Wiepking, Pamala, Femida Handy, Sohyun Park, Michaela Neumayr, René Bekkers, Beth Breeze, Chris Einolf, Zbignev Gricevic, Wendy Scaife, Steffen Bethmann, Oonagh B. Breen, Chulhee Kang, Hagai Katz, Irina Krasnopolskaya, Michael D. Layton, Irina Mersiyanova, Kuang-Ta Lo, Una Osili, Anne Birgitta Pessi, Karl-Henrik Sivesind, Arjen de Wit, Naoto Yamauchi, Yongzheng Yang. (2021). Global philanthropy: Does institutional context matter for charitable giving. *Accepted for publication in NVSQ*.

Online Appendices

Appendix A includes a description of the individual datasets included in the International Individual Philanthropy Database (IIPD, 2016).

<<Insert Appendix A about here>>

Appendix B includes the correlations between contextual measures of institutionalization.

<<Insert Appendix B about here>>

Appendices C through F include robustness tests to investigate potential bias in the reported result resulting from our data.

Rationale behind robustness tests and results of robustness tests

In order to investigate the potential bias from the low number of countries included in our study, we used restricted maximum likelihood (REML) estimation in the analyses of amounts donated, as suggested by Elff et al. (2016). Appendix C includes the results of a REML mixed-effects multilevel linear regression analyses of the natural log of the amount donated to charitable organizations.¹ Comparing the results of the REML estimation in Appendix C and the maximum likelihood (ML) estimation in Table 8, we do not find significantly different results.

<<Insert Appendix C about here>>

Still, we feel that the low number and especially selective sample of countries included in this study may be driving the results. Therefore, we also conducted the analyses displayed in Table 7 and 8 without the two countries that appeared most influential from bivariate scatterplots, Germany and Japan. The results of these analyses are displayed in Appendices D1 and D2, and show that leaving out Germany and Japan, the results are a little more in line with what we expected from our hypotheses. Without Japan and Germany, the relationship between number of nonprofit programs and likelihood of giving and amounts donated is positive as expected, and people living in an established fundraising regime are more likely to give and give higher amounts than those living in an evident fundraising regime.²

<<Insert Appendices D1 and D2 about here>>

In order to control for the level of economic development in a country, which can also drive philanthropic giving and factors of institutionalization, Appendices E1 and E2 control for per capita Gross Net Income, Purchasing Power Parity (Current international dollars) in 2003 (divided by 1,000), which precedes the collection of giving data across all countries (Worldbank, 2019).³ The results of the multilevel analyses including per capita GNI do not differ from the results in Tables 7 and 8, indicating that level of economic development does not influence the relationship between our measures of institutionalization and philanthropic giving. Also, we find no relationship between level of economic development and likelihood of giving and amounts donated.

<<Insert Appendices E1 and E2 about here>>

Finally, Appendix F shows the results for maximum likelihood mixed-effects multilevel logistic and linear regression analyses including all contextual variables simultaneously. Because of the high correlation between the different measures of institutionalization, and because of the low number of countries included in the study, these models including six contextual factors are likely not very robust, the very strong estimated Odds Ratio's and coefficients are also an indication for this.

<<Insert Appendix F about here>>

Endnotes

¹ In Stata 15 it is not possible conduct multilevel mixed-effects logistic regression analyses with REML.

² Excluding one of the nineteen countries each time, we found that excluding most of the countries resulted in similar effect sizes. The main exception is the United Kingdom. When we exclude the United Kingdom from the analyses, the effect sizes are comparable with those reported with Tables 7 and 8, but the relationships are not significant. When excluding the Netherlands, the relationship between the likelihood of giving and established fundraising regime and evident fundraising regime is not significantly different. Excluding either Germany, Switzerland or Japan resulted in a positive significant relationship between the number of nonprofit education programs and level of giving (at $p \le .05$). Overall, our findings appear robust against the exclusion of one country, although in the case of the United Kingdom caution is warranted.

³ The Worldbank's description of this measure: "GNI per capita based on purchasing power parity (PPP). PPP GNI is gross national income (GNI) converted to international dollars using purchasing power parity rates. An international dollar has the same purchasing power over GNI as a U.S. dollar has in the United States. GNI is the sum of value added by all resident producers plus any product taxes (less subsidies) not included in the valuation of output plus net receipts of primary income (compensation of employees and property income) from abroad. Data are in current international dollars based on the 2011 ICP round." (Worldbank, 2019). The correlations between the different measures of institutionalization and per capita GNI is displayed in Appendix B. Typically, a higher level of economic development corresponds with higher levels of institutionalization.

Appendix A. International Individual Philanthropy Database (IIPD)

Individual International Philanthropy Database

The Individual International Philanthropy Database is a harmonized dataset composed of microdata from 19 countries: Australia, France, United Kingdom, Netherlands, United States of America, Canada, Norway, Finland, Mexico, South Korea, Japan, Austria, Indonesia, Taiwan, Ireland, Israel, Russia, Switzerland and Germany. The datasets were collected between 2004 and 2010 (see Table 1).

Country	Dataset	Acronym	Year	Research study	Wave	Total waves ¹
Australia	Giving Australia, Individual and Household Survey 2005	-	2005	Cross-sectional (one-off study)	-	-
France	The Giving France Study	-	2009	One-off study	-	-
United Kingdom	Helping Out		2006- 2008	One-off study	-	-
Netherlands	Giving in the Netherlands Panel Study 2005	GINPS 2005	2005	Longitudinal	2 nd wave	4
United States	Philanthropy Panel Study	PPS	2004	Longitudinal	3 rd wave	5
Canada	Canada Survey of Giving, Volunteering, and Participating	CSGVP	2004	Cross-sectional	3 rd wave	5
Norway	Population survey on giving and volunteering Statistics Norway	-	2009	Cross-sectional (one-off study)	-	-
Finland	Auttaminen, RAY	-	2008	Cross-sectional (one-off study)	-	-
Mexico	National Survey on Philanthropy and Civil Society	ENAFI	2005	Cross-sectional	1 st wave	2

South Korea	Giving Korea 2006	-	2006	Cross-sectional	3 rd wave	Unknown
Japan	Japan Giving and Volunteering Study	JGVS	2009	Longitudinal	1 st wave	Unknown
Austria	Findings on giving in Austria from a representative population survey		2008	Cross-sectional	3 rd wave	4
Indonesia	Indonesia Family Life Survey	IFLS4	2007	Longitudinal	4 th wave	4
Taiwan	Taiwan Social Change Survey'	TSCS	2009	Cross sectional	5 th wave (from phase 5)	Unknown
Ireland	Irish Household Budget Survey	HBS	2005	Cross sectional	4 th wave	5
Israel	Giving, Volunteering and Organ Donations in Israel,	GiVOD- IL	2009	Longitudinal	3 rd wave	3
Russia	Population survey Centre for Studies of Civil Society and the Nonprofit Sector NRU HSE	-	2010	One-off study	-	-
Germany	German Socio Economic Panel Study	G-SOEP	2010	Longitudinal	27 th wave	30
Switzerland	Freiwilligen- monitor	-	2006	Cross sectional	1 st wave	3

¹ Current number of waves refers to the number of waves conducted before May 2014. *Source:* Wiepking & Handy (2016).

Sample composition (overview)

Below an overview is given of the sample composition for every country (see Table 2).

Country	Number of cases	Response	Type of data	Weighting variable
Country	itumber of cases	rate	collection	weighting variable
Australia	N=6,209	40%	Telephone interview	Yes, based on age, gender
France	N=1,195	-	CASI	Yes based on age, gender, social class, region, and household size to make it representative of the French
United Kingdom	N=2,705	60%	САРІ	Yes, weighting to correct for bias due to sampling methods
Netherlands	N=1,367	79%	CASI	Yes, excluding the Protestant oversample
United States	N=7,251	-	CATI	Yes, weighted to adjust for the unequal probability of selection into the original 1968 low-income over- sample, the 1997 immigrant refresher, and attrition.
Canada	N= 20,832	-	CATI	Yes, based on age and province
Norway	N=1,937 (N=1,579 and N=359 respondents from Africa and Asia)	53% and 36%	Telephone interviews	Yes, a weighed-in sub-sample of 359 respondents from Africa and Asia
Finland	N=701	-	Telephone interviews	No
Mexico	N=2990	-	Face-to-face interviews	No
South Korea	N=1,005	-	-	No
Japan	N=5,121	-	-	No
Austria	N=1,019	-	Computer-assisted face-to-face interviews	Yes, based on age, sex, federal state, and size of municipality
Indonesia	N=12,692	-	-	No
Taiwan	N=1,927	43%	Face-to-face interviews	Yes
Ireland	N=6,884		www.ucd.ie/issda/	Yes, based on the CSO weighting system
Israel	N=1,498	52%	Telephone survey	No
Russia	N=41,500	-	Face to face interviews	No

Table 2Overview sample composition

Germany	N=25,456	-	Face-to-face interviews	Yes, applying frequency weights using the expansion factor
Switzerland	N=7,410	58.7	CATI	Yes, a post stratification weight variable that corrects for different selection probabilities in respect to cantons and household size. It also extrapolates the sample with respects to age, nationality, gender and education to the Swiss resident population parameters.

Source: Wiepking & Handy (2016).

A detailed sample composition is provided for every country in the IIPD Data documentation (Wiepking & Handy, 2016).

<u><i>Table 3</i></u> Country	Country specific information
Country	Country specific information
Australia	-
France	-
United Kingdom	 The number of non-donors in cidont and cadont did not match because of 6 very small donors (amount donated was rounded down to 0), we recoded these 6 cases donating virtually nothing to non-donors on cidont; The amount question was only asked for donors who donated during the previous four weeks, amounts donated were not asked to respondents that only donated over the course of last year, for which incidence was measured. Hence those not donating last four weeks, but donated last year (N=282) are missing (999999) on cadont. Amount donated was asked for past four weeks, and then multiplied by 13 to get the amount donated on a yearly basis.
Netherlands United States Canada Norway	- - Description weight variable Vekt 1 is used because there is an oversampled group of immigrants from Africa and Asia in the data set. With Vekt 1, they are weighted according to their share of the population.
Finland	Amount donated and income is based on categorical var, top category recoded as lowest boundary ("over 100 euros", coded as 100)

6

Mexico	Data submitted was automatically weighted, set weight off.
South Korea	Researchers have to mention that the Korean data is Giving Korea, constructed by the Beautiful Foundation in Korea.
Japan Austria Indonesia	Researchers wanting to use the Japanese data need to ask Naoto Yamauchi.
Taiwan	 Table 25.5 in Palgrave book (Tobit) is wrong, because of the coding error (999997 and 999998) were treated as amounts rather than missings: "1. Religious giving: 30 cases indicating "forgot", 7 cases indicating "refused"; 2. Secular donations: 15 cases indicating "forgot", 2 cases indicating "refused". Therefore, there are 37 cases with incorrect values of religious giving and 17 cases with incorrect values of secular giving, respectively. For total giving, the number of cases with incorrect value of total giving is 46 because eight cases have incorrect values for both religious and secular giving." Data included in the IIPD is corrected and correct.
Ireland	• age is measured in categories 10-20-30-40-50-60-70-80 converted to <35;36- 65;>65 using midpoints of original data, except for lowest category (=14) and highest (=80). Weight is absolute weight, but statistical software accounts for this.
Israel	Religion in Israel is different. recoded the Jewish, the Muslims and the Christians to "other", as we also do not know whether they are Orthodox or Roman Catholic (or Protestant). We made an exception and included the original religious affiliation variable with the data for Israel (treligion). we set Tromcat and tprot to 999999 as we do not know whether christians are roman catholic or protestant / Note the big outlier in amounts donated. The highest value on "tadont" is 5,868,622, which is a lot higher than the second highest value of 293,431, Trespnr=415 was extreme outlier, with donation of 5,868,622 US Dollar, while only 19 years old. It could always be a possibility that it is a correct donation, but following the advice of the Israeli authors, we have set the donation value for this respondent to "999999", missing.
Russia	Income in seven categories: below 172 US Dollar in 2012; $172 - 344$; $344 - 516$; 516 - 860; 860 - 1548; 1548 - 2064; over 2064 2012 US dollar. The only condition for using the data is to mention our Centre as an institution which elaborated the methodology and questionnaire for Russian data and conducted the data collection. The complete name of the Centre is The Center for Studies of Civil Society and the Nonprofit Sector, National Research University Higher School of Economics.

Germany	The religious affiliation variables "wromcat", "wprot" and "wothrel" are adopted from the 2007 wave of the survey The religious attendance variable "wrelatt" is adopted from the 2009 wave. The generalized social trust measure "wtrust" is adopted from the 2008 wave. Arjen de Wit and Marius Mews took a closer look at the weighting variable and found out that there is an independent sample in the data (in the SOEP documentation it is referred to as the 'Incentive Sample', which is included in the 'Innovation Sample' after 2012). These households distort the distribution and score 0 on the weighting variable. the ~2,000 respondents from the oversample are excluded in the data prepared for IIPD.
Switzerland	Only the post stratification weight is needed. The design weight weighs for selection probability after canton (state) and household size. The post stratification weight extrapolates the sample to be representative for the population as measured in the 2000 census and hast the design weight included. From the method report: (Um Stichprobenverzerrungen für Auswertungen zu korrigieren, wurden zwei Gewichte berechnet. Das Designgewicht (Variable des_gew) gewichtet für die unterschiedlichen Auswahlwahrscheinlichkeiten nach Kanton und Haushaltsgrösse. Das Poststratifikationsgewicht kombiniert das Designgewicht mit einer Poststratifikation, welche die gewichteten Bevölkerungsanteile hinsichtlich Alter, Nationalität, Geschlecht und Bildung auf die Eckwerte der Wohnbevölkerung über 15 Jahren gemäss Volkszählung 2000 hochgerechnet (Variable gew_tot).

Source: Wiepking & Handy (2016).

	(1)	(2)	(3)	$(4)^1$	$(5)^2$	(6)	$(7)^3$
(1) Ease of forming philanthropic organizations	1						
(2) Fiscal incentives system	-0.847	1					
(3) Number of nonprofit education programs ¹	0.514	-0.690	1				
(4) Fundraising regime	0.819	-0.788	0.668	1			
(5) Proportion nonprofit revenue from public sources ²	0.753	-0.742	0.330	0.591	1		
(6) Proportion religiously affiliated	-0.342	0.509	-0.422	-0.447	-0.166	1	
(7) Per capita GNI ³	0.884	-0.854	0.558	0.923	0.658	-0.382	1

Appendix B. Correlations between contextual measures of institutionalization (N_{individual}=118,788; N_{country}=19)

Notes: All correlations are significant at p < 0.001; ¹ without US (N=111,537); ² without Indonesia (N=108,376); ³ Per capita GNI based on PPP in 2003 in current international Dollars/1,000. *Sources:* IIPD (2016); Adelman et al. (2015); Charities Aid Foundation (2016); Breeze & Scaife (2015); Mirabella & Wish (2001); Mirabella et al. (2007); Pew Research Center (2012); Salamon, Sokolowski, & Haddock (2017); Wiepking & Handy (2015); Worldbank (2019).

	0	1	2	3	4	5	6
Ease of forming philanthropic orgs		0.202					
Egalitarian		(0.500)	-0.0282				
Egalitarian & pragmatic			(0.750) 1.954* (0.950)				
Pragmatic			(0.930) 0.502 (0.672)				
Taxtypes 4,5,6,7 (ref.) ¹			-				
# np educ progs ²				0.0760~			
embryonic				(0.0431)	0.432		
emeryonie					(1.254)		
Emerging					0.253		
					(0.810)		
Evident (ref.)					-		
established					(0.628)		
					1.169		
Advanced					(1.254)		
Proportion np revenue from public							
sources ³						0.854 (1.684)	
Proportion religiously affiliated							2.652 (1.767)
Constant	0.0738 (0.269)	-0.819 (1.699)	-0.335 (0.549)	0.0108 (0.341)	-0.470 (0.445)	-0.290 (0.776)	-2.094 (1.438)
Observations Number of groups	118,788 19	118,788 19	118,788 19	111,537 18	118,788 19	108,376 18	118,788 19

Appendix C. Restricted maximum likelihood (REML) mixed-effects multilevel linear regression analyses of the natural log of the amount donated to charitable organizations (N_{individual}=118,788; N_{country}=19)

Standard errors in parentheses

*** p<0.001, ** p<0.01, * p<0.05, ~ p<0.10 Notes: ¹ Because the (combinations of) pragmatic transitional and r

Notes: ¹ Because the (combinations of) pragmatic, transitional and restrictive fiscal incentive systems only relate to one country in our sample, we used these categories as reference category; ² without US (N=111,537);

 3 without Indonesia (N=108,376); individual control variables included in the analyses (but not presented in the table): age, gender, educational level, marital status and the natural log of income.

Sources: IIPD (2016); Adelman et al. (2015); Charities Aid Foundation (2016); Breeze & Scaife (2015); Mirabella & Wish (2001); Mirabella et al. (2007); Pew Research Center (2012); Salamon, Sokolowski, & Haddock (2017); Wiepking & Handy (2015).

	0	1 adda	2 adda	3 adda	4 odda	5 odda	6
VARIABLES	odds ratio	ratio	ratio	ratio	ratio	ratio	odds ratio
Ease of forming							
philanthropic orgs		1.188 (0.320)					
Egalitarian		(0.02-0)	0.854				
U			(0.475)				
Egalitarian &							
pragmatic			2.077				
			(1.418)				
Pragmatic			0.877				
			(0.433)				
Taxtypes 4,5,6,7 (ref.) ¹			-				
# np educ progs ²				1.074**			
				(0.0288)			
embryonic					1.253		
emeryonic					(0.898)		
- ·					1.484		
Emerging					(0.697)		
Evident (ref.)					-		
established					2.849**		
					(1.096)		
Advanced					0.614		
					(0.440)		
Proportion np revenue							
from public sources ³						1.001	
						(1.242)	
Proportion religiously							0.0770
affiliated							0.0778
							(0.118)
Constant	0 /70***	0 226	0.481	0 // 2***	0 312***	0.521	3 026
Collstallt	(0.0081)	(0.220)	(0.401~ (0.100)	(0.0075)	(0.0850)	(0.331)	(5 001)
	(0.0901)	(0.209)	(0.190)	(0.0973)	(0.0039)	(0.297)	(3.001)
Observations	98,522	98,522	98,522	91,271	98,522	88,110	98,522
Number of groups	17	17	17	16	17	16	17

Appendix D1. Maximum likelihood multilevel mixed-effects logistic regression analyses of likelihood of giving to charitable organizations, without Germany and Japan

Standard errors in parentheses

*** p<0.001, ** p<0.01, * p<0.05, ~p<0.10

Notes: ¹ Because the (combinations of) pragmatic, transitional and restrictive fiscal incentive systems only relate to one country in our sample, we used these categories as reference category; ² without US; ³ without Indonesia; individual control variables included in the analyses (but not presented in the table): age, gender, educational level, marital status and the natural log of income.

Sources: IIPD (2016); Adelman et al. (2015); Charities Aid Foundation (2016); Breeze & Scaife (2015); Mirabella & Wish (2001); Mirabella et al. (2007); Pew Research Center (2012); Salamon, Sokolowski, & Haddock (2017); Wiepking & Handy (2015).

	0	1	2	3	4	5	6
VARIABLES							
Ease of forming philanthropic orgs		$0.420 \sim$					
Egalitarian		(0.255)	0.636 (0.400)				
Egalitarian & Pragmatic			1.928***				
Pragmatic			(0.489) 0.727* (0.354)				
Taxtypes 4,5,6,7 (ref.) ¹			-				
# np educ progs ²				0.0926** *			
Embrania				(0.0233)	0.0149		
Embryonic					(0.621)		
Emerging					-0.172		
					(0.407)		
Evident (ref.)					- 1.057**		
Established					(0.333)		
Advanced					0.704		
Auvanceu					(0.621)		
Proportion np revenue from public							
sources						1.511 (1.094)	
Proportion religiously affiliated							-1.066 (1.520)
Constant	0.418*	-1.414	-0.256	0.387*	0.0347	-0.184	1.297
)	(1.038)	(0.283)	(0.189)	(0.238)	(0.494)	(1.268)
Observations Number of groups	98,522 17	98,522 17	98,522 17	91,271 16	98,522 17	88,110 16	98,522 17

Appendix D2. Maximum likelihood mixed-effects multilevel linear regression analyses of the natural log of the amount donated to charitable organizations, excluding Germany and Japan

Standard errors in parentheses

*** p<0.001, ** p<0.01, * p<0.05, p<0.10

Notes: ¹ Because the (combinations of) pragmatic, transitional and restrictive fiscal incentive systems only relate to one country in our sample, we used these categories as reference category; ² without US; ³ without Indonesia; individual control variables included in the analyses (but not presented in the table): age, gender, educational level, marital status and the natural log of income.

Sources: IIPD (2016); Adelman et al. (2015); Charities Aid Foundation (2016); Breeze & Scaife (2015); Mirabella & Wish (2001); Mirabella et al. (2007); Pew Research Center (2012); Salamon, Sokolowski, & Haddock (2017); Wiepking & Handy (2015).

	0	1	2	3	4	5	6
ease of forming philanthropic orgs		1.050					
Tax system		(0.489)					
Egalitarian			0.574				
			(0.436)				
Egalitarian & Pragmatic			2.371				
			(2.418)				
Pragmatic			0.775				
			(0.556)				
Tax systems 4,5,6,7 (ref.) ¹ # np educ progs ²				1.063 (0.0424)			
Fundraising regime				`	1.070		
Embryonic					(2 155)		
					(5.155)		
Emerging					2.314		
					(2.928)		
Evident (ref.)					2.691~		
Established					(1.408)		
					0.792		
Advanced					(0.904)		
Proportion np revenue							
from public sources ³						0.569	
Droportion religiously						(0.935)	
affiliated							2.517 (4.251)
GNI	0.997 (0.0221)	0.994	0.995 (0.0262)	0.995	1.007 (0.0517)	1.000 (0.0283)	1.000
Constant	0.373 (0.234)	0.318 (0.516)	0.461 (0.278)	0.350~ (0.210)	0.169 (0.261)	0.461 (0.379)	0.164 (0.266)
	110 700	110 700	110 700	111 505	110 700	100 27 5	110 700
Number of groups	118,788 19	118,788 19	118,788 19	111,537	118,788 19	108,376	118,788 19

Appendix E1. Maximum likelihood multilevel mixed-effects regression analyses of the likelihood of giving to charitable organizations, controlling for per capita GNI

*** p<0.001, ** p<0.01, * p<0.05, ~ p<0.10

Standard errors in parentheses; Odds ratio's

Notes: ¹ Because the (combinations of) pragmatic, transitional and restrictive fiscal incentive systems only relate to one country in our sample, we used these categories as reference category; ² without US (N=111,537); ³ without Indonesia (N=108,376); individual control variables included in the analyses (but not presented in the table): age, gender, educational level, marital status and the natural log of income. *Sources:* IIPD (2016); Adelman et al. (2015); Charities Aid Foundation (2016); Breeze & Scaife (2015);

Sources: IIPD (2016); Adelman et al. (2015); Charities Ald Foundation (2016); Breeze & Scaffe (2015); Mirabella & Wish (2001); Mirabella et al. (2007); Pew Research Center (2012); Salamon, Sokolowski, & Haddock (2017); Wiepking & Handy (2015); Worldbank (2019).

	0	1	2	3	4	5	6
Ease of forming philanthropic orgs		0.0374					
1 1 0		(0.496)					
Egalitarian			0.0479				
			(0.762)				
Egalitarian & Pragmatic			2.066*				
			(1.021)				
Pragmatic			0.580				
			(0.720)				
Taxtypes 4,5,6,7 (ref.) ¹							
# np educ progs ²				0.0703~			
				(0.0421)	0.424		
Embryonic					(1.705)		
					0.246		
Emerging					(1.354)		
Evident (ref.)							
Established					1.141*		
Lisuonished					(0.560)		
Advanced					1.173		
					(1.222)		
Proportion np revenue from public sources ³						0.415	
						(1.755)	
Proportion religiously affiliated							3.193~ (1.660)
GNI	0.017	0.016	-0.005	0.011	-0.000	0.017	0.028
Constant	(0.024) -0.382 (0.669)	(0.033) -0.502 (1.730)	(0.026) -0.266 (0.604)	-0.0239 -0.251 -0.633	(0.055) -0.461 (1.649)	(0.030) -0.570 (0.879)	(0.022) -3.225* (1.600)

Appendix E2. Maximum likelihood mixed-effects multilevel linear regression analyses of the natural log of the amount donated to charitable organizations, controlling for per capita GNI

Observations	118,788	118,788	118,788	111,537	118,788	108,376	118,788
Number of groups	19	19	19	18	19	18	19

Standard errors in parentheses

*** p<0.001, ** p<0.01, * p<0.05, ~ p<0.10

Notes: ¹ Because the (combinations of) pragmatic, transitional and restrictive fiscal incentive systems only relate to one country in our sample, we used these categories as reference category; ² without US (N=111,537); ³ without Indonesia (N=108,376); individual control variables included in the analyses (but not presented in the table): age, gender, educational level, marital status and the natural log of income.

Sources: IIPD (2016); Adelman et al. (2015); Charities Aid Foundation (2016); Breeze & Scaife (2015); Mirabella & Wish (2001); Mirabella et al. (2007); Pew Research Center (2012); Salamon, Sokolowski, & Haddock (2017); Wiepking & Handy (2015); Worldbank (2019).

	(1)	(2)
VARIABLES	Odds ratio	B
Ease of forming philanthropic		
organizations	0.860	-0.376
-	(0.383)	(0.390)
Tax system		
Egalitarian	0.442	0.347
	(0.424)	(0.841)
Egalitarian & pragmatic	0.691	1.188
	(0.746)	(0.946)
Pragmatic	0.674	0.589
	(0.554)	(0.720)
Tax systems $4,5,6,7$ (ref.) ¹		
# np educ progs	1.055	0.0507
	(0.0475)	(0.0394)
Fundraising regime		
emerging	1.045	-0.119
	(1.020)	(0.856)
Embryonic, evident and advanced		
(ref.)		
established	2.317	0.878~
	(1.387)	(0.524)
Proportion np revenue from public		
sources	0.712	0.463
	(1.539)	(1.893)
Proportion religiously affiliated	3.198	3.914*
	(6.318)	(1.729)
Constant	0.341	-2.267
	(0.781)	(2.010)
Observations	101,125	101,125
Number of groups	17	17

Appendix F. Maximum likelihood mixed-effects multilevel logistic (Model 1) and linear (Model 2) regression analyses, including all measures of institutionalization simultaneously

Standard errors in parentheses

*** p<0.001, ** p<0.01, * p<0.05, ~ p<0.10

Notes: Because the United States is excluded from the measure number of nonprofit education programs, and because Indonesia does not have a value for proportion of nonprofit revenue from public sources, these two countries were excluded from the analyses; ¹ Because the (combinations of) pragmatic, transitional and restrictive fiscal incentive systems only relate to one country in our sample, we used these categories as reference category; individual control variables included in the analyses (but not presented in the table): age, gender, educational level, marital status and the natural log of income.

Sources: IIPD (2016); Adelman et al. (2015); Charities Aid Foundation (2016); Breeze & Scaife (2015); Mirabella & Wish (2001); Mirabella et al. (2007); Pew Research Center (2012); Salamon, Sokolowski, & Haddock (2017); Wiepking & Handy (2015); Worldbank (2019).

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