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### How is Culture paving the path for Women's Rights?

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#### Abstract

In an emerging literature, informal institutions or culture has been defined based on four important traits - TRUST, RESPECT, CONTROL and OBEDIENCE. This paper investigates the question - do informal institutions, defined by these traits, enhance women's political, social and economic rights? A simple empirical analysis reveals that informal institutions or culture is a determinant of women's rights.

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## 1. Introduction

Women's rights, which are a component of human rights in general, have undergone substantial changes over the past decades. Almost all aspects of women's rights - economic, political or social, have been redefined and remolded over this time. According to Coleman (2004), discrimination in aspects of political participation and school enrollment has gone down steadily. Further, gender gaps in important facets like infant mortality rates and literacy levels have also narrowed. Yet, this statement cannot be generalized for all countries in the world. According to a report published by the World Economic Forum (2005)<sup>1</sup>, many developing countries, along with some developed nations, rank poorly in terms of eliminating gender gaps.

Among other factors, the institutional framework of a society largely impacts such rights. For example, an extensive range of literature has supported the view that democratic institutions<sup>2</sup> support human rights and, further, enhance them. Thus, institutions which have been laid down by rules, or commonly known as formal institutions, play a major role in creating, shaping and/or bettering human rights for a society. Yet, informal institutions or what is more loosely defined as norms and culture can also play an important role in defining such rights. This paper explores this particular association - do informal institutions, or what we define as culture, contribute towards enhancement of women's rights?

Informal institutions or culture encompass a wide range of aspects. As a result it is very hard to define culture in a concrete fashion since it could include a variety of societal facets ranging from how people behave to what they eat to what they wear and so on so forth. As in Guiso et. al. (2006), culture “is so broad and the channels through which it can enter economic discourse so ubiquitous (and vague) that it is difficult to design testable, refutable hypotheses”. Although an accurate measure of culture has still not been defined in the literature, an extensive survey data has made it possible to come up with a decent measure of informal institutions or culture. Tabellini (2007) identifies some distinct traits from the World Value Survey (WVS) and European Value Survey (EVS) based on which a proxy for informal institutions or culture has been used in the literature. Since the focus of this paper is to empirically measure the association between informal institutions and women's rights, I consider this particular measure of culture, though many other aspects of culture can affect such rights.

The traits or attributes identified in the literature as the defining characteristics of culture of a nation can have substantial influence over the rights of women. One such trait, TRUST<sup>3</sup>, implies whether people in general trust other people. But TRUST can also work towards enhancement of women's rights. Lower TRUST leads to greater monitoring and transaction costs. In societies with lower TRUST levels, people do not participate in broader anonymous market transactions but rather trade among known small networks, developing rigid and narrow outlook and, thus, are prone to carry out unfair practices

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<sup>1</sup> According to the report, countries like Sweden, Canada, United Kingdom, Australia as well as some East European Nations like Lithuania, Latvia and Estonia have succeeded in narrowing the gender gap to a huge extent. Yet, nations like Costa Rica, Pakistan, Brazil, Mexico, Uruguay, India and many others have shamelessly failed in removing or lowering gender gaps.

<sup>2</sup> Beetham (1999) stresses that ‘human rights constitute an intrinsic part of democracy’ based on the sole fact that democracy define basic freedom of individuals which is a pre-condition for voices of the populace to be effective in public sphere.

<sup>3</sup> It has been shown in the literature that higher trust in a society lowers transaction cost which, in turn, facilitates market exchange and result in efficient outcomes (Fukuyama 1996, Dixit 2004). Greater trust has also been shown to promote secure property rights because it reduces the cost of monitoring (Williamson and Kerekes 2009).

against women. Greater TRUST levels lead to efficient outcomes as people become conscious about women's position in the society. Further, women themselves realize that they need to lead a more respectful life in the society. Thus, greater TRUST leads to generation of more favorable informal institutions which supports women's political, social and economic rights.

In the same way, another trait, RESPECT affects enhancement of women's rights. RESPECT implies the degree of tolerance and respect among individuals. An array of literature on violence against women has associated economic dependency of women with incidents of violence. The studies have shown that increased economic dependency is linked with greater incidences of violence against women( See, Gelles (1976), Roy (1977), Kalmuss and Straus (1990) and Basu and Famoye(2004)). Such attitudes indicate lower respect towards women's status in society. As people develop trust for individuals outside their close circle, their RESPECT for all individuals, including women, improve.

The third trait, CONTROL, implies the extent of freewill possessed by an individual. Greater CONTROL makes individual hard working. They become conscious of the status of women and the importance of their contribution in the society. Thus, improvements in women's rights are achieved over time.

OBEDIENCE is the fourth and final trait capturing the level of obedience in a society. It is measured as the percentage of respondents within a country answering that obedience is an important quality for children to learn. Based on similar arguments presented in the development literature, OBEDINECE should have a negative impact on women's rights. Higher the level of OBEDINECE in a society, the more efficient will be the passing on of ideas and culture over generations. Since older generations prefer and adhere to conservative and rigid outlooks, higher OBEDIENCE will have a negative impact on women's rights.

The analysis of this paper is deeply rooted in sociological and anthropological studies on rights and culture. Hernandez – Truyol (2004) suggest that cultural practices can be interpreted or employed in the erroneous way as a justification for violating women's rights. 'Culture' should be critiqued so that it can be used as a tool for protection of women's rights. Thus, the author claims that cultural practices should be molded so that they can protect and enhance women's rights. Merry (2001) suggests that 'rights are a cultural phenomenon, developing and changing overtime in response to a variety of social, economic, political and cultural influences'. The author mentions that over decades, the meaning of human rights has changed substantially from its original meaning being deeply rooted in liberal theory, to a broad notion which is strongly and intricately connected with collective, cultural<sup>4</sup>, social and economic rights. Cowan, Dembour and Wilson (2001) examine how understanding and evaluating human rights is 'approached itself as a cultural process'.

Literature has usually focused how democracy or formal institutions enhance human rights and, therefore, rights of women. Missing from the literature is an empirical analysis of the impact of culture on rights of women – in particular, the impact of the traits of culture which have been identified in the literature. This paper endeavors to fill up this missing link. The results of the paper show that better informal institutions work towards enhancement of women's rights. Both OLS and robust regression specifications confirm the findings. The results are robust to the inclusion of various controls.

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<sup>4</sup> Based on a study on India, Basu (1993) shows that, while there is strong association between culture and women's status, there is also a linkage between women's status and demographic welfare.

Section 2 discusses the data used in the paper. The empirical specification and the benchmark results are described in Section 3. Section 4 talks about robustness issues and Section 5 summarizes.

## 2. Data

Data for the analysis has been taken from various sources. The dependent variables of the paper are different proxies representing women's rights. The different rights considered are women's economic, political and social rights. The data source is *The Cingranelli-Richards (CIRI) Human Rights Dataset*. It 'contains standard-based quantitative information on government respect for 15 internationally recognized human rights for 195 countries, annually from 1981-2007'. The data description is provided in detail in Appendix 2.

The main explanatory variable of the paper is informal institutions or culture. The variable used to measure culture or informal institutions has been first identified by Tabellini (2007) and Williamson and Kerekes (2009) has expanded the variable later. As stated by Knowles and Weatherston (2006), the definition of informal institutions should capture multiple aspects which encompass norms, conventions, grass-roots institutions and trust. Tabellini<sup>5</sup> has identified some important traits in an attempt to capture the above mentioned aspects. These four important traits are TRUST, RESPECT, CONTROL and OBEDIENCE.

These cultural traits are measured by utilizing survey data from the European Values Survey (EVS) and World Values Survey (WVS). These surveys capture culture in the form of individual beliefs and values reflecting local norms and customs (The EVS Foundation and the WVS Association 2006). The data for the paper has been taken from Coyne and Williamson (2009). In order to maximize sample size Coyne and Williamson (2009) pool all countries surveyed in any of the five waves over the time periods 1981-84, 1989-1993, 1994-1999 and 1999-2004. The proxy for culture is constructed by summing TRUST, CONTROL, and RESPECT and subtracting the OBEDIENCE score.

Several control variables are used in all the specifications. Norms and culture differ to a great extent based on regional characteristics and, thus, they should play an important role in the evolution of the same. Thus, regional dummies<sup>6</sup>, based on World Bank classification, have been considered. For example, women's rights in terms of economic, political and social issues can differ a lot in countries of MENA<sup>7</sup> compared to countries which belong to South Asia. The other controls used are religious affiliations, initial schooling and proxies of formal institutions.

Variables to capture the extent of growth and development are also controlled for in alternate specifications. For the benchmark specifications, Gross domestic product (GDP) of the initial period of the sample (1981), growth of GDP of the same period and initial population have been used. As robustness checks, years of schooling of initial periods, 1960 and 1970, various proxies of formal institutions and religious affiliations have also been included in the specifications.

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<sup>5</sup> Other literature, which has argued that TRUST, RESPECT and CONTROL, are important for social interaction and encourages production and entrepreneurial initiatives are Harper (2003) and Lane (1991).

<sup>6</sup> The regional dummies are Sub-Saharan Africa (SSA), Latin America and the Caribbean, Middle East and North Africa (MENA), Europe and Central Asia (EAC), East Asia and the Pacific (EAP) and South Asia (SA).

<sup>7</sup> For example, according to UNICEF, State of the World's Children, 2007, the discrepancy of pay between men and women is much higher in MENA countries (5 percent in U.S. 2003 dollars) than South Asian countries (0.5 percent in U.S. 2003 dollars).

### 3. Methodology and Benchmark Results

For the specifications, cross-country regressions have been used. Informal institutions or culture take some time to change and may impact outcomes in the society gradually over time. Cross country regressions consider long term changes and, thus, are the appropriate models to use. Another, reason to have a cross-country specification is to avoid endogeneity issues. It is not hard to think that women's rights can also have an impact on informal institutions or culture. Presence of efficient rights and non-existence of all unfair practices against women should bring a positive change in norms and culture<sup>8</sup>. As all aspects of women's rights – social, economic and political, gain importance among masses, they shed their conservative and rigid outlooks. Thus, there is an overall change in attitude, norms, beliefs, and, thus, in culture. As McAdam (1994) mentions, while explaining the association between social movements for human (women) rights, gay rights and so on, the causation can run both ways. Just as social movements are shaped by culture, social movements and, thus, redefined rights have their impact on culture as well.

To avoid this bias of reverse causality in the regression, initial (values for 1989) values of the aggregate culture variable have been used. Averages of women's rights proxies have been considered. Due to fewer observations for the year 1989, averages of informal institutions have been used for the other specifications which should also help to overcome the endogeneity bias. Before running empirical specifications, the association is represented by means of scatter plots. Figure 1 shows the scatter plots when initial 1989 values of informal institutions or culture is used. For all the scatter plots, the association is positive. The empirical specification is as follows:

$$Rights_i = \alpha_1 + \alpha_2 Culture_i + \alpha_i X_i + \alpha_4 R_i + \varepsilon_i \quad (1)$$

where  $Rights_i$  implies women's economic, political or social rights.  $Culture_i$  represents the aggregate index of informal institutions.  $X_i$  represents the matrix for controls and  $R_i$  represents the vector for regional dummies.  $\varepsilon_i$  represents the random error term.

In Table I, the results are presented. As stated, the 1989 aggregate index figures are considered. While columns (1) to (3) present ordinary least square (OLS) results, columns (4) to (6) present robust regression<sup>9</sup> specifications. The results show that informal institutions have a strong impact on all types of women's rights. The problem with these specifications is that there are only 39 observations. So these specifications are run without including any controls. In order to maximize the set of observations, average of informal institutions over the period 1984 to 2004 is considered. The results are presented in Table II. To start with, the results are again run by considering informal institutions as the only explanatory variable. Again, the conclusion is the same – informal institutions affect women's rights strongly. Similar to Table 1, both OLS and robust regression specifications are considered.

In Table III, more controls are added. The controls added are regional dummies, formal institutions of 1981 and log of years of schooling of 1960. Democratic<sup>10</sup>

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<sup>8</sup> Culture, as stated before, is multifaceted and nuance. At the same time, the linkages between culture and women's rights are multidimensional too. Many aspects of such an association have not been captured and are beyond the focus of this paper.

<sup>9</sup> Robust regression analysis help to control the bias generated due to the presence of outliers. Such specifications attach least weight to outliers.

<sup>10</sup> Poe, Tate and Keith (1999) have claimed in their paper that high levels of democracy and high economic development are supportive of human rights. Women's rights, being a part of human rights, should be affected by the same variables as well.

institutions should have significant positive impact on rights for women. Initial values are considered since better democratic institutions in the past should provide the infrastructure for evolvement of women's rights over time. Proxies for economic development have been considered later. Further, a better educated citizen should also have more respect towards women's status in the society. As the results in Table 3 shows, the coefficients of rights for women lose their significance in the case of economic rights but remain significant for the other two. While the coefficient of democracy is significant in the case of economic rights, it is not significant in the case of political and social rights. In columns (4) to (6), a variable indicating extent of institutionalized constraints on the decision making powers of the chief executive, is used as a proxy for formal institutions, instead of democracy. Initial (1960) values are considered. The variable ranges from 1 to 7 with higher values indicating more constraints on the chief executive. The conclusions remain unchanged but the variable itself is not significant.

In Table IV, more controls are added. These controls are proxies for religious affiliations. Individuals belonging to different religions have separate viewpoints about women's status in society and accordingly women's rights will be defined. Among the religious affiliation variables, Muslim population has a negative impact on all types of rights but the impact is not significant. In alternate specifications, averages for democracy<sup>11</sup> and schooling are considered and conclusion is unaltered. The results are reported in Appendix 1. For the OLS specifications, the coefficient of Muslim population is significant in the specifications for economic and social rights but for robust regressions, the coefficient is only significant for social right specification.

For the same set of specifications, gross domestic product (GDP) of 1981, GDP growth of the same year and population of the same year are included. Initial values of these macroeconomic and development variables should affect the pattern of human rights development of women over time. Coefficients for all three types of rights are significant (results not reported).

As mentioned before, the aggregate index is constructed based on the four traits. To delve into deeper analysis, the benchmark specifications are rerun by considering OBEDIENCE as the proxy of informal institutions or culture. OBEDIENCE is the negative trait among the four traits and, thus, the results would put forward an interesting perspective about the negative impact of a facet of culture on women's rights. The results are presented in Table V. Though the results are identical with OLS specifications, the robust regression results are reported. The coefficient of obedience has a negative impact on all types of women's rights. In columns (4) to (6), TRUST is included along with OBEDIENCE. While TRUST has a positive impact on all three types of rights, OBEDIENCE has a negative impact.

#### **4. Robustness Analysis**

To confirm the findings, several robustness tests have been carried out. The specifications are rerun with different proxies of formal institutions. The idea is to check, that whether controlling for other types of formal institutions, takes away the significance of informal institutions. Table VI<sup>12</sup> presents the results. Two proxies of schooling are included in the

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<sup>11</sup> While the democracy average ranges over the period 1970 to 1994, the schooling average is over the period 1960 to 1985.

<sup>12</sup> Columns (1) to (4) control for Initial (1970) Schooling and column (5) to (8) control for schooling average over the years 1960 to 1985. The different proxies of formal institutions are as follows: (A) column (1) and column (5) control for democracy average over the period 1970 to 1994; (B) column (2) and column (6) control for autocracy average over the period 1960 to 1990; (C) column (3) and column (7) control for initial (1970)

specifications. The results reported are for social rights. For columns (5) to (8), which control for schooling average, the coefficient of social right is weekly significant (p ranging from 0.10 to 0.11). The results are almost identical<sup>13</sup> for political right while the coefficient of economic right remains insignificant for most of the specifications.

## 5. Conclusion

The paper stresses the importance of culture in the development process of women's rights. As the populace in a society develops more Trust, Respect and Control (the positive traits of culture), they become conscious about the position of women in society as well as their contributions, and, thus rights of women improve over time. The paper stresses while efficient formal institutions should be articulated for defining and shaping women's rights, the role of informal institutions cannot be denied.

## References

- Basu A.M. (1993), "Culture, the status of women, and demographic behaviour: illustrated with the case of India", *Oxford University Press*
- Basu, Bharati and Felix Famoye (2004), "Domestic violence against women, and their economic dependence: a count data analysis", *Review of Political Economy*, 16(4), 457 – 472.
- Beetham, David (1999), "Democracy and Human Rights," Polity Press in association with Blackwell Publishers Ltd.
- Coleman Isobel (2004), "The Payoff from Women's Rights", *Essays in Foreign Affairs*, published by the Council on Foreign Relations
- Cowan Jane K., Marie – Benedicte Dembour and Richard A. Wilson (2001), "Culture and Rights – Anthropological Perspectives", *Press Syndicate of the University of Cambridge, NY*
- Coyne, Christopher J. and Claudia R. Williamson (2009), "Trade Openness and Culture," *Mimeo*, Appalachian State University.
- Fukuyama, F. (1999). "The great disruption". *New York: Simon and Schuster*.
- Gelles, J. (1976), "Abused Wives: Why Do They Stay?" *Journal of Marriage and the Family*, 38, 659-668.
- Glaeser, Edward L., Rafael La Porta, Florencio Lopez-De-Silanes, and Andrei Shleifer (2004), "Do Institutions Cause Growth?" *Journal of Economic Growth* 9, 271-03.
- Guiso Luigi, Paola Sapienza and Luigi Zingales (2006), "Does Culture Affect Economic Outcomes?" *Journal of Economic Perspectives*, 20(2), 23-48.
- Knowles, Stephen and Clayton Weatherston (2006), "Informal Institutions and Cross-Country Income Differences," Discussion Papers, University of Nottingham, CREDIT.
- Kalmuss, D. and M. Straus (1990), "Wife's Marital Dependency and Wife Abuse," in *Physical Violence in American Families*, edited by M.A. Straus and R.J. Gelles. New Brunswick, NJ: Transaction Publishers.
- Harper, David A. (2003), *Foundations of Entrepreneurship and Economic Development*, New York, Routledge.

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executive constraints; (D) column (4) and column (8) control for an average of executive constraints over the period 1960 to 2000.

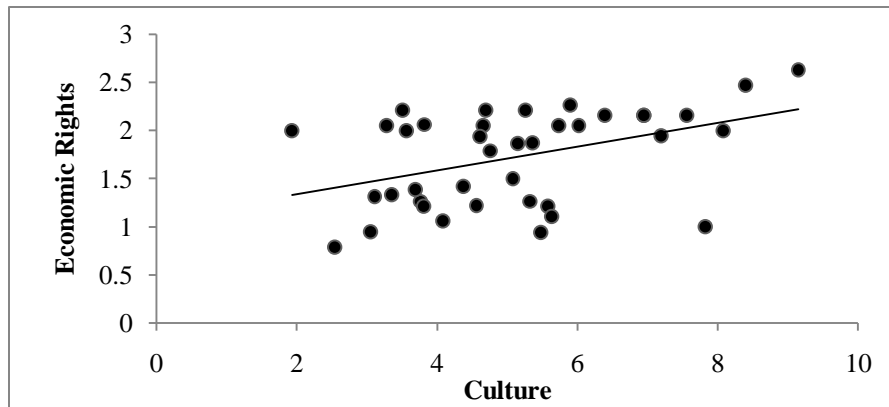
<sup>13</sup> All specifications are rerun with robust regressions and the results stay unaltered.

- Hernandez-Truyol Berta Esperanza ( 2004), “ Women’s Rights as Human Rights – Rules, Realities and the Role of Culture – A Formula for Reform,” in Fred E. Jandt ( Ed.) *International Communication* by Sage Publications Inc.
- Lane, Robert E (1991), *The Market Experience*. Cambridge: Cambridge University Press.
- La Porta Rafael, Florencio Lopeez-De-Silanes, Andrei Shleifer and Robert Vishny (1999), “The Quality of Government” *Journal of Law, Economics and Organization*, 15(1), 222-278.
- Merry Sally Engle ( 2001), “ Changing Rights, Changing Culture”, in Jane K. Cowan, Marie – Benedicte Dembour and Richard A. Wilson ( 2001) (Ed.) *Culture and Rights – Anthropological Perspectives*, Press Syndicate of the University of Cambridge, NY
- North, Douglass C. (1990), *Institutions, Institutional Change and Economic Performance*, New York, Cambridge University Press.
- Polity IV Project. *Polity IV Dataset: Political Regime Characteristics and Transitions, 1800-2003*, Center for International Development and Conflict Management, University of Maryland, College Park, Maryland. Published online, 2009.
- Roy, M. K. (1977), “A research project probing a cross section of battered women” in M. K. Roy (Ed.), *Battered Women: A Psychological Study of Domestic Violence*. New York, N. Y.: Van Nostrand Reinhold.
- Tabellini, Guido (2007), “Culture and Institutions: Economic Development in the Regions of Europe,” *Journal of the European Economic Association*, Forthcoming
- The European Values Study Foundation and World Values Survey Association (EVSF-WVSA) (2006), *European and World Values Surveys Four-Wave Integrated Data File, 1981–2004, v.20060423*.
- CIRI Human Rights Data Project Home. *Human Rights Database:The Cingranelli-Richards (CIRI) Human Rights Dataset* by David L. Cingranelli and David L. Richards, current version copyright: 2009
- Williamson, Claudia. R., & Carrie K. Kerekes (2008). “Securing private property: formal versus informal institutions”, *Mimeo*, Appalachian State University.
- World Bank (2006). *World Development Indicators*, CD ROM.

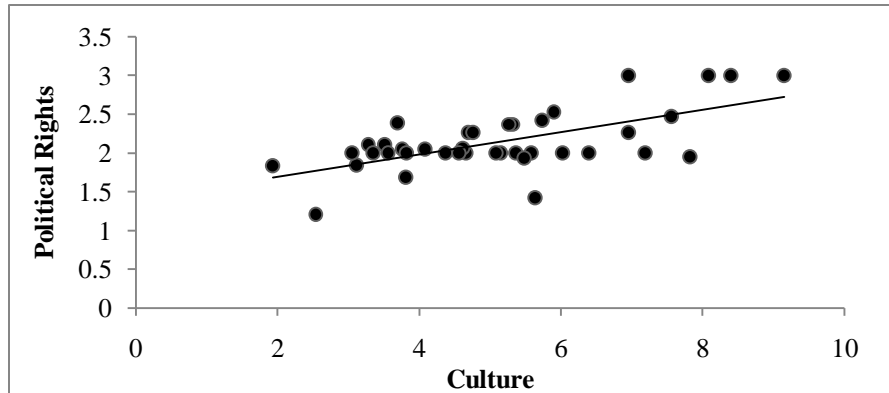


**Figure 1: Scatter Plots - The association between Women's Rights and Culture**

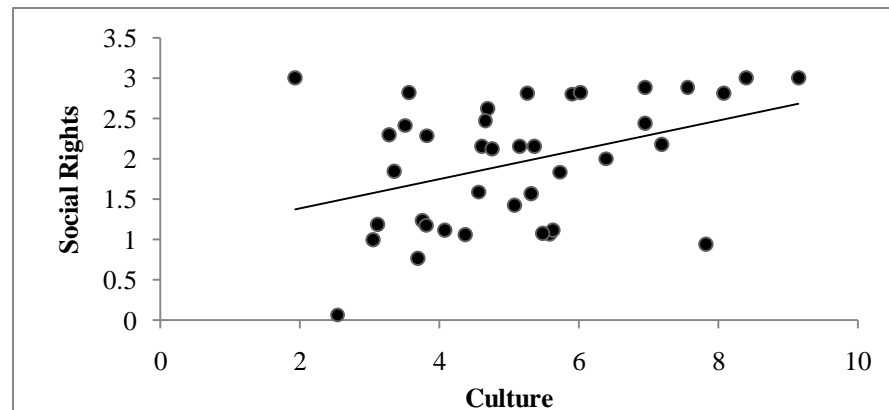
**A. Economic Rights**



**B. Political Rights**



**C. Social Rights**



**Table I: Cross Sectional Specification: The Impact of Informal Institutions on Women's Rights (With Initial Informal)**

Independent Variables	OLS	OLS	OLS	Robust Regression	Robust Regression	Robust Regression
	Economic Rights	Political Rights	Social Rights	Economic Rights	Political Rights	Social Rights
Informal( 1989)	0.123** (0.0471)	0.145*** (0.0331)	0.180** (0.0821)	0.141*** (0.0465)	0.144*** (0.0289)	0.206*** (0.0732)
Constant	1.095*** (0.256)	1.402*** (0.159)	1.028** (0.469)	1.019*** (0.251)	1.425*** (0.156)	0.901** (0.395)
Observations	39	39	39	39	39	39
R-squared	0.180	0.409	0.155	0.199	0.400	0.177

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table II: Cross Sectional Specification: The Impact of Informal Institutions on Women's Rights (With Informal Averages)**

Independent Variables	OLS	OLS	OLS	Robust Regression	Robust Regression	Robust Regression
	Economic Rights	Political Rights	Social Rights	Economic Rights	Political Rights	Social Rights
Informal	0.181*** (0.0216)	0.119*** (0.0214)	0.271*** (0.0331)	0.188*** (0.0250)	0.106*** (0.0158)	0.290*** (0.0376)
Constant	0.719*** (0.0988)	1.398*** (0.0980)	0.406*** (0.152)	0.715*** (0.111)	1.489*** (0.0698)	0.333** (0.166)
Observations	89	89	89	89	89	89
R-squared	0.354	0.261	0.377	0.395	0.344	0.406

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table III: Controlling for Initial Formal Institutions and Schooling**

Independent Variables	OLS	OLS	OLS	OLS	OLS	OLS
	Economic Rights (1)	Political Rights (2)	Social Rights (3)	Economic Rights (4)	Political Rights (5)	Social Rights (6)
Informal	0.0465 (0.0326)	0.0992* (0.0511)	0.0922** (0.0440)	0.0432 (0.0349)	0.133** (0.0523)	0.113** (0.0471)
Formal	0.0303* (0.0175)	0.00736 (0.0176)	0.0254 (0.0201)	0.0261 (0.0251)	-0.0122 (0.0274)	-0.00952 (0.0321)
Schooling (1960)	-3.16e-05 (0.0904)	-0.0661 (0.131)	-0.0882 (0.135)	-0.0382 (0.112)	-0.0622 (0.161)	-0.0265 (0.149)
Intercept	1.510*** (0.221)	1.680*** (0.211)	1.787*** (0.304)	1.729*** (0.152)	1.604*** (0.175)	1.842*** (0.258)
Observations	40	40	40	39	39	39
R-squared	0.907	0.554	0.888	0.876	0.540	0.863

**Table IV: Controlling for Religious Affiliations**

Independent Variables	OLS	OLS	OLS	OLS	OLS	OLS
	Economic Rights (1)	Political Rights (2)	Social Rights (3)	Economic Rights (4)	Political Rights (5)	Social Rights (6)
Informal	0.0531* (0.0287)	0.113** (0.0543)	0.119** (0.0545)	0.0603 (0.0419)	0.137** (0.0651)	0.0980 (0.0644)
Formal	0.0287 (0.0185)	0.0105 (0.0231)	0.0271 (0.0255)	0.0262 (0.0269)	-0.00875 (0.0248)	-0.0110 (0.0360)
Schooling (1960)	-0.0520 (0.116)	-0.0282 (0.192)	-0.113 (0.222)	-0.107 (0.149)	-0.0506 (0.220)	-0.0186 (0.197)
Catholics	-0.000175 (0.00160)	0.000371 (0.00302)	-9.97e-05 (0.00338)	0.000500 (0.00160)	0.000731 (0.00219)	-0.000839 (0.00312)
Muslims	-0.00189 (0.00208)	-0.00120 (0.00521)	-0.00501 (0.00522)	-0.00228 (0.00253)	-4.30e-05 (0.00448)	-0.00199 (0.00403)
Constant	1.583*** (0.292)	1.489** (0.624)	1.662** (0.659)	1.730*** (0.211)	1.527*** (0.351)	1.992*** (0.451)
Observations	38	38	38	36	36	36
R-squared	0.902	0.564	0.883	0.870	0.556	0.864

Notes: All specifications are run with regional dummies. Columns (1) to (3) controls for initial (1981) values of democracy while columns (4) to (6) control for initial (1960) executive constraints  
Robust standard errors in parentheses\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table V: Controlling for Obedience and Trust**

Independent Variables	(1) Economic Rights	(2) Political Rights	(3) Social Rights	(4) Economic Rights	(5) Political Rights	(6) Social Rights
Obedience	-1.076** (0.425)	-0.474* (0.266)	-1.892*** (0.504)	-0.977** (0.408)	-0.404 (0.286)	-1.846*** (0.486)
Trust				0.00914* (0.00510)	0.0121*** (0.00358)	0.0119* (0.00608)
Muslim	-0.00522** (0.00239)	-0.00533*** (0.00150)	-0.00843*** (0.00284)	-0.00321 (0.00228)	-0.00445*** (0.00160)	-0.00785*** (0.00272)
Catholics	-0.000101 (0.00221)	-0.000809 (0.00138)	-0.000225 (0.00262)	0.00108 (0.00227)	0.000238 (0.00159)	0.00146 (0.00270)
Formal	0.0505*** (0.0161)	0.00319 (0.0101)	0.0895*** (0.0191)	0.0518*** (0.0164)	0.00619 (0.0115)	0.0748*** (0.0195)
Constant	1.757*** (0.193)	2.196*** (0.120)	2.020*** (0.228)	1.404*** (0.257)	1.795*** (0.180)	1.653*** (0.306)
Observations	42	42	42	42	42	42
R-squared	0.519	0.447	0.693	0.564	0.544	0.726

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Notes: All specifications are robust regressions. Formal implies initial (1981) values of democracy.

**Table VI: Controlling for Different Proxies of Formal Institutions**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Informal	0.109* (0.0549)	0.112** (0.0489)	0.168** (0.0636)	0.123** (0.0502)	0.0930 (0.0557)	0.0404 (0.0542)	0.102 (0.0628)	0.0819 (0.0489)
Formal	0.00960 (0.0254)	-0.0864 (0.135)	-0.0176 (0.0312)	-0.0126 (0.0496)	0.0219 (0.0250)	-0.469*** (0.133)	0.00001 (0.0296)	0.108** (0.0450)
Schooling	-0.0297 (0.173)	-0.0483 (0.178)	-0.113 (0.207)	-0.0284 (0.182)	0.146 (0.266)	0.176 (0.233)	0.00387 (0.227)	0.0630 (0.240)
Catholics	-0.000828 (0.00278)	-0.000583 (0.00266)	0.000338 (0.00298)	-0.000669 (0.00267)	-0.000485 (0.00280)	0.000366 (0.00264)	-0.000857 (0.00285)	0.000372 (0.00266)
Muslims	-0.00589 (0.00434)	-0.00565 (0.00437)	-0.00462 (0.00397)	-0.00597 (0.00407)	-0.00753** (0.00358)	-0.00683* (0.00347)	-0.00962*** (0.00261)	-0.00817** (0.00310)
Constant	1.778*** (0.422)	1.869*** (0.437)	1.726*** (0.405)	1.845*** (0.461)	1.316** (0.596)	1.872*** (0.503)	1.835*** (0.423)	1.033* (0.583)
Observations	45	44	41	45	50	50	38	50
R-squared	0.877	0.877	0.854	0.877	0.796	0.835	0.859	0.821

Robust standard errors in parentheses

\*\*\* p&lt;0.01, \*\* p&lt;0.05, \* p&lt;0.1

Notes: Regressand: Social Rights. Columns (1) to (4) control for Initial (1970) Schooling and column (5) to (8) control for schooling average over the years 1960 to 1985. The different proxies of formal institutions are as follows: (A) column (1) and column (5) control for democracy average over the period 1970 to 1994; (B) column (2) and column (6) control for autocracy average over the period 1960 to 1990; (C) column (3) and column (7) control for initial (1970) executive constraints; (D) column (4) and column (8) control for an average of executive constraints over the period 1960 to 2000. All specifications are run with regional dummies.

### Appendix 1: Controlling for democracy average and schooling average

VARIABLES	OLS	OLS	OLS	Robust Regression	Robust Regression	Robust Regression
	Economic Rights	Political Rights	Social Rights	Economic Rights	Political Rights	Social Rights
	(1)	(2)	(3)	(4)	(5)	(6)
Informal	0.0433 (0.0400)	0.0895** (0.0383)	0.0930 (0.0557)	0.0645* (0.0370)	0.0689** (0.0333)	0.107* (0.0559)
Formal (average)	0.0222 (0.0188)	0.00142 (0.0127)	0.0219 (0.0250)	0.0117 (0.0174)	-0.00581 (0.0157)	0.0144 (0.0264)
Schooling (average)	0.0504 (0.134)	0.0852 (0.114)	0.146 (0.266)	0.0195 (0.167)	0.0396 (0.151)	0.0904 (0.253)
Catholics	-0.00115 (0.00174)	0.000809 (0.00179)	-0.000485 (0.00280)	-0.000335 (0.00160)	0.00178 (0.00144)	-0.000176 (0.00242)
Muslims	-0.00351* (0.00188)	-0.00318 (0.00216)	-0.00753** (0.00358)	-0.00321 (0.00272)	-0.00310 (0.00245)	-0.00748* (0.00412)
Constant	1.513*** (0.255)	1.451*** (0.342)	1.316** (0.596)	1.519*** (0.350)	1.603*** (0.315)	1.426** (0.529)
Observations	50	50	50	50	50	50
R-squared	0.793	0.525	0.796	0.773	0.464	0.772

Notes: All specifications are run with regional dummies.

Robust standard errors in parentheses\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

## **Appendix 2: Description of Women's Rights proxies and Culture**

### **A. Women's Rights ( Source: CIRI Database)**

The components of women's economic rights are equal pay for equal work, free choice of profession or employment without the need to obtain a husband or male relative's consent, the right to gainful employment without the need to obtain a husband or male relative consent, equality in hiring and promotion practices, job security ( maternity leave, unemployment benefits, no arbitrary firing or layoffs, etc ...), non - discrimination by employers, the right to be free from sexual harassment in the workplace, the right to work at night, the right to work in occupations classified as dangerous and the right to work in the military and the police force.

The components of political rights are women's right to vote, their right to run for political office, their right to hold elected and appointed government positions, the right to join political parties and the right to petition government officials. Finally, women's social rights include the right to equal inheritance, the right to enter into marriage on a basis of equality with men, the right to travel abroad, the right to obtain a passport, the right to confer citizenship to children or a husband, the right to initiate a divorce, the right to own, acquire, manage, and retain property brought into marriage, the right to participate in social, cultural, and community activities, the right to education, the freedom to choose a residence/ domicile, freedom from female genital mutilation of children and of adults without their consult and freedom from forced sterilization.

### **B. Culture ( Source: Coyne and Williamson, 2009; Original Source: EVS and WVS Database)**

TRUST, the first cultural attribute, aims to capture the level of trust among individuals. The following question from the survey is used to measure this attribute: "Generally speaking, would you say that most people can be trusted or that you can't be too careful in dealing with people?" The percentage of respondents that answered "Most people can be trusted," has been used to capture the level or degree of trust in each country. The second component which is considered from WVS and EVS is CONTROL which, as mentioned above, measures the extent to which individuals possess freewill. The question used to capture this trait is: "Some people feel they have completely free choice and control over their lives, while other people feel that what we do has no real effect on what happens to them. Please use this scale (from 1 to 10) where 1 means "none at all" and 10 means "a great deal" to indicate how much freedom of choice and control in life you have over the way your life turns out". By averaging all the individual responses and multiplying them by 10, an aggregate control component is determined.

RESPECT is the third cultural trait which is based on the distinction between generalized versus limited mortality. The following question is used to decide the importance of respect in a society: "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". Respect is defined as the percentage of respondents in each country that mentioned the quality "tolerance and respect for other people," as being important. OBEDIENCE is the fourth and final trait and question measuring respect is also utilized in capturing the level of obedience in a society. It is measures as the percentage of respondents within a country answering that obedience is an important quality for children to learn. The proxy for culture is constructed by summing Trust, Control, and Respect and subtracting the Obedience score.

### Appendix 3: List of Variables and Sources

Variable Name	Source	Definition
Women's Economic Rights	The Cingranelli-Richards (CIRI) Human Rights Dataset	Described in Appendix (1)
Women's Economic Rights	The Cingranelli-Richards (CIRI) Human Rights Dataset	Described in Appendix (1)
Women's Economic Rights	The Cingranelli-Richards (CIRI) Human Rights Dataset	Described in Appendix (1)
Informal Institution/ Culture Democracy	World Value Survey(WVS) and European Value Survey (EVS) Polity IV Database	Described in Appendix (1) An index ranging from 0 to 10 based on the competitiveness of political participation, the openness and competitiveness of executive recruitment and constraints on the chief executive
Initial Schooling 1960 and 1970	Glaeser, La Porta, Lopez-De-Silanes and Schleifer (2004)	Log of initial years of schooling of the years 1960 and 1970.
Initial Executive Constraints 1960 and 1970	Glaeser, La Porta, Lopez-De-Silanes and Schleifer (2004) (Original Source: Jagers and Gurr, 1996)	Measure of the extent of institutionalized constraints on the decision making powers of the chief executive.
Autocracy	Glaeser, La Porta, Lopez-De-Silanes and Schleifer (2004)	This variable ranges from zero to two where higher values equal a higher degree of autocracy. Democracies are coded as 0, bureaucracies (dictatorships with a legislature) are coded as 1 and autocracies (dictatorship without a legislature) are coded as 2.
Population	World Development Indicators (2006)	Total Population
GDP per capita	World Development Indicators (2006)	Gross Domestic Product per capita in constant 2000 dollars
Growth	World Development Indicators (2006)	Growth rate of Gross Domestic Product
Religious Affiliations	La Porta, Lopez-de-Silanes, Schleifer and Vishny (1999)	Percentages of Muslims and Roman Catholics for different countries in 1980.