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Individualistic values, institutional trust, and interventionist attitudes

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Abstract. A popular explanation for economic development is that 'individualistic values' provide a mind-set that is favorable to the creation of growth-promoting institutions. The present paper investigates the relationship between individualistic values and personal attitudes toward government intervention. We consider two key components of an individualistic culture to be particularly relevant for attitude formation: self-direction ('social' individualism) and self-determination ('economic' individualism). Results indicate that both are negatively associated with interventionist attitudes. Effects of self-direction are much weaker though, than self-determination. Moreover, the effects of self-direction are mitigated through higher trust in the state and lower confidence in companies, while that is not the case for self-determination values. We conclude that especially economic individualism supports attitudes conducive to the formation of formal market-friendly institutions.

1. Introduction

That institutions channel human behavior, and are therefore crucial for the economic performance of nations is now practically part of conventional wisdom. With the availability of new comparative data, a considerable literature explores empirically effects of formal and informal institutions on economic outcomes, such as growth, trade, or financial development (e.g. Acemoglu and Robinson, 2012; Algan and Cahuc, 2013; Berggren and Eliner, 2012; Bjørnskov, 2012; Guiso *et al.*, 2006; Kovac and Spruk, 2016; Mathers and Williamson, 2011; Putnam, 1993; Rode and Coll, 2012; Yoo and Steckel, 2016; Zak and Knack, 2001). Along these lines, a growing number of investigations find that 'individualistic values' provide a more favorable background for promoting wealth and prosperity than 'collectivistic values' (Ball, 2001; Davis,

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2016; Gorodnichenko and Roland, 2011a, 2011b; Greif, 1994; Hansen, 2013; Harrison, 2013; van Hoorn, 2014; Williamson, 2009).[1]

Following authors such as Licht *et al.* (2005), Guiso *et al.* (2006), Williamson (2009), Tabellini (2010), and Harrison (2013), culture influences economic performance via two interrelated, but distinct routes: First, social norms exert a direct motivational effect by impacting on eligible and rational behavior through 'internal rules'. For example, as Weber (1930) forcefully noted, by shaping attitudes toward profit-making and capital accumulation, Calvinism had a deep impact on individual work ethics and economic activities. Second, a country's laws and institutional framework naturally tend to reflect a significant part of its cultural values and heritage (e.g. Harrison, 2013; Kyriacou, 2016).[2] For example, Bjørnskov (2010) points out that generalized trust, as an integral part of a country's social capital, impacts on the quality of formal institutional settings both through improved policy implementation capabilities in the public sector, and through enhanced ability of citizen-voters to systematically demand 'better' policies and hold politicians accountable (see also Boix and Posner, 1998; Jottier and Heyndels, 2012).

The purpose of this paper is to explore whether individualistic cultural traits shape attitudes toward government interventions, apart from the hypothetical effect of social trust. All else equal, are more individualist cultures also less inclined to support government interventionism? We thus add an aspect that is placed primarily at the political demand side of the transmission from culture to formal institutions. However, instead of searching for a macro-impact of cultural traits on governance quality, we aim to identify the micro-association of individualism and political preference formation. Building on a recent paper by Pitlik and Kouba (2015) on social trust and interventionist attitudes, we explore if the impact of different individualistic traits is conditional on perceived governance quality. We consider some key components of an 'individualistic culture', namely values related to non-obedience and personal independence (i.e. self-direction), as well as beliefs in control of one's own life course (i.e. self-determination), to be particularly relevant for attitude formation. Results indicate that both elements are negatively associated with interventionist preferences. Interestingly, effects of self-direction values on intervention attitudes are much weaker though, than the effects of a strong belief in self-determination.

The paper is structured as follows: Section 2 gives a brief overview or related literature, section 3 describes our data generation process. Section 4

1 Some authors hold an opposing view (i.e. Swank, 1996). Lavoie and Chamlee-Wright (2000) criticize more generally a 'cultural nationalism', and stress that diverse cultural background probably also implies a different set of 'optimal', i.e. development-friendly, formal institutions. We follow their critique when it comes to deriving unconditional normative policy conclusions. However, our focus here is only on searching for the association of certain cultural values and attitudes toward institutions and policies.

2 Guiso *et al.* (2006) and Alesina and Giuliano (2015) provide excellent surveys.

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proceeds with an individual-level empirical analysis of intervention preferences, and section 5 concludes.

2. Related literature and hypotheses

Recent decades have witnessed a significant increase of scholarly interest in the role that an individualistic culture plays for the economic success of nations. Even though exact definitions differ slightly from one another, individualism is generally conceptualized as a worldview which emphasizes the individual, i.e. personal goals, uniqueness and control, while collectivism emphasizes the group or the society as the core unit, and individuals must fit into the groups.[3]

Current psychological research supports the idea that individualism and collectivism prime the way people think about the social world (e.g. Oyserman and Lee, 2008). Gorodnichenko and Roland (2015a) provide a survey of cultural psychology literature on differences between individualism and collectivism, concerning visions of self, and differences in cognitive behavior and motivation. The key characteristic of individualistic cultures is to reward personal endeavor and effort, innovation, or other achievements, with higher social status. Individualism is thus strongly associated with capitalist entrepreneurship (Mokyr, 1990).[4] Collectivism instead fosters conformity and an internalization of collective goals while discouraging individuals from striving for outstanding results that challenge group hierarchy.[5]

Boettke *et al.* (2008) argue that it is decisive that a country's formal institutions map onto its informal rules in order for the former to become a source of economic success. Systematic differences in (cultural) belief systems toward government intervention may be responsible for slow and long-run changes of governance structures. In individualistic societies, one should therefore observe a stronger 'demand' for formal institutions that provide a framework to unfold incentives for personal achievement, creating a more growth-friendly

3 According to Hofstede (2011: 11), 'On the individualist side we find cultures in which the ties between individuals are loose: everyone is expected to look after him/herself and his/her immediate family. On the collectivist side we find cultures in which people from birth onwards are integrated into strong, cohesive in-groups, often extended families'. Similarly, Schwartz (2004) makes a distinction between autonomy (individualistic) and embeddedness (collectivistic) cultures: 'In autonomy cultures, people are viewed as autonomous, bounded entities. They cultivate and express their own preferences, feelings, ideas, and abilities, and find meaning in their own uniqueness.... In embeddedness cultures, meaning in life comes largely through social relationships, identifying with the group, participating in its shared way of life, and striving toward its shared goals ... Important values in such cultures are social order, respect for tradition, security, obedience, and wisdom'.

4 Different cultural backgrounds may yet be supportive of alternative forms of entrepreneurship. See Lavoie and Chamlee-Wright (2000).

5 Talking about collectivism, we are not referring to neo-corporatist structures, especially those of Scandinavia. Despite the high degree of formal organization in these societies, they are shaped by individualistic values in the determination of one's life course. Association is voluntary and any collectivist strain is based on free choice.

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environment that is in line with protection of property rights, the rule of law, and economic freedom (Greif 1994). Storr (2013) argues that formal rules and institutions not only emerge from a society's cultural system but are viewed and interpreted through a cultural filter.

Recent research indeed reveals a match of individualistic traits and the quality of the economic and political institutions. Licht *et al.* (2005, 2007) and Kyriacou (2016) provide evidence of a positive relationship of measures of individualism and the rule of law, absence of corruption, and democratic accountability. Inglehart and Welzel (2010) report that 'self-expression values' exert pressure for improvements in democracy. Gorodnichenko and Roland (2015b) also find individualistic values to be positively related to the development of democratic institutions.

Tabellini (2008, 2010), Williamson (2009), and Williamson and Kerekes (2011), consider (1) social trust, (2) tolerance, (3) life control (self-determination), and (4) obedience, to be particularly important for an 'economic culture'. All these components are related to individualistic values, although to different degrees. Following Tabellini (2010: 683), self-determination and non-obedience stand for 'an entrepreneurial environment where individuals seek to take advantage of economic opportunities', and symbolize 'confidence in the virtues of individualism'. Trust and tolerance are vital for the operation of personal interactions and governmental institutions, but are only indirectly related to individualism, as they are typical for societies where individualism is not suppressed.[6]

Arguably, one could also defend the standpoint that individualistic traits are the result of a process of 'crowding in' (cf. Janssen and Mendys-Kamphorst, 2004), where formal institutions that are conducive to growth over time shape the accompanying attitudes. Even though there is some merit in the hypothesis that formal institutions are reinforced by informal practice, seeing formal institutions as the sole creators of civic norms would also ultimately mean that creating governmental institutions favorable to development is purely an outcome of chance, which is at odds with most of the institutional development literature. Individualistic ideas and values yet certainly impact on the mind-set, shaping attitudes toward the direction of formal institutional change. Several ideas all point to the fact that government intervention and productivity growth are ultimately the consequence of pre-existing cultural values, rather than values being created by formal institutions.

For instance, Mokyr (1990) documents that the Industrial Revolution first occurred in parts of Western Europe and North America, also because of civic norms already in place, favoring the free relationship of entrepreneurs and

6 Van Hoorn (2015) notes that individualism is associated with a broader trust radius, whereas collectivism is associated with a narrower trust radius.

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investors. Rather than a momentary shift to capitalism, the Industrial Revolution is seen as a culmination of centuries of technical and institutional innovation with higher 'openness to new information' at its roots. Also, Harrison (2013) highlights tolerance, education, and rationality as a basis for industrialization and development. Fevre (2016) claims that ideas of classical liberal individualism and economic inequality are linked. By establishing a vision of individualism in most Western societies, where inequality is seen as a natural outcome that reflects differences in capability and motivation, individualist values have endorsed the idea that governments should only promote the conditions of meritocracy, entrepreneurship, and fair market-dealings, instead of intervening in the economy on behalf of the poor. Such relationships also hold at the firm level. Van Hoorn (2014) finds individualistic values to be positively related to the quality of management practices, by promoting positive attitudes toward performance-related pay and merit-orientation. Moreover, individualistic culture is the main determinant for the implementation of productivity enhancing management practices. This is surely also in line with the interpretation of the decision-making-culture-nexus by Storr (2013: 55), who argues that culture should not be seen as a tool or production item, but that culture instead frames the decision set, '... regarding which tools (strategies) available to us and which tools we should utilize as we pursue our goals'.

To summarize, while people with strong individualistic attributes are expected to want governments to refrain from interventions into the personal economic sphere, collectivist traits may be, as a general rule, associated with a more pro-interventionist view. This leads us to

> Hypothesis 1: Individualistic cultural traits are negatively related to interventionist attitudes.

A related strand of the literature is concerned with the relationship of social trust and attitudes toward intervention and the regulatory state (Aghion *et al.*, 2010; Tirole, 1988). People who distrust others tend to abstain from economic transactions, if they are not facilitated by government regulation as an implicit third party guarantee (Aghion *et al.*, 2010). However, people are less willing to assign a strong interventionist and regulating role to the state, if they expect that government is unwilling or unable to perform that role properly. Svallfors (2013) finds that people who perceive state institutions to be efficient and fair have a more positive attitude toward higher taxes and government spending. For post-soviet transition economies, Dimitrova-Grajzl *et al.* (2012) report that the general public's attitude toward regulation is driven both by trust in market participants and concerns about government corruption. Using European Social Survey data for 29 countries, Daniele and Geys (2015) find a more pronounced effect of social trust on welfare state support in countries where government institutions are perceived to be uncorrupted. Pitlik and Kouba (2015) analyze the impact of trust for public support of government intervention,

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arguing that a lack of confidence in companies will intensify demand for regulation. If people have no confidence in policymakers, this is associated with a stronger appeal of self-regulation or refusal of any intervention at all. Transferring this idea to the context on individualistic traits, we formulate the following additional hypotheses:

Hypothesis 2: High trust in state institutions and low trust in companies are positively related to interventionist preferences.

Hypothesis 3: Higher trust in state institutions, as compared to trust in companies, mitigates the negative relationship of individualistic values to interventionist preferences.

3. Data and measurement

Our empirical analysis of the association of individualistic values and government intervention attitudes is largely based on data from the integrated World Values Surveys/European Values Studies (WVS/EVS) file. The WVS is a global network of social scientists studying changing values and their impact on life perceptions. It consists of representative surveys conducted in almost 100 countries since 1981 using a common questionnaire. The combined dataset is currently made up of 6 WVS, and 4 EVS waves. Due to missing questions, we only use observations since 1990.

The focus is on individual-level analyses, for two reasons. First, our hypotheses are formulated on an individual level, and main variables of interest are defined there. We look at individuals with different characteristics within countries, which would be impossible if we estimated with WVS averages on the country level. Second, at the margin, it is quite unlikely that individual attitudes are pivotal for the design and quality of national policies and institutions, thus eliminating at least one potential source of reverse causality.

It should further be mentioned that critique of literature attempting to measure the elusive concept of culture via surveys is almost as old as the WVS itself, originally focusing on the question whether culture is something measurable at all (e.g. Lavoie and Chamlee-Wright, 2000; Storr, 2013). While a measurement strategy is necessarily 'reductionist', we attempt to combine different value questions that fit important aspects of the individualist/collectivist-scale in our approach, in order to cover more than just one single dimension of the concept.

Individualistic traits

Based on the main ideas of the individualism–collectivism distinction, and the literature discussed in section 2, we identify two different but closely related values and beliefs from WVS/EVS survey questionnaires that are supposed to capture essential dimensions of individualism. These are *self-direction* and *self-determination*.

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Selfdirection

The first measure captures the ideal of autonomous, self-directed decision making for important life choices (SELFDIRECTION). To compose an indicator for self-direction we rely on two variables, namely NOOBEDIENCE and INDEPENDENCE, which are derived from the following WVS/EVS question: 'Here is a list of qualities that children can be encouraged to learn at home. Which, if any, do you consider to be especially important? Please choose up to five'. We assigned a value of '1' to SELFDIRECTION if a respondent did select the item 'independence' and did not select the item 'obedience' from the list.[7]

NOOBEDIENCE and INDEPENDENCE both refer to the disapproval of hierarchical decisions without scrutinizing the underlying structures that make institutional cooperation possible. Following Tabellini (2010: 685), people who claim obedience to be important also follow the idea that 'good behavior is deemed to result [mainly] from coercion'. Thus, obedience stands in opposition to social trust, where individuals expect non-opportunistic behavior from others. Yet, obedience is not simply 'distrust'; it stands also contrary to Schwartz's (2004) notion of 'intellectual autonomy'. Rather than encouraging people to pursue own ideas, obedience is associated with accepting obligations within a legitimately perceived unequal distribution of power, roles, and resources. This perspective supports the idea that SELFDIRECTION is associated with a higher propensity to reject government intervention, because regulation is associated with constraints on individualized personal decision making. Due to the focus on personal intellectual autonomy, we would also expect SELFDIRECTION to better reflect the valuation of freedom in the social and political sphere, rather than in the economic dimension.

Selfdetermination

Individualistic traits are further reflected by values of SELFDETERMINATION, or self-efficacy. Following Bandura (1977), self-efficacy is the extent or strength of one's belief in one's own ability to complete tasks and reach goals. Closely related is Rotter's (1966) notion of internal vs. external locus of control, which refers to the degree to which individuals expect outcomes to be contingent on own behavior or characteristics, or as a function of pure chance or fate. Individuals who have an internal locus of control believe in their own ability to control their life course. They interpret personal choices as the main cause of individual success or failure. As one of the first, Feldman (1988) argues that 'economic individualism', measured by the belief that people should get ahead on hard work, is related to a less interventionist attitude. Feldman and Zaller (1992) find that so-defined individualistic values provide a basis for welfare state

7 Besides 'obedience' and 'independence', the list includes 'good manners', 'hard work', 'feeling of responsibility', 'imagination', 'tolerance and respect for other people', 'thrift saving money and things', 'determination and perseverance', 'religious faith', and 'unselfishness'.

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critique. Most people seem to differentiate between incomes acquired effortless, or pure 'luck', and those acquired by personal 'effort'. This distinction matters for postures toward redistribution (Alesina and Angeletos, 2005; Bavetta and Navarra, 2012; Benabou and Tirole, 2006), and supposedly matters also for interventionist attitudes. According to D'Orlando *et al.* (2010), the belief of fatalism is linked to a stronger demand for job security from labor market institutions. Kouba and Pitlik (2014) find that people who interpret their life course as not being at their disposition, have a more positive attitude toward income equalization.

To measure SELFDETERMINATION, we again selected two items from the WVS/EVS database: First, LIFECONTROL is based on the survey question: 'Some people feel they have completely free choice and control over their lives, while other people feel that what they do has no real effect on what happens to them. Please use this scale [between] "none at all" and... "a great deal" to indicate how much freedom of choice and control you feel you have over the way your life turns out'. On a 1–10 scale, we coded LIFECONTROL as '1' if the respondent chose a score of 7, or higher, otherwise we assigned a '0'. Second, SUCCESS is based on a survey question whether hard work brings success or not, again coded on a 1–10 scale. SUCCESS gets assigned a '1', if the respective response was 4 or smaller, meaning that one believes in a positive relationship of effort and success. Accordingly, the compound indicator SELFDETERMINATION gets a value of '1' if (and only if) both LIFECONTROL and SUCCESS are assigned a '1', otherwise '0'. In comparison with SELFDIRECTION, we expect the values of SELFDETERMINATION to reflect individualism in the economic sphere, due to the focus on effort and achievement.

In an auxiliary principal component analysis, all four variables load on two distinctive factors with Eigenvalues > 1. NOOBEDIENCE and INDEPENDENCE load heavily on one factor, LIFECONTROL and SUCCESS on the other. From a purely statistical standpoint, it thus appears reasonable to construct two separate compound indicator variables.

Government intervention attitudes

Individual attitudes toward government intervention are also assessed by using WVS/EVS data from all survey waves since the 1990s,[8] where we focus on universal attitudes regarding the appropriate role of government. Responses to three distinct survey questions are used:

- Government responsibility: 'People should take more responsibility to provide for themselves vs. The government should take more responsibility to ensure that everyone is provided for'.
- State ownership: 'Private ownership of business should be increased vs. Government ownership of business should be increased'.

8 The respective survey questions were launched in the WVS in the early 1990s.

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- Competition attitudes: 'Competition is good. It stimulates people to work hard and develop new ideas vs. Competition is harmful. It brings out the worst in people'.

Original responses are Likert-scaled on a 1–10 point ladder. A principal component factor analysis over all available observations (across time and countries) confirms that the three variables load on a single principal factor (EV = 1.3), and can therefore be aggregated to a single measure. The resulting factor variable GOVINTERVENTION, with a mean of zero and standard deviation of one, is employed as dependent variable in the empirical analysis, where higher values indicate a more positive view of government intervention.

Trust in formal institutions

Institutional trust is derived from confidence data of the WVS/EVS dataset. Confidence measures fairly reflect institutional quality, as corruption, fraud, unlawful, and unethical behavior are clearly associated with an erosion of both, trust in state institutions (Clausen *et al.*, 2011; Grönlund and Setälä, 2012), and trust in major private companies (Shleifer, 2004).

To proxy for confidence in formal institutions, the compound variable STATECONFIDENCE employs information on trust in parliament, government, civil service, political parties, and the justice system by calculating the mean of the related confidence questions from the WVS.[9] All responses are re-coded to scores between 0 and 1, where higher values also indicate higher confidence. We further employ data on confidence in major companies (COMPANYCONFIDENCE), also re-coded to a 0–1 scale, as a proxy for trust in the private sector. The variable TRUSTDIFFERENCE denotes the difference between STATECONFIDENCE and COMPANYCONFIDENCE, lying in a range between −1 and +1. Values greater than zero indicate that respondents have more trust in government institutions than in private companies, while values smaller than zero indicate that respondents have more confidence in private companies than in government institutions.

4. Results of individual level estimates

Estimation approach

In this section, we estimate determinants of attitude formation at the individual level. To test Hypotheses 1 and 2, government intervention preferences (GOVINTERVENTION) of person i living in country j at time t are regressed on

9 The respective survey question is: "I am going to name a number of organisations. For each one, could you tell me how much confidence you have in them: is it a great deal of confidence, quite a lot of confidence, not very much confidence or none at all?" If the survey did not ask for a certain institution, we dropped it from calculation. As confidence in institutions is highly correlated, and a Principal Factor Analysis confirms that all variables score on a single factor, this appears to be justified. We only included observations when we have responses for at least three (out of five) institutions.

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individualistic values, confidence in state institutions and major companies, plus a set of individual level covariates (X_{ijt}):

$$\begin{aligned}&\text{GOVINTERVENTION}_{ijt}\\&\quad=\alpha_0+\alpha_1\text{INDIVIDUALISM}_{ijt}+\alpha_2\text{STATECONFIDENCE}_{ijt}\\&\qquad+\alpha_3\text{COMPANYCONFIDENCE}_{ijt}\ +\alpha_4X_{ijt}+\alpha_5Z_{jt}+\varepsilon_{ijt}.\end{aligned}\tag{1}$$

We expect coefficient α_1 of the individualism variables to be negative, whereas for STATECONFIDENCE we expect $\alpha_2 > 0$, and for COMPANYCONFIDENCE $\alpha_3 < 0$.

Individual covariates X include sex, age groups, household income (low and high income groups, middle income as reference group), educational status (low and high education, middle education as reference group), and employment status (self-employed, unemployed). We also include dummy variables for protestant, roman-catholic, and orthodox Christian denomination, recognizing the notion that economic views and personal characteristics are influenced by religious denomination (Chadi and Krapf, 2015). These covariates are included in all specifications.

Further individual controls are included in some specifications. SOCIALTRUST is a dummy variable that indicates generalized trust toward unknown and anonymous others. As explained in section 2, we expect people who trust others to also have a lower propensity to demand regulatory interventions. Moreover, we control for political ideology effects on interventionist attitudes by adding dummy variables for self-reported political left-wing or right-wing orientation (centrist as reference group). Leftist attitudes are frequently and very strongly associated with a pro-interventionist stance, but for right-wingers this is less clear. Provided that interventionist attitudes are closely related to trust and political orientation on a left-right scale, we gain additional confidence in our results, if the central variables of interest survive the introduction of both indicators.

To test Hypothesis 3, we further examine if the effects of individualistic traits on intervention attitudes are conditional on relative trust, by introducing an interaction variable of individualistic traits and institutional trust.

$$\begin{aligned}&\text{GOVINTERVENTION}_{ijt}\\&\quad=\beta_0+\beta_1\text{INDIVIDUALISM}_{ijt}+\beta_2\text{TRUSTDIFFERENCE}_{ijt}\\&\qquad+\beta_3(\text{INDIVIDUALISM}_{ijt}\times\text{TRUSTDIFFERENCE}_{ijt})+\beta_4X_{ijt}\\&\qquad+\beta_5Z_{jt}+\eta_{ijt}.\end{aligned}\tag{2}$$

Hence, the marginal conditional effect of INDIVIDUALISM is given by

$$\frac{\partial\text{GOVINTERVENTION}_{ijt}}{\partial\text{INDIVIDUALISM}_{ijt}}=\beta_1+\beta_3\times\text{TRUSTDIFFERENCE}_{ijt}.$$

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We expect the coefficient β_1 of the individualist cultural variable to show a negative sign, *if we do not control for the interaction effect*. This would indicate that people with more individualistic values are indeed more skeptical toward government interventions. On the other hand, coefficient β_2 is expected to be positive, *if we do not control for the interaction effect*, indicating that people who trust state actors more than major companies will prefer interventions. In case of individualistic cultural traits one would expect $\beta_3 > 0$, i.e., an individualistic prior against intervention is mitigated by a higher relative trust in state institutions.

We do not include specific country-level covariates in our estimations for two reasons. First, there are almost certainly countless idiosyncratic country-specific factors, which could impact on intervention preferences, and it is hardly possible to control for all of them. To account for this unobservable heterogeneity in the cross-country dimension, country fixed effects are recommended. However, if we include such country effects, we are running into the problem that for some variables of interest, such as democracy levels, there is only very little variation over time. Second, for some countries, we only have one observation, as they only took part in one survey wave. In this case, country-dummies absorb all cross-section information for economic and political variables such as GDP per capita, democracy, or policies at the time of the survey. For countries with two or more observations, a fixed effects within-transformation effectively changes the interpretation of the respective coefficients from a 'level perspective' to a 'change-over-time' perspective. Put differently, including covariates such as GDP per capita or democracy measures simultaneously with country fixed effects provides us information about the effects of *changes* in GDP or *changes* in political institutions, while we are interested in level effects. Moreover, there are probably additional country idiosyncrasies at certain points in time that influence responses, but which are impossible to account for. One may think of political scandals, or particular economic events, driving attitudes toward government intervention. To control for these unknown factors, we include country-year-effects Z_{jt}, which simultaneously account for all country-level aspects at the time the opinion survey was conducted.

Baseline results

Table 1 displays results of pooled OLS estimates. Standard errors are clustered at the country level to correct for the Moulton bias (Moulton, 1990). Robust *P*-values are reported in parentheses.

Before turning to our covariates of interest, we take a brief look at the control variables where we find the following: Women are more inclined to government intervention than men, in line with the well-known fact that they are more risk averse. While we never find age-related attitudes, unemployed people are more, and self-employed are less in favor of intervention. Roman Catholics and especially Protestants prefer less, while people with Orthodox Christian

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Table 1. Determinants of individual government intervention attitudes (individual base model)

Dependent variable govintervention	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SELFDIRECTION	− 0.052	− 0.052	− 0.050	− 0.052				
	(0.000)	(0.000)	(0.000)	(0.000)				
* TRUSTDIFFERENCE			0.105	0.094				
			(0.000)	(0.001)				
SELFDETERMINATION					− 0.331	− 0.335	− 0.334	− 0.325
					(0.000)	(0.000)	(0.000)	(0.000)
* TRUSTDIFFERENCE							0.035	0.044
							(0.173)	(0.152)
STATECONFIDENCE		0.186				0.274		
		(0.000)				(0.000)		
COMPANYCONFIDENCE		− 0.332				− 0.280		
		(0.000)				(0.000)		
TRUSTDIFFERENCE			0.249	0.260			0.265	0.273
			(0.000)	(0.000)			(0.000)	(0.000)
SOCIALTRUST				− 0.033				− 0.019
				(0.003)				(0.079)
LEFT ORIENTATION				0.182				0.177
				(0.000)				(0.000)
RIGHT ORIENTATION				− 0.126				− 0.075
				(0.000)				(0.002)
FEMALE	0.135	0.129	0.129	0.125	0.111	0.106	0.106	0.104
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
AGE1530	− 0.008	− 0.002	− 0.003	0.004	0.008	0.018	0.017	0.022
	(0.601)	(0.892)	(0.866)	(0.826)	(0.596)	(0.229)	(0.231)	(0.166)
AGE60PLUS	− 0.002	− 0.001	− 0.003	− 0.006	0.006	0.004	0.004	0.004
	(0.928)	(0.944)	(0.864)	(0.715)	(0.805)	(0.863)	(0.862)	(0.853)

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Table 1. Continued

Dependent variable govintervention	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SELFEMPLOYED	−0.115	−0.115	−0.113	−0.104	−0.090	−0.081	−0.081	−0.071
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)
UNEMPLOYED	0.087	0.086	0.089	0.077	0.060	0.059	0.059	0.047
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)
ROMANCATHOLIC	−0.060	−0.064	−0.068	−0.041	−0.044	−0.048	−0.048	−0.029
	(0.001)	(0.001)	(0.001)	(0.019)	(0.001)	(0.000)	(0.000)	(0.024)
PROTESTANT	−0.111	−0.112	−0.114	−0.098	−0.089	−0.089	−0.089	−0.084
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
ORTHODOX	0.064	0.066	0.066	0.087	0.070	0.078	0.078	0.090
	(0.019)	(0.017)	(0.019)	(0.003)	(0.004)	(0.004)	(0.004)	(0.001)
INCOME_LOW	0.114	0.108	0.109	0.101	0.100	0.098	0.098	0.091
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
INCOME_HIGH	−0.093	−0.077	−0.079	−0.068	−0.067	−0.061	−0.061	−0.055
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
EDUCATION_LOW	0.120	0.107	0.105	0.104	0.124	0.110	0.110	0.108
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
EDUCATION_HIGH	−0.134	−0.129	−0.130	−0.129	−0.111	−0.109	−0.109	−0.109
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
_CONS	−0.002	0.065	−0.002	−0.024	0.100	0.102	0.099	0.062
	(0.877)	(0.019)	(0.878)	(0.121)	(0.000)	(0.000)	(0.000)	(0.000)
N	309,557	243,713	243,713	193,518	198,389	176,727	176,727	140,167
countries	99	92	92	88	88	85	85	81
Adj. *R*-square	0.138	0.146	0.145	0.165	0.181	0.187	0.187	0.204
F-stat (model)	54.3	47.5	48.3	41.2	65.5	77.0	78.9	84.9

Pooled OLS with standard errors clustered at country level. Cluster-robust *P*-values reported below coefficients in parentheses. All estimates include fixed country-year dummies.

denomination prefer more intervention.[10] We also find significant negative effects of higher income and higher education, as compared to middle or low level income and education.

Turning to the variables of special interest, we observe the expected negative association of both SELFDIRECTION and SELFDETERMINATION with GOVINTERVENTION, in all specifications (Hypothesis 1). There is, however, a notable difference with respect to coefficient size, as SELFDETERMINATION is substantially stronger (−0.33, which is one-third of a standard deviation of GOVINTERVENTION) than SELFDIRECTION (−0.05, or 5% of a standard deviation of the dependent variable).

Results for STATECONFIDENCE and COMPANYCONFIDENCE in specifications (2) and (6) are stable and clear: The higher individual trust in state actors and the lower trust in major companies, the stronger are pro-interventionist attitudes. To calculate effects of individualism conditional on confidence in state and major companies, we use TRUSTDIFFERENCE in specifications (3) and (7). As expected, the 'base term' TRUSTDIFFERENCE and the interaction variable are both positive. However, it is well known that in models with interaction terms the total marginal effect that a variable exerts on the dependent variable consists of two parts: the coefficient on the interaction term multiplied by the interacting variable, as well as the coefficient on the individual variable of interest (Brambor *et al.*, 2006; de Haan *et al.* 2013). For easier interpretation, we prefer a graphical illustration of marginal effects.

Figure 1, based on (3), shows that at low levels of confidence in state actors and high confidence in companies, SELFDIRECTION is associated with a lower demand for interventions, while at high TRUSTDIFFERENCE levels it is even positively related to GOVINTERVENTION. What is important to take into account here is that, given our standard deviation of TRUSTDIFFERENCE, the region that we can safely make a claim about is roughly between −0.5 and 0.5. This means that at very low levels of confidence in state actors, and high confidence in companies, SELFDIRECTION is associated with a lower demand for government interventions, while the contrary situation of very high state confidence and low company confidence is probably driven by outliers and should not be overemphasized, as the effects are not statistically significant in this region.

In Figure 2, based on (7), the interaction of SELFDETERMINATION with TRUSTDIFFERENCE is positive, but not significant. This suggests that the negative impact of SELFDETERMINATION on interventionist attitudes is prevalent regardless

10 Despite the fact that the Roman Catholic and Eastern Orthodox churches have a common origin and present an internally similar structure, both have been subject to very different influences that have resulted in substantial divergence (cf. Acemoglu and Robinson, 2012). As such, Harrison (2013) attributes the comparatively higher development of Catholic countries to a change in Catholic economic values under the impact of Protestantism, while Orthodox Christianity was largely isolated from this development. Relatedly, Acemoglu and Robinson (2012) argue that Communism was so successful in Eastern Europe, because it could build on the extensive authoritarian tradition of the Orthodox Church.

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Figure 1. Marginal effects of SELFDIRECTION on government intervention attitudes.

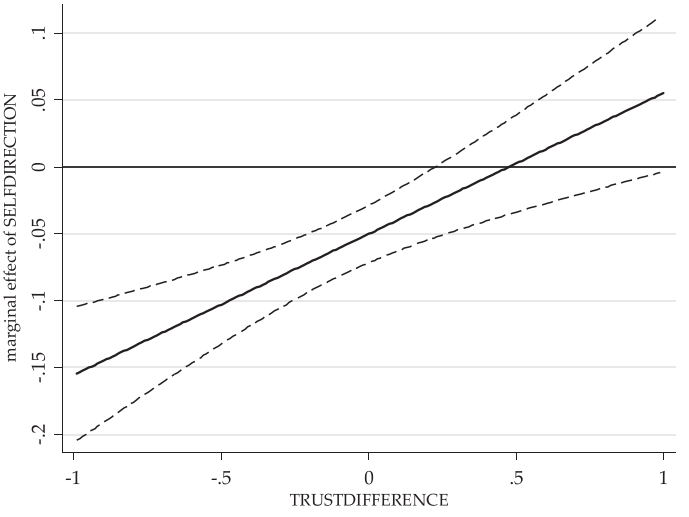
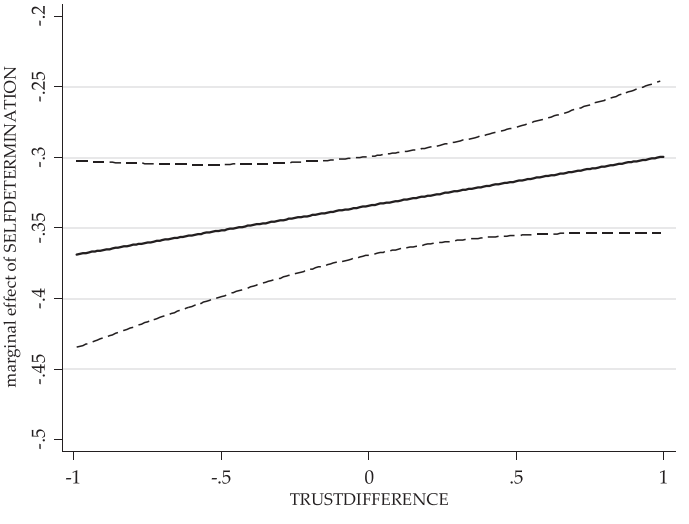


Figure 2. Marginal effects of SELFDETERMINATION on government intervention attitudes.



whether trust in state institutions is low and/or confidence in major companies is high, or not. The respective marginal effect is around −0.35 in the relevant regions of TRUSTDIFFERENCE.

An important question raised by our results is why the association of SELFDIRECTION with GOVINTERVENTION is mediated by TRUSTDIFFERENCE, while the association of SELFDETERMINATION and GOVINTERVENTION is not? A possible answer might be that absence of SELFDIRECTION (i.e. social individualism) reflects

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a personally more coercive environment. If individuals value obedience and reject independence they systematically support the view that decision-making capabilities in important matters of life should be delegated to a higher authority. Hence, changes in SELFDIRECTION views of such individuals and their impact on attitudes toward GOVINTERVENTION will greatly depend on how these people perceive authority of the state and major companies, as either positive or negative. In turn, neither the normative belief that hard work should bring success, nor the feeling of being in control of one's own life have a lot to do with personal views on authority. Therefore, SELFDETERMINATION values and its association with attitudes toward GOVINTERVENTION are not mitigated by personal views on governmental trust as compared to confidence in companies, and the legitimacy of its authority.

In specifications (4) and (8), we add controls for ideological orientation and social trust, as a kind of sensitivity test. As expected, political left orientation is positively related to intervention attitudes. The coefficient is rather strong (+0.18). Right-leaning people have a negative view of intervention (−0.13 in specification (4) and −0.08 in (8)) as compared to centrists. SOCIALTRUST has the expected negative sign, but the coefficient is small. Most importantly, including these control variables does not change previous results.

In further tests, we checked robustness for the several sub-components of individualistic traits and controls.[11] The two components of SELFDIRECTION, NOOBEDIENCE, and INDEPENDENCE, behave exactly as the compound variable. Isolated effects are negative and weak; interaction with TRUSTDIFFERENCE is positive and significant. The size of the effects is also similar to SELFDIRECTION. We find negative effects of individualistic traits that disappear slowly when people have higher trust in state authorities as compared to major companies. Regarding the components of SELFDETERMINATION, our general results are confirmed in separate regressions of GOVINTERVENTION on LIFECONTROL and SUCCESS. The negative signs of both components are much stronger than for SELFDIRECTION components. However, this exercise reveals that LIFECONTROL is weakly conditional on TRUSTDIFFERENCE, while this is not the case for SUCCESS.

Estimating the country-year group level effects

Concerns might be raised about potential endogeneity of interventionist attitudes and individualistic values. One may certainly argue that all types of cultural values and interventionist attitudes are driven by an unknown factor, such as wealth or per capita income, reflecting the notion that cultural change is ultimately driven by changes in living standards. In essence, this reflects a debate summarized by Paldam and Gundlach (2008) on the two basic views that link institutional development and long run growth: One strand of literature sees development as a process where steady economic growth causes transitions of

11 All results are available from the authors upon request.

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all institutions, the other understands an exogenous selection of institutions as a driver of development. While our paper would be part of the latter notion, this does not mean that we can rule out the existence of the first, nor is this in any way desirable. Overall, Paldam and Gundlach (2008) demonstrate convincingly that neither view can be proven to be right or wrong with available data or empirical techniques, and conclude that both views tell us important details about the complex process of development.

To get at least an idea of some of the main country level factors, we proceed by estimating

$$\widehat{Z_{jt}} = \gamma_0 + \gamma_1 \Gamma_{jt-1} + \delta_t + \in_{jt}, \tag{3}$$

where $\widehat{Z_{jt}}$ are estimated country-year fixed effects from (2), and Γ_{jt-1} is a vector of country-year-level variables, lagged by one year. $\widehat{Z_{jt}}$ are 'unexplained' group effects adjusted for differences in individual level variables, including individualistic traits. δ_t denote time effects to account for unobserved overall heterogeneity. Following Angrist and Pischke (2008) group effects are estimated by WLS. We confine the exercise to three covariates of major interest:

(1) GDP PER CAPITA to account for Wagner's Law effects of higher nation's wealth (Bird, 1971; Lamartina and Zaghini, 2011). GDP data are from the World Development indicators data base (in 10,000 constant 2005 US-$).
(2) An indicator of DEMOCRACY from Freedom House (2016) to account for democratic versus autocratic structures.[12] One may expect that in democratic regimes voters expect more interventions from their government; however, in less democratic regimes, we might observe an underprovision of public goods and people therefore are inclined to demand more services.
(3) An indicator for actual government intervention. We use the Economic Freedom of the World summary index score (Gwartney *et al.*, 2016) to measure the overall market-orientation of a country's policies (EFWINDEX).[13] The idea is that if we already observe substantial market-orientation of policies, people may ceteris paribus demand less additional liberalization.

Table 2 shows results of WLS estimates of country-year group level effects of individualistic traits. The country-year averages ($\widehat{Z_{jt}}$) FE_SELFDIRECTION and FE_SELFDETERMINATION are calculated from the individual estimation equations (3) and (7) in Table 1. GDP PER CAPITA is the only variable that is statistically significant in all specifications. In contrast to expectations based on Wagner's

12 We employ the political rights index concerned with Electoral Process, Political Pluralism and Participation, and Functioning of Government. Original data are re-coded to a 0–10 scale, higher values indicating more rights.

13 The Economic Freedom of the World index is published annually by the Canadian Fraser Institute and includes 43 specific components in five areas, all measured on a 0 to 10 scale, reflecting the degree to which economic institutions and policies correspond to free market principles. A '0' represents the least free and '10' the most free. Missing scores in some WVS/EVS survey years between 1990 and 1995, or 1995 and 2000 were replaced by linearly interpolated values.

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Table 2. Country-level determinants of government intervention attitudes

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
DEPENDENT VARIABLE	FE_SELFDIRECTION				FE_SELFDETERMINATION			
GDP PER CAPITA	− 0.062			− 0.044	− 0.069			− 0.074
	[− 0.324]			[− 0.242]	[− 0.314]			[− 0.360]
	(0.000)			(0.011)	(0.001)			(0.005)
DEMOCRACY		− 0.020		0.008		− 0.013		0.015
		[− 0.210]		[0.074]		[− 0.139]		[0.148]
		(0.028)		(0.467)		(0.184)		(0.152)
EFWINDEX			− 0.091	− 0.057			− 0.067	− 0.017
			[− 0.315]	[− 0.194]			[− 0.236]	[− 0.059]
			(0.001)	(0.074)			(0.022)	(0.657)
N	215	215	208	198	156	156	151	141
countries	91	90	89	86	84	83	81	78
Adj. *R*-square	0.319	0.208	0.329	0.337	0.400	0.262	0.385	0.417
F-stat (model)	15.0	10.5	14.5	11.7	15.8	10.7	14.6	11.3

Pooled WLS with standard errors clustered at country level. Standardized (beta)-coefficients in brackets. Cluster-robust *P*-values in parentheses, reported below beta-coefficients. All estimates include time period dummies.

Law, the coefficient is negative, indicating that we have a more positive view of government interventions in countries at lower levels of development. Effects are quite strong, as indicated by a standardized beta-coefficient around −0.3.

DEMOCRACY shows a negative sign, meaning that higher levels of political freedom are associated with a less positive view of government interventions. The effect is substantially weaker than for GDP PER CAPITA and significant in only one specification.

The economic freedom measure EFWINDEX also has a negative sign, which implies that economic freedom is associated with a reduced demand for government intervention. The effects are significant at a 5%-level when we do not control for the two other variables, but it turns insignificant when GDP PER CAPITA and DEMOCRACY are included.

5. Conclusions

Several culture-based explanations of successful development claim that individualistic values provide a more favorable background for promoting the wealth of nations, and are conducive to the establishment of 'good' institutions and policies in line with rule of law and economic freedom. A potential channel through which these values may influence formal settings is a pre-disposition to a market-friendly mind-set. In the present paper, we investigate the relationship of values associated with individualism and personal attitudes toward government intervention. In particular, we consider ideas of autonomous and independent decision-making (self-direction values), and a belief in the relevance of own efforts and control for personal success (self-determination values) as interrelated but conceptually separable facets of individualistic values.

Results indicate that all individualistic traits are associated negatively with government intervention attitudes. The effects of self-direction values on intervention preferences are nevertheless weaker than the effects of self-determination. This might be due to the fact that self-determination values are more directly linked to personal economic interests that can be affected by government intervention. For example, high taxes that deprive the individual of enjoying the benefits of an elevated income generated by effort would be perceived to be especially unfair if this individual believes in hard work as a driver of personal success. Likewise, interventions are perceived as particularly negative by those who have a strong belief in self-determination, as economic regulation will ultimately shift control from the individual in the hands of government. In turn, self-direction values probably have more of a bearing on the political sphere, where they are likely to be more strongly associated with the defense of free speech and other negative rights, rather than being related to non-interventionist values of government in the economy. Effects of self-direction on intervention preferences are mitigated through higher confidence in state actors and lower confidence in major companies, while that is not the case for self-determination values.

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Some caveats must be kept in mind when interpreting the results of our exercise, however. First, although there are good reasons to assume that the causal relationship goes from fundamental values to attitudes, it cannot completely be excluded that the link between the two is affected by endogeneity. Here, a major problem of all such investigations is that deeper (i.e. biological) personality aspects could very well be the ultimate drivers of values and attitudes, but these cannot easily be quantified (Haidt, 2012). For the time being, the present study shows the strong clustering of individualistic values and government intervention attitudes at the individual level. Second, our results do not imply that individualistic values are 'superior' in that they automatically cause 'better' institutional quality. Put into perspective, the relationship between informal and formal institutions is a much-too-complex phenomenon, so as to be reduced to a simple bilateral relationship, or to interpret cultural values as a toolkit for producing superior economic outcomes (Lavoie and Chamlee-Wright, 2000; Storr, 2013). Our exercise also does not aim to predict a certain institutional configuration. Nonetheless, according to our results, by framing the search process for improvements, individualistic values may be an important element of cultural preconditions that allow formal institutions conducive to markets to be built easier, and with lower reform costs to society.

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References

Acemoglu, D. and J. Robinson (2012), *Why Nations Fail: The Origins of Power, Prosperity, and Poverty*, New York, NY: Random House.

Aghion, P., Y. Algan, P. Cahuc and A. Shleifer (2010), 'Regulation and Distrust', *Quarterly Journal of Economics*, **125**(3): 1015–1049.

Alesina, A. and G. M. Angeletos (2005), 'Fairness and Redistribution', *American Economic Review*, **95**(4): 960–980.

Alesina, A. and P. Giuliano (2015), 'Culture and Institutions', *Journal of Economic Literature*, **53**(4): 898–944.

Algan, Y. and P. Cahuc (2013), 'Trust and Growth', *Annual Review of Economics*, **5**: 521–549.

Angrist, J.D. and J.S. Pischke (2008). *Mostly harmless econometrics, An empiricist's companion*. Princeton, NJ: Princeton University Press.

Ball, R. (2001), 'Individualism, Collectivism, and Economic Development', *The ANNALS of the American Academy of Political and Social Science*, **573**: 57–84(2).

https://doi.org/10.1017/S1744137416000564 Published online by Cambridge University Press

Bandura, A. (1977), 'Self-Efficacy: Toward a Unifying Theory of Behavioral Change', *Psychological Review*, **84**(2): 191–215.
Barker, D. C. and C. J. Carman (2000), 'The Spirit of Capitalism? Religious Doctrine, Values, and Economic Attitude Constructs', *Political Behavior*, **22**(1): 1–27.
Bavetta, S. and P. Navarra (2012), 'Freedom and Redistribution', *Rivista di Politica Economica*, **3**: 29–49.
Bénabou, R. and J. Tirole (2006), 'Belief in a Just World and Redistributive Politics', *Quarterly Journal of Economics*, **121**(2): 699–746.
Berggren, N. and M. Elinder (2012), 'Is Tolerance good or bad for Growth?', *Public Choice*, **150**(1): 283–308.
Bird, R. M. (1971), 'Wagner's Law of expanding state Activity', *Public Finance* **26**(1): 1–26.
Bjørnskov, C. (2010), 'How Does Social Trust Lead to Better Governance? An Attempt to Separate Electoral and Bureaucratic Mechanisms', *Public Choice*, **144**(1): 323–346.
Bjørnskov, C. (2012), 'How Does Social Trust Affect Economic Growth?', *Southern Economic Journal*, **78**(4): 1346–1368.
Bjørnskov, C. and M. Paldam (2012), 'The Spirits of Capitalism and Socialism. A cross-country Study of Ideology', *Public Choice*, **150**(3): 469–498.
Boettke, P.J., C.J. Coyne and P.T. Leeson (2008). 'Institutional Stickiness and the New Development Economics', *The American Journal of Economics and Sociology*, **67**(2): 331–358.
Boix, C. and D. N. Posner (1998), 'Social Capital: Explaining its Origins and Effects on Government Performance', *British Journal of Political Science*, **28**(4): 686–695.
Brambor, T., W. R. Clark and M. Golder (2006), 'Understanding Interaction Models: Improving Empirical Analyses', *Political Analysis*, **14**(1): 63–82.
Chadi, A. and M. Krapf (2015), 'The Protestant Fiscal Ethic: Religious Confession and Euro Skepticism in Germany', IAAEU Discussion Paper Series in Economics No. 07/2015.
Clausen, B., A. Kraay and Z. Nyiri (2011), 'Corruption and Confidence in Public Institutions: Evidence from a Global Survey', *World Bank Economic Review*, **25**(2): 212–249.
D'Orlando, F., F. Ferrante and G. Ruiu (2010), 'Culturally-based Beliefs and Labour Market Institutions', Dipartimento di Scienze Economiche Università di Cassino Working Paper, 2/2010.
Daniele, G. and B. Geys (2015), 'Interpersonal Trust and Welfare State support', *European Journal of Political Economy*, **39**: 1–12.
de Haan, J., R. Jong-A-Pin and J. Mierau (2013). Do budgetary institutions mitigate the common pool problem? New empirical evidence for the EU, Public Choice, **156**(3), 423–441.
Davis, L. (2016), 'Individualism and Economic Development: Evidence from Rainfall Data', *Kyklos*, **69**(3): 426–470.
Dimitrova-Grajzl, V.P, P. Grajzl and A.J Guse (2011). 'Trust, Perceptions of Corruption, and Demand for Regulation: Evidence from Post-Socialist Countries', *Journal of Socio-Economics*, **41**(3): 292–303.
Feldman, S. (1988), 'Structure and Consistency in public Opinion: The Role of core Beliefs and Values', *American Journal of Political Science*, **32**(2): 416–440.
Feldman, S. and J. Zaller (1992). The Political Culture of Ambivalence: Ideological Responses to the Welfare State, *American Journal of Political Science*, **36**(1): 268–307.
Fevre, R. (2016), *Individualism and Inequality: The Future of Work and Politics*, Cheltenham, UK: Edward Elgar.
Freedom House (2016), *Freedom in the World Report 2016. Anxious Dictators, Wavering Democracies: Global Freedom under Pressure*, Washington D.C.: Freedom House.

https://doi.org/10.1017/S1744137416000564 Published online by Cambridge University Press

Gorodnichenko, Y. and G. Roland (2011), 'Which Dimensions of Culture Matter for Long-Run Growth?', *American Economic Review: Papers & Proceedings*, **101**(3): 492–498.

Gorodnichenko, Y. and G. Roland (2011b), 'Culture, Institutions and the Wealth of Nations', University of California Berkeley Working Paper, 01/2011.

Gorodnichenko, Y. and G. Roland (2015a), 'Understanding the Individualism-Collectivism Cleavage and its Effects: Lessons from Cultural Psychology', XVIth Congress of the International Economic Association.

Gorodnichenko, Y. and G. Roland (2015b), 'Culture, Institutions, and Democratization', NBER Working Paper 04/2015.

Greif, A. (1994), 'Cultural Beliefs and the Organization of Society: A Historical and Theoretical Reflection on Collectivist and Individualist Societies', *Journal of Political Economy*, **102**(5): 912–950.

Grönlund, K. and M. Setälä (2012), 'In Honest Officials We Trust: Institutional Confidence in Europe', *American Review of Public Administration*, **42**(5): 523–542.

Guiso, L., P. Sapienza and L. Zingales (2006), 'Does Culture Affect Economic Outcomes?', *Journal of Economic Perspectives*, **20**(2): 23–48.

Gwartney, J., R. Lawson and J. Hall (2016), *Economic Freedom of the World. 2016 Annual Report*, Vancouver, CA: The Fraser Institute.

Haidt, J. (2012), *The Righteous Mind: Why good People are divided by Politics and Religion*, New York, NY: Random House.

Hansen, C. W. (2013), 'Economic Growth and Individualism: The Role of Informal Institutions', *Economics Letters*, **118**(2): 378–380.

Harrison, L. E. (2013), *Jews, Confucians, and Protestants: Cultural Capital and the End of Multiculturalism*, Lanham, MA: Rowman & Littlefield.

Hofstede, G. (2011), 'Dimensionalizing Cultures: The Hofstede Model in Context', *Online Readings in Psychology and Culture*, **2**(1): 1–26.

Inglehart, R. and C. Welzel (2010), 'Changing Mass Priorities: The Link between Modernization and Democracy', *Perspectives on Politics*, **8**: 551–567.

Jenssen, M. C. W. and E. Mendys-Kamphorst (2004), 'The Price of a Price: On the Crowding out and in of Social Norms', *Journal of Economic Behavior and Organization*, **55**(3): 377–395.

Jottier, D. and B. Heyndels (2012), 'Does Social Capital increase Political Accountability? An empirical test for Flemish municipalities', *Public Choice*, **150**(3): 731–744.

Kouba, L. and H. Pitlik (2014). 'I wanna live my life: Locus of Control and Support for the Welfare State', MENDELU Working Papers in Business and Economics, 07/2014.

Kovac, M. and R. Spruk (2016), 'Institutional Development, Transaction Costs and Economic Growth: Evidence from a Cross-country Investigation', *Journal of Institutional Economics*, **12**(1): 129–159.

Kyriacou, A. (2016). 'Individualism–Collectivism, Governance and Economic Development', *European Journal of Political Economy*, **42**: 91–104.

Lamartina, S. and A. Zaghini (2011), 'Increasing Public Expenditure: Wagner's Law in OECD Countries', *German Economic Review*, **12**(2): 149–164.

Lavoie, D. and E. Chamlee-Wright (2000), *Culture and Enterprise: The Development, Representation and Morality of Business*, London, UK: Routledge.

Licht, A. N., C. Goldschmidt and S. H. Schwartz (2005), 'Culture, Law, and Corporate Governance', *International Review of Law and Economics*, **25**(2): 229–255.

https://doi.org/10.1017/S1744137416000564 Published online by Cambridge University Press

Licht, A. N., C. Goldschmidt and S. H. Schwartz (2007), 'Culture Rules: The Foundations of the Rule of Law and Other Norms of Governance', *Journal of Comparative Economics*, **35**(4): 659–688.

Maseland, R. and A. van Hoorn (2011), 'Why Muslims like Democracy yet have so little of it', *Public Choice*, **147**(3): 481–496.

Mathers, R. L. and C. R. Williamson (2011), 'Cultural Context: Explaining the Productivity of Capitalism', *Kyklos*, **64**(2): 231–252.

Mokyr, J. (1990). *The Lever of Riches: Technological Creativity and Economic Progress*, Oxford, UK: Oxford University Press.

Moulton, B. (1990), 'An Illustration of a Pitfall in Estimating the Effects of Aggregate Variables in Micro Units', *Review of Economics and Statistics*, **72**(2): 334–338.

Nannestad, P. (2008), 'What have we Learned About Generalized Trust, if Anything?', *Annual Review of Political Science*, **11**: 413–436.

Oyserman, D. and S. W. Lee (2008), 'Does Culture Influence What and How we Think? Effects of Priming Individualism and Collectivism', *Psychological Bulletin*, **134**(2): 311–342.

Paldam, M. and E. Gundlach (2008), 'Two Views on Institutions and Development: The Grand Transition vs the Primacy of Institutions', *Kyklos*, **61**(1): 65–100.

Pitlik, H. and L. Kouba (2015), 'Does Social Distrust always Lead to a Stronger Support for Government Intervention?', *Public Choice*, **163**(3): 355–377.

Putnam, R. (1993), *Making Democracy Work: Civic Traditions in Modern Italy*, Princeton, NY: Princeton University Press.

Robbins, B. G. (2012), 'A Blessing and a Curse? Political Institutions in the Growth and Decay of Generalized Trust: A Cross-National Panel Analysis, 1980–2009', *PLOS ONE*, April 25, DOI: 10.1371/journal.pone.0035120.

Rode, M. and S. Coll (2012), 'Economic Freedom and Growth. Which Policies matter the most?', *Constitutional Political Economy*, **23**(2): 95–133.

Rotter, J. B. (1966), 'Generalized Expectancies for Internal versus External Control of Reinforcement', *Psychological Monographs: General and Applied*, **80**(1): 1–28.

Schwartz, S. H. (2004), 'Mapping and Interpreting Cultural Differences around the World', in H. Vinken, J. Soeters and P. Ester (eds.), *Comparing Cultures, Dimensions of Culture in a Comparative Perspective*, Leiden: Brill, pp. 43–73.

Shleifer, A. (2004), 'Does Competition Destroy Ethical Behavior?', *American Economic Review*, **94**(2): 414–418.

Svallfors, S. (2013), 'Government Quality, Egalitarianism, and Attitudes to Taxes and Social Spending: A European Comparison', *European Political Science Review*, **5**(3): 363–380.

Storr, V. H. (2013). *Understanding the Culture of Markets*, London, UK: Routledge.

Swank, D. (1996), 'Culture, Institutions, and Economic Growth: Theory, Recent Evidence, and the Role of Communitarian Polities', *American Journal of Political Science*, **40**(3): 660–679.

Tabellini, G. (2008), 'Institutions and Culture', *Journal of the European Economic Association*, **6**(2–3): 255–294.

Tabellini, G. (2010), 'Culture and Institutions: Economic Development in the Regions of Europe', *Journal of the European Economic Association*, **8**(4): 677–716.

Tirole, J. (1988). *The Theory of Industrial Organization*. Cambridge, MA: MIT Press.

van Hoorn, A. (2014), 'Individualism and the Cultural Roots of Management Practices', *Journal of Economic Behavior & Organization*, **99**: 53–68.

https://doi.org/10.1017/S1744137416000564 Published online by Cambridge University Press

van Hoorn, A. (2015), 'Individualist-Collectivist Culture and Trust Radius: A Multilevel Approach', *Journal of Cross-Cultural Psychology*, **46**(2): 269–276.
Weber, M. (1930), *The Protestant Ethic and the Rise of Capitalism*, Crows Nest, AU: Allen and Unwin.
Williamson, C. R. (2009), 'Informal Institutions Rule: Institutional Arrangements and Economic Performance', *Public Choice*, **139**(3): 371–387.
Williamson, C. R. and C. B. Kerekes (2011), 'Securing Private Property: The Relative Importance of Formal versus Informal Institutions', *Journal of Law and Economics*, **54**(3): 537–572.
Williamson, O. E. (2000), 'The New Institutional Economics: Taking Stock, Looking Ahead', *Journal of Economic Literature*, **38**(3): 595–613.
Yoo, D. and R. H. Steckel (2016), 'Property Rights and Economic Development: The Legacy of Japanese colonial Institutions', *Journal of Institutional Economics*, **12**(3): 623–650.
Zak, P. J. and S. Knack (2001), 'Trust and Growth', *The Economic Journal*, **111**(470): 295–321.

Appendix

Table A1. Summary statistics (individual level)

Variable	Obs	Mean	Std. Dev.	Min	Max
GOVINTERVENTION	313099	−0.015	1.001	−2.09	2.88
SELFDIRECTION	309557	0.370	0.483	0	1
SELFDETERMATION	198389	0.370	0.483	0	1
NOOBEDIENCE	309685	0.648	0.477	0	1
INDEPENDENCE	310223	0.498	0.500	0	1
LIFECONTROL	309190	0.612	0.487	0	1
SUCCESS	201695	0.564	0.496	0	1
STATECONFIDENE	260825	0.461	0.233	0	1
COMPANYCONFIDENCE	288650	0.467	0.279	0	1
TRUSTDIFFERENCE	246764	−0.004	0.269	−1	1
SOCIALTRUST	301004	0.282	0.450	0	1
FEMALE	313099	0.512	0.500	0	1
AGE1530	313099	0.300	0.458	0	1
AGE60PLUS	313099	0.164	0.370	0	1
SELFEMPLOYED	313099	0.095	0.294	0	1
UNEMPLOYED	313099	0.088	0.284	0	1
ROMANCATHOLIC	313099	0.272	0.445	0	1
PROTESTANT	313099	0.125	0.330	0	1
ORTHODOX	313099	0.121	0.326	0	1
INCOME_LOW	313099	0.252	0.434	0	1
INCOME_HIGH	313099	0.399	0.490	0	1
EDUCATION_LOW	313099	0.167	0.373	0	1
EDUCATION_HIGH	313099	0.326	0.469	0	1
LEFTDUM	251481	0.253	0.434	0	1
RIGHTDUM	251481	0.314	0.464	0	1

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