extension of liberal, freedom-oriented, or so-called self-expression values. Below, we reinvestigate this proposed relationship, but find no support for any causal effect of self-expression values on democracy. Instead we highlight how their correlation may be explained by democracy – which often emerges from coups or international interventions – gradually inducing the “learning” of self-expression values within the population.

Despite having previously been contested by important contributions,⁴ the self-expression values explanation of democracy remains commonly acknowledged.⁵ Ronald Inglehart and Christian Welzel have presented a widely cited (almost 2800 Google Scholar citations on their

¹ E.g., Almond and Verba 1963; Lipset 1959, 87.

² E.g., Huntington 1997.

³ Gassebner et al. 2012; Teorell 2010.

⁴ Hadenius and Teorell 2005; Jackman and Miller 1996; Muller and Seligson 1994; Seligson 2002.

⁵ See Clark, Golder and Golder 2012; Coppedge 2012; Wucherpfennig and Deutsch 2009 for reviews.

2005-book, henceforth denoted “IW”, alone), and arguably the most developed, theoretical framework on this.⁶ IW argue that several indicators, e.g. post-materialistic aspirations and generalized trust, tap the same dimension, measuring what they call “self-expression values” – the extent to which individual choice and freedom is appreciated and prioritized. Further, IW propose that when citizens adopt self-expression values, they increasingly view autocratic regimes as illegitimate, eventually forcing regime liberalization. Meanwhile, citizens in democracies experiencing strengthened self-expression values will work harder to protect their regimes. Hence, self-expression values supposedly breed democracy.

Cross-country correlations do, indeed, indicate such a positive relationship. Figure 1 (top plot) shows the correlation between *levels* of self-expression values (early 1990s) and democracy a decade later.

[FIGURE 1]

Although often given a causal interpretation, this correlation could, however, stem from many different processes.⁷ Another look at the data indicates that values may not causally affect regime type after all; there is no positive relationship between *changes* in self-expression values and in democracy from the early 1990s to the early 2000s (Figure 1, bottom plot).⁸ Several countries, such as South Africa, Taiwan and Slovakia, experienced considerable changes towards democracy without value changes in their populations, whereas Peru experienced political liberalization and less self-expression values. Furthermore, many countries, e.g. Jordan or Russia, experienced increases in self-expression values without

⁶ E.g., Inglehart and Welzel 2005 (“IW”); Welzel 2006, 2007; Welzel and Inglehart 2006, 2008.

⁷ See, e.g., Diamond 2008, 101.

⁸ Several countries were at the Freedom House Index’ bounds in the early 1990s. Excluding these only changes the correlation from -0.25 to -0.19.

democratization. The high correlation between self-expression values and democracy levels could rather be due to different demographic, political-historical or socio-economic factors systematically influencing *both* values and regime type. The correlation could also come from democratic institutions affecting values, at least – as our results below indicate – in the longer run. We add to the literature by designing empirical tests that account for such issues, and thus contribute to resolving a long-standing debate on whether self-expression values *causally determine* chances of democratization or democratic survival. Previous contributions have highlighted that the positive effect of values on regime type is sensitive, for example, to choice of democracy measure and other specification issues such as lag length on independent variables.⁹ Still, previous studies have relied on very limited data material and – by current standards – fairly crude model specifications.¹⁰

We employ multiple imputation to correct for potential sample-selection biases and use panel data techniques in order to better deal with omitted variable bias and endogeneity of self-expression values. We also run models that account for the slow-moving nature of political regimes and, particularly, self-expression values. In sum, we find no evidence that self-expression values cause democracy. Moreover, self-expression values neither enhances democratization chances *nor* democratic survival. Further, we do not find effects from any sub-components of self-expression values, such as generalized trust. Rather, we find that values are endogenous to countries' experiences with democracy, corroborating the so-called institutional learning hypothesis. This has implications for debates on the viability of “democracy without democrats”, i.e. whether democratization and subsequent consolidation, are possible without democratic political cultures.¹¹ Our findings suggests that not only can

⁹ Teorell and Hadenius 2006.

¹⁰ But, see Abdollahian et al. 2012.

¹¹ Salame 1994; Lindberg 2006

democracy emerge and endure without democrats – democracy breeds democrats in the long run. Thus, we propose that i) democratization processes are spurred by other factors than self-expression values, and ii) the observed cross-country correlation partly reflects democracy affecting popular values.

We first review the argument that self-expression values enhance democracy, before presenting our alternative theoretical account, our data and design, and finally the empirical analysis.

Self-expression values as a force for democracy; the argument

Numerous scholars have proposed that popular values – while not necessarily exogenous – affect political regime type. For instance, almost 200 years ago, de Tocqueville postulated that democracy in the United States reflected the liberal orientations of the American people, which, in turn, were a function of particular historical and socio-economic conditions.¹² After WWII, sociological and psychological work elaborated on variations in individual “democratic predispositions”. For example, Adorno and colleagues introduced the “authoritarian personality” – rooted in perceptions of threats nurturing low self-esteem, misanthropy and dogmatic rigidity, whereas Maslow proposed two democratic orientations, namely emphasis on self-actualization and humanistic inclinations to consider others as equals.¹³ Further, Almond and Verba argued that stable democracies require a civic culture, “a pluralistic culture based on communication and persuasion, a culture of consensus and diversity, a culture that permitted change but moderated it”.¹⁴ As noted, values are not

¹² De Tocqueville [1835]1955.

¹³ Adorno et al. 1950; Maslow 1954.

¹⁴ Almond and Verba 1963, 6.

exogenously given, and economic development is often considered a key factor in creating more tolerant, liberal, freedom-oriented, or simply “democratic” citizens.¹⁵ Lipset, for instance, argues that improved educational attainment – related to economic development – makes people more tolerant towards opposition and minorities, in turn promoting democracy.¹⁶

More recently, IW proposed their “Revised Theory of Modernization” (RTM), the current standard for the argument that citizens’ values systematically determine regime type.¹⁷ RTM contains two links. The *first* ties socio-economic development to value changes, proposing that individuals mired in scarcity aspire to satisfy basic economic needs, while individuals whose economic needs are satisfied strive for self-realization and autonomy. The outcome of economic modernization is thus an ecological syndrome of values encompassing different orientations such as autonomy, participation, tolerance, and trust; the underlying value-dimension ranges from survival to self-expression orientations. The *second link*, conceptualized as a supply–demand relation of freedoms, ties self-expression values to democracy.¹⁸ Democratic-institutional structures provide the supply of freedoms while demand is related to citizens’ values.¹⁹ A tendency towards congruence is supposedly inherent, as the institutional supply of freedoms is under pressures to satisfy the masses’ demands. Two important assumptions are that mass support is crucial to regime survival, and

¹⁵ Inglehart 1997.

¹⁶ Lipset 1959. Lipset also highlighted other societal changes associated with economic development, such as industrialization and urbanization, that may affect democratization chances.

¹⁷ See Diamond 2008; Coppedge 2012.

¹⁸ IW, 186-191.

¹⁹ But, see Qi and Shin 2011.

that mass support is driven by values rather than, for example, instrumental evaluations of how regimes affect resource distribution.²⁰

One can further nuance the second link by distinguishing between democratization and democratic survival. Regarding democratic survival, the argument is that liberally oriented publics discipline governing elites to obey by democratic rules, *and* that the elites' values resemble those of wider society. Hence, both winners and losers of democratic elections are disciplined by a liberal public, *and* political actors drawn from such publics are more likely to act out of genuine commitment to democratic ideals. This mitigates various threats to democratic survival, such as coups and auto-coups. IW further argue that self-expression values induce *democratization* by eroding regime support and increasing support for pro-democratic forces in autocracies.²¹ The pro-democratic forces materialize through collective action (e.g., social movements and campaigns) motivated by aspirations for freedom. Collective action motivated by such aspirations supposedly has a high probability of success in engendering democratization; participants and leaders of freedom-motivated movements are dedicated and thus not tempted by economic benefits promised by autocrats, or containable by repression in the long-run.²² As people increasingly emphasize self-expression values, autocracies face growing "suppression costs" leading to intra-elite tensions and anti-regime movements. When the regime can no longer bear these costs, democratization occurs.

Yet, this argument hinges on assumptions that are problematic, for example in light of recent literature on co-optation, repression and manipulation in autocracies. The expectation on democratization is particularly ambiguous; IW's model is relatively straightforward, with liberal-democratic preferences being converted into institutional change through mass

²⁰ Boix 2003.

²¹ IW; see also Welzel 2007; Welzel and Inglehart 2008.

²² Welzel and Inglehart 2008, 134.

collective action. However, autocrats can prevent mass values from translating into collective action through different measures, and employ strategies to mitigate its impact if collective action actually materializes. Although regime capabilities in co-opting and repressing threats may depend on access to revenues, e.g. from natural resource extraction, Bueno de Mesquita and Smith analyze how leaders can reduce demands for revolutionary change by increasing public goods provision.²³ More generally, autocrats can co-opt selected population groups and their leaders by providing economic benefits and political positions.²⁴ Alternatively, leaders can underprovide “coordination goods”, such as a free press and communication technologies, thereby limiting strategic coordination.²⁵ To illustrate, Iran – a country scoring fairly high on self-expression values – has shut down internet and phone access when facing unrest.²⁶ Regimes also repress their oppositions, thereby enduring despite large gaps between supply of freedoms and people’s demand.²⁷ Indeed, leaders anticipating democratization movements, for example because of widespread self-expression values, may have extra incentives to spend resources on co-optation or repression.

However, autocrats repressing or co-opting “liberal” populations only constitutes one potential reason for why only a weak, or no, causal link from values to democracy may exist: Democracy may largely emerge because of other factors than popular values – including international-political developments and domestic elite strategies, but also other societal changes highlighted by traditional modernization theory, such as urbanization and increased

²³ Bueno de Mesquita and Smith 2009.

²⁴ Gandhi 2008.

²⁵ Bueno de Mesquita and Downs 2005.

²⁶ IW, 156.

²⁷ Francisco 2005; Kuran 1991.

education. Further, democratic institutions – once in place – could induce self-expression values, thus explaining the cross-country correlation. We elaborate on this below.

An alternative account of the democracy—values relationship

Historically, democratization processes have often been triggered by international factors unrelated to domestic value orientations.²⁸ For example, the post-WWII democratization experiences of Japan and (Western) Germany were direct results of military defeat in WWII and external imposition by the Allied powers. Indeed, early expositions of German and Japanese political cultures questioned whether democracy could survive given their illiberal citizenries. Almond and Verba even provided survey data showing low “participant culture” in Western Germany about a decade after democratization. In 1959/60 only 19% of Germans thought “most people can be trusted” (49% for UK and 55% for US).²⁹ In 2013 (data from 6th WVS wave), 45% of Germans answered this question in the positive. Hence, the current extension of self-expression values in Germany has seemingly followed rather than preceded democracy. More recently, external pressures and conditionalities imposed by western governments and international organizations – such as the EU in post-communist Eastern European countries and donor governments, and the IMF and World Bank in early-1990s Sub-Saharan African countries – have contributed to political liberalization in several countries that according to Figure 1(still) score low on self-expression values.³⁰

²⁸ See Huntington 1991.

²⁹ Almond and Verba 1963, 213.

³⁰ See Levitsky and Way 2010.

The literature also documents that various domestic factors affect democratization.³¹ Still, these factors often involve other actors than the general public. Coups d'état constitute the most common mode of autocratic breakdown,³² and coups in autocracies actually improve democratization prospects.³³ Smaller party or military elites organizing coups expectedly face less difficult collective action problems than organizers of mass uprisings,³⁴ and involve actors with the requisite means to depose the ruler. Huntington, for example, describes how the first transition of the Third Wave, in Portugal, started with a military coup.³⁵ Although coup makers, as in Portugal, often do not intend it, coups may initiate political dynamics ultimately inducing democratization.³⁶ Further, transition processes mainly involving elite-led negotiations and subsequent pacts have also been common historically; popular values may have been less important than elite-led negotiation tactics and bargains in, for example, Spain and Chile.³⁷

Finally, *even in* cases where popular pressure might have played a critical role in inducing democratization – one example according to Acemoglu and Robinson was 19th century Britain where the working classes pushed for franchise extensions – their motivations need not be desires to realize self-expression values, but rather securing a regime allowing for progressive redistribution.³⁸ Although we lack survey material for the 19th century British working class,

³¹ See Gassebner et al. 2012; Teorell 2010.

³² Svolik 2012.

³³ Marinov and Goemans 2014; Thyne and Powell 2014.

³⁴ Houle 2009.

³⁵ Huntington 1991, 3-5.

³⁶ Thyne and Powell 2014.

³⁷ See Linz and Stepan 1996.

³⁸ Acemoglu and Robinson 2006.

its material conditions and education levels would – if we accept the *first* link of RTM from IW – suggest that self-expression values were not widespread.

Even if democracy is not caused by self-expression values, but emerges for the above-discussed reasons, democracy and values may still correlate strongly: According to “institutional learning theory”, the values, preferences and behavior of individuals are heavily influenced by the institutional environments they operate within. Hence, democratic institutions establish particular practices, norms and values as the going standards, and these standards ultimately shape people’s values and preferences. This implies that citizens, by living under democratic institutions over time, internalize “democratic values”. When becoming accustomed to channeling demands through democratic institutions and experiencing democratic competition and debate, people turn more tolerant, trusting and liberal, and this may explain the democracy—self-expression values correlation.³⁹

The above proposition builds on an assumption that self-expression values, such as genuine tolerance and generalized trust, are cognitively complex and inherently difficult to learn.⁴⁰ Superficial support of freedom and democracy can be acquired through, for instance, international diffusion, but fully internalizing self-expression values requires having practiced democratic behavior. Theories of social identity suggest that individuals are inherently inclined to distrust strangers and be intolerant towards people from other backgrounds. Yet, persistent experience of engaging with different fellow citizens gives people the opportunity

³⁹Mishler and Rose 2007; Muller and Seligson 1994; Rohrschneider 1994; Rustow 1970. Indeed, some consider this an inherent feature of the democratic consolidation process; “with consolidation, democracy becomes routinized and deeply internalized in social, institutional, and even psychological life” Linz and Stepan 1996, 5.

⁴⁰ Sniderman 1975.

to apply a “sober, second thought”; values such as tolerance are therefore “learned best when citizens are exposed to the rough-and-tumble of democratic politics”.⁴¹

Different democratic-institutional aspects may help to instill self-expression values: A free media stimulates open discussion and advances civil liberties through the dissemination of knowledge; elections create awareness among citizens of their roles as political participants; and, the growth of civil society organizations, and citizens’ active practice in such organizations, strengthen political involvement and induce tolerance and trust through contact with others.⁴² Finally, several democracies have actively worked to promote democratic norms and values through “civic education”, teaching democratic citizenship in educational institutions or community workshops.⁴³

The literature offers several historical examples of such “democratic learning”. Mishler and Rose report democratic-institutional learning mechanisms in post-Communist Eastern European countries, and Lindberg proposes that repeated (but often initially flawed) elections in Sub-Saharan African countries have induced democratic values.⁴⁴ Returning to the German case, Rohrschneider shows how political elites in East and West Germany, although sharing similar pre-war history and culture, developed different values because of different post-war institutional experiences: The relatively authoritarian German political culture was replaced by growing acceptance of democratic values among West-German elites after years of experience with democratic institutions.⁴⁵ This change did not occur in communist East Germany.

⁴¹ Peffley and Rohrschneider 2003, 245.

⁴² See, e.g., Finkel and Smith 2011; Lindberg 2006.

⁴³ Finkel and Smith 2011.

⁴⁴ Lindberg 2006; Mishler and Rose 2001, 2007.

⁴⁵ Rohrschneider 1994.

Thus, self-expression values may be a consequence rather than a critical force for democracy. Importantly, *even if* we accept a modernization framework, modernization theorists from Lipset onwards have suggested multiple channels through which economic changes affect regime type – including class composition, cross-cutting cleavages and urbanization – and RTM’s focus on self-expression values as *the* critical channel is not necessarily valid. Moreover, the empirical evidence supporting RTM rests on shaky methodological foundations:

Existing empirical evidence and threats to inference

Some recent systematic analyses studying effects of mass attitudes and values on democracy exist, and not all reach the same conclusion.⁴⁶ Yet, Inglehart and Welzel’s studies are seminal contributions.⁴⁷ Using data from the WVS, they very clearly conclude that self-expression values result from processes of modernization *and* induce democracy. In contrast, Seligson and Hadenius and Teorell report that the findings are sensitive to control–variable selection and choice of democracy measure.⁴⁸ Inglehart and Welzel have responded vociferously to these criticisms, contending that “[t]here is a remarkably strong correlation between self-expression values and effective democracy. The evidence indicates that the causal linkage is mainly from self-expression values to democracy”.⁴⁹ Below, we show that this interpretation is unwarranted.

⁴⁶ E.g., Fails and Pierce 2010; Hadenius and Teorell 2005; Norris 2002; Paxton 2002; Seligson 2002.

⁴⁷ IW; see also Welzel 2006, 2007; Welzel and Inglehart 2006, 2008; Welzel, Inglehart and Klingemann 2003.

⁴⁸ Hadenius and Teorell 2005; Seligson 2002; Teorell and Hadenius 2006.

⁴⁹ Welzel and Inglehart 2008, 132.

IW's inferences are mainly based on cross-country variation – as holds true for the literature in general – but also on pooled data with countries observed at two time-points, and a model investigating changes between two points in time. These designs are not unreasonable, given the issue of available survey data. However, they provide insufficient basis for drawing strong causal inferences. Strictly speaking, all the positive OLS coefficients tell is that self-expression values are more widespread in countries with democratic regimes (controlling for selected variables), while survival values are more widespread in autocracies. This may seem like methodological purism; given the plausible argument in RTM and cross-country correlation, can we not conclude that self-expression values induce democracy? Unfortunately, we cannot. The income–democracy literature provides some important indications why:

Following Lipset, several scholars replicated the income—democracy correlation using more data, alternative controls and more complex estimation techniques.⁵⁰ The correlation was – often implicitly – taken as evidence that income enhances democratization prospects *and* stabilizes existing democracies. However, Przeworski and Limongi altered the conventional knowledge, reporting that income *only* enhances democratic stability and not democratization.⁵¹ Even more dramatically, Acemoglu and co-authors argue that the income–democracy relationship is not causal at all; the correlation disappears when controlling for country-fixed effects.⁵² Although later analysis suggests that this stems from fixed effects models being inefficient for slow-moving variables, it casts doubt on classic modernization

⁵⁰ E.g., Burkhart and Lewis-Beck 1994.

⁵¹ Przeworski and Limongi 1997; see also Gassebner et al. 2012; but, see Boix and Stokes 2003; Kennedy 2010.

⁵² Acemoglu et al. 2008.

theory's most central relationship.⁵³ One interpretation is that different historical experiences – for instance concerning institutions built during colonial rule – explain why some countries embarked on paths of economic development and democracy while others did not.

Inferring from cross-country correlations to a causal relationship is at least equally problematic for values and democracy.

First, omitted variables may systematically affect both democracy and self-expression values.⁵⁴ Country-specific factors – related to particularities in political histories, religious traditions or geographic locations – may crucially impact on the population's ideals *and* the accountability and transparency of government. If so, the values–democracy relationship could be spurious. There may, for instance, be trajectories in the political histories of the UK or Netherlands explaining why these countries currently have both liberally oriented populations and democratic regimes.

Second, the correlation may be due to democracy enhancing self-expression values, following the democratic learning argument above. This may induce endogeneity biases in estimates if not accounted for. IW challenge institutional learning theory, claiming that emancipative values are largely exogenous to democratic institutions. Admittedly, they discuss reverse causality and conduct Granger tests, lagging independent variable(s) and controlling for the lagged dependent. However, their specifications are problematic.⁵⁵ First, when using democracy (measured in 1997-2002) as dependent variable, lagged democracy (early 1980s) is measured long before lagged values (early 1990s), since “1990 measures refer to a point in

⁵³ Heid, Langer and Larch 2012; likewise, on education, cf. Acemoglu et al. 2005; Castelló-Climent 2008

⁵⁴ Seligson 2002.

⁵⁵ IW, 178-186.

time at which democracy was a moving target in many countries”.⁵⁶ We consider this a problematic (and arbitrary) choice. These tests do then, for example, not reflect early-1980s democracy potentially affecting early-1990s values, and fail to control for the relevant democracy level. This choice also affects the sample, as early-1980s democracy cannot be (appropriately) measured for new states emerging in the early 1990s. Further, the Granger tests reported to disconfirm institutional learning theory include *only 19 countries*, mostly developed countries where democratic institutions had long existed (thereby, possibly, already having exhausted institutional learning effects). Further, IW’s tests do not include multiple controls.⁵⁷

Thus, democratic institutions affecting self-expression values may still explain the correlation taken as evidence for RTM. Below, we employ panel models with similar lags for all independent variables, expand the sample, and control for multiple confounders. Moreover, we use GMM models that are constructed to handle endogenous regressors, which the OLS models of IW are not.

⁵⁶ IW, 185

⁵⁷ In contrast, Abdollahian et al. 2011 formalize different links of RTM, e.g. modelling democracy changes as a multiplicative function of self-expression values and the normalized difference (“gap”) between values and democracy. They then estimate seven parameters from a “system of four asymmetric, coupled nonlinear differential equations” (p.832), using so-called Genetic Algorithm Nonlinear Least Squares and 133 observations from 45 countries. They generally find support for RTM, and that values–democracy gaps drive regime change. This is an interesting exercise, explicitly modelling different feedback-mechanisms. While we do not know this technique in detail, we are, however, concerned with result-sensitivity when estimating such a large, complex system on so few observations. The authors do not report any robustness tests for their chosen specification.

Research design, imputation model, and data

In contrast to previous studies employing cross-section data, we mainly use panel data to study whether self-expression values affect democracy. This has three major advantages. First, it expands the number of data points. Second, it allows controlling for country-fixed effects, which reduces risks of omitted variable bias, and may also – although we are not focusing on this here – alleviate measurement equivalence problems.⁵⁸ Third, it allows accounting for the endogeneity of values. Importantly, if self-expression values actually cause democracy, we should identify covariance along the temporal dimension within countries, not only between countries.

Imputation model

Our dependent variable and most controls have decent time-series. Yet, one challenge is the lack of temporal variation on values. As IW we employ WVS data, supplying with European Values Survey observations when available. These data contain five survey-waves – from 1981 to 2009 – and many countries have participated in fewer. Hence, we run multiple imputation employing Amelia II, which accounts for the time-series–cross-section data structure, to predict self-expression values for years not covered by WVS waves (and other missing data points).⁵⁹ This allows using panel models, but also has other substantial benefits:

⁵⁸ This constitutes an additional source of error for IW's estimates, besides the omitted variable bias, endogeneity and sample-selection issues that we address; see, e.g. Ariely and Davidov 2011. Measurement equivalence may be particularly problematic for models drawing on comparisons of national means for inferences. Although the temporal dimension may sometimes also pose problems, models controlling for country-fixed effects (such as those below) relieve some concerns such as language differences and translation of items, or differences in sampling methods between countries.

⁵⁹ Honaker and King 2010.

The conventional response to missing in the values—democracy literature is listwise deletion; units with ≥ 1 missing are dropped. *Even if* data is missing completely at random (MCAR), listwise deletion generates inefficiencies. Moreover, missingness is often systematic, leading also to selection biases; previous estimates of how values relate to democracy may therefore be wrong.⁶⁰ The WVS, for instance, contains an overweight of rich, democratic countries among those participating in all waves. Certain types of dictatorships could be selected out of the sample, and perhaps at particular points in time, potentially leading us to mis-estimate the general effect of values on democracy. When conducting imputation we assume data are *missing at random* (MAR), meaning the missingness pattern only depends on variables included in the imputation model and not on non-included predictors or the variable with missing itself. Although MAR is a strict assumption, we seek to mitigate violations of it by including proxies of self-expression values from regional barometers and numerous other relevant predictors (e.g. repression and development proxies, see Appendix Sections A.I—A.III). While unobserved predictors might remain, we have thus tried to mitigate concerns that the data are not missing at random when composing our model. Nevertheless, MAR is a weaker assumption than MCAR, which must hold for listwise deletion to yield unbiased results.

As noted, multiple imputation may potentially contribute to minimizing selection biases and to increasing efficiency. Hence, one could argue that we should have constructed imputed datasets for *all* countries. But, to provide a minimum of direct information for predicting

⁶⁰ See Honaker and King 2010. In addition, some WVS respondents in autocracies may expect regime monitoring – or even think interviewers are government agents – possibly inducing them to under-report liberal values. If so, the actual correlation between democracy and self-expression values is weaker than observed. There are several other reliability and validity problems with WVS data – e.g. data duplication and faked interviews; Blasius and Thiessen 2012.

values, we retain only countries having participated in ≥ 1 WVS wave and run most models on countries with ≥ 2 non-imputed observations on the Self-Expression Index (SEI; see below). Our imputation-model specification allows for country-specific (second-order polynomial) time trends. Indexes, fractions and other restricted variables have their theoretical minimum and maximum values as bounds, and unrestricted variables have their empirically observed minimum and maximum values. We incorporate numerous variables in the imputation model to increase predictive power and satisfy the MAR-condition. Notably, we include questions on values from the Afro-, Arab-, Asia-, and Latinobarometer Waves. These surveys include SEI-component questions, measured for many years missing in WVS (see Appendix Sections A.II—A.III). Below, we run regression models on five imputed datasets, to mitigate the influence of particular predictions, and calculate average coefficients and imputation-corrected errors. Importantly we have tested different imputation-model specifications, and our results are very robust (see Appendix Section A.IX).

Although listwise deletion likely yields more misleading results,⁶¹ we impute numerous observations, and our results' validity therefore hinges on the imputation model's performance. Does it fairly precisely predict SEI for years not measured by WVS? We try to ensure the answer is "yes", for instance by including various predictors. But, ultimately, this is an empirical question, and different tests (see Appendix for details) do indicate that the imputed data are trustworthy: First, imputed SEI values could largely be driven by particular other variables (e.g. socioeconomic resources) that are also included in our regressions; hence, the "null-results" below might thus stem from high collinearity. Yet, sensitivity tests using different control sets yield stable results, and VIF-tests indicate that colinearity is, actually, unproblematic. Second, our null-results might emanate from incorporating additional uncertainty on the imputed data points; we follow standard prescriptions and calculate

⁶¹ Honaker and King 2010.

imputation-corrected errors. How much the SEI standard errors are inflated by such uncertainty varies a lot with the model specification (see Appendix Tables A.6-A.7; 44.3% increase on average). Despite this, our null-results are retained, except in two models, *even when* completely ignoring this uncertainty. Third, visual inspections indicate that the imputation model produces “sensible” predictions. Finally, over-imputation tests show surprisingly good results – we cannot *know* whether the imputation model provides correct predictions for missing SEI values, but it very accurately re-produces *actual* values. In sum, the imputation model predicts well, and different tests indicate that problems with the imputation procedure are not driving our results.

Operationalization of main variables

IW favor a substantive democracy definition, as opposed to defining democracy according to formal institutions such as contested elections. Their Effective Democracy Index (EDI) is constructed by multiplying the Freedom House Index (FHI) with a measure of corruption *or* rule of law. The resulting index, they argue, is a more realistic indicator of how democracy functions, capturing whether governing elites actually safeguard civil and political rights. We use EDI – multiplying FHI with “Control of Corruption” from World Governance Indicators, as in IW – when replicating and investigating the robustness of their results. Yet, EDI suffers from serious validity and reliability problems,⁶² and Teorell and Hadenius report that the EDI-values correlation is largely driven by EDI’s corruption component.⁶³ Despite the proponents of EDI claiming it is the most valid measure of democracy,⁶⁴ we therefore also

⁶² Hadenius and Teorell 2005; Knutsen 2010.

⁶³ Teorell and Hadenius 2006.

⁶⁴ Alexander, Inglehart and Welzel 2012.

present models using FHI, which taps a broad, substantive democracy concept,⁶⁵ and should thus be appropriate for testing RTM.

IW consider self-expression values to consist of different related aspirations, such as autonomy, participation, tolerance and trust, at one end of a dimension and survival values at the other. WVS contains different indicators potentially tapping this dimension. To replicate IW, we use their additive index (SEI) based on five indicators. The first indicator measures generalized trust; the second propensity to engage in civic action, reporting whether respondents have or would consider signing a petition; the third tolerance of others' liberty, as indicated by tolerance of homosexuality; the fourth feeling of happiness; and, the fifth postmaterialistic aspirations for liberty. The resulting additive SEI ranges from 0–1.⁶⁶

Empirical analysis

Among WVS-participating countries, those with more widespread self-expression values are generally also more democratic. However, countries with such values, e.g. Sweden or the US, have often been democratic for many decades, and the correlation may be due to different mechanisms. If self-expression values is indeed a key determinant of democracy, countries with (predominantly) such values should mainly experience democratization rather than sliding towards autocracy, *and* countries dominated by survival values should not

⁶⁵ Munck and Verkuilen 2002.

⁶⁶ Following IW we first transform all five indicators into dummies. We run factor analysis on them, and use factor loadings as weights when adding the indicators, before dividing by the sum of the weights. As IW we calculate weights prior to aggregating from individual- to nation-level. To measure happiness and liberty aspirations, we use similar indicators as in the second part of IW. In the first part, IW use life-satisfaction and an index measuring post-materialism. We also tested different versions of the SEI, for example calculating weights after aggregating to the nation-level; this does not affect results.

predominantly experience democratization. Although the first pattern holds in the sample, the second does not: For countries scoring below-median on SEI, 80 percent of changes were towards more democratic regimes (using FHI) between the second and third (alternatively fourth if not participating in third) WVS waves. The equivalent number is actually even higher (about 85 percent) for the lower quartile of SEI observations. Furthermore, Figure 1 showed that positive or negative *changes* in SEI were not systematically associated with particular changes in FHI either. However, these are only bivariate patterns, and we investigate the values–democracy relationship more thoroughly below.

Do self-expression values cause democracy?

IW find that self-expression values enhance democracy, and report this as robust to controlling for different variables. Taking their analysis as our starting point, we replicate their Model 5 from p. 199. This model (A1, Table 1) uses EDI as dependent variable, and Vanhanen’s Index of socioeconomic resources and years under democracy as controls.⁶⁷ We include only 58 countries, whereas IW have 61 – for example, we do not include East and West Germany as different countries with both having assigned Germany’s post-reunification democracy scores, but exclude East Germany.⁶⁸ Our cross-section OLS model replicates the strong positive relationship. SEI is significant at 0.1 percent, and the point-estimate indicates that a one-unit increase is associated with about 1.4 point higher EDI, more than EDI’s

⁶⁷ Vanhanen 1997; IW, 180-181 and Appendix.

⁶⁸ We exclude Yugoslavia (keep Serbia) for the same reason, China for lacking data on one SEI-component and socio-economic resources, and Bosnia for lacking socio-economic resources data. IW use data from different time-points to increase observations: They e.g. consider values in the early-90s, with exact year differing between countries, and democracy in the late-90s. We follow this strategy, measuring democracy seven years after values.

range.⁶⁹ The result is further strengthened when substituting socioeconomic resources with log GDP per capita. Still, the results are fairly sensitive to other minor adjustments, such as using rule-of-law-based EDI (only significant at 5 percent) or modifying the lag structure by a few years.⁷⁰

Generally, IW find somewhat weaker evidence of a relationship when using FHI as dependent variable. Model A2 replicates their model of values and “formal democracy” (p. 183), controlling for socioeconomic resources and lagged democracy.⁷¹ SEI is positively related with FHI, although significant only at 10 percent.

[TABLE 1]

Many proposed determinants of democracy are highly sensitive to including and excluding particular controls.⁷² Also when testing the effect of SEI, several controls are of relevance; but, we follow IW’s proposed list.⁷³ Thus, Model A3 adds measures of religious composition (Protestants—Muslims), years of schooling and ethnic fractionalization, alongside socioeconomic resources and democratic tradition.⁷⁴ Whereas IW always find a significant

⁶⁹ This highlights how using linear models on restricted indices may yield biased results. Yet, SEI is significant also in a tobit model accounting for EDI being restricted.

⁷⁰ See also Teorell and Hadenius 2006.

⁷¹ But, we use lagged democracy from early 1990s rather than early 1980s to include several young countries.

⁷² Gassebner et al. 2012.

⁷³ IW, 206.

⁷⁴ IW run models controlling for one variable *in seriatim*, alongside democratic tradition. Yet, it is inconsistent to assume that, e.g., Protestants—Muslims is a relevant control in one model, and then omit it when controlling for ethnic fractionalization. The Alesina et al. 2003 index we use is structurally similar to the Ethno-Linguistic Fractionalization index in IW, but includes data for young

coefficient at 0.1 percent, SEI is significant only at 5 percent in A3, and the coefficient size is reduced by 37 percent from A1. Furthermore, when substituting EDI – a highly problematic measure of democracy – with FHI, Model A4 yields no relationship ($t=1.44$).

Still, the results could be affected by sample-selection biases. As discussed, selection into WVS waves is likely not completely random; democratic and liberal Western countries are, for instance, overrepresented in Models A1–A4. Thus, we conducted the described multiple-imputation procedure to adjust for selection biases, thereby increasing the number of countries from 52 to 92.⁷⁵ Models A5 (EDI) and A6 (FHI) are otherwise similar to A3 and A4: When including imputed data, even the EDI-based result turns insignificant ($t=1.14$), and SEI drops dramatically in size and t -value when FHI is dependent variable ($t=0.16$). Hence, selection biases may have contributed to the result reported by IW.

Cross-country OLS models utilize limited information – and arguably the wrong type of information (see below) – since it disregards developments within countries over time. The imputation model allows predicting SEI in years it is missing, and we run OLS models with panel-corrected standard errors (PCSE) using country-year as unit.⁷⁶ Models A7 (EDI) and A8 (FHI) include similar controls to the cross-section models to facilitate comparison. Including time-series variation *strengthens* the result again; SEI is now significant at 0.1 percent for

countries. We could have entered three additional controls from IW’s list, but this strongly reduces the sample. However, Models B1 and B2 (with imputed data, Table 2) contain all controls.

⁷⁵ To ensure (some) directly relevant information for predicting SEI, we only include countries having participated in ≥ 1 of the first five WVS waves.

⁷⁶ Beck and Katz, 1995.

EDI, as the standard error drops when including time-series information. Still, SEI remains insignificant ($t=0.58$) when using FHI.⁷⁷

IW proposed more controls than included in Table 1, namely the Gini income inequality index, government welfare expenditure—army expenditure, and exports per capita. We excluded these above due to few degrees of freedom, but including them is less problematic when using imputed data and time-series information. The extended models are B1 (EDI) and B2 (FHI) in Table 2. All models in Table 2 employ samples including only countries having ≥ 2 non-imputed SEI observations, but this is not critical as the results are retained when including countries with 1 SEI observation, or all WVS-participating countries (see Appendix Section B.III). While B1 and B2 still show that choice of democracy measure influences estimates – the t -value of SEI is 3.49 for EDI and 0.64 for FHI – both coefficients shrink when also controlling for inequality, public spending and trade.

[TABLE 2]

There are thus legitimate reasons to question whether self-expression values enhance democracy, especially if one does not consider EDI a valid measure. However, even scholars arguing that EDI is valid should not conclude on a causal effect. The above results may be influenced by democracy affecting values, or by country-specific characteristics systematically relating to *both* values and regime type. If self-expression values indeed enhance democracy, we should observe a relationship also in Fixed Effects (FE) models controlling for country-specific characteristics. The FE model on EDI (B3) reports a small, insignificant ($t=0.61$) SEI coefficient, and so does Model B4 using FHI ($t=0.21$). Since the FE

⁷⁷ Models A5–A8 include imputed data for countries with 1 SEI observation or only data for some SEI sub-components. We also ran OLS PCSE models only for the 57 countries with ≥ 2 non-imputed SEI observations. The results barely change: EDI is positively related to SEI (Model A9), whereas FHI is unrelated (A10).

models only incorporate within-country variation, they guard against omitted variable bias related to time-invariant, country-specific factors influencing regime type. Still, FE models are inefficient when estimated for slow-moving variables such as SEI, potentially leading to Type II errors.⁷⁸ Thus, to ensure we are not falsely discarding any effect we tested more efficient Random Effects (RE) models. Yet, Models B5 and B6 do not identify any effect of SEI either.

The positive cross-country correlation between self-expression values and democracy may therefore be spurious. Borrowing from an analogous argument in Acemoglu et al. on income and democracy, deeper contextual variables could have had a crucial impact both on citizens' intrinsic ideals and the accountability of their governments:⁷⁹ Some societies, such as the Scandinavian, may have embarked on development paths where people gradually acquired liberal-democratic values and where political institutions became increasingly transparent and accountable, while others, such as China or Ethiopia, embarked on paths of repressive governments and citizens valuing authority and tradition. These divergent development paths could result from differences in the characteristics of institutions that were adopted at critical junctures in history, for instance during colonial rule.⁸⁰

A second explanation of the spurious relationship concerns the spatial clustering of democracy *and* of particular values – IW, for example, speak of different “Cultural zones”. Regarding strategies for transitions to and consolidation of democracy, populations and rulers are more likely to learn from and emulate those in neighboring countries.⁸¹ Different regional

⁷⁸ Beck and Katz 2001.

⁷⁹ Acemoglu et al. 2008.

⁸⁰ Acemoglu et al. 2001. Yet, the PCSE coefficients from Table 2 are stable when adding former colonizer dummies.

⁸¹ Huntington 1991; Gleditsch and Ward 2006.

hegemony – such as the US in the Americas and Russia in Central Asia – also have different regime-type preferences for their respective neighboring countries.⁸² Hence, (culturally similar) neighboring countries often also have similar regime types. To investigate whether this explains the above-identified omitted variable bias, we included IW’s Cultural-zone dummies to the OLS PCSE Models B1 and B2 (see Appendix Table B.12). Indeed, this draws the SEI coefficient from B1 (EDI) much closer to the FE coefficient in B3 (which is 0.04). More specifically, the coefficient drops from 0.32 to 0.15, and is now only significant at 10 percent. This suggests that regional diffusion mechanisms contribute to explaining the spurious relationship between values and regime type. Regarding the PCSE model using FHI, the SEI coefficient actually turns negative (but remains insignificant) when including Cultural-zone dummies.

A third candidate-explanation relates to divergent histories of democratic rule. Some countries have long histories of elections, civil liberties protection and other democratic institutions and practices, whereas others do not. A democratic history is among the most robust determinants of current democracy,⁸³ and self-expression values may – as institutional learning theory suggests – have been shaped by citizens experiencing and enjoying democratic rights, open debate and “compromise politics” over decades. Hence, a prior democratic history could induce a spurious relation between self-expression values and current democracy. The models above control for IW’s “Democratic Tradition”, but this has a peculiar construction, only registering democratic experience for current democracies. Furthermore, it simply counts number of years with Polity-score \geq 6, not distinguishing between differential impacts from living under high- and low-quality democracies. Although manipulated elections may induce

⁸² Levitsky and Way 2010.

⁸³ Gassebner et al. 2012.

learning of democratic norms,⁸⁴ living in a high-quality democracy such as Sweden or Denmark plausibly enhances self-expression values more than living in a “flawed democracy”. Hence, we substitute Democratic Tradition with Democratic Stock from Gerring et al. – which, importantly, incorporates the graded nature of democracy – in the OLS PCSE Models B1 and B2.⁸⁵ Consequently, SEI drops with 61 percent and remains far from significant ($t=0.25$) when FHI is dependent variable, whereas it drops with 55 percent and also turns insignificant ($t=1.61$) when EDI is dependent (see Appendix Table B.11). Thus, there is no clear effect of values on democracy – independent of the democracy measure used – once appropriately controlling for pre-existing democratic history.

These results on how democratic history both shapes prospects for current democracy *and* self-expression values point further towards the above-discussed endogeneity problem. Previous studies using cross-country correlations for inferring that self-expression values produce democracy may simply have picked up a reverse causal effect, which is congruent with the above-discussed literature on institutional learning. The endogeneity of values should thus be accounted for before concluding on whether they affect regime type. To mitigate such endogeneity biases, we run Arellano-Bond GMM models. Importantly, these models account *both* for endogeneity of values and country-fixed effects.⁸⁶ Furthermore, FE models are less efficient when time series are relatively short. Although our FE models do draw on time-

⁸⁴ Lindberg 2006.

⁸⁵ Gerring et al. 2005.

⁸⁶ The Sargan test far from rejects the exclusion restriction in Model B7, indicating it provides a proper framework for inferring about causal effects. Yet, the Sargan-test p-value for B8 is low. Since low p-values can also stem from heteroskedasticity, Sargan-tests for two-step Arellano-Bond models more appropriately test the specification. For these models, the Sargan-tests indicate that the exclusion restriction holds also for B8.

series of 21 years, Arellano-Bond models are therefore arguably more appropriate. We ran several Arellano-Bond specifications, for instance varying the lag structure, but did not find any positive effect of SEI on either EDI or FHI. For example, Models B7 (EDI) and B8 (FHI) in Table 2 – using 7-year lags and including countries with SEI observations from ≥ 2 WVS waves – report minuscule t-values of 0.02 and -0.27, respectively. Still, Arellano-Bond models perform sub-optimally for slow-moving variables. Blundell and Bond, using Monte Carlo simulations, show that system GMM models perform better in such contexts.⁸⁷ These models still account for country-specific effects, and augment the Arellano-Bond instrumentation strategy when dealing with endogenous regressors. Interestingly, later studies report that the null-results on income and democracy from Acemoglu et al. are altered – rather identifying a positive effect – when using system GMM models.⁸⁸ Likewise, such models recover an effect of education on democracy in system GMM models where FE models yield none.⁸⁹ Perhaps also values affect regime type, but our FE and Arellano-Bond models fail to pick this up because values and democracy levels change slowly, leading us to conduct Type II errors? This is, however, not the case. Self-expression values *do not* affect democracy according to the system GMM Models B9 (EDI; $t=0.97$) and B10 (FHI; $t=-0.15$).⁹⁰

All (non-)results in Models B3–B10 are robust. SEI remains insignificant when removing outliers and influential observations; when using Polity as democracy measure; when testing 1-, 5- or 8-year lags; and, when applying different sample-inclusion criteria. The results are also retained when adding year dummies to control for time trends. Throughout, we have

⁸⁷ Blundell and Bond 1998.

⁸⁸ Acemoglu et al. 2008; e.g., Heid, Langer and Larch 2012.

⁸⁹ Acemoglu et al. 2005; Castelló-Climent 2008.

⁹⁰ The results are robust, and retained, e.g., when restricting number of lags used for instrumentation to mitigate the “too-many-instruments problem” Roodman 2009 (see Appendix).

operationalized values with SEI from IW. We re-ran our models using the values index from Norris, but still find non-significant results.⁹¹ In sum, when accounting for endogeneity and country-fixed effects, neither choice of democracy measure nor other specification choices matter; there is simply no evidence that self-expression values causally affect regime type.

Table 2 shows stronger results for other potential determinants of democracy that are entered as controls. Once accounting for country-fixed effects, Democratic Tradition is robustly related to current democracy levels, and even changes in democracy according to the GMM models. Welfare spending—military spending is positive significant in several models, and so is Protestants—Muslims. Interestingly, also socio-economic resources affects democracy in many models. Although not robust, this lends some support to classic modernization theory. This contrasts with the null-results on income and democracy from Acemoglu et al., but actually also with RTM as laid out by IW. RTM proposes that value changes is the transmitter of the effect of economic change on regime type; socioeconomic resources should thus turn insignificant once controlling for values. Our results indicate otherwise.

Admittedly, RTM is not the only prominent theory of democratization having failed to receive strong empirical support.⁹² Nevertheless, other proposed determinants of democracy receive robust support in different analysis. Employing Extreme Bounds Analysis (on dynamic probit models), Gassebner et al. find that short-term growth, past regime transitions, OECD membership and fuel exports robustly relate to democratization, whereas income level, past transitions, former military leader as chief executive, and democratic neighbors robustly explain democratic survival.⁹³ Indicating the relevance of the alternative explanations of democracy discussed above, this list includes international-political factors (OECD member;

⁹¹ Norris 2009.

⁹² See Teorell 2010.

⁹³ Gassebner et al. 2012.

democratic neighborhood) and domestic elite factors (military leader; fuel exports, providing elites with resources to repress and co-opt). Some determinants are retained in panel models akin to those above; using system GMM models, Aslaksen finds that an oil-dependent economy harms democracy.⁹⁴ We re-ran our Table 2 models (see Appendix Section B.III), but including fuel exports; we also find some support for the “political resource curse” thesis, although this is not robust in GMM models. Finally, concerning international-political factors, we re-ran our models including WAVE from Knutsen – registering whether or not a country’s last regime change was within one of Huntington’s reverse waves of democratization.⁹⁵ WAVE, which taps exogenous sources of democratization from the geo-political climate *and* regional diffusion effects, is often highly significant. Thus, while self-expression values are unrelated to democracy, some international-political factors and features affecting the capacities and strategies of domestic elites are.

The endogeneity issue revisited: Does experience with democracy affect values?

To reiterate, there is no effect of self-expression values on democracy once accounting for country-fixed effects and the endogeneity of values. We have, however, not yet presented any *positive* evidence for the assertion that democracy causes self-expression values. To more directly investigate this, we also tested system GMM models with SEI as dependent variable and lagged democracy and either Democratic Tradition or Democratic Stock as independent (see Table 3). FHI and EDI are generally positive in different specifications, and sometimes statistically significant, but not robust. In contrast, Democratic Tradition and Democratic

⁹⁴ Aslaksen 2010.

⁹⁵ Knutsen 2011.

Stock are always positive and very robust. A long democratic history shapes values in a more liberal direction, as institutional learning theory anticipates.

[TABLE 3]

Importantly, this result holds when Democratic Tradition or Democratic Stock are treated as endogenous (as in Table 3; see Appendix Section B.IV for specifications using different lag-lengths, instrumentation strategies, and estimators). Past regime type can, naturally, not have been affected by current self-expression values, but it *could* have been affected by factors *correlating* with current values, such as past values. Hence, there are far stronger indications that democracy causes more liberal values – at least when considering long-term experience with democracy – than that values affect democracy. As for growth,⁹⁶ democracy may assert stronger effects on citizens' values over the longer run; cumulative historical experiences with democracy may matter the most.

Combined with the findings from the previous section, this supports our argument that the values—regime type correlation mainly stems from i) democratization taking place because of factors unrelated to popular values, and ii) that subsequent experiences with democratic institutions shape values in more liberal directions.

Extension I: Separating between democratization and democratic stability

We failed to find evidence that self-expression values systematically affect regime type. Nevertheless, while 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. Thus, we dichotomize FHI and run

⁹⁶ Gerring et al. 2005.

dynamic probit models. The choice of FHI cut-off is arbitrary,⁹⁷ and we therefore test two different thresholds provided by Freedom House (“Free”; “Partly Free”). We also use the dichotomous ACLP, or DD, (minimalist) regime measure.⁹⁸

The point-estimates *on democratization* are actually negative, but insignificant, for the low FHI-threshold and for ACLP – both when employing 1-year- or 7-year lags (see Appendix Section B.I). 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. 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 RTM, 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 of our six models in Appendix Table B.1 show a negative point-estimate, and – although the model using 7-year lags and high FHI threshold shows a weakly significant association – the relationship is always insignificant at 5 percent.

Despite the widely accepted arguments on how self-expression values enhance democratization and democratic survival, the results above simply reflect that most countries have not followed the theoretically suggested patterns. One illustrative example is South Africa. Although there was mass mobilization prior to the transition, the pacted nature of the transition following Apartheid – ensuring that rich, white elites would keep their property while, in practice, transferring political power to ANC elites – was critical in allowing for democratization. In contrast, Venezuela experienced a small increase in SEI leading up to

⁹⁷ Boogards 2012.

⁹⁸ Cheibub, Gandhi and Vreeland 2010.

Hugo Chavez' consolidation of presidential power, but still experienced reversed democratization under Chavez with the curtailing of civil liberties and electoral manipulation. Chavez drew notable popular support from the masses because of promises of redistribution, perhaps suggesting that material benefits rather than self-expression values drive popular preferences for regime type.⁹⁹ Belarus experienced a fairly large increase in SEI from 1990 to 2008, but the regime's ties to Russia and extensive repression helped it avoid democratization.¹⁰⁰

A few countries – notably ex-communist countries such as Lithuania – have followed the “predicted pattern” by having high and slightly increasing SEI-scores accompanied by democratization, and then consolidation. However, a closer look at these countries' experiences casts further doubt on the validity of the values–democracy link by highlighting the above-discussed importance of international factors for democratization. The democratization experiences in Central and Eastern European countries such as Lithuania were strongly influenced by linkages to and the leverage of Western countries;¹⁰¹ EU-membership possibilities, and later EU accession, may have disciplined elites to commit to democratic governance. Possibly, then, increasing self-expression values in Lithuania played little effective role. Indeed, Latvia – experiencing the second steepest *drop* in SEI after Iran in Figure 1 (bottom scatterplot) – had an identical increase in FHI to Lithuania. Bosnia was among the few other countries experiencing both increasing SEI scores and notable democratization during the time interval in Figure 1. However, Bosnia's democratization related to international occupation and peacekeeping after the ethnic civil war. In sum, there are few clear-cut cases actually showcasing the mechanisms sketched out by RTM. In the

⁹⁹ Acemoglu and Robinson 2006; Boix 2003.

¹⁰⁰ Levitsky and Way 2010.

¹⁰¹ Levitsky and Way 2010.

cases that fit the pattern, like Lithuania (or even the Czech Republic), it is difficult to establish that the extensiveness of self-expression values was a prerequisite for popular collective action, and to identify the relative importance of popular action compared to other factors, such as external influence.

Extension II: Components of self-expression values

Despite the null-results above, certain SEI-components could affect democracy, but not others. Indeed, the components may tap fairly different things, and perhaps, e.g., social trust affects democracy whereas life satisfaction does not.¹⁰² Yet, we find little evidence for this:

We re-ran the models in Table 2, sequentially substituting the five components for SEI (see Appendix Section B.II). *No FE or GMM models show even weakly significant effects.* Post-materialism and happiness are *always* unrelated to democracy, whereas tolerance is positively related, but only in the PCSE (significant 5 percent) and RE (10 percent) models using EDI. However, civic action – reporting whether people have or would consider signing a petition – is the strongest. Independent of the democracy measure used, it is significant at 1 percent in PCSE models and 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 civic action is insignificant in FE and GMM models; we cannot conclude that it causally affects democracy. Importantly, signing petitions is likely endogenous, since such activities carry less risk for citizens in democracies than in autocracies.

Further, generalized trust is actually always *negatively* signed, although only significant in the PCSE model using FHI. This finding is particularly interesting, given the large literature on

¹⁰² Hadenius and Teorell 2006; Muller and Seligson 1994.

generalized trust/‘social capital’ and democracy. Whereas some authors propose that the observed positive correlation comes from high trust generating democratic improvements, others argue that it mainly stems from citizenries living under democratic institutions building trust.¹⁰³ Corroborating Muller and Seligson, we find no evidence that trusting citizens enhance democracy levels.¹⁰⁴ Moreover, we tested dynamic probit models, finding that trusting citizens neither induce democratization nor stabilize existing democracies.

Conclusion

The analysis above finds no evidence that self-expression values enhance democracy levels, democratization prospects, or democratic durability. Hence, we doubt the popular proposition that having a relatively liberal population is a requirement for viable democracy. We propose that previous conclusions on a strong effect may have been driven by a combination of sample selection-, omitted variable-, and endogeneity biases. Critics might interject that the above results are non-credible because of the missing data and our reliance on multiple imputation – despite the good performance of our imputation model. Our conclusions are, of course, associated with uncertainty. But, poor data coverage is a problem pertaining to the wider literature and is not unique to our analysis. In the absence of broader data coverage and new studies, skeptics should follow standard norms of scientific inference and conclude that there is currently little empirical evidence available for a positive effect of self-expression values on democracy. In other words, the absence of actual data should not lead to concluding in favor of any positive relationship; it is inappropriate to reject the null-hypothesis of no relationship between values and democracy based on studies using limited data and not accounting for important sources of bias.

¹⁰³ See, e.g., Paxton 2002; Warren 1999.

¹⁰⁴ Muller and Seligson 1994.

We document above that the observed relationship between self-expression values and democracy dwindles when including multiple relevant controls, or when accounting for country-fixed effects. The latter result is strikingly robust and suggests that deeper political-historical or geographical factors determine both a country's level of self-expression values *and* democracy. Moreover, we find evidence indicating that countries' prior historical experiences with democracy and regional diffusion effects contribute to explaining why some countries today are both democratic and have liberal populations, whereas others are autocratic with illiberal populations. We also present analyses distinguishing between democratization and democratic survival. We find that citizenries with more self-expression values neither enhance the survival of existing democracies, nor improve democratization chances. The latter result suggests that the model of IW – assuming a strong and consistent effect of self-expression values on democratization through collective action – is too simple to capture the dynamics of institutional change in autocracies. In line with recent literature on authoritarian survival, regime change requires more than a public preference for freedom and autonomy, in the face of autocrats exhibiting deep pockets and controlling the guns. Rather, we highlight how the cross-country correlation between self-expression values and democracy stems from democratization processes being triggered by other factors – such as international interventions, coups, or bargains between elite groups – and that the subsequently established democratic institutions gradually nurture a more freedom-oriented citizenry inclined to appreciate and defend democracy.

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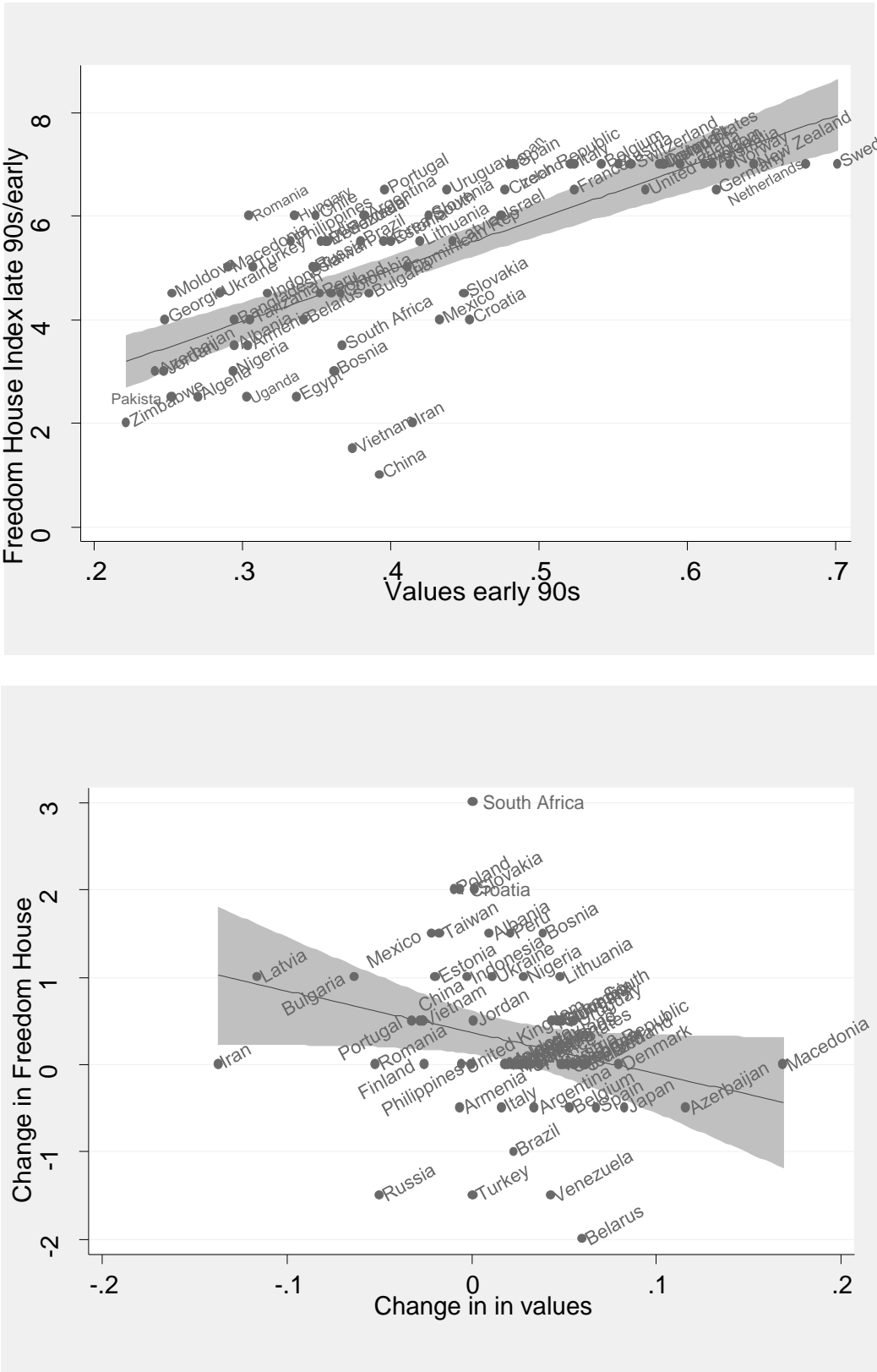
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Figure 1. Top: Levels of self-expression values (early 1990s) and democracy (late 1990s/early 2000s). Bottom: Changes in values and democracy from early 1990s to early 2000s.



Notes: Self-expression values is measured by IW's (p.150) index, ranging from 0–1 and drawing on World Values Survey (WVS). Democracy is measured by (reversed, 7-year lagged) Freedom House Index, ranging from 1–7.

Table 1. Replicating and adjusting models in Inglehart and Welzel (2005); accounting for omitted variable and sample-selection biases.

Description:	Replication I&W (2005:199)	Replication I&W (2005:183)	Adding controls	Adding controls	Adding imputed countries	Adding imputed countries	Panel data including imputed obs.	Panel data including imputed obs.	Panel data imputed for ≥2 SEI obs.	Panel data imputed for ≥2 SEI obs.
Model:	A1 (OLS)	A2 (OLS)	A3 (OLS)	A4 (OLS)	A5 (OLS)	A6 (OLS)	A7 (PCSE)	A8 (PCSE)	A9 (PCSE)	A10 (PCSE)
Dep. variable:	EDI	FHI	EDI	FHI	EDI	FHI	EDI	FHI	EDI	FHI
SEI	1.378***	4.418 ⁺	0.864*	2.985	0.330	0.442	0.346***	0.584	0.359***	0.790
early-1990s	(0.387)	(2.354)	(0.419)	(2.074)	(0.288)	(2.697)	(0.0967)	(1.004)	(0.100)	(0.800)
Socio-ec. resources	0.00634**	-0.0163	0.00455 ⁺	-0.0103	0.00175***	0.00585 ⁺	0.00935***	0.0362***	0.00874***	0.0302**
early-1990s	(0.00223)	(0.0154)	(0.00226)	(0.0123)	(0.000333)	(0.00323)	(0.00104)	(0.00950)	(0.00107)	(0.00893)
Democratic tradition	0.000271		0.000926		-0.000182	0.00183	-0.000195	0.00851	-0.000721	0.00235
1995	(0.000674)		(0.000674)		(0.000276)	(0.00262)	(0.000871)	(0.00766)	(0.000858)	(0.00560)
Protestants–Muslims			0.00148*	0.00721*	0.000286***	0.00246***	0.00137***	0.0106**	0.00148***	0.00654*
1990			(0.000627)	(0.00324)	(0.0000657)	(0.000621)	(0.000268)	(0.00323)	(0.000312)	(0.00260)
Years schooling			0.00447	0.0578	0.00168	0.0258 ⁺	0.0117*	0.141*	0.0182**	0.181**
1992			(0.00961)	(0.0496)	(0.00149)	(0.0139)	(0.00572)	(0.0583)	(0.00662)	(0.0650)
Ethnic			-0.151	0.102	-0.00529	0.0430	-0.0631	-0.0634	-0.107	-0.504
fractionalization			(0.0988)	(0.497)	(0.0107)	(0.100)	(0.0528)	(0.498)	(0.0670)	(0.470)
Freedom House		0.756***		0.458**						
early-1990s		(0.148)		(0.134)						
Constant	-0.286*	-0.0940	-0.0275	1.531	0.0456	3.011**	0.0461	3.033***	0.0157	3.051***
	(0.134)	(0.944)	(0.192)	(1.048)	(0.103)	(1.006)	(0.0652)	(0.707)	(0.0800)	(0.783)
Observations	58	58	52	52	92	92	2105	2105	1468	1468
R ²	0.785	0.713	0.791	0.676	0.832	0.598	0.783	0.492	0.776	0.470

Notes: ⁺ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$; standard errors in parentheses. Models A1–A6 are OLS on cross-country data. Models A7–A10 are OLS PCSE with errors adjusted for panel-specific AR(1) autocorrelation and heteroskedastic panels. Following IW, the dependent variable is measured in late-1990s or early-2000s in OLS models; control variables are measured for similar years as IW, and SEI and independent FHI-variable are lagged 7 years. Models A5–A10 include imputed data; coefficients are averaged over five imputed samples and errors are imputation-corrected. Imputed observations in A6–A7 are measured in 1995. Maximum time series (dependent variable) in Models A7–A10 is 1988–2009; independent variables are lagged 7 years.

Table 2. Accounting for country-fixed effects and endogeneity of values.

Model:	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10
Dependent 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	0.317*** (0.0908)	0.520 (0.816)	0.0385 (0.0634)	0.109 (0.515)	0.0842 (0.0623)	0.235 (0.495)	0.00148 (0.0710)	-0.128 (0.471)	0.0807 (0.0830)	-0.0620 (0.425)
Socio-ec. resources	0.00867*** (0.000946)	0.0277** (0.00817)	0.00176* (0.000745)	0.0189** (0.00730)	0.00367*** (0.000660)	0.0241*** (0.00581)	0.000341 (0.000678)	0.00424 (0.00483)	0.00246*** (0.000671)	0.00509 (0.00452)
Democratic tradition	-0.000752 (0.000794)	0.00159 (0.00558)	0.00244*** (0.000499)	0.0119* (0.00563)	0.00167*** (0.000468)	0.00781 (0.00485)	0.00210*** (0.000554)	0.0129** (0.00398)	0.00106+ (0.000605)	0.00834* (0.00342)
Protestants–Muslims	0.00136*** (0.000295)	0.00557* (0.00271)	0.000862 (0.00250)	0.00477 (0.0228)	0.00283*** (0.000393)	0.00860** (0.00289)	0.00000949 (0.00229)	-0.00396 (0.0147)	0.000898* (0.000378)	0.00323 (0.00206)
Years 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)	0.00232 (0.00273)	0.00859 (0.0195)	0.00357 (0.00228)	0.0142 (0.0180)
Ethnic fractionaliz.	-0.140* (0.0658)	-0.857+ (0.437)	-0.408 (0.794)	-0.372 (5.237)	-0.248*** (0.0633)	-1.085* (0.470)	-0.351 (0.805)	-0.0223 (3.496)	-0.0628 (0.0583)	-0.122 (0.368)
Gini	-0.000141 (0.00148)	0.00635 (0.00868)	0.000730 (0.000990)	0.00810 (0.00795)	0.000536 (0.000962)	0.00695 (0.00752)	0.000399 (0.000689)	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)	0.000633 (0.000567)	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)	0.000156 (0.000346)	0.00260 (0.00267)	0.000204 (0.000236)	0.00282 (0.00222)
Lagged dep. variable							0.465*** (0.0454)	0.718*** (0.0203)	0.542*** (0.0253)	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)	0.306 (0.260)	1.210 (1.139)	0.0874* (0.0345)	1.058*** (0.283)
Observations	1468	1468	1468	1468	1468	1468	1404	1404	1468	1468
R ² (avg.)	0.796	0.494	0.452	0.681	0.706	0.473				

Notes: + $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$; standard errors in parentheses. Data are from 58 countries with ≥ 2 SEI-observations. Coefficients are averaged over five imputed samples, and errors are imputation-corrected. Errors are adjusted for panel-specific AR(1) autocorrelation and heteroskedastic panels in PCSE models, and clustered on country in Fixed Effects models. Arellano-Bond and system GMM models consider socioeconomic resources, public spending and SEI endogenous. Maximum time series (dependent variable) is 1988–2009; independent variables are lagged 7 years.

Table 3. System GMM models with SEI as dependent variable.

Model:	C1	C2	C3	C4
FHI	0.00369 ⁺ (0.00222)	0.00364 (0.00322)		
EDI			0.0775 ^{**} (0.0270)	0.0373 (0.0379)
Democratic tradition	0.000959 ^{***} (0.000283)		0.000789 ^{**} (0.000300)	
Democracy stock		0.000157 ^{***} (0.0000442)		0.000152 ^{**} (0.0000473)
Socio-economic resources	0.00270 ^{***} (0.000292)	0.00170 ^{***} (0.000478)	0.00236 ^{***} (0.000375)	0.00149 ^{**} (0.000520)
Years schooling	0.00161 (0.00191)	0.00156 (0.00202)	0.000970 (0.00193)	0.00138 (0.00174)
Public spending	0.000667 (0.000461)	0.000460 (0.000453)	0.000474 (0.000539)	0.000417 (0.000501)
Protestants–Muslims	0.00105 ^{***} (0.000231)	0.000427 (0.000300)	0.000970 ^{***} (0.000220)	0.000452 (0.000328)
Gini index	-0.000215 (0.000288)	-0.000798 [*] (0.000368)	-0.000276 (0.000310)	-0.000787 [*] (0.000392)
Ethnic fractionalization	-0.0435 (0.0316)	-0.0228 (0.0279)	-0.0445 (0.0437)	-0.0227 (0.0364)
Exports	-0.000268 (0.000201)	-0.00000581 (0.000231)	-0.000180 (0.000169)	-0.0000405 (0.000268)
Lagged dependent variable	0.0928 ^{***} (0.0250)	0.0288 (0.0343)	0.0802 ^{***} (0.0242)	0.0232 (0.0392)
Constant	0.256 ^{***} (0.0217)	0.316 ^{***} (0.0319)	0.263 ^{***} (0.0266)	0.329 ^{***} (0.0374)
Observations	1852	1238	1852	1238

Notes: ⁺ $p < 0.10$, ^{*} $p < 0.05$, ^{**} $p < 0.01$, ^{***} $p < 0.001$; standard errors in parentheses. Data from 58 countries with ≥ 2 SEI-observations. Coefficients are averaged over five imputed samples, and errors are imputation-corrected. FHI, EDI, Democratic tradition and Democracy stock are endogenous. Independent variables are lagged 1 year. Maximum time-series is 1982–2009 for C1, C3, and 1982–2006 for C2, C4.