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WPS4835

POLICY RESEARCH WORKING PAPER 4835

Democracy and Reforms

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The World Bank
Financial and Private Sector Vice Presidency
Enterprise Analysis Unit
February 2009



Policy Research Working Paper 4835

Abstract

The authors use a sample of 147 countries to investigate the link between democracy and reforms. Democracy may be conducive to reforms, because politicians have the incentive to embrace growth-enhancing reforms to win elections. By contrast, authoritarian regimes do not have to worry as much about public opinion and may undertake reforms that are painful in the short run but bring future prosperity. This paper tests these hypotheses, using data on micro-economic reforms from the World Bank's Doing Business database. These data do not suffer the endogeneity issues associated with other datasets on changes in economic institutions. The results provide robust support for the claim that democracy is good for growth-enhancing reforms.

This paper—a product of the Enterprise Analysis Unit, Financial and Private Sector Vice Presidency—is part of a larger effort in the department to better understand the functioning of the private sector. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The author may be contacted at mamin@worldbank.org.

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Produced by the Research Support Team

Democracy and Reforms

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Keywords: Reform, Democracy, Regulation
JEL: P11, P16, K20, L51

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1. Introduction

The link between political and economic governance has been the subject of debate at least since Aristotle in 4th century BC. Aristotle thought that democracy functioned well in the absence of poverty, and hence that economic prosperity led to democracy. In contrast, twenty centuries later Montesquieu supported the view that checks on the powers of government are a pre-requisite for good economic governance and prosperity. In more recent times, one can find examples of authoritarian as well as democratic regimes that implemented major economic reforms. For example, successful economic liberalization was achieved under the military regimes in Argentina (1966 and 1976), Chile (1973), Brazil (1964), and Uruguay (1976), and under authoritarian regimes in China (1978), Vietnam (1993), Saudi Arabia (2006) and Azerbaijan (2008). Reform has also been achieved under democratic regimes in Australia (1983), Colombia (1986, 1991), New Zealand (1984), Spain (1977-1978), Poland (1992), Estonia (1993), Slovakia (1998-2000), Georgia (2004-2008), and FYR Macedonia (2007-2008).

The existing economics literature on the relationship between democracy and reform revolves around the experience of countries with macroeconomic stabilization efforts in the 1970s. It is largely based on case studies (see, for example, Williamson 1994, Nelson 1990, Bates and Krueger 1993). While this literature does not reach a consensus on whether democracy promotes reform, it highlights the argument that reforms are often unpopular because they tend to reduce living standards in the short run. Even reforms that increase overall prosperity (measured in GDP growth) may be unpopular if compensation schemes for the losers are not credible; and if benefits are far in the future and costs more immediate (Fernandez and Rodrik 1991, Rodrik 1996).

These problems with democracy are compounded by the fact that democracies offer more channels of protest and influence on policymaking to subordinate groups than authoritarian regimes; and that they create more favorable conditions for the development of strong and independent sector and non-government organizations capable of resisting reform efforts (Remmer, 1986). Lastly, democratic rule may fragment decision-making authority among branches of government, allowing opponents of reform to interfere more easily with program design.

In contrast, authoritarian governments have less need to respond to either popular opinion or vested interests and hence can more readily base their decision on criteria of economic rationality. They are better able to make long-run plans than are democratic governments tied to electoral cycles; and have greater centralization of power that facilitates the implementation of reforms.

However, these supposed advantages of authoritarianism are not without their problems. For example, to the extent that policy information and feedback are vital to the design of reforms, democracies may have an advantage (Remmer 1986); autocratic rulers do not have to worry about re-election and hence it is not clear what their incentive to reform is; losers from reforms may comply with their defeat because they believe that the institutional framework that organizes the democratic competition will permit them to advance their interest in the future (Przeworski 1991).

In this paper we provide analysis of the link between democracy and reforms. In particular, we study the relationship between micro-economic reforms, shown in previous studies (for example, Klapper, Laeven and Rajan (2006) and Barseghyan (2008)) to expand growth, and the level of democracy. The analysis is done on a sample of 147

countries, with data on micro-economic reforms drawn from the World Bank's Doing Business project.

Our data are not subject to the criticisms on other measures of economic institutions, which suffer from significant endogeneity issues, and measure outcomes rather than institutions (for example, Glaeser et al 2004). The Doing Business data are focused on specific regulatory or legal reforms, and as such they are a better indicator of underlying institutions. At the same time, they are sufficiently micro-measured so as to avoid the possibility of such reforms affecting the level of democracy.

We find robust evidence for the link between democracy and growth-enhancing reforms. The estimates imply that a move from below-average to above-average level of democracy increases the probability of reform by 20.4 percentage points, a large effect given that the mean value of the dependent variable is 55.1%. Higher-end estimates imply an increase of 28.6 percentage points in the probability of a reform in moving from below- to above-average level of democracy.

Using a continuous measure of democracy, we find that moving from the lowest to the highest value on the democracy scale increases the probability of reform by 17 to 35 percentage points. Finally, using an alternative measure of democracy, we find that democracy increases the likelihood of growth-enhancing reform by a high of 40 percentage points and a low of 16 percentage points. These results are robust to the inclusion of various proxies for the initial institutional environment, controlling for per capita income, and restricting the sample to developing countries.

The rest of the paper is organized as follows. Section 2 describes the data and main variables. Section 3 shows the main regression results, Section 4 provides robustness checks. Section 5 concludes.

2. Description of data

The sample consists of 147 countries for which information on our main variables is available. The time period covered by the study is 2003-2008. In the analysis we utilize several sources of data including the World Bank's Doing Business project and World Development Indicators, Polity IV, Freedom House, Djankov et al. (2007), and La Porta et al. (1999). A definition of all variables and their sources is provided in Table 1. Summary statistics and correlations between the main variables are provided in Tables 2 and 3, respectively.

2.1 *Dependent variable*

The dependent variable is based on data collected by the World Bank's Doing Business project. As part of its annual exercise, Doing Business compiles ten sets of indicators covering various aspects of the business climate including starting a business, paying taxes, obtaining licenses, getting credit, protecting investors, employing workers, international trade, property registration, closing a business and enforcement of private contracts. Information is also available on an annual basis on important reforms on each of these indicators. This information is coded as a dummy variable which equals 1 if a country implemented a positive reform during the year on a given indicator and 0 otherwise. A positive reform, as defined in Doing Business, is one that makes it faster,

cheaper or administratively easier for local businesses to start and run operations; or a reform that defines and increases the protection of property rights. An example is reducing the number of days to get an industry license, eliminating the minimum capital requirement for start-ups, or increasing the legal rights of creditors and minority shareholders.

Using this dataset, we define the main dependent variable, *Reform*, as a dummy variable equal to 1 if a positive reform occurred in one or more of the ten indicators in a given year and 0 otherwise. The mean value of the variable equals 0.55 and the standard deviation is 0.50 (Table 2). For robustness, we also report all results using an alternative measure that equals (log of 1 plus) the number of indicators on which a positive reform occurred during a given year (*Number of Reforms*). For example, in 2005, Turkey implemented reforms in paying taxes and international trade implying a score of (log of 1 plus) 2 for the dependent variable. The two dependent variables are highly correlated (correlation of 0.877).

Information on changes in the quality of the business environment is also available from alternative sources such as Heritage Foundation's Freedom of the World Index or Fraser Institute's Economic Freedom of the World. One could use annual changes in these data to construct a measure of reform similar to the ones described above. However, the Doing Business data offer two advantages. First, unlike other data sources that are based in part on experts' perceptions, the Doing Business data are based on actual reforms. This allows us to interpret the findings in terms of specific reforms that are more (or less) likely under a democratic vs. non-democratic environment. Second, and more important, since the Doing Business data cover a specific set of policy reforms,

reverse causality from our dependent variable to democracy is unlikely. It is difficult, for example, to imagine that the enactment of a more efficient bankruptcy law would influence the societal bend towards democracy. In contrast, other available indicators of the business environment are aggregate or macro level measures. A possible feedback effect from macro level changes in the business environment to the quality of democracy is plausible. This problem is identified in Glaeser et al. (2004), among others.

2.2 *Explanatory variables*

Democracy

The main explanatory variable is a measure of the level of democracy. We use data from Polity IV and Freedom House to construct three separate measures of democracy. The "democracy" variable in the Polity IV data provides a score between 0 and 10 for each country with higher scores implying a better quality of democracy. In our sample, countries with the highest level of democracy include Costa Rica, Mauritius, Mongolia, the Netherlands and United States, while Azerbaijan, Belarus, Bhutan, Vietnam and Sudan show the lowest level of democracy.

The democracy scores from Polity IV are available on an annual basis but there is little time variation in these scores over our sample period. Hence, we use scores in year 2003, the beginning of the sample period, to construct *Democracy*, our main measure of democracy. It equals 1 for a country with a score of 5 or higher (high democracy) and 0 otherwise (low democracy). To check that our results are not sensitive to the high and low democracy classification, we report all results using the democracy scores on the full

0-10 scale (*Democracy* 2). The mean value of *Democracy* equals 0.62 and the standard deviation is 0.49.

The third measure of democracy we use is based on data from Freedom House. It equals the average of the Political Rights index and the Civil Liberty index for the year 2003 (*Democracy* 3). According to *Democracy* 3, Australia, Chile, Mauritius, Norway, and United States are most democratic in our sample, while the least democratic countries are China, Eritrea, Sudan, Vietnam and Uzbekistan. The three democracy measures defined above are highly correlated with each other (Table 3).

These two sources of democracy data have been used in the previous studies in this field: Barro (1997), La Porta et al (1999), Rodrik (1999), and Glaeser et al. (2004).

Other determinants of reform

The proclivity to reform is likely to depend on the quality of the broader economic institutions that may determine how governments behave. We check for the robustness of the democracy-reform relationship by controlling for a number of alternative proxy measures of broader economic institutions suggested in the previous literature.

We begin by controlling for differences in income levels across countries using (log of) GDP per capita in 2003 taken from Penn World Tables. The quality of democracy is typically better in higher income countries (Table 3). We may also expect higher income countries to reform more because these countries have greater capacity for reform, more checks and balances on the government that prevent the use of business regulations by politicians for generating rents, etc.

Second, another strand of the literature highlights a strong relationship between the quality of institutions and geography related factors (Gallup et al. 1998). Following this body of work, we use two sets of controls for geography. The first is the absolute distance of a country from the equator divided by 90 (Latitude). The second is region fixed effects where regions include East Asia and Pacific, Latin America and Caribbean (LAC), Middle East and North Africa (MENA), North America, South Asia, Sub-Saharan Africa (SSA) and the omitted category of Europe and Central Asia (ECA). Classification of countries into these regions is taken from the World Development Indicators of the World Bank.

Third, micro-economic reforms are unlikely to be of much use and hence unlikely to be implemented if the broader institutional environment does not provide adequate security and protection of private investment. We control for this factor using the Rule of Law measure taken from World Bank's Governance indicators (year 2003 values). The measure broadly captures respect for private property, incidence of crime and enforceability of private and government contracts.

Fourth, there is now substantial evidence showing that the legal tradition of a country is a strong proxy for various aspects of the institutional environment. For example, Djankov et al. (2002) show that entry barriers are much lower in English common law relative to the French civil law countries. Similar findings are reported for shareholder rights (Djankov et al. 2008), contract enforcement (Djankov et al. 2003) and the flexibility of labor markets (Botero et al. 2004). We control for the legal tradition of a country using dummy indicators for the legal tradition of a country. These traditions

include French, German, Scandinavian, Socialist and the omitted category of English common law. The data source for the variable is Djankov et al (2007).

Fifth, starting with the seminal work of Max Weber, a number of studies have highlighted the importance of religion in shaping the quality of institutions. For example, Stulz and Williamson (2003) show that the low level of creditors' protection present in Catholic countries is most likely due to the anti-usury culture pervasive in the Catholic tradition. Following this literature, we use dummy indicators identifying the main religious group in the country as either Muslim or Catholic, Protestant and the residual category of all other religions. The data source for these indicators is La Porta et al. (1999).

Consistent with the literature discussed above, we find a strong link between some of the control variables discussed above and reform. Nevertheless, the positive relationship between democracy and reform easily survives these controls. Figure 1 provides a graphical illustration of the democracy-reform linkage controlling for GDP per capita and regional fixed effects.

3. Main empirical results

The main empirical results are provided in Table 4. The estimated coefficient values and their significance levels are obtained using a logit specification with Huber-White robust standard errors clustered on the country. Without any additional controls, the estimated coefficient of *Democracy* equals 0.828, significant at the 1% level (column 1). The coefficient estimate implies that a move from below-average to above-average level of

democracy increases the probability of reform by 20.4 percentage points, a large effect given that the mean value of the dependent variable equals 55.1%.

The estimated coefficient of the democracy variable remains large and statistically significant when we control for various proxies of the initial level of institutions (columns 2-7). The coefficient value is lowest when we control for Latitude equaling 0.638, significant at the 1% level (column 3).

Controlling for the legal origin of countries, region fixed effects and Rule of Law lowers the estimated coefficient of democracy but it remains significant at 1% level (columns 4, 5 and 7, Table 4). The largest impact on the estimated coefficient of *Democracy* occurs when we control for religion fixed effects. It rises from 0.828 (column 1) to 1.178 (significant at the 1% level) due to the religion controls (column 6). The latter implies an increase of 28.6 percentage points in the probability of a reform in moving from below- to above average level of democracy.

Among other factors, we find that, controlling for the level of democracy, reform is significantly more likely in countries that are more distant from the equator and those in the Middle East and North Africa region and in Europe and Central Asia. Chances of reform are significantly lower for countries that follow the English common law relative to all other legal traditions and for countries where the majority are either Catholic or Protestant relative to the rest (Muslim and All other religions).

In sum, democracy is associated with micro-economic reforms, and this association remains strong when we control for various measures of institutional quality.

4. Robustness

First, we repeat the regression exercise using the full (0-10) democracy scale. The relationship between democracy and reform holds (Table 5). As above, it is weaker in magnitude but still significant at the 1% level when we control for Latitude, region fixed effects and the legal origin of countries. Based on the estimated coefficients, moving from the lowest to the highest value on the democracy scale increases the probability of reform by 17.1-35.5 percentage points.

Second, we report regression results using the OLS estimation method for the total number of reforms as the dependent variable (Table 6). The main results hold. Without any other controls, a move from low to high democracy increases the (log) number of reforms by 0.212 (column 1, Table 6) or 38.5% of the mean value of the dependent variable. The corresponding increase as a percentage of the mean value of the dependent variable equals a high of 53.9% with the religion fixed effects (column 6, Table 6) and a low of 27.7% with the region fixed effects (column 5, Table 6).

Next, we use the third measure of democracy from Freedom House (Table 7). These results are similar to the ones discussed above. The democracy-reform relationship is economically large and statistically significant at the 5% level when we control for Latitude and region fixed effects and at the 1% level in other specifications. Estimates in the table imply that moving from the lowest to the highest value of *Democracy* 3 increases the probability of reform by 27.2 percentage points with no additional controls (column 1), a high of 40.3 percentage points with the religion fixed effects (column 6) and a low of 16 percentage points when we control for region fixed effects (column 5).

Fourth, we check for the stability of the democracy-reform relationship by restricting the sample to developing countries (109 countries in our sample). We follow the World Bank's definition of a developing country as one with a GNI per capita of less than $11,456 in 2007, roughly the income level of Hungary or Antigua and Barbuda. Regression results provided in Table 8 show that democracy has a positive and significant effect on growth-enhancing reforms in the developing countries although the magnitude of the effect is smaller than in the full sample.

Finally, we performed a number of additional robustness checks on the results reported in Tables 4-8. These checks include following Rodrik (1999) in controlling for the primary and secondary gross enrollment rates (from World Development Indicators, World Bank), controlling for GDP per capita in all specifications, restricting the sample to the set of high-income and middle income countries (following World Bank's classification of countries by income levels), controlling for the initial (year 2003) level of regulation using the Heritage Foundation's Business Freedom index and controlling for the (log of) settler mortality rate from Acemoglu et al. (2001). The relationship between democracy and reform remain robust to all these checks except when we controlled for the settler mortality rate, a result most likely due to the smaller sample size (we lose 87 countries, which have no data on settler mortality).

5. Conclusion

The last two decades have seen rapid growth in both Africa and the former socialist economies in Eastern Europe. With democracy also expanding significantly in both

regions, the link between the level of democracy and growth-enhancing reforms is receiving renewed interest.

This study expands the previous literature based on anecdotal evidence and case studies of countries while using new and improved data. The findings confirm the earlier case study results that an expansion of democratic rights encourages micro-economic reforms and is likely to increase efficiency and growth.

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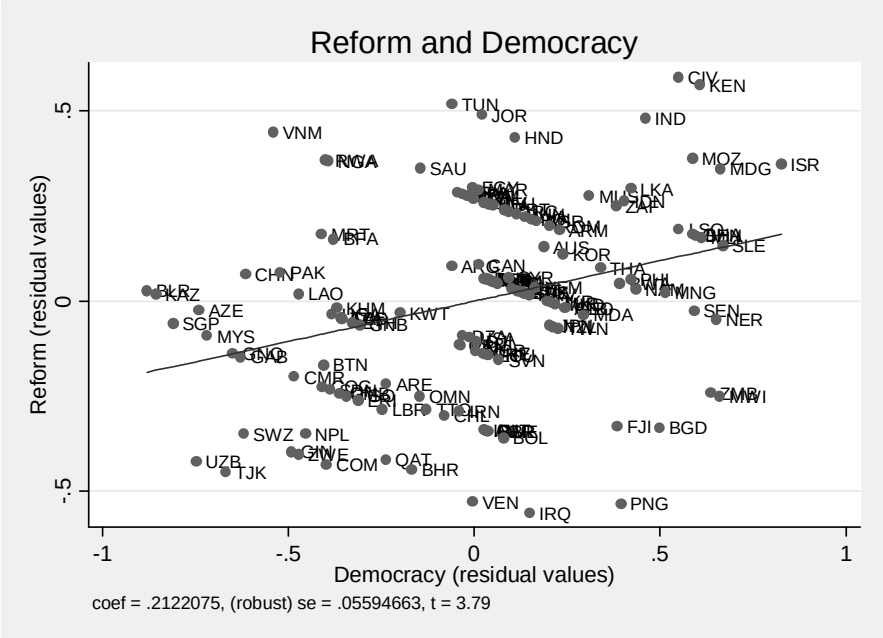


Figure 1

The figure is a partial scatter plot showing the relationship between *Reform* and *Democracy* on average over the sample period, and controlling for GDP per capita and regional fixed effects. The Y axis plots the residuals from the linear regression of *Reform* on the control variables while the X axis contains residuals from a similar regression using *Democracy*. Both these regressions are run over average values of all the variables taken over the sample period (2003-2008). Abbreviations of country names follow World Development Indicators, World Bank.

Table 1: Description of variables

Variable	Description
Reform	Dummy equal to 1 if a country implemented one or more reform during the year and 0 otherwise. Source: Doing Business, www.doingbusiness.org.
Number of reforms	Log of 1 plus the total number of reforms for a given country-year. Source: Doing Business.
Democracy	Dummy equal to 1 if a country has a democracy score of 5 or higher in 2003 and 0 otherwise. Source: Polity IV.
Democracy 2	Democracy score in 2003. Source: Polity IV.
Democracy 3	Average of the Political rights and Civil Liberty index for the year 2003 from Freedom House. Source: Freedom House.
GDP per capita	Log of GDP per capita in 2003. Source: Penn World Tables.
Latitude	Absolute distance of a country from the equator divided by 90. Source: La Porta et al. (1999).
Rule of Law	Values of Rule of Law index in 2003. Source: World Bank. www.worldbank.org/wbi/governance/data
Regions	
Europe and Central Asia (ECA)	Dummy indicating a country in Europe or Central Asia region. Source: WDI, World Bank.
East Asia and Pacific	Dummy indicating a country in East Asia or Pacific region. Source: WDI, World Bank.
Latin America and Caribbean (LAC)	Dummy indicating a country in Latin America or Caribbean region. Source: WDI, World Bank.
Middle East and North Africa (MENA)	Dummy indicating a country in Middle East or North Africa region. Source: WDI, World Bank.
North America	Dummy indicating a country in North America region. Source: WDI, World Bank.
South Asia	Dummy indicating a country in South Asia region. Source: WDI, World Bank.
Sub-Saharan Africa (SSA)	Dummy indicating a country in Sub-Saharan Africa region. Source: WDI, World Bank.
Legal origin, religions	
English legal origin	Dummy indicating a country's legal system based on the English common law. Source: Djankov et al. (2007).
French legal origin	Dummy indicating a country's legal system based on the French civil law. Source: Djankov et al. (2007).
German legal origin	Dummy indicating a country's legal system based on German civil law. Source: Djankov et al. (2007).
Scandinavian legal origin	Dummy indicating a country's legal system based on Scandinavian legal system. Source: Djankov et al. (2007).
Socialist legal origin	Dummy indicating a country's legal system is Socialist. Source: Djankov et al. (2007).
Muslim	Dummy indicating the main religion in the country is Islam. Source: La Porta et al. (1999).
Catholic	Dummy indicating the main religion in the country is Catholicism. Source: La Porta et al. (1999).
Protestant	Dummy indicating the main religion in the country is Protestantism. Source: La Porta et al. (1999).
All other religions	Dummy indicating main religion is other than Islam, Catholicism and Protestantism. Source: La Porta et al. (1999).

Table 2: Summary statistics

Variable	Mean	Standard deviation	Minimum	Maximum	Observations	Countries
Reform	0.551	0.498	0	1	735	147
Number of reforms (log)	0.552	0.561	0	2.08	735	147
Democracy	0.619	0.486	0	1	735	147
Democracy 2	5.483	3.867	0	10	735	147
Democracy 3	3.293	1.901	0	6	735	147
GDP per capita (log)	8.540	1.190	5.84	10.50	710	142
Latitude	0.297	0.190	0.01	0.71	735	147
Rule of Law	-0.129	0.980	-1.73	1.97	735	147
Europe and Central Asia (ECA)	0.279	0.449	0	1	735	147
East Asia and Pacific	0.122	0.328	0	1	735	147
Latin America and Caribbean (LAC)	0.150	0.357	0	1	735	147
Middle East and North Africa (MENA)	0.116	0.320	0	1	735	147
North America	0.014	0.116	0	1	735	147
South Asia	0.041	0.198	0	1	735	147
Sub-Saharan Africa (SSA)	0.279	0.449	0	1	735	147
English legal origin	0.308	0.462	0	1	715	143
French legal origin	0.476	0.500	0	1	715	143
German legal origin	0.112	0.315	0	1	715	143
Scandinavian legal origin	0.028	0.165	0	1	715	143
Socialist legal origin	0.077	0.267	0	1	715	143
Muslim	0.279	0.449	0	1	735	147
Catholic	0.333	0.472	0	1	735	147
Protestant	0.143	0.350	0	1	735	147
All other religions	0.245	0.430	0	1	735	147

Table 3: Correlation between main variables

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
Democracy	1																				
Democracy 2	.92[a]	1																			
Democracy 3	.84[a]	.92[a]	1																		
GDP per capita	.36[a]	.47[a]	.51[a]	1																	
Latitude	.27[a]	.35[a]	.39[a]	.56[a]	1																
Rule of Law	.39[a]	.54[a]	.67[a]	.76[a]	.53[a]	1															
ECA	.30[a]	.35[a]	.37[a]	.44[a]	.78[a]	.36[a]	1														
East Asia & Pacific	.04	.07	.00	.07	-.15[c]	.09	-.23[a]	1													
LAC	.29[a]	.24[a]	.19[b]	.05	-.27[a]	-.15[c]	-.26[a]	-.16[c]	1												
MENA	-.42[a]	-.40[a]	-.35[a]	.12	-.01	.04	-.22[a]	-.14	-.15[c]	1											
North America	.09	.14[c]	.17[b]	.18[b]	.15[c]	.22[a]	-.07	-.04	-.05	-.04	1										
S. Asia	-.05	-.10	-.09	-.15	-.05	-.03	-.13	-.08	-.09	-.07	-.02	1									
SSA	-.26[a]	-.31[a]	-.27[a]	-.61[a]	-.47[a]	-.38[a]	-.39[a]	-.23[a]	-.26[a]	-.22[a]	-.07	-.13	1								
English	-.08	-.06	-.04	-.10	-.24[a]	.05	-.34[a]	.07	-.16[c]	.07	.18[c]	.31[a]	.18[b]	1							
French	-.08	-.12	-.13	-.19[b]	-.30[a]	-.23[a]	-.24[a]	-.11	.33[a]	.09	-.11	-.20[b]	.11	-.63[a]	1						
German	.23[a]	.29[a]	.29[a]	.30[a]	.37[a]	.30[a]	.38[a]	.13	-.15[c]	-.12	-.04	-.07	-.23[a]	-.24[a]	-.34[a]	1					
Scandinavian	.13	.20[b]	.24[a]	.25[a]	.34[a]	.35[a]	.28[a]	-.06	-.07	-.06	-.02	-.04	-.11	-.11	-.16[c]	-.06	1				
Socialist	-.05	-.13	-.19[b]	.001	.33[a]	-.22[a]	.41[a]	-.03	-.12	-.10	-.03	-.06	-.18[b]	-.19[b]	-.27[a]	-.10	-.05	1			
Muslim	-.51[a]	-.53[a]	-.50[a]	-.22[a]	-.13	-.24[a]	-.15[c]	-.14[c]	-.26[a]	.53[a]	-.07	.03	.09	.04	.09	-.21[b]	-.10	.06	1		
Catholic	.35[a]	.37[a]	.38[a]	.26[a]	.01	.14	.08	-.13	.51[a]	-.26[a]	.04	-.15[c]	-.15[c]	-.29[a]	.35[a]	.12	-.12	-.21[b]	-.44[a]	1	
Protestant	.28[a]	.27[a]	.31[a]	.12	.10	.25[a]	.05	.03	-.06	-.15[c]	.12	-.08	.09	.34[a]	-.34[a]	-.08	.42[a]	-.12	-.25[a]	-.29[a]	1
All Other religions	-.07	-.08	-.15[c]	-.15	.04	-.10	.03	.27[a]	-.24[a]	-.16[c]	-.07	.20[b]	.00	.00	-.20[b]	.15[c]	-.10	.26[a]	-.35[a]	-.40[a]	-.23[a]

Significance level denoted by: [a] (1% or less), [b] (5% or less) and [c] (10% or less).

Table 4: Determinants of Reform

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Dependent variable: *Reform*							
Democracy	0.828[a]	0.849[a]	0.638[a]	0.783[a]	0.695[a]	1.178[a]	0.686[a]
	(0.000)	(0.000)	(0.002)	(0.000)	(0.001)	(0.000)	(0.000)
GDP per capita		0.036					
(log values)		(0.664)					
Latitude			2.075[a]				
			(0.000)				
Rule of Law				0.058			
				(0.583)			
East Asia and Pacific					-1.128[a]		
					(0.000)		
LAC					-1.291[a]		
					(0.000)		
Middle East and North Africa					-0.774[b]		
					(0.045)		
North America					-2.205[a]		
					(0.000)		
South Asia					-0.873[c]		
					(0.083)		
Sub Saharan Africa					-1.305[a]		
					(0.000)		
Muslim						-0.064	
						(0.818)	
Catholic						-0.477[b]	
						(0.046)	
Protestant						-0.993[a]	
						(0.001)	
French legal origin							0.669[a]
							(0.002)
German legal origin							1.165[a]
							(0.000)
Scandinavian legal origin							0.702[c]
							(0.085)
Socialist legal origin							1.598[a]
							(0.000)
Constant	-0.302[c]	-0.597	-0.788[a]	-0.267	0.663[a]	-0.192	-0.769[a]
	(0.052)	(0.355)	(0.000)	(0.120)	(0.004)	(0.394)	(0.000)
Observations	735	710	735	735	735	735	715

p-values in brackets. All standard errors are Huber-White robust and clustered on the country. Significance level denoted by: [a] (1% or less), [b] (5% or less) and [c] (10% or less).

Table 5: Determinants of Reform

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Dependent variable: *Reform*							
Democracy 2	0.101[a]	0.102[a]	0.069[a]	0.101[a]	0.074[a]	0.144[a]	0.090[a]
	(0.000)	(0.001)	(0.010)	(0.002)	(0.009)	(0.000)	(0.000)
GDP per capita		0.005					
(log values)		(0.954)					
Latitude			2.01[a]				
			(0.000)				
Rule of Law				-0.006			
				(0.962)			
East Asia and Pacific					-1.150[a]		
					(0.000)		
LAC					-1.224[a]		
					(0.000)		
Middle East and North Africa					-0.856[b]		
					(0.026)		
North America					-2.275[a]		
					(0.000)		
South Asia					-0.825		
					(0.101)		
Sub Saharan Africa					-1.300[a]		
					(0.000)		
Muslim						-0.075	
						(0.790)	
Catholic						-0.485[c]	
						(0.054)	
Protestant						-0.97[a]	
						(0.002)	
French legal origin							0.695[a]
							(0.001)
German legal origin							1.105[a]
							(0.001)
Scandinavian legal origin							0.569
							(0.171)
Socialist legal origin							1.705[a]
							(0.000)
Constant	-0.340[b]	-0.369	-0.75[a]	-0.345[c]	0.690[a]	-0.25	-0.85[a]
	(0.047)	(0.580)	(0.000)	(0.097)	(0.006)	(0.311)	(0.000)
Observations	735	710	735	735	735	735	715

p-values in brackets. All standard errors are Huber-White robust and clustered on the country. Significance level denoted by: [a] (1% or less), [b] (5% or less) and [c] (10% or less).

Table 6: Robustness of Reforms Variable

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Dependent variable: *Number of reforms*							
Democracy	0.212[a]	0.217[a]	0.157[a]	0.215[a]	0.153[a]	0.297[a]	0.163[a]
	(0.000)	(0.001)	(0.008)	(0.001)	(0.009)	(0.000)	(0.003)
GDP per capita		0.007					
(log values)		(0.745)					
Latitude			0.523[a]				
			(0.001)				
Rule of Law				-0.003			
				(0.922)			
East Asia and Pacific					-0.304[a]		
					(0.000)		
LAC					-0.325[a]		
					(0.000)		
Middle East and North Africa					-0.224[b]		
					(0.042)		
North America					-0.587[a]		
					(0.000)		
South Asia					-0.258[b]		
					(0.049)		
Sub Saharan Africa					-0.341[a]		
					(0.000)		
Muslim						-0.061	
						(0.420)	
Catholic						-0.148[b]	
						(0.039)	
Protestant						-0.31[a]	
						(0.000)	
French legal origin							0.178[a]
							(0.002)
German legal origin							0.364[a]
							(0.000)
Scandinavian legal origin							0.125
							(0.319)
Socialist legal origin							0.485[a]
							(0.000)
Constant	0.421[a]	0.363[a]	0.300[a]	0.419[a]	0.683[a]	0.479[a]	0.293[a]
	(0.000)	(0.039)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Observations	735	710	735	735	735	735	715
R-squared	0.034	0.037	0.063	0.034	0.101	0.06	0.093

p-values in brackets. All standard errors are Huber-White robust and clustered on the country. Significance level denoted by: [a] (1% or less), [b] (5% or less) and [c] (10% or less).

Table 7: Robustness of Democracy Variable

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Dependent variable: *Reform*							
Democracy 3	0.183[a]	0.192[a]	0.112[b]	0.199[a]	0.109[b]	0.272[a]	0.175[a]
	(0.000)	(0.002)	(0.041)	(0.006)	(0.048)	(0.000)	(0.001)
GDP per capita		0.004					
(log values)		(0.967)					
Latitude			2.066[a]				
			(0.000)				
Rule of Law				-0.047			
				(0.725)			
East Asia and Pacific					-1.128[a]		
					(0.000)		
LAC					-1.184[a]		
					(0.000)		
Middle East and North Africa					-1.002[a]		
					(0.008)		
North America					-2.270[a]		
					(0.000)		
South Asia					-0.909[c]		
					(0.074)		
Sub Saharan Africa					-1.386[a]		
					(0.000)		
Muslim						-0.182	
						(0.517)	
Catholic						-0.512[b]	
						(0.046)	
Protestant						-1.03[a]	
						(0.001)	
French legal origin							0.707[a]
							(0.001)
German legal origin							1.133[a]
							(0.001)
Scandinavian legal origin							0.511
							(0.224)
Socialist legal origin							1.762[a]
							(0.000)
Constant	-0.393[c]	-0.43	-0.76 [a]	-0.452[c]	0.772[a]	-0.309	-0.94[a]
	(0.051)	(0.520)	(0.001)	(0.099)	(0.003)	(0.251)	(0.000)
Observations	735	710	735	735	735	735	715

p-values in brackets. All standard errors are Huber-White robust and clustered on the country. Significance level denoted by: [a] (1% or less), [b] (5% or less) and [c] (10% or less).

Table 8: Robustness for the sample of Developing countries

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Dependent variable: *Reform*							
Democracy	0.675[a]	0.582[b]	0.655[a]	0.542[b]	0.782[a]	1.098[a]	0.576[a]
	(0.002)	(0.020)	(0.003)	(0.026)	(0.001)	(0.000)	(0.008)
GDP per capita		0.251[b]					
(log values)		(0.041)					
Latitude			2.775[a]				
			(0.000)				
Rule of Law				0.323			
				(0.146)			
East Asia and Pacific					-1.331[a]		
					(0.002)		
LAC					-1.593[a]		
					(0.000)		
Middle East and North Africa					-0.62		
					(0.204)		
South Asia					-1.195[b]		
					(0.019)		
Sub Saharan Africa					-1.609[a]		
					(0.000)		
Muslim						-0.032	
						(0.913)	
Catholic						-0.636[b]	
						(0.020)	
Protestant						-1.34[a]	
						(0.001)	
French legal origin							0.551[b]
							(0.022)
German legal origin							2.077[a]
							(0.000)
Socialist legal origin							1.547[a]
							(0.000)
Constant	-0.201	-2.123[b]	-0.858[a]	0.061	0.943[a]	-0.083	-0.667[a]
	(0.223)	(0.019)	(0.000)	(0.804)	(0.000)	(0.738)	(0.002)
Observations	545	520	545	545	545	545	535

p-values in brackets. All standard errors are Huber-White robust and clustered on the country. Significance level denoted by: [a] (1% or less), [b] (5% or less) and [c] (10% or less). The sample of countries in the Table consists of developing countries as classified by World Bank (GNI per capita of less than $11, 456 in 2007).