International Human Rights Treaty to Change Social Patterns

- The Convention on the Elimination of All Forms of Discrimination against Women

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Abstract

This paper analyzes empirically whether the ratification of the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), advocating the multiple dimensions of women's rights, affects the level of women's rights in a country. Measuring the commitments to the CEDAW based on reservations by member states, I test (i) whether the Convention enhances women's rights if a member country has a higher level of democracy; and (ii) whether the effects are most pronounced in the dimension of women's social rights, a special focus of the Convention. Using panel data for 126 countries during 1981-2005, I do not find statistically significant effects of the CEDAW alone on any dimension of women's rights. However, I do find a positive impact of the CEDAW on women's social rights if combined with a higher degree of democracy. These findings are robust to the choice of control variables and the method of estimation. In particular, taking into account the potential reverse-causality does not alter the main conclusions.

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Key Words: effectiveness of international human rights treaties; women's rights; social dimension; democracy; and reservations

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1. Introduction

Is an international treaty on human rights effective? This is a recurring question in political economy. However, in both theoretical and empirical studies, there is little consensus in answering this question and the arguments and findings of many studies often contradict each other. Potentially, this is a too broadly defined question, ignoring the dynamics of conditions where the mandates of an international human rights treaty can be realized. Thus, the question should be rephrased to 'under which conditions can an international human rights treaty be effective in improving the human rights practice of a country?'

In investigating conditions conducive to ensuring the effectiveness of human rights treaties, the role of institutional quality deserves special attention. In fact, a substantial amount of literature has studied how the level of institutional quality affects various economic, political and social phenomena, since Acemoglu et. al (2001)'s well-known finding of a significant effect of institutions on economic growth by using settler mortality as an instrument. In the human rights literature, most studies agree that democratic institutions are crucial to improving the human rights practice of a country (Moravscik 1997; Poe, Tate and Keith 1999; Simmons 1998). Indeed, it is logical to assume that democracies, respecting law and justice, are more likely to promote human rights than authoritarian regimes. However, the role of democracy has not been sufficiently investigated in studies on the effectiveness of international legal mechanisms advocating human rights norms.

To my knowledge, Neumayer (2005) is the only empirical study addressing this issue. In his analysis on universal and regional human rights treaties, he found that the ratification of these treaties improves human rights practice, if a country has a higher degree of democracy. His findings are meaningful that democracy is suggested as a condition to promote the effectiveness of human rights treaties. However, his study has several limitations. First, in his interpretation on the interaction term, he disregards that the marginal effect and the statistical significance of the interaction term vary, depending on the levels of the two independent variables consisting of the interaction term (Ai and Norton 2003). Thus, he fails to capture the threshold level of democracy at which ratification turns to have a positive, significant effect on human rights practice of a country. In addition, he uses two identical dependent variables, physical integrity and civil rights, to measure the effects of various human rights treaties, neglecting specific mandates each treaty addresses.

In this paper, I focus on one major human rights treaty in order to find whether the treaty is effective in fulfilling the specific agenda it aims at. My chosen treaty is the International Convention on the Elimination of Discrimination against Women (CEDAW

1981), known as the 'Women's Convention' due to its standing as a prime, universal convention on women's rights (Clark 1991). The CEDAW has been ratified by 186 states to date and aims at improving women's rights in diverse dimensions with a particular emphasis on women's social rights.

In fact, the effectiveness of the CEDAW has been rarely studied, particularly in quantitative studies, despite its prominence among international human rights treaties. Some qualitative studies (Centre for Feminist Research 2000) documented country cases where the participation in the Convention has lead to progress in women's rights – for instance Turkey, while there exist only a few unpublished quantitative studies (Den Boer 2008; Gray et. al. 2004; Simmons 2004; Sweeney 2004) on the effects of the CEDAW on women's rights. As can be seen in Figures 1 and 2, women's rights are (gradually) improving over the past three decades, alongside with increasing commitments to the CEDAW by countries. Given these trends, it is relevant to raise the following question; has the CEDAW contributed to improving women's rights or is the improvement simply a time trend unrelated to the Convention?

This paper aims at answering this question by providing an econometric assessment on the effectiveness of the CEDAW. In my analysis, I estimate the effects of the Convention on the multiple dimensions of women's rights by employing the Cingranelli-Richards (CIRI) Dataset on women's social, political and economic rights. In particular, I try to find institutional condition where the ratification of the Convention can create positive effects promoting women's rights. In doing so, two main arguments are tested. According to the first hypothesis, the effects of the CEDAW on women's rights are enhanced if a member country has a high level of democracy. The second hypothesis argues that the effects of the CEDAW are most pronounced in women's social rights, given its special focus. The findings of my estimations suggest that the effects of the CEDAW are significant and positive for women's social rights if combined with a higher level of democracy – measured by the Polity IV project (Marshall and Jaggers 2009). In particular, the ratification generates significant and positive effects if the level of democracy is the median score 0 of the Polity IV dataset (score from -10 to +10) or higher. However, the impact is not confirmed for women's political and economic rights. Taking into account reverse-causality issues, this finding is consistent and robust.

Through my analysis, I contribute to the literature are as following. First, my analysis finds a specific institutional condition (the level of democracy) on a specific dimension of women's rights (social rights), beyond general impact. This finding provides policy implications on how a country could promote women's rights by committing to the

Convention. Furthermore, this paper shows how the effects of the CEDAW vary depending on the levels of democracy, and also finds the threshold level of democracy where the effect of the CEDAW becomes positive and significant. Indeed, estimating an interaction term in a non-linear model – such as ordered probit estimation used in the paper – is not straightforward because the coefficient does not correctly reflect the marginal effect and many studies wrongly suggest the effects (Ai and Norton 2003). By constructing manual programming and a graphical application, I was able to correctly demonstrate the marginal effect of the interaction term between the CEDAW and the level of democracy. Third, (potential) reverse causality – i.e. countries with a higher level of women's rights are more likely to commit to the CEDAW – is tackled. Indeed, reverse-causality is one of the most serious issues in estimating the effects of human rights treaties but most studies do not address this issue properly. To overcome the reverse causality issue, I employ exogenous instruments, commitments to other human rights treaties uncorrelated to women's rights, and obtain robust results. To my knowledge, this paper is the only study on the effectiveness of a human rights treaty, estimating results robust to the reverse-causality problem by applying an instrumental variable approach.

This paper follows the structure below. Section 2 discusses the role of democracy on enhancing the effectiveness of human rights treaties. Section 3 describes the mandates, focus and membership of the CEDAW. In Section 4, I propose a method to measure countries' commitments to the CEDAW. Section 5 presents the research design and estimation method, follow by the results in Section 6 and robustness checks in Section 7. Section 8 summarizes and concludes the paper.

2. Democracy as a Vehicle to Enhance the Effects of a Human Rights Treaty

The role of intuitions is recently emphasized in a wide range of empirical studies in the field of political economy; growth (Acemoglu et. al. 2001; Hall and Jones 1999); aid (Burnside and Dollar 2001; Dalgaard et. al. 2004); shadow economy (Dreher et. al. forthcoming); and human rights (Hafner-Burton and Tsutsui 2005; Keith 1999; Poe, Tate and Keith 1999). In particular, some human rights literature argues that the level of democracy and the linkage to international NGOs are determinants of the level of human rights practices,

while human rights treaties do not necessarily improve the human rights records of a country (Hafner-Burton and Tsutsui 2005; Keith1999)[1].

It seems that empirical studies suggest that human rights treaties are merely a 'cheap talk' without any strong enforcement mechanism (Downs, Rocke and Barsoom 1996). The studies conclude that international human rights treaties are futile because they do not have statistically significant effects on countries' human rights practices and suggest that democracy, rather than the ratification of human rights treaties, is determinant to promoting a better practice of human rights.

However, these empirical studies do not directly address the question, whether an international human rights treaty can be effective if reinforced by democratic institutions. Their approach, focusing on the ratification of human rights treaties and treating democracy as a control variable, neglects the institutional conditions which can ensure the effective implementation of the treaties. While the ratification of the treaties alone may not create any positive effects, it could still improve human rights performance of a country, if implemented by sound institutions respecting law and order and human rights.
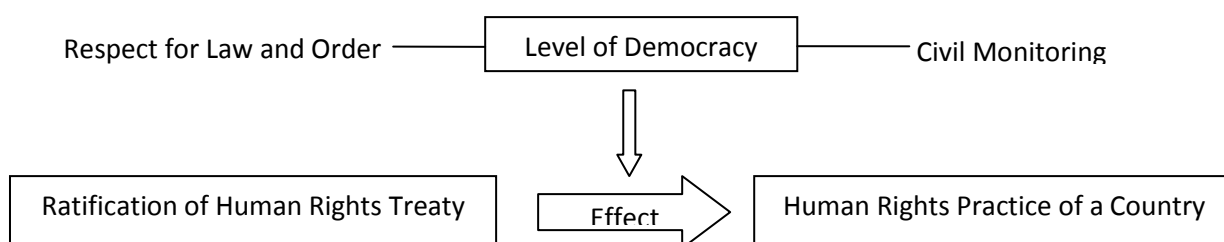
Indeed, regime type is crucial to understanding the effectiveness of international human rights treaties because the realization of the mandates of the treaties is arguably subject to political interactions among stakeholders – institutions, civil society and state actors (Moravcsik 1997). Many influential studies suggest that democracies are more likely to comply with the obligations of the international human rights treaties; because democratic countries respect the rule of law and judicial independence (Dixon 1993); because citizens in these countries are more aware of their governments' performance and exercise pressure on the government to comply with human rights regimes (Hathaway 2003); and because civil society and NGOs actively participate in spreading the norms of human rights treaties (Keck and Sikkink 1998) .

It seems logical that a country, respecting law and order, is more likely to respect international law and its obligations. Also, the ratification of a human rights treaty by a democratic country leads to real commitments to the mandate of the treaty as the performance of the country is subject to civil monitoring. Thus, democracy can be an effective mechanism translating the content of the human rights treaty into domestic practice.

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[1] Hafter-Burton and Tsutsui analyzed the effects of six universal human rights treaties including the CEDAW and Keith the International Covenant on Civil and Political Rights (ICCP).

Figure 3: Democracy as a Vehicle to Enhance the Effects of a Human Rights Treaty

Respect for Law and Order ——— | Level of Democracy | ——— Civil Monitoring

⇓

| Ratification of Human Rights Treaty | → Effect → | Human Rights Practice of a Country |

3. The CEDAW: A Comprehensive Convention with a Focus on Social Rights

The Convention on the Elimination of Discrimination against Women (CEDAW, 1981) was adopted by the United Nations General Assembly in 1979 and entered into force in 1981. Ratified by 186 parties[2] at present, the CEDAW marks itself as one of the universal human rights treaties[3]. The main feature of the CEDAW is its 'ambitious' approach aiming at achieving gender equality in 'all dimensions' in life and eliminating 'all forms' of discrimination. Indeed, the CEDAW is the prime international treaty on women's rights, resulted from the accumulated efforts in progressing women's status since the end of World War II[4] (the CEDAW Committee, 1995).

Prior to the CEDAW, the Convention on the Political Rights of Women (1952), the Convention on the Nationality of Married Women (1957) and the Convention on Consent to Marriage, Minimum Age for Marriage and Registration of Marriages (1962) advocated women's rights in specific areas such as voting rights, political representation, the preservation of nationality and marriage contracts. Although addressing specific issues in the areas where women were believed to be particularly vulnerable, these approaches did not

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[2] Among the major countries in the world, the U.S. has not ratified the Convention after becoming a signatory in 1980.

[3] The magnitude of participation in the CEDAW is comparable to that of other major human rights treaties such as the International Covenant on Economic, Social and Cultural Rights (ICESCR 1966) with 160 parties; the International Covenant on Civil and Political Rights (ICCPR 1966) with 164; and the International Convention on the Elimination of All Forms of Racial Discrimination (CERD) with 173. Among international conventions on women's rights, 121 countries have ratified the Convention on the Political Rights of Women; 74 the Convention on the Nationality of Married Women; and 54 the Convention on Consent to Marriage, Minimum Age for Marriage and Registration of Marriages.

[4] Women's rights were initially protected by the general human rights mechanisms under the United Nations systems, particularly under the ICESCR and the ICCPR, which are the legally binding forms of the Preamble to the Charter of the UN (1945) and the Universal Declaration of Human Rights (1948).

include all necessary measures to improve women's rights as a whole. Gathering the limitations of the fragmented approaches, the CEDAW was created as a single, comprehensive form of an international legal instrument (the CEDAW Committee, 1995).

In fact, article 1 of the CEDAW clearly states its comprehensive approach that the agendas of the Convention are to eliminate discrimination against women in all of the political, economic, social, cultural and civil dimensions. The CEDAW consist of six parts (30 articles) and addresses the obligations of member states in all of the five dimensions. Part I (article 1-6) states the principles of the Convention, including the definition of discrimination. Part II (article 7-9) deals with women's rights in political and public life; Part III (article 10-14) with developmental issues in gender equality such as education, employment, health, economic and social benefits as well as the standings of rural women; and Part IV (article 15-16) with women's legal status and equality in family and marriage life. Additionally, Part V (article 17-22) and Part VI regulate monitoring and administrative procedures.

One notable element of the CEDAW is the inclusion of social and family matters – sensitive issues deeply rooted in local cultures (Simmons 2004) and not well-addressed in other conventions on women's rights (Brandt and Kaplan 1995/6). Article 5, calling for changes in social and cultural patterns related to gender discrimination, reads, "to modify the social and cultural patterns of conduct of men and women, with a view to achieving the elimination of prejudices and customary and all other practices which are based on the idea of the inferiority or the superiority of either of the sexes or on stereotyped roles for men and women". Article 16 specifically addresses gender equality in all matters relating to marriage and family relations. This provision deals with issues sensitive to many cultures – namely women's reproduction rights, equal rights in guardianship, the choice of family names and inheritance. The importance of article 16 is particularly weighted by the Committee on the Elimination of Discrimination against Women (hereinafter CEDAW Committee) as one of the two core provisions of the Convention together with article 2 (CEDAW Committee, 1998)[5].

In addition, the CEDAW regulates reporting obligations of its member states. In most international human rights treaties, monitoring systems are rare or non-existent and also enforcement is relatively weak compared to other types of international treaties such as trade and finance (Bayefsky 2001). The CEDAW has no means to immediately punish states for violating obligations. However, it is worthwhile noting that the reporting requirements and the

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[5] Article 2 (Policy Measure) calls for the legal adoption of women's rights as constitutional rights and the implementation of the principle by legislative measures.

supervisory system of the CEDAW are the only monitoring system in international bodies regarding the protection and promotion of women's rights (den Boer, 2008). The supervisory body, the CEDAW Committee, consists of 23 experts, nominated by their own states and elected at a special meeting of states parties (article 17). Member states are obliged to submit country-reports on progress in women's rights in their countries to the Committee every four years, after the initial reporting within one year upon the ratification (article 18). The Committee consults and guides individual member states based on their country reports and reports their progress to the UN General Assembly on an annual basis (article 21).

One peculiarity in members' participation behaviors is the existence of many reservations. Despite its position as the prime, comprehensive convention on women's rights with nearly universal ratification, commitments to the CEDAW are tainted by a large number of reservations made by member states. One-third of the member states currently have reservations to the Convention, particularly to the two core provisions (article 2 and 16). This widely spread reservation practice reflects limited commitments to the CEDAW because members are not obliged to fulfill the mandates of articles they reserved. Reservations to the core provisions are especially controversial given the fact that these reservations show the negligence of member states on the principles of the Convention.

In Section 4 below, I will describe the reservation practice in the CEDAW mechanism in detail and discuss how one should take into account this practice in measuring commitments of member states to the Convention.

4. Measuring Commitments to the CEDAW

In measuring commitments to human rights treaties, most studies (Hathaway 2002; Keith 1999; Neumayer 2005; Simmons 2004) use a dummy variable, indicating whether the country ratified the treaty in a given year. Alternatively, some (Hafner-Burton and Tsutsui 2005) employ the number of years after ratification[6]. However, in measuring commitments to the CEDAW, neither holding the membership nor the number of years staying inside the Convention correctly reflects commitments given the significant magnitude of reservations member states have made.

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[6] One of the problems of this method is the assumption that commitments to the CEDAW increase linearly every year, which may not be true. If commitments are stronger at the initial stage, possibly due to public awareness in the beginning or the requirement for the initial reporting in the first year, they would have a concave shape. Also, the development of commitments could be convex if they arise after a certain threshold period.

At present, 62 parties out of 186 members have reservations to at least one article of the CEDAW and the total number of reservations sums up to 148 (excluding the general reservation declared by Mauritania). Among the 148 reservations, 108 are substantive reservations related to the principles of women's rights and its measurement and 40 reservations are related to dispute settlement regulated in article 29. It is a large number of reservations compared to other human rights treaties under the United Nations. For instance, the International Convention on the Elimination of All Forms of Racial Discrimination (CERD 1966), ratified by 173 parties, currently has 80 reservations by 52 parties and, among the 80 reservations, 22 are related to dispute settlement and only 58 are substantive reservations related to the content of racial discrimination and its measurement.

Furthermore, more than one-fifth of the ratifying members of the CEDAW have reservations to the core articles declared by the CEDAW Committee – articles 2 and 16[7]. Article 16 on Marriage and Family Life is currently the most reserved article (other than article 29 on Dispute Settlement) and reserved by 33 parties, either partially or completely. Article 2 on Policy Measures is reserved by 19 parties. 14 parties have reservations to both article 2 and 16. Altogether, more than 20% of the members of the CEDAW have reservations to at least one of the two core articles[8]. This reservation practice by member states has been persistent. Although there have been 61 withdrawals of reservations since 1981, only 10 withdrawals were related to the partial or complete cancellation of the reservations to article 2 or 16.

One salient feature worthwhile noting in describing reservations to the CEDAW is a large number of reservations by Muslim countries[9]. Muslim countries have made broad scopes of reservations based on conflicts with the Islamic Law (Sharia) since the adoption of the Convention (Brandt and Kaplan 1995/6; Clark 1991). More than half of the countries with

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[7] In principle, the CEDAW does not permit a reservation incompatible with the object and the purpose of the Convention, as stated in article 28, adopting the impermissibility principle of the Vienna Convention on the Law of Treaties (1969). However, it does not further regulate which articles are specifically impermissible (Clark, 1991).

8 Other notable reservations are: article 9 on Nationality reserved by 19 parties; article 7 on Political and Public Life by 7 parties; and article 15 on Law by 13 parties.

[9] For instance, Mauritania maintains general reservations, not approving any part of the Convention contrary to the Islamic Law and Qatar, which ratified the Convention in 2009, has reservations to seven articles including article 2 and 16. Other countries with more than 5 reservations are Bahrain, Malaysia, Micronesia, Morocco, Niger, Syria, the United Arab Emirates and the United Kingdom. Among them, six countries are Muslim-majority countries (except the United Kingdom and Micronesia).

reservations to article 2 and/or 16 are Muslim-majority countries: 12 out of 19 countries for article 2, 18 out of 33 for article 16 and 11 out of 14 for both[10]. This implies that Muslim-majority countries, taking about 20% of the member states of the CEDAW, are responsible for more than half of the reservations to the core articles.

Given the seriousness of reservations to the principles and prime obligations of the Convention, the magnitude of reservations by member states have to be taken into account in measuring their commitments. Indeed, findings of empirical studies suggest that reservations to the CEDAW are highly correlated to human rights practice of countries. Democracies, having better human rights records, have less serious reservations to the CEDAW (Landman 2005) and politically-constrained countries, which have more obstacles in implementing the Convention, are likely to have more reservations to the CEDAW (Neumayer 2007). These findings imply that countries with more serious reservations to the Convention are less likely to perform well[11].

Taking reservations seriously, Landman (2005) proposes a method measuring commitments to the CEDAW: a scaling method weighted by the reservations a country made. He suggests giving penalty to reservations to article 2 (Policy Measure), 7 (Political and Public Life), 11 (Employment), 15 (Law) and 16 (Marriage and Family Life), with a special weight on article 2. This is a sophisticated method differentiating commitments by member states based on the seriousness of reservations. However, he does not further provide justifications on the choice of the articles he selects; why reservations to these articles more significantly affect progress in women's rights. For instance, while giving importance on employment (article 11), education (article 10) – one of the United Nations Millennium Development Goals – does not receive a special consideration in this method, although gender equality in education is known to be important in achieving equal employment (Klasen and Lamanna 2009). Also, it is not explained why the reservation to article 2 receives higher penalty than that to article 16, the other core article.

In this paper, I modify Landman's scaling method and propose a new weighting scale. My scale gives special weights to the two core articles – article 2 and 16 – based on the following justifications. First of all, they are the articles the monitors and supervisors of the Convention assign special importance. Additionally, the choice of article 2 is in line with Landman's proposal. Furthermore, the importance of article 16 is re-stated by another article

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[10] See Appendix B for the list of countries with reservations to the core provisions.

[11] I do acknowledge that there is a potential endogeneity problem in this relationship. I will refer to this issue in Section 5.

of the CEDAW, article 5 calling for changes in social and cultural patterns regarding women's rights, which makes a special feature in the mechanism of the Convention (Clark 1991; Simmons 2004). My proposed scale measuring commitments to the CEDAW is provided below.

> 0: No signatory
> 1: Signed but not ratified
> 2: Ratified but with reservations to article 2 and/or 16 (including general reservations based on conflicts with religious or domestic law)
> 3: Ratified but with reservations to other articles than article 2 and 16
> 4: Full ratification without reservations

In addition to reservations, there is another dimension which may capture the level of commitments to the CEDAW. The number of country-reports submitted to the CEDAW Committee[12] shows some persistent effects by member states. Reporting is a good indicator of governmental effects in meeting with the mandates and requirements of the Convention because the obligation of report submission is not always respected by all members due to the lack of punishments. However, this method reflects only limited scopes of commitments because reports only need to address progress in areas where member states did not make reservations. I use the number of reports submitted as an alternative proxy to commitments to the CEDAW in order to test for robustness in my estimation.

5. Research Design

Based on the discussions in Section 2, 3 and 4, I hypothesize two arguments in estimating the effects of the CEDAW on women's rights, as below.

Hypothesis 1: The effects of the CEDAW on women's rights are enhanced if a member country has a higher level of democracy.

As democratic countries are more likely to respect law and order and the performance of the governments are scrutinized by civil society, the ratification of the CEDAW by a democratic government is more likely to lead to reforms and policy adoption promoting women's rights.

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[12] Den Boer (2008) uses this method to measure commitment to the CEDAW.

<u>Hypothesis 2:</u> The effects of the CEDAW are most pronounced in the dimension of women's social rights, given the emphasis of the Convention on social and family issues related to women's rights.

As explained in Section 3, the innovative feature of the CEDAW compared to other treaties on women's rights are its emphasis on the social dimensions rooted in cultures and habituated in daily life. In particular, article 16, one of the two core articles, well-represents this special emphasis. If the CEDAW is an effective treaty, the focus of the CEDAW on women's social rights should be translated into a stronger impact on this dimension of women's rights.

In order to determine the effects of the CEDAW on different dimensions of women's rights, I estimate pooled time-series cross-section (panel data) regressions by employing data from 126 countries covering the years of 1981-2005[13].

The main equation to be tested takes the following form.

$$\text{Women's Rights}_{i,t} = \alpha + \beta \, \text{Reservations}_{i,t} + \text{Reservations}_{i,t} \times \text{Democracy}_{i,t}$$
$$+ \theta \, \text{Women's Rights}_{i,t-1} + \varphi \, x'_{i,t} + \gamma_t + u_{i,t} \qquad (1)$$

, where subscripts i indicates countries and t years

The dependent variable, *Women's Rights $_{i, t}$*, represents the levels of women's social, political and economic rights, respectively, measured by the CIRI Women's Rights Index. The CIRI Women's Rights Index is coded from the annual Human Rights Reports of the State Department of the United States[14] and has an ordinal structure with a scale 0, 1, 2 and 3: where 0 indicates no respect for women's rights and 3 the (nearly) full guarantee of women's rights. *Women's Social Rights* in the CIRI Index covers article 16 (marriage and family life), 10 (education) and 9 (nationality). *Women's Economic Rights* is relevant to article 11(employment) and 13 (economic and social benefits), and *Women's Political Rights* to

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[13] The panel data are mostly balanced and some missing values are imputed by taking neighboring values except missing values from former Soviet and Eastern-bloc countries during 1981-1990.

[14] There is a concern about political bias the U.S. Human Rights Reports may have. Some argue that allies of the U.S. tend to be favored and opponent countries are penalized in the reports. Thus, some studies use Amnesty International's reports on countries' human rights practice as an alternative or a supplementary method. However, empirical results are nearly identical across the two informational sources (Neumayer 2005).

article 7 (political and public life) and 8 (representation). The detailed list of the three CIRI Women's Rights is presented in Appendix D.

The main variable of interest is $Reservations_{i,t}$, the proxy to the commitments to the CEDAW. It has a scale weighted by ratification of and reservations to the Convention, taking the value from 0 to 4, as described in Section 4. The data on countries' reservations are taken from the United Nations Treaty Collection. Another main variable in my estimation is the interaction term between $Reservations_{i,t}$ and $Democracy_{i,t}$. The inclusion of this interaction term is based on the aforementioned arguments and findings that an international human rights treaty can be more effective if implemented by democratic institutions.

Among the other explanatory variables, a one year-lagged dependent variable, Women's Rights $_{i,\,t-1}$, is included in the estimation. Lagged dependent variables are known to have a great explanatory power to the current level of women's rights (Simmons 2004; Sweeney 2004), probably because the practice is deeply embodied in cultures and societies and therefore changed slowly over time. Most studies on human rights practice also include a one year lagged dependent variable as an explanatory variable in their estimations (Dreher et. al. 2006; Hathaway 2002; Hafner-Burton and Tsutsui 2005; Keith 1999; Neumayer 2005). In addition to its high explanatory power, there is another advantage of including a lagged dependent variable; it corrects for possible autocorrelation (Beck and Katz 1995). A disadvantage is that the lagged dependent variable may incorrectly reduce the explanatory power of independent variables by absorbing a great deal of variation in the dependent variable (Achen 2000). Taking the plus and minus of the inclusion of a lagged dependent variable into consideration, I estimate the model with three different choices of lagged dependent variables and compare the results: with the one-year lagged dependent variable; with the initial level of the dependent variable – i.e. the level of women's rights in 1981; and without any lagged dependent variable. My model reduces possibilities of biased estimation caused by including a lagged dependent variable in a panel setting, so-called Nickell bias (Nickell 1981), because the period of time (T) in the panel, 27 years, is sufficiently long and goes to infinity in the statistical sense (Beck and Katz 1995).

In selecting the control variables, I mainly follow the major prior studies on the effectiveness of human rights treaties, in particular, Neumayer (2005) and Hafner-Burton and Tsutsui (2005). These two most recently published papers on the (quantitative) effects of

human rights treaties[15] focus on the impact of democracy in relation to the effects of human rights treaties and demonstrate robust results by employing the following variables: the degree of democracy, the number of NGOs, regime durability, external conflict, internal conflict, population sizes, per capita income and trade openness.

The measure of democracy is taken from the Polity IV Project (Marshall and Jaggers 2009), a widely used score (ranging from -10 to +10) reflecting the democratic and authoritarian characteristics of a country with regard to electoral democracy, political constraints, civil liberty and pluralism. Concerning the number of NGOs, I take the number of human rights NGOs normalized by the logarithm of a country's population following Boockmann and Dreher (2009), instead of the number of international NGOs used by Neumayer and Hafner-Burton and Tsutsui. Focusing on human rights NGOs better serves the purpose of the paper, given the diverse ranges of agendas international NGOs work on. Regime durability – the number of years of the most recent regime in power – represents political stability regardless of regime type and the data is taken from the Polity IV data. External and internal conflicts are taken from the International Country Risk Guide (ICRG) provided by the PRS group. Population size, per capita income and trade openness – the percentage of exports plus imports in GDP – are taken from the World Bank (2006). The population size and per capita income take a logarithmic form, given the conventionally assumed function of decreasing marginal effects. The definition and sources of all variables are presented in Appendix D and the corresponding summary statistics in Appendix E. Time dummies for each year, γ_t, are included in order to capture the effects of time equally affecting all the countries. Country-specific fixed effects are not included in the ordered probit estimation, which is used for the main testing of the paper, due to the incidental parameter problem: having country-dummy variables causes an inconsistency problem in this type of non-linear estimations (Lancaster 1999; Wooldbridge 2002). However, for further-testing for robustness, I run OLS regressions including country fixed-effects in order to control for endogenous omitted variables.

Given the ordinal structure of the dependent variables, the maximum likelihood method of ordered probit is used as the method for the main estimation. But, in this method time invariant country-specific fixed effects, which might affect the level of women's rights in a country, cannot be controlled for because of the incidental parameter problem as

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[15] Up to date, four peer-reviewed papers on this topic have been published. The other two papers are Hathaway (2002) and Keith (1999).

explained above. Indeed, this problem is common in many studies on human rights because most human rights measurements have ordinal structures: for instance, the CIRI Index, the Freedom House Civil and Political Rights Index and the Political Terror Scale. In prior studies, Hafner-Burton and Tsutsui (2005) and Keith (1999) employed ordered probit estimations without fixed effects exacerbating a potential omitted variable problem. On the other hand, Hathaway (2002) manually included country-dummies, causing the aforementioned incidental parameter problem. In this paper, I employ the ordered probit method for the main testing and then the linear ordinary least squares with country-fixed effects for robustness check, following Neumayer (2005). In my ordered probit estimation, religion and region dummy variables, which were not included in Neumayer's approach, are added up in order to capture country-specific effects as much as possible. In addition, a potential heteroscedascity problem is also taken into account by employing robust standard errors.

However, this estimation cannot be free from potential reserve-causality. Countries with a higher level of women's rights may commit to the CEDAW with fewer reservations because these countries can more easily meet the obligations. If so, the independent variable of main interest, commitments to the CEDAW measured by reservations, would not be a cause determining the level of women's rights of a country but rather a consequence. Most other studies try to control for possible endogeneity problems mainly by including an extensive list of control and country-specific variables. However, this approach would not solve the reserve-causality problem but only reduces endogeneity problems caused by omitted variables correlated to other independent variables.

To tackle this reverse-causality problem, the instrumental variable (IV) method, employing variables exogenous to the dependent variable but correlated to the independent variable of the main interest, is applied. My choice of instrumental variables is commitments to other human rights treaties, measured by reservations to the treaties. The selected treaties are the Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (Torture Convention, CAT 1984) and the Convention on the Prevention and Punishment of the Crime of Genocide (Genocide Convention, GPPCG 1948)[16]. The justification for my choice is that, if a country commits to one human rights treaty, it is likely to commit to another. The high explanatory power of the two treaties on the CEDAW in the first stage regressions supports this claim (Table 5). Regarding the exogeneity of the instruments, there is no reason to believe that the mandates of these two conventions are

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[16] As both *Reservations* and the interaction variables have to be treated as two endogenous variables, two exogenous instruments are used for overidentifying.

directly related to women's rights, given the fact that the Torture Convention specifically addresses the problem of torture and the prevention of such crimes and the Genocide Convention war crimes against humanity. The validity of the instruments is checked by the Hansen J- test and the null-hypothesis of exogeneity cannot be rejected at conventional level of significance (Table 5). In addition, I employ an alternative way to measure commitments to the CEDAW, the number of country-reports submitted to the Committee, as further test for robustness, as explained in Section 4. This measurement complements the scale weighted by reservations because the number of reports is accumulated over time, reflecting ex-post efforts made by countries, while reservations are initially ex-ante efforts countries declared upon entering the Convention and may gradually withdraw.

6. Estimation Results

Table 1-3 report the results for the ordered probit estimations on women's social, political and economic rights, respectively. Column 1 of each table shows the results of the model without the interaction term between the reservation and democracy variables. Column 2, 3 and 4 include the interaction term and the different choice of lagged dependent variables. The lagged dependent variables – both the one-year lagged dependent variable and the initial level of women's rights – mark the highest explanatory power with 1% level significance in explaining the current levels of women's social, political and economic rights, regardless of the choice of the interaction term. This finding supports the argument that women's rights are the habituated practice and require a long time for changes. But, comparing the magnitudes of the one-year lagged dependent variable and the initial level of women's rights on each dimension of women's rights, those of the one-year lagged dependent variable (1.82-2.61) are much greater than those of the initial level of women's rights (0.66-0.89), implying that the levels of women's rights slowly but gradually change over time. The statistical significance and directions of the coefficients of the independent variables across column 2, 3 and 4 in Table 1-3 are mostly consistent regardless of the choices of lagged dependent variables, suggesting that the inclusion of a lagged-dependent variable does not cause inconsistent estimations.

Among other control variables, the effects of the number of human rights NGOs (per capita) are positive and significant in all of the three women's rights. The result suggests that the participation of civil society is important in promoting women's rights, confirming the findings of Hafner-Burton and Tsutsui (2005) and Neumayer (2005). Additionally, regime

durability positively affects women's social and economic rights, showing that political stability, regardless of regime types, also affects women's rights. The results also suggest that smaller countries perform better in promoting women's social and economic rights as population sizes have negative effects on these two types of women's rights. Besides, low risks of internal conflicts positively affect women's political rights. One surprising finding is that the effects of per capita income are widely insignificant throughout all the three dimensions of women's rights, possibly because the level of economic development of a country rather indirectly affects women's status through other political or social factors[17].

Concerning the independent variables of main interests, the reservation variable is positive and significant in women's social and political rights, while having no statistically significant effect on women's economic rights. As the coefficients do not correctly reflect the quantitative magnitudes of the marginal effects in a non-linear model, I calculate the marginal effects by using the 'margin' command of the STATA 11. The magnitudes of the statistically significant effects on women's social and political rights are, however, trivial from 0.00005-0.001, depending on the scale of the reservation variable.

Turning to the interaction term between the reservation and democracy variables[18], it has a positive effect only on women's social rights at the conventionally significant level. In non-linear models, the interpretation of an interaction term is complicated because its marginal effect depends on the levels of the independent variables consisting of the interaction term and thus the coefficient of the interaction term may not correctly reflect the statistical significance and the direction of the marginal effect (Ai and Norton 2003). In order to capture the correct effects of the interaction term, I calculate the marginal effects at the mean "by hand". The results are presented on the right side of each column 2, 3 and 4 in Tables 1, 2 and 3. At the mean, the effect of the interaction term on women's social rights is positive at the 1% level of significance with the magnitude ranging from 0.0025 to 0.005, depending on the choice of lagged dependent variables. Regarding women's political and economic rights, the marginal effects of the interaction term are mostly insignificant except one in column 3 of Table 3 having a moderate positive effect on women's economic rights at the 10% level of significance.

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[17] The estimation results excluding a lagged dependent variable (column 4) in women's social and political rights show negative effects of the income level, but it is probably because the exclusion of a lagged dependent variable with such high explanatory power is a misspecification.

[18] The level of democracy alone has mostly no significant effect on women's rights, except some negative effects on women's social rights when excluding the one year-lagged dependent variable, which might be a misspecification.

To better understand how the marginal effect of commitments to the CEDAW interacting with the degree of democracy develop, a graphical demonstration would serve the purpose well, as suggested by Greene (2009). Figure 4 shows the development of the marginal effect of the reservation variable interacting with democracy on women's social rights when the score of women's social rights is 3, the highest level. The marginal effect of an interaction term is best-captured at the highest order of the dependent variable in this type of ordinal structure model (Wooldbridge 2002). Basically, the marginal effect has an upward direction in Polity2, the measurement of the level of democracy ranging from -10 (total autocracy) to +10 (full democracy). It implies that commitments to the CEDAW, measured by reservations, become more effective in enhancing women's social rights, if the level of democracy is higher. The marginal effect gains statistical significance after the level of democracy reaches the median level of Polity2, score 0[19], meaning that the positive effect is realized in countries with a level of democracy higher than Polity2 score 0. In other words, the CEDAW promotes women's social rights in countries whose institutions are closer to democracy than autocracy. Table 4 shows the development of the marginal effect in different levels of democracy. At Polity2 score 0, the marginal effect of the reservation variable is 0.00014 with the significance level of 10%. The magnitude gradually increases as the level of democracy becomes higher and, when the level of democracy reaches highest (Polity2 score 10), the magnitude is 0.0004 at 5% level. This upward development and statistical significance of the marginal effect holds when the level of women's social rights is 2, while the effects are widely insignificant at the two lowest scores, 0 and 1. It suggests that the interaction effect is more pronounced if the level of women's rights is relatively high – higher than the mean score 1.26. Also, as the effect becomes significant and positive after turning the level of women's social rights into 2, it shows that commitments to the CEDAW, if interacting with a higher level of democracy, can be effective in improving the level of women's social rights from a level below to above average.

Before concluding the effect of commitments to the CEDAW and the interaction effect with democracy, a potential reverse-causality problem has to be addressed. Table 5 shows the findings of the instrumental variable (IV) estimations by employing exogenous variables, commitments to the Torture Convention (CAT) and the Genocide Convention (GPPCG). In conducting the IV estimations, I manually program and run the regressions because there is no function in STATA or other relevant software programs to command instrumental variable

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[19] The mean of Polity2 score is 2.49 in this data, as presented in Appendix E.

regressions for ordered probit. First, I regress the two endogenous variables – the reservation variable and the interaction term – on the two instruments and the other control variables by using the ordered probit (the first stage regression); predict the values of the two endogenous variables; and then regress the dependent variables, women's social, political and economic rights, respectively, by using OLS and adjust standard errors (the second stage regression). In addition, the two-stage least squares (2SLS) estimation with fixed effects was employed in order to control for unobserved effects.

Table 5 shows the results by the instrumental variable estimations. The positive, significant effect of the interaction term on women's social rights is re-confirmed by both IV methods. However, the positive effect of the reservation variable on women's social rights loses its statistical significance, contrary to the results of the main testing above. The positive effect of the reservation variable on women's political rights is not re-confirmed by the ordered probit IV estimation, although the effect remains significant in the 2SLS. The reservation variable and the interaction term have no significant effect on women's economic rights, identical to the findings of the main testing. Among the other control variables, the one-year lagged dependent variable remain to have high explanatory power and the number of human rights NGO (per capita) and population size mostly maintain their statistical significant effects.

In summary, the significant effect of the interaction term between reservations and democracy on women's social rights is robust to the potential endogeneity problem, while the other significant effects of the reservation variable and/or the interaction term found in the main estimations are not re-confirmed by the instrumental variable approach.

7. Robustness Check

To test the robustness of the main findings above, I employ two further strategies[20]. First, in order to control for omitted variables which might be correlated to other independent variables and therefore cause inconsistent estimations, OLS with fixed-effects is applied. As discussed above, the dependent variable has an ordered structure – score 0, 1, 2 and 3 – requiring non-linear modelling. A linear estimation may produce results with a value of the dependent variable over the range of the given structure and increase the variations of the error term. Among the existing studies using dependent variables with ordered structures,

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[20] The estimation results by these two methods are not presented here but can be obtained from the author upon request.

some studies use OLS with fixed effects (Cingranelli and Richards 1999; Keith 1999; Poe, Tate and Keith 1999), while many others (Dreher et. al. 2008; Haftner-Burton and Tsutsui 2005; Hathaway 2002; Sweeney 2004) employ ordered probit estimation. In this paper, taking the advantages of controlling for the omitted fixed-effects, OLS estimations with fixed-effects are used supplementing the main method of the ordered probit. In the OLS estimations with fixed effects, the positive, significant effect of the interaction term on women's social rights is re-confirmed with the marginal effect, 0.02, at the 5% level of significance. The coeffients of the reservation variable are not significant for any of women's social, political and economic rights in these estimations. The interaction term is also not significant for women's political and economic rights. These findings support the results by the instrumental variable approach.

Second, I use an alternative way of measuring commitments to the CEDAW, the accumulated number of country-reports submitted to the CEDAW Committee. The justificaiton for this measurement is explained in Section 5. This method provides a different angle in measuring the commitments by comparing the ex-post (the accumulation of report submission) and the ex-ante (reservation and its gradual withdrawal) efforts. By employing ordered probit estimations, the reservation variable has significant, positive effects on women's social and economic rights but only at the 10% level of significance. The interaction term between the reservation and the democracy variables positively affects women's social rights at the 5% level, measured at the mean. The interaction term has no significant effect on women's political and economic rights. Once again, the positive, significant effect of the interaction term on women's social rights is re-confirmed by this alternative measurement, alongside with the results of the other estimations presented above.

8. Conclusion

In this paper, I analyzed the impact of commitments to the CEDAW on women's rights. In particular, this paper aims to estimate the effectiveness of the CEDAW if the Convention is implemented by democratic institutions. In estimating the effects, wide ranges of reservations practiced by the members of the CEDAW are taken into account and the magnitudes of reservations are used as a proxy to commitments to the Convention. Also, the emphasis of the CEDAW on women's social rights and calling for social and cultural patterns receive a special attention in my analysis. In estimating the effects of the CEDAW and its interaction effects with the level of democracy, various methods were applied. By constructing manual programming and utilizing a graphical application, I was able to draw the

threshold level of democracy where commitments to the CEDAW become effective and also find the gradually increasing effect of the CEDAW as the level of democracy becomes higher.

The interaction effect of the CEDAW with the level of democracy is positive and significant for women's social rights and this finding is robust to the choice of variables and estimation methods, in particular to the problem of reverse-causality. However, I do not find any significant impact of the interaction term on women's political and economic rights. The positive effects of commitments to the CEDAW on women's rights are partially detected but the findings are not consistent across the different estimation methods and test for robustness.

My results confirm that the CEDAW is effective in improving women's social rights if implemented by democratic institutions. This effect may seem partial as the CEDAW aims at addressing multiple dimensional issues of women's rights. However, women's social rights have been probably most neglected by previous efforts to improve women's rights, given their cultural and habitual nature, and improvement in women's standing in private spheres such as family matters tend to be slower than that in public spheres such as franchise rights and (legal) equal rights for employment. With this regard, this finding of the (conditional) positive effect of the CEDAW on women's social rights is inspiring. The positive interaction effect over the 27 year-period implies that, under the joint efforts of the commitments to the Convention and democratic institutions, social patterns and cultures of discrimination against women can be changed before all of us are dead, although the practice is deeply rooted and habituated in the hundred and thousand years of tradition. The findings suggest important policy implications in promoting women's rights. To improve women's rights, collaborative efforts between international human rights regimes and domestic institutions are crucial. As seen above, neither the CEDAW nor the level of democracy alone creates any positive effect on women's rights. It means that the international legal frame itself could be merely a 'cheap talk' if not carried out by sound domestic executors. Also, the democratic development of a country may not be automatically translated into positive development in women's rights. This study on the CEDAW indicates that international human rights regimes, which have shaped international norms and values of fundamental rights, could become a 'meaningful promise' only with joint efforts of sound domestic institutional conditions.

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Table 1

CEDAW Reservations and Women's Social Rights, ordered probit, 126 countries, 1981-2005

	(1)	(2)		(3)		(4)	
CEDAW Reservations	0.059	0.056		0.85		0.10	
	(2.70)***	(2.55)**		(4.68)***		(5.17)***	
Reservation*Democracy		0.007	0.0025	0.13	0.005	0.01	0.0036
		(2.60)***	(2.56)***	(6.37)***	(6.27)***	(4.78)***	(4.55)***
Democracy	0.007	-0.009		-0.023		-0.013	
	(1.31)	(1.09)		(3.70)***		(2.02)**	
Women's Social Rights (t-1)	1.984	1.98					
	(28.87)***	(28.75)***					
Women's Social Rights (initial level)				0.773			
				(18.02)***			
NGO	0.041	0.042		0.05		0.095	
	(3.75)***	(3.82)***		(5.27)***		(10.3)***	
External Conflict	0.010	0.007		0.011		0.031	
	(0.59)	(0.4)		(0.81)		(2.17)**	
Internal Conflict	0.013	0.0135		0.015		0.02	
	(0.83)	(0.87)		(1.12)		(1.46)	
Regime Durability	0.002	0.0025		0.003		0.005	
	(1.36)	(1.71)*		(2.59)***		(3.55)***	
(log) GDP pc	-0.044	-0.061		-0.017		-0.273	
	(-0.49)	(0.67)		(0.21)		(3.67)***	
Trade Openness	-0.0000003	0.0001		-0.002		0.0003	
	(-0.00)	(0.16)		(2.43)**		(0.54)	
(log) Population Size	-0.22	-0.208		-0.366		-0.455	
	(-3.71)***	(3.53)***		(7.03)***		(8.96)***	
Observations	3167	3167		3281		3281	
Number of Countries	126	126		126		126	
R-squared	0.59	0.59		0.39		0.35	
Log-likelihood	-1589.383	-1586.336		-2427.664		-2611.672	
Wald chi2 (Prob > chi2)	1533.25 (0.000)	1522.77 (0.000)		1861.50 (0.000)		1740.38 (0.000)	

Notes: The dependent variable is Women's Social Rights (CIRI Index). Ordered probit estimation with robust standard errors. z-statistics in parenthesis. Region, religion and year dummies are included. The rights sides of the interaction term show marginal effects at the mean. * significance at 10% level, ** significance at 5% level, *** significance at 1% level (two-tailed)

Table 2

CEDAW Reservations and Women's Political Rights, ordered probit, 126 countries, 1981-2005

	(1)	(2)		(3)		(4)	
CEDAW Reservations	0.082 (2.91)***	0.082 (2.92)***		0.167 (8.04)***		0.20 (9.95)***	
Reservation*Democracy		0.002 (0.66)	0.0007 (0.63)	0.004 (1.86)*	0.001 (1.38)	0.002 (0.91)	0.0005 (0.62)
Democracy	0.001 (0.17)	-0.0034 (0.37)		0.0035 (0.54)		0.001 (0.15)	
Women's Political Rights (t-1)	2.607 (27.92)***	2.61 (27.92)***					
Women's Political Rights (initial level)				0.893 (16.29)***			
NGO	0.052 (3.82)***	0.052 (3.83)***		0.089 (8.94)***		0.122 (13.13)***	
External Conflict	0.005 (0.22)	0.0042 (0.18)		0.003 (0.19)		0.015 (0.99)	
Internal Conflict	0.042 (2.30)**	0.043 (2.32)**		0.042 (2.96)***		0.061 (4.27)***	
Regime Durability	-0.0004 (-0.30)	-0.0003 (0.20)		-0.0005 (0.46)		-0.001 (0.92)	
(log) GDP pc	-0.009 (-0.09)	-0.014 (0.13)		0.11 (1.32)		-0.335 (4-39)***	
Trade Openness	-0.0002 (-0.30)	-0.0002 (0.27)		-0.0009 (1.64)		-0.0004 (0.64)	
(log) Population Size	-0.066 (-0.96)	-0.06 (0.90)		-0.056 (0.97)		-0.088 (1-57)	
Observations	3167	3167		3281		3281	
Number of Countries	126	126		126		126	
R-squared (within)	0.69	0.69		0.40		0.32	
Log-likelihood	-940.482	-940.295		-1892.391		-2133.32	
Wald chi2 (Prob > chi2)	1580.69 (0.000)	1589.03 (0.000)		1557.80(0.000)		1511.86 (0.000)	

Notes: The dependent variable is Women's Political Rights (CIRI Index). Ordered probit estimation with robust standard errors applied. z-statistics in parenthesis. Region, religion and year dummies are included. The rights sides of the interaction term show marginal effects at the mean. * significance at 10% level, ** significance at 5% level, *** significance at 1% level (two-tailed)

Table 3

CEDAW Reservations and Women's Economic Rights, ordered probit, 126 countries, 1981-2005

	(1)	(2)		(3)		(4)	
CEDAW Reservations	0.025 (1.14)	0.024 (1.10)		0.016 (0.81)		0.022 (1.13)	
Reservation*Democracy		0.0016 (0.64)	0.0006 (0.63)	0.004 (1.77)*	0.0015 (1.75)*	0.003 (1.53)	0.0013 (1.50)
Democracy	0.010 (1.93)*	0.0065 (0.83)		0.01 (1.53)		0.01 (1.52)	
Women's Economic Rights (t-1)	1.826 (29.36)***	1.82 (29.37)***					
Women's Economic Rights (initial level)				0.66 (13.59)***			
NGO	0.046 (4.31)***	0.046 (4.32)***		0.053 (5.65)***		0.085 (8.98)***	
External Conflict	0.013 (0.75)	0.012 (0.71)		0.04 (2.93)***		0.053 (3.73)***	
Internal Conflict	0.008 (0.52)	0.008 (0.53)		0.006 (0.47)		0.008 (0.533)	
Regime Durability	0.003 (2.43)**	0.003 (2.50)**		0.004 (3.50)***		0.005 (4.33)***	
(log) GDP pc	0.064 (0.74)	0.057 (0.66)		0.20 (2.55)**		-0.002 (0.02)	
Trade Openness	0.0006 (0.78)	0.0007 (0.81)		0.0004 (0.55)		0.0007 (1.18)	
(log) Population Size	-0.255 (-4.26)***	-0.252 (4.20)***		-0.407 (7.79)***		-0.513 (9.61)***	
Observations	3167	3167		3281		3281	
Number of Countries	126	126		126		126	
R-squared (within)	0.48	0.48		0.31		0.28	
Log-likelihood	-1606.111	-1605.919		-2214.84		-2334.325	
Wald chi2 (Prob > chi2)	1506.26 (0.000)	1508.97 (0.000)		1433.81 (0.000)		1505.58 (0.000)	

Notes: The dependent variable is Women's Economic Rights (CIRI Index). Ordered probit estimation with robust standard errors. z-statistics in parenthesis. Region, religion and year dummies are included. The rights sides of the interaction term show marginal effects at the mean.* significance at 10% level, ** significance at 5% level, *** significance at 1% level (two-tailed)

Table 4

CEDAW Reservations and the Level of Democracy, Women's Social Rights, ordered probit, 126 countries, 1981-2005

Level of Democracy (Polity Score 2)	Marginal Effects of CEDAW Reservations	95% Conf. Interval	Level of Democracy (Polity Score 2)	Marginal Effects of CEDAW Reservations	95% Conf. Interval
-10	-0.00002 (-0.28)	-0.00014 / 0.0001	0	0.00014 (1.93)	0 / 0.0003
-9	-5.77e-06 (-0.09)	-0.00013 / 0.00011	1	0.00016 (2.10)	0.00001 / 0.00031
-8	6.60e-06 (0.11)	-0.00011 / 0.00012	2	0.00018 (2.23)	0.00002 / 0.00034
-7	0.00002 (0.33)	-0.0001 / 0.00014	3	0.00021 (2.33)	0.00003 / 0.0004
-6	0.00003 (0.57)	-0.0001 / 0.0002	4	0.00023 (2.41)	0.00004 / 0.00042
-5	0.00005 (0.81)	-0.0001 / 0.0002	5	0.00026 (2.46)	0.00005 / 0.0005
-4	0.00006 (1.05)	-0.0001 / 0.0002	6	0.00029 (2.48)	0.00006 / 0.00051
-3	0.00008 (1.30)	-0.00004 / 0.0002	7	0.00032 (2.48)	0.00007 / 0.0006
-2	0.0001 (1.53)	-0.00003 / 0.00022	8	0.00035 (2.47)	0.00007 / 0.00063
-1	0.0001 (1.74)	-0.00001 / 0.00025	9	0.00039 (2.44)	0.00007 / 0.0007
			10	0.00042 (2.41)	0.00008 / 0.0008

Note: z-statistics in parenthesis. The marginal effects are calculated at p(y=3|x).

Table 5

CEDAW Reservations and Women's Rights, Instrumental Variable Approach (ordered probit IV and 2SLS), 126 countries, 1981-2005

	Women's Social Rights		Women's Political Rights		Women's Economic Rights	
	Ordered probit IV	2SLS	Ordered probit IV	2SLS	Ordered probit IV	2SLS
CEDAW Reservations	0.01	0.009	0.09	0.019	-0.05	0.007
	(0.17)	(0.94)	(1.26)	(2.64)***	(-0.71)	(0.67)
Reservation*Democracy	0.14	0.003	-0.026	-0.001	0.03	0.001
	(2.67)***	(2.49)**	(-0.63)	(-1.86)*	(0.53)	(0.86)
Democracy	-0.003	-0.006	0.001	0.001	0.004	-0.004
	(-1.07)	(-1.47)	(0.66)	(0.23)	(1.67)*	(-0.93)
Women's Rights	0.70	0.54	0.80	0.63	0.62	0.43
(t-1)	(32.49)***	(23.14)***	(33.16)***	(25.66)***	(30.90)***	(18.49)***
NGO	0.01	0.01	0.01	0.02	0.01	0.02
	(2.81)***	(0.76)	(3.21)***	(2.15)**	(3.26)***	(0.92)
External Conflict	-0.01	-0.006	-0.003	0.0001	0.003	-0.01
	(-0.25)	(-1.00)	(-0.07)	(0.02)	(0.60)	(-1.41)
Internal Conflict	0.003	0.004	0.006	0.005	0.003	-0.001
	(0.61)	(0.80)	(1.68)*	(1.23)	(0.61)	(-0.17)
Regime Durability	0.001	0.001	-0.0001	-0.0004	0.001	-0.0004
	(1.69)*	(1.38)	(-0.48)	(-0.49)	(1.67)*	(-0.42)
(log) GDP pc	-0.007	0.15	-0.003	-0.03	0.01	0.20
	(-0.18)	(1.18)	(-0.14)	(-0.31)	(0.41)	(1.53)
Trade Openness	0.0001	-0.0004	0.0001	0.001	0.0003	0.0003
	(0.44)	(-0.82)	(0.54)	(2.52)**	(0.91)	(0.58)
(log) Population Size	-0.05	-0.85	-0.0003	0.55	-0.07	-0.02
	(-2.58)***	(-2.94)***	(-0.02)	(2.76)***	(-3.24)***	(-0.06)
Observations	2817	2817	2817	2817	2817	2817
Number of Countries	126	126	126	126	126	126
R-squared (centered/adjusted)	0.80	0.32	0.82	0.52	0.65	0.21
Hansen J Stat:	0.414		1.86		3.37	
Chi-sq(2)P-val	0.81		0.40		0.19	
First Stage Regression (dependent variable= CEDAW Reservations, control variables are included in the regression but omitted in the table)						
Torture Convention	0.279		0.21		0.24	
	(8.26)***		(6.40)***		(7.38)***	
Genocide Convention	0.08		0.09		0.09	
	(3.71)***		(4.22)***		(4.02)***	
First Stage Regression (dependent variable= interaction bet. Reservations and Democracy, control variables are included in the regression but omitted in the table)						
Torture Convention	0.179		0.18		0.18	
	(5.22)***		(5.20)***		(5.19)***	
Genocide Convention	0.086		0.11		0.1	
	(3.15)***		(4.16)***		(3.81)***	

Notes: The dependent variables are Women's Social, Political and Economic Rights (CIRI Index). t-statistics in parenthesis. Robust standard errors are employed. The first stage regression of the ordered probit IV estimation is conducted by ordered probit and the second stage by linear estimation using the predicted values. Standard errors are corrected. The second stage regressions of the ordered probit IV include region, religion and year dummies. 2 SLS regressions include time and country specific fixed-effects. Hansen J Stat and Chi-sq(2) P-val are based on the results by 2SLS. The results of the first stage regressions are drawn by ordered probit estimations. Instrument: commitments to the Torture and Genocide Conventions weighted by reservations. * significance at 10% level, ** significance at 5% level, ***significance at 1% level (two-tailed)

Figure 1

Time Trend of Women's Social Rights
- Measured by the CIRI Women's Rights Index (126 countries, 1981-2005)
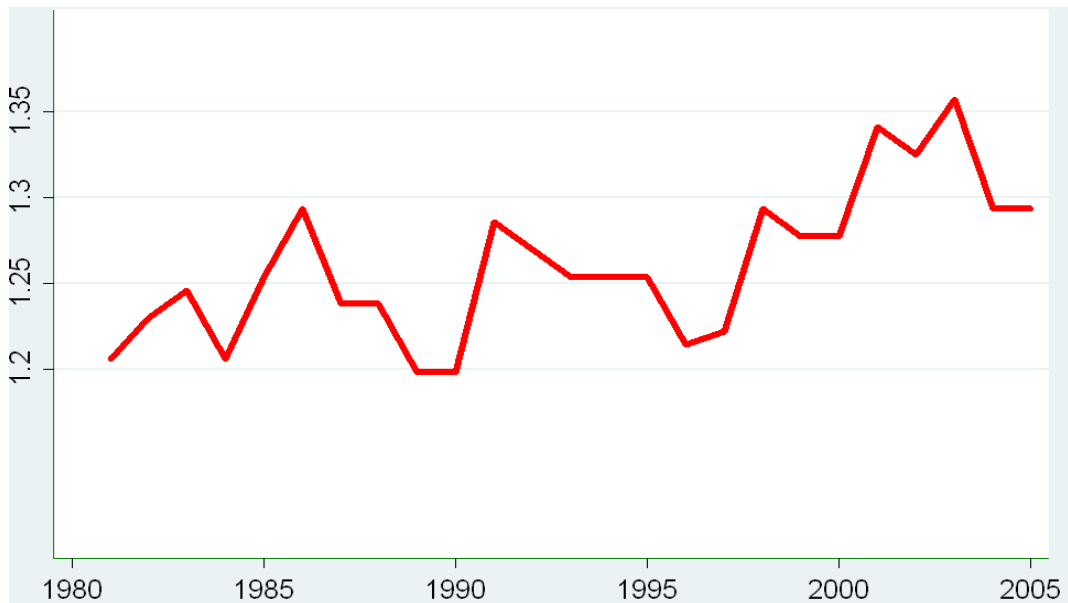

Figure 2

Time Trend of Commitments to the CEDAW
- Measured by the weighting scale of reservations (126 countries, 1981-2005)
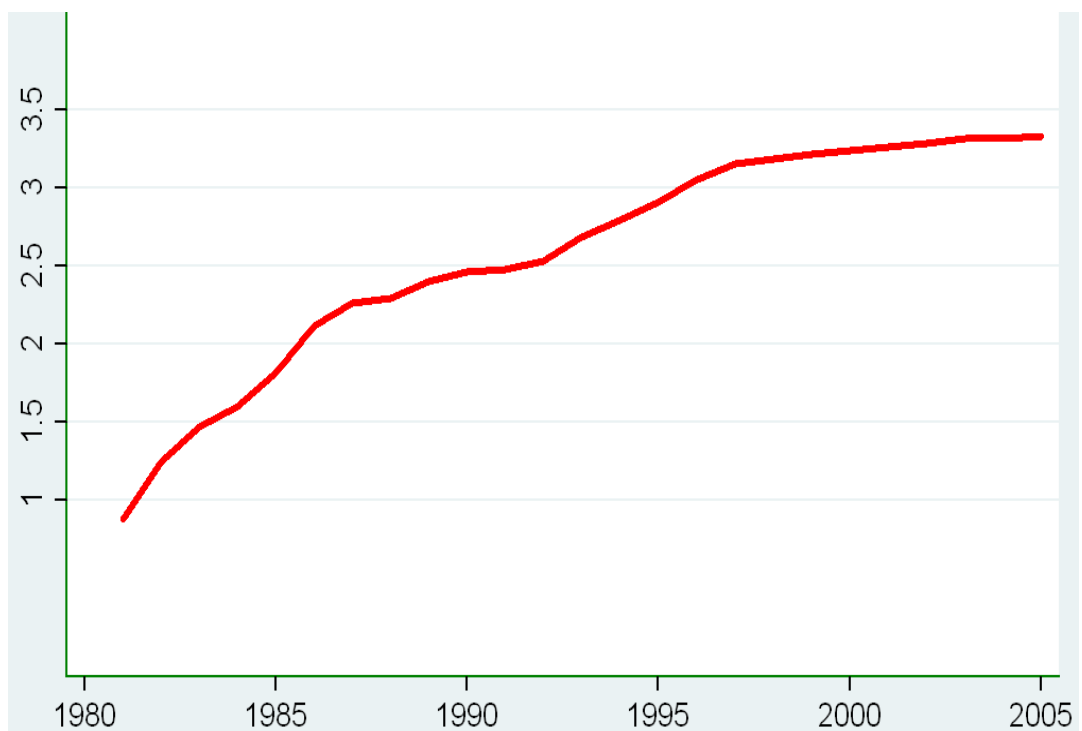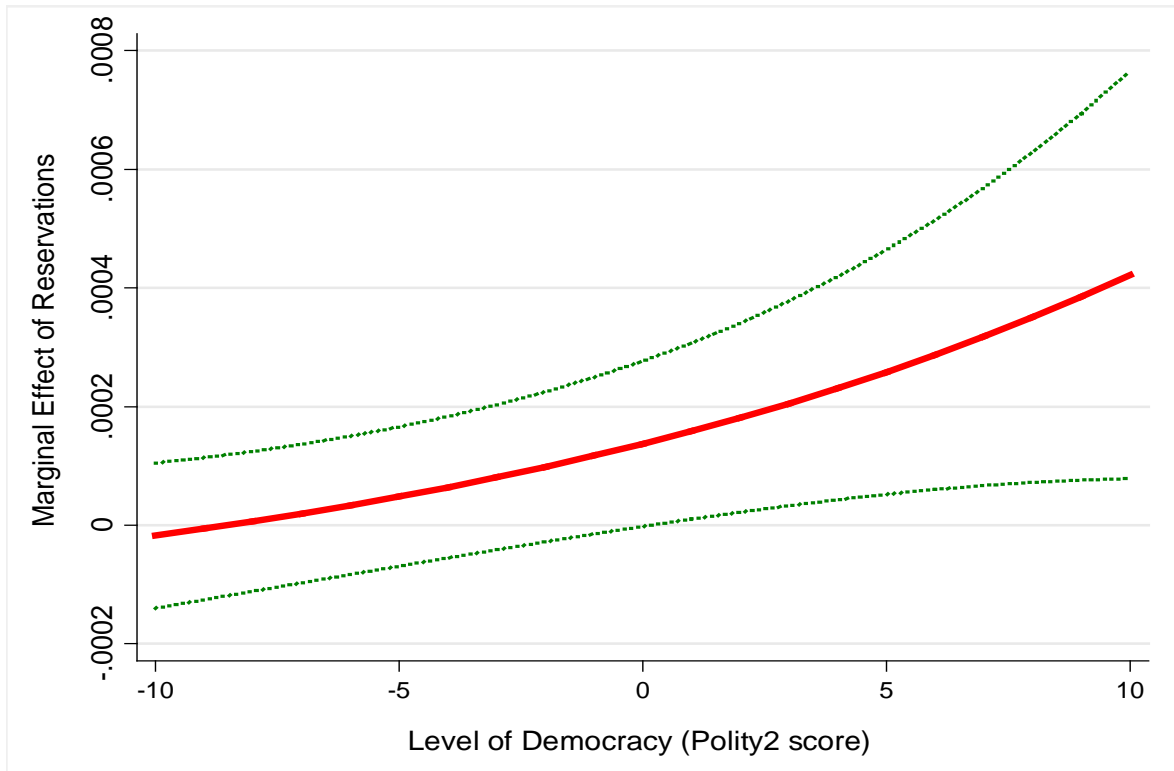
Figure 4

Reservations to the CEDAW and Democracy, Marginal Effect on Women's Social Rights

Note: 95% level of confidence interval

Appendix A: Content of Article 2, 5 and 16 of the CEDAW

Article 2
States Parties condemn discrimination against women in all its forms, agree to pursue by all appropriate means and without delay a policy of eliminating discrimination against women and, to this end, undertake:

(a) To embody the principle of the equality of men and women in their national constitutions or other appropriate legislation if not yet incorporated therein and to ensure, through law and other appropriate means, the practical realization of this principle;

(b) To adopt appropriate legislative and other measures, including sanctions where appropriate, prohibiting all discrimination against women;

(c) To establish legal protection of the rights of women on an equal basis with men and to ensure through competent national tribunals and other public institutions the effective protection of women against any act of discrimination;

(d) To refrain from engaging in any act or practice of discrimination against women and to ensure that public authorities and institutions shall act in conformity with this obligation;

(e) To take all appropriate measures to eliminate discrimination against women by any person, organization or enterprise;

(f) To take all appropriate measures, including legislation, to modify or abolish existing laws, regulations, customs and practices which constitute discrimination against women;

(g) To repeal all national penal provisions which constitute discrimination against women.

Article 5
States Parties shall take all appropriate measures:

(a) To modify the social and cultural patterns of conduct of men and women, with a view to achieving the elimination of prejudices and customary and all other practices which are based on the idea of the inferiority or the superiority of either of the sexes or on stereotyped roles for men and women;

(b) To ensure that family education includes a proper understanding of maternity as a social function and the recognition of the common responsibility of men and women in the upbringing and development of their children, it being understood that the interest of the children is the primordial consideration in all cases.

Article 16

1. States Parties shall take all appropriate measures to eliminate discrimination against women in all matters relating to marriage and family relations and in particular shall ensure, on a basis of equality of men and women:

(a) The same right to enter into marriage;

(b) The same right freely to choose a spouse and to enter into marriage only with their free and full consent;

(c) The same rights and responsibilities during marriage and at its dissolution;

(d) The same rights and responsibilities as parents, irrespective of their marital status, in matters relating to their children; in all cases the interests of the children shall be paramount;

(e) The same rights to decide freely and responsibly on the number and spacing of their children and to have access to the information, education and means to enable them to exercise these rights;

(f) The same rights and responsibilities with regard to guardianship, wardship, trusteeship and adoption of children, or similar institutions where these concepts exist in national legislation; in all cases the interests of the children shall be paramount;

(g) The same personal rights as husband and wife, including the right to choose a family name, a profession and an occupation;

(h) The same rights for both spouses in respect of the ownership, acquisition, management, administration, enjoyment and disposition of property, whether free of charge or for a valuable consideration.

2. The betrothal and the marriage of a child shall have no legal effect, and all necessary action, including legislation, shall be taken to specify a minimum age for marriage and to make the registration of marriages in an official registry compulsory.

Appendix B: List of Countries with Reservations to Article 2 and 16

Countries with Reservation to Article 2
*Algeria**
Bahamas*
*Bahrain**
Bangladesh
Democratic People's Republic of Korea
*Egypt**
*Iraq**
Lesotho
*Libyan Arab Jamahiriya**
*Mauritania**
Micronesia*
*Morocco**
New Zealand (Cook Islands)
*Niger**
*Qatar**
Singapore*
*Syrian Arab Republic**
*United Arab Emirates**
United Kingdom   (19 countries)

* Countries with reservations to both article 2 and 16 (14 countries)
Muslim-majority countries are in *italic*

Countries with Reservation to Article 16

Algeria	Malta
Bahamas	*Mauritania*
Bahrain	Micronesia
Egypt	Monaco
France	*Morocco*
India	*Niger*
Iraq	*Oman*
Ireland	*Qatar*
Israel	Republic of Korea
Jamaica	Singapore
Jordan	Switzerland
Kuwait	*Syrian Arab Republic*
Lebanon	Thailand
Libyan Arab Jamahiriya	*Tunisia*
Luxembourg	*United Arab Emirates*
Malaysia	United Kingdom
Maldives	(33 countries)

Muslim-majority countries are in *italic*

Appendix C: CIRI Index: Women's Rights

(Source: Short Variable Descriptions for the Indicators in the Cingranelli-Richards Human Rights Dataset, 2008)

Women's Social Rights

• 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 an education
• The freedom to choose a residence/domicile
• Freedom from female genital mutilation of children and of adults without their consent
• Freedom from forced sterilization

Women's Political Rights

• The right to vote
• The right to run for political office
• The right to hold elected and appointed government positions
• The right to join political parties
• The right to petition government officials

Women's Economic Rights

• 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's 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
• The right to work in the military and the police force

Appendix D: Data Sources

Variable	Definition	Source
Women's Rights	Women's social, political and economic rights, respectively – score 3 (nearly full guaranteed) to score 0 (no rights)	Cingranelli and Richards Human Rights Index (2008)
Reservations to the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW)	Scales weighted by the ratification and reservations 0: no signature, 1: signed but not ratified 2: ratified with significant reservations 3: ratified with some other reservations 4: full ratification	United Nations Treaty Collection http://treaties.un.org/
Reservations to the Convention against Torture and Other Cruel, Inhuman or Degrading Treatment of Punishment (CAT)	Scales weighted by the ratification and reservations 0: no ratification, 1: ratified with more than four reservations 2: ratified with 2-3 reservations 3: ratified with one reservation 4: full ratification	United Nations Treaty Collection http://treaties.un.org/
Reservations to the Convention on the Prevention and Punishment of the Crime of Genocide (CPPG)	Scales weighted by the ratification and reservations 0: no ratification, 1: ratified with 3-4 reservations 2: ratified with two reservations 3: ratified with one reservation 4: full ratification	United Nations Treaty Collection http://treaties.un.org/
Number of Country-reports submitted to the CEDAW Committee	The accumulated number of country-reports on progress on women's rights submitted to the Committee	CEDAW website http://www.un.org/womenwatch/daw/cedaw/reports.htm
Democracy	Polity IV Index of democracy – score 10 (full democracy) to score -10 (total autocracy)	Marshall and Jaggers (2009)
NGO	The number of human rights NGO operating in a country , normalized by the (log) population size	Union of Internaitonal Associations (2000)
Regime Durability	The number of years since the most recent regime change	Marshall and Jaggers (2009)
External Conflict	The risk to the incumbent government from foreign action (war, cross-border conflict, and foreign pressure) – score 4 (very low risk) to score 0 (very high risk)	Political Risk Index (ICRG) by the PRS Group (2005)
Internal Conflict	Political violence in the country and its actual or potential impact on governance (civil war, coup threat, terrorism, political violence and civil disorder) – score 4 (very low risk) to score 0 (very high risk)	Political Risk Index (ICRG) by the PRS Group (2005)
GDP per capita	Per capita income (purchasing power parity term, logarithm)	World Bank, World Development Indicator and Penn World Table (2008)
Trade Openness	% of the sum of exports and imports in GDP	World Bank, World Development Indicators (2008)
Population size	The total number of the population (logarithm)	World Bank, World Development Indicators (2008)

Appendix E: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Women's Social Rights, index	3042	1.26	0.85	0	3
Women's Political Rights, index	3042	1.73	0.67	0	3
Women's Economic Rights, index	3042	1.34	0.66	0	3
CEDAW Reservations, scale	3042	2.63	1.55	0	4
Torture Convention, scale	2834	2.02	1.89	0	4
Genocide Convention, scale	3310	2.62	1.72	0	4
CEDAW Reports, number of submission	3402	1.17	1.43	0	7
Democracy, Polity IV index	3402	2.49	7.16	-10	10
NGO (normalized by log populations)	3402	8.16	4.09	0	19
Regime Durability, year	3281	25.21	30.86	0	198
External Conflict, index	3402	9.53	2.24	0	12
Internal Conflict, index	3402	8.80	2.59	0	12
(log) GDP p.c.	3402	3.59	0.57	2.26	4.73
Trade (% of GDP)	3402	75.74	46.92	0.42	473
(log) Population size	3402	7.05	0.65	5.40	9.12