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**Integrating Equality**
**Globalization, Women's Rights, Son Preference and Human Trafficking**

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# Integrating Equality

## - Globalization, Women's Rights, Son Preference and Human Trafficking

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**Abstract:**

Employing economic and social globalization indicators, we empirically analyze whether globalization affects women's rights in the economic and social dimensions. Using panel data from 150 countries over the 1981-2008 period, we find that social globalization positively affects both women's economic and social rights, while the impact of economic globalization disappears when controlling for social globalization. Furthermore, we find that social globalization also reduces 'son preference' problems, prevailing in developing countries. However, (marginalized) foreign women, proxied with inflows of human trafficking, are not beneficiaries of such 'female-friendly' globalization effects.

**Keywords:** economic and social globalization; women's economic and social rights; son preference; human trafficking

**JEL codes:** F15, J13, J16, O16, O19

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## 1. Introduction

In the 21st century, globalization has become the 'Zeitgeist' re-shaping different dimensions in life. Globalization also affects women's rights and its overall impact on women has become a critical agenda in gender-related studies. In an attempt to empirically investigate this argument, much of the literature focuses on the effects of economic integration on women's economic activities. These studies look into the impact of globalization on women through an angle of traditional trade theory, comparative advantage and competition, thus analyzing whether economic integration could create more employment opportunities for women and increase their wages.

This focus on economic integration and women's employment raises the question of how certain types of economic reform affect particular forms of women's rights and welfare. It is not surprising to observe very different outcomes across countries, depending on their economic and industrial structures. In other words, this approach focusing on economic globalization and female employment can provide the answer to the question regarding whether certain economic reform could create an economic structure favoring characteristics of labor typically provided by women and if such increases in demand could push up the price of female labor. However, it does not answer an arguably more fundamental question, whether globalization can eventually reduce the causes of gender discrimination, improve women's fundamental rights and generally empower women.

To address this issue, one should look into the impact of globalization beyond the outcome of women's economic activities – wages and employment – and examine whether globalization can enhance 'women's status' or 'women's rights', which allow women better access to resources and ensure their standing in legal and social institutions without discrimination (Morrisson and Jütting 2005). Surprisingly, most literature has neglected the difference between women's rights and the subsequent outcomes and investigated the impact of globalization on certain economic activities of women only. To the best of our knowledge, there are only a few existing studies empirically addressing causal relation between women's fundamental rights and globalization. Among them, Neumayer and de Soysa (2007, 2011) and Richards and Gelleny (2007) empirically show that economic globalization – trade openness and/or FDI – positively affect women's economic and/or social rights. However, these studies limit globalization as economic integration, which tends to be more closely associated with the outcomes of women's economic activities rather than the fundamental rights of women, and do not take into account the impact of another important dimension of globalization,

social globalization. Social globalization can arguably be seen as more important in determining respect for, and attitudes towards women because it can promote the spread of ideas, norms and civil actions worldwide by facilitating contacts and communications across people in different countries. While economic globalization mainly reflects flows of goods and services representing the interests of capital, social globalization connects people and enables them to exchange ideas and thoughts and furthermore to pursue solidarity for shared causes (e.g. human rights and gender equality). With this respect, a recent study by Potrafke and Ursprung (2010) empirically shows that both social and economic dimensions of globalization are positively associated with women's institutional right. However, their study investigates the impact of economic and social globalization separately, not taking into account that there might be overlapping effects across the two types of globalization. In other words, it could be possible that the positive effects of economic globalization have been detected because of underlying effects of social globalization accompanied[1].

In this paper, we make the following contributions to the current literature. First, we empirically investigate the importance of social globalization on women's rights simultaneously with economic globalization in order to single out effects of each type of globalization. Second, our analysis addresses not only the two important dimensions of women's economic and social rights but also extreme circumstances violating women's rights and damaging respect for women, son preference and human trafficking. By employing such different indicators, we are able to capture comprehensive aspects of women's fundamental rights and the respect for and value of women a society has.

In particular, addressing son preference and human trafficking in relation to the impact of globalization on women's rights is a noble approach. To the best of our knowledge, this paper is the pioneer study linking the two problems with globalization. 'Son preference' is conceptualized as the number of 'missing women' – i.e. estimated numbers of female deaths triggered by uneven access to health care and nutrition (Sen 1988; Klasen and Wink 2003) and therefore it can be a good proxy to measure how society values women's life and existence. Human trafficking is a form of extreme exploitations for sexual and labor purposes and the vast majority of victims are marginalized foreign women (UNODC 2006). Therefore, human trafficking can be an indicator of how the country tolerates abuses and exploitation against foreign women. We include the human trafficking measurement in our analysis

[1] Additionally, their study is limited with cross-sectional data in developing countries, not capturing variations in women's rights over time worldwide.

because if globalization can promote respect for women's rights, making them norms across countries, such improvement should benefit not only local women but also foreign women living in another country.

Through a cross-country study of 150 countries for the 1981-2008 period, we find that: 1) the impact of economic globalization on women's rights disappears if controlling for social globalization (measured by the KOF Globalization Index, Dreher 2006); 2) social globalization increases women's economic and social rights and reduces son preference; and 3) despite positive linkages between globalization and women's rights, globalization does not have any positive effect on foreign women's rights, proxied with human trafficking. In our analysis, we take potential reverse causality problems into account by employing an instrumental variable approach and the robustness of our choice of control variables is scrutinized using the extreme bound analysis (EBA).

We continue as follows. In section 2, we examine the linkages between globalization and women's rights and present our main hypotheses. Section 3 describes the data on women's rights and globalization both in the social and economic dimensions, as well as son preference and human trafficking data. Section 4 discusses the estimation strategy including endogeneity concerns, followed by the empirical findings in section 5 and tests for robustness in section 6. In section 7, we conclude with policy implications and suggestions for further research.

## 2. Hypotheses

We construct our hypotheses on linkages between globalization and women's rights on the basis of the previous literature. Our hypotheses comprise economic and social dimensions of globalization and various types of women's fundamental rights.

### 2.1. Economic Globalization and Women's Rights

A considerable amount of literature has contributed to the question, *whether economic globalization improves women's economic rights in the form of employment and wage.* Proponents of globalization argue that trade and FDI positively affect women's employment opportunities in developing countries, due to their comparative advantages. In other words, developing countries have comparative advantages in labor-intensive goods, thus demand for female labor would increase in order to keep price competitiveness in international trade as female wages are generally lower. Indeed, many empirical studies find a positive association

between export-oriented manufacturing and women's increased share in paid employment (Chow 2003; Fontana and Wood 2000; Seguino 1997). However, an increase in female labor force participation does not always lead to economic empowerment as long as such demand for female labor is based on women's acceptance of poor payment and exploitative working conditions. Although Stolper-Samuelson-type trade theory predicts that an increase in female labor will eventually lead to higher female wages and working conditions, empirical evidence rarely supports this theoretical prediction as long as there is an abundance of unemployed females available in those developing countries. Thus, whether economic globalization is beneficial to women's economic empowerment is an open-end question, requiring further empirical investigation.

***H1. Ceteris paribus, economic globalization does not increase women's economic rights***

Here we use an inclusive term, women's economic rights. Neither female wage nor labor force participation rates reflect overall economic empowerment of women as it is often the case that female labor force participation increases with wage and vice versa. Thus, in our study we utilize a composite measurement of women's rights to access to economic resources – including women's pay, employment and entrepreneurship – in order to estimate the overall effect on women's economic status, as Neumayer and de Soysa (2007, 2011) and Richards and Gelleny (2007) propose.

Turning to the social dimension of women's rights, economic globalization may not improve women's social rights. A potential increase in female participation in economic activities is generated by capitalists' need for cheaper labor, which does not necessarily lead to an improvement in women's fundamental rights, especially if a women's role is merely seen as a cheap labor provider or a supplement to male labor. Such globalization may fix women's role in the society as inferior to the male role and women's rights beyond the scope of employment – such as access to educational and health resources and equality in social and private spheres – may not be improved. Furthermore, as critics of globalization point out, the impact of economic integration can be disproportionally disadvantageous to marginalized groups such as women in society and increases poverty and inequality (Moghadam 2007). For instance, ever-increasing competition and market-oriented reform would lead to cuts in social programs and such a reduction would damage women's well-being more than men (Sen 2001). With this argument, we expect that economic globalization does not increase women's rights in the cultural, social and institutional dimensions (i.e. no improvement in rights beyond the

economic dimension) as these rights are not directly related to the interests or needs of the market.

### 2.2. Social Globalization and Women's Rights

In actual fact, a commonly accepted definition of globalization includes not only economic but also political, cultural, social and technological interactions across countries (Dreher et al. 2008). In other words, globalization also represents the spread of ideas, information, values and people, beyond flows of goods, capital and services or market exchanges.

While critics of a Washington Consensus type of globalization argue that the neo-liberal economic integration may exacerbate poverty and inequality by intensifying competition (Cagatay and Ertürk 2004), scholars focusing on global diffusion of norms suggest that social globalization should be a mechanism for promoting norms, values of democracy, human rights and 'learning processes' through information exchanges and personal interactions (Chow 2003; Dreher et al. 2011; Elkins and Simmons 2005).

With this respect, social globalization can be influential to changing perception in society in regards to women's status, value, role and abilities, by facilitating the exchange and flow of ideas, knowledge and images across countries and people living in different countries (Dreher 2006). For instance, with the development of the internet and other telecommunication technologies, news about abuse and unequal treatment of women can spread quickly and provoke public attention in other countries, which can function as international pressure on countries where gender inequality is high. Also, through advanced telecommunications, advocates of women's rights can cooperate and work towards common agendas, as seen through the recent public campaigns against the execution of an Iranian woman by stoning for committing adultery, actively utilizing online discussions and petitions, organized by international human rights and women's rights groups (Guardian 2010). Moreover, increases in information exchanges can create opportunities for people to learn about positive images and roles women carry out in more developed countries, generating 'learning effects' (Simmons and Elkins 2004). Besides interactions through communicational devices, social globalization also promotes direct personal contact among people from different countries in the form of immigration and tourism. Personal interaction among different people can have a positive impact on tolerance towards different lifestyles and increase acceptance of different genders, sexuality, religions and ethnic backgrounds (Rosenau 2003). Furthermore, social globalization tends to decrease cultural gaps across

countries because people are now more exposed to different cultures. As women's rights are deeply grounded in culture and value systems (Cho 2010; Dollar and Gatti 1999; Simmons 2009), cultural exposure to and proximity with other diverse cultures (in particular, western cultures as they are the dominant players globalization and tend to respect women's rights more than others), can have a positive impact in reducing cultural practice against women.

Social globalization can therefore create change in the perceptions and attitudes towards women, the key determinant of shaping the fundamental rights of women. The impact of social globalization can be stronger than that of economic globalization because it reflects spreads of ideas, as well as networks and collaboration of people rather than interests of capital. Regarding this potential impact social globalization can have on women's rights, we predict that social globalization is capable of benefitting both women's economic and social rights. In particular, social globalization will have a positive impact on women's social rights granting equality in family matters, self-governance and access to resources (e.g. education and health) because these rights directly reflect societal perception and attitudes towards women.

***H2: Ceteris paribus, social globalization increases women's economic rights.***

***H3: Ceteris paribus, social globalization increases women's social rights.***

Lastly, we expect that social globalization increases the degree in which a society values and respects women. We proxy the values of women in a society with the concept of 'son preference', reflecting discrimination of women (daughters) in access to health care, which results in uneven deaths of women (Klasen and Wink 2003; Sen 2003). We argue that social globalization increases respect for women and their existence in a country and therefore reduces son preference.

***H4. Ceteris paribus, social globalization reduces son preference.***

### 2.3. Globalization and Rights of Marginalized / Foreign Women

One posing question we contribute to the literature is whether globalization can be further beneficial to women without a legal standing in a country. Human rights protection is basically a matter for sovereign nations and their own citizens (Poe, Tate and Keith 1999), even in the era of globalization. When countries protect the rights of a citizen of another country, it is mainly due to pressure and intervention from the country where the citizen holds his/her nationality. While countries may have interests in empowering their own female

citizens, they would not have much incentive to ensuring the rights of foreign women, particularly those without a legal standing in the country. In this paper, we try to find out whether globalization – economic and social – can reverse this trend and make a positive impact on this matter, regardless of citizenship.

It is in fact a tricky question because while globalization may improve domestic women's rights, this empowerment may not have the same impact for foreign women and it is even possible for a negative impact to be generated. For instance, let's assume that a country improves women's rights and domestic women no longer want to work in exploitative sex industries as prostitutes because they can find other opportunities. However, if there is still a need for these services domestically as men continue to demand them, it may lead to the illegal immigration of women from poorer countries who are more likely to tolerate exploitative situations. In fact, when analyzing the statistics regarding international trafficking of women for the purpose of sexual exploitation, the major destinations are mostly developed countries such as Germany, the United States and the Netherlands, where women generally enjoy high levels of rights (UNODC 2006). On the other hand, if globalization, in particular social globalization, improves general respect for women, it could also lead to the assurance of foreign women's rights. By proxying rights of and respect for foreign women with inflows of international human trafficking, the majority of victims being marginalized foreign women exploited in sex businesses, we construct our hypotheses as below.

***H5. Ceteris paribus, globalization – social and economic – does not decrease human trafficking.***

## 3. Measuring Globalization and Women's Rights

### 3.1. Globalization

In this paper, economic globalization captures two actual economic flows: trade openness (the ratio of imports and exports to GDP) and foreign direct investment (accumulated stock of FDI normalized by GDP). FDI stocks are taken instead of flows because stocks reflect the long-term influence of multinational corporations in a country. Trade openness and FDI are the most commonly used indicators of economic globalization (Berik et. al. 2004; Braunstein and Brenner 2007; Fontana and Wood 2000; Neumayer and de Soysa 2007, 2011: Oostendorp 2009; Seguino 1997; de Soysa and Vadlamannati 2010).

For the purpose of defining social globalization, we follow the KOF Index (Dreher 2006). There have been several attempts to quantify globalization. Among them, AT Kearney/Foreign Policy Magazine (2006) and the Maastricht Globalization Index (2008) are well-known. However, the KOF Index has several advantages over the others because it covers most countries (208) over a long time period (1970-2007)[2] in a time series manner, while the other indices provide data for a limited number of years and countries. The KOF Index classifies social globalization in three dimensions: personal contacts, information flows and cultural proximity. The personal contacts dimension captures direct interaction among people across countries. It includes international telecom traffic, international letters sent and received, arrival/departure of international tourists, government and workers' transfer received and paid (as a percentage of GDP) and stocks of foreign population living in a country. The first two indicators measure direct communications among people living in different countries, while the latter three indicate the degree of face-to-face interaction with foreigners.

The 'information flows' dimension is more indicative compared to measurable direct interactions in the 'personal contacts' component, and is intended to proxy potential flows of ideas and images. This dimension includes the number of internet users, cable television subscribers, and the number of radios and daily newspapers traded. These indicators measure (potential) degrees of news and information exchanges and the spread of ideas, images and norms.

The last dimension is cultural proximity, capturing familiarity with the global mainstream culture, i.e. the United States and the west. It includes the number of McDonald's outlets and IKEA stores, as well as the amount of books imported and exported (as a percentage of GDP). Given the fact that books are generally cultural goods, book trade proxies cultural exchanges, while newspaper trade stands for information exchanges. Cultural proximity basically measures a country's closeness to western culture, taking the argument of Rosendorf (2000) regarding the American domination of cultural globalization.

A more detailed description on the KOF Social Globalization Index can be found in Appendix 3.

[2] In order to cover the year of 2008, we linearly interpolate the KOF Social Globalization Index.

### 3.2. Women's Rights

There is no agreement as to the most effective and representative indicators of women's economic rights. Female labor force participation rates, one of the commonly used indicators, often neglect the fact that an increase in women's labor force participation does not necessarily lead to women's economic empowerment because high participation can be accompanied with low pay and poor working conditions, especially for women in developing countries (Cagatay and Ertürk 2004; Seguino 1997). Besides, another available indicator, female earned income share relative to total income, suggested by the UNDP Gender-related Development Indicator (GDI), includes female wage bills in non-agricultural sectors and total female population in the calculation, neglecting how many women actually participate in the labor force and the income earned by women working in agricultural and informal sectors, a significant portion of female employment in developing countries (Klasen 2004; Stanton 2007).

Seeing as the currently available indictors of female employment and income have these distinctive drawbacks, and therefore reflect women's economic power only partially, we choose a composite index including different dimensions of women's economic empowerment. The Cingranelli and Richards (CIRI) Index on women's economic rights measures legal guarantee and actual practice in ensuring equal payment, employment, promotion and choice of occupation. Detailed components of the women's economic rights the CIRI Index includes are listed in Appendix 4.

Women's social rights include social institutional factors, tradition, cultural practice and attitude attributing to root causes of gender discrimination (Branisa, Klasen and Ziegler 2009(a); Morrison and Jütting 2005; Potrafke and Ursprung 2010). We employ the CIRI Index on women's social rights because this index measures women's legal standing and related practice in family and private matters, as well as a fundamental foundation shaping women's well-being and opportunity – education[3]. Appendix 4 presents detailed components of the women's social rights the CIRI Index includes.

Both indices have an ordinal score ranging from 0 to 3: score 0 indicating no women's rights in the relevant dimension; 1 some women's rights guaranteed under law but not enforced in practice; 2 some rights guaranteed under law and enforced in practice but still

[3] The OECD Social Institutions and Gender Index (SIGI) also measures women's institutional rights. But we prefer the CIRI Index because the SIGI Index is available only in developing countries and does not provide time-variations in its measurements.

allowing a low level of discrimination against women; and 3 full or nearly full rights guaranteed by law and enforced in practice (Cingranelli and Richards 2008).

In order to assess the impact on son preference, we utilize the well-known concept of 'missing women' developed by Sen (1988; 2003). He estimates the number of women who died due to unequal access to health ('missing women'), based on sex ratios in African populations and suggests approximately 100 million women worldwide have been victims of gender inequality in healthcare. His estimations have been discussed and modified with more accurate methods that take the determinants of female and male mortality in different ethnic groups and regions into account (Coale 1991; Klasen 1994; Klasen and Wink 2003; Oster 2005). Regardless of the method used, all of the studies estimate 6-9 million missing women in a given time, suggesting the problem is very significant in magnitude. Arguably, missing women is one of the most atrocious forms of gender discrimination, depriving women of life. We use a newly developed indicator of 'Son Preference', which is part of the OECD Social Institution and Gender Index (Branisa, Klasen and Ziegler 2009(b)). Son preference (missing women) describes the difference between the number of women that should be alive (assuming no son preference) and the actual number of women in a country. All countries (124 developing countries covered in total) are assigned values between 0 (no women are missing) and 1 accordingly (Gender, Institutions and Development Database, 2009).

### 3. 2. 1. Human Trafficking

Human trafficking inflows into a country proxy respect for foreign women without a legal standing in a country, indicating the degree a country tolerates exploitation and abuse against undocumented foreign women. It is a good indicator for this purpose because human trafficking is an extreme form of abuse and violence against those vulnerable in society, the vast majority of victims being foreign women (Dutch National Rapporteur 2010; German Federal Criminal Police Office 2008; UNODC 2006). Therefore, this proxy indicates whether women's rights can be ensured regardless of citizenship and for those most marginalized in society.

As human trafficking is a clandestine, criminal activity, with those being trafficked and involved in such activities being part of 'hidden populations' (Tyldum and Brunovskis 2005), reliable and comparable data reflecting comprehensive magnitudes of the problem is very difficult to obtain, if not impossible (Kangaspunta 2003). Among the currently available informational sources, the Incidence Reporting Index developed by the UNODC (2006) is one

of the most reliable indicators, aggregating numbers of incidence reporting from 113 major institutes during the data collection period of 1996-2003. The Index covers 161 countries and has an ordinal scale ranging from 0 to 5, with score 0 indicating no (reported) inflow of human trafficking and 5 a very high inflow (see Appendix 5 for more details). . This index is relatively comprehensive and comparable across countries but is not free from drawbacks. Firstly, it aggregates information collected during the period and therefore time-variations of human trafficking are not captured. Secondly, given the geographical distribution of informational sources, the data collection can be subject to regional bias, namely an overestimation of incidences in western countries and an underestimation in other regions.[4] In order to overcome these problems, we employ another dataset coded from the United States Trafficking in Persons Reports (2001-2009). Country narratives of the reports categorize countries of destination if at least 100 cases of human trafficking inflows have been discovered in the past year. We construct a binary variable coding 1 if a country is a destination in a given year and 0 otherwise, following Akee et al. (2010(a); 2010(b)). While Akee et al. focus on cross-sectional information collected in 2002, we extend the data from 2000 to 2008[5] in order to capture time-dimensions in our analysis. Therefore, this binary panel data supplements the UNODC Index with cross-sectional but more detailed ordinal scores.

### 4. Estimation Strategies

We estimate pooled time-series cross-section (panel data) regressions. The panel data covers a maximum of 150 countries during the 1981-2008 period. The basic equation to test our hypotheses is specified as:

$$\text{Rights}_{it} = \alpha_1 + \beta_2 \text{Rights}_{it-1} + \theta_3 \text{Globalization}_{it} + \varphi_4 Z_{it} + \mu_i + \nu_t + u_{it} \qquad (1)$$

where $Rights_{it}$ represents our measure of women's economic and social rights (CIRI Index) respectively, for country i in year t. $Globalization_{it}$ is the variable(s) of our main interest: trade openness[6] and foreign direct investment (stock)[7] for economic globalization and information flows, personal contacts and cultural proximity for social globalization. Z is a vector

[4] The geographical distributions of the informational source institutions are Western Europe (29%); North America (18%); Asia (11%); Africa (5%); Central and Eastern Europe (5%); Latin America (4%); Oceania (4%); and the CIS (2%), in addition to 22% of institutions categorized as international.
[5] The US Annual Reports are based on information collected in the previous year, thus the annual reports of 2001-2009 cover the 2000-2008 period.
[6] We normalize the sum of exports and imports by GDP.
[7] Given the distribution of FDI (stock), we take a log. Furthermore, we normalize log FDI (stock) by GDP.

containing control variables. $\mu_i$ represents country fixed effects and $\nu_t$ time fixed effects. $u_{it}$ is the idiosyncratic error term. We also include the lagged dependent variable, $Rights_{it-1}$, as women's rights reflect culturally rooted practice and persist over time. Including a lagged dependent variable has another advantage, fixing problems associated with autocorrelation and model dynamic effects of X variables on Y (Beck and Katz 1995). As we have a time-series of 28 years, a potential inconsistency problem by including a lagged dependent variable in a panel setting, a so-called Nickell bias (1981), can be minimized (Beck and Katz 1995). Our dependent variable has an ordinal structure ranging from 0 to 3, and therefore we estimate our model with ordered probit following the previous literature. Consequently, we cannot control for country fixed effects due to the incidental parameter problem (Lancaster 2000; Wooldridge 2002). Instead, we include several time-invariant variables which reflect country characteristics and influence women's rights in that country. Additionally, unobserved heterogeneous effects are addressed in the two-stage least squares estimations with fixed effects, which we will describe in section 4.2. Standard errors are clustered at the country level to account for the fact that observations from the same country in different years are not independent observations. To correct for autocorrelation and heteroskedasticity in the error term, we additionally employ Newey-West estimations with one lag (Newey and West 1987).

The vector of control variables ($Z_{it}$) includes other potential determinants of women's rights suggested by the existing literature on the subject. We follow the studies of Neumayer and de Soysa (2007, 2011), Oostendorp (2009) and Kucera and Milberg (2000), who all focus on causal factors of women's rights and gender discrimination. Accordingly, the model includes the level of economic development, (logged) per capita income, data taken from the World Development Indicator (2009), and political development, democracy, taken from the Polity IV data (Marshall and Jaggers 2009). We also control for regional effects as suggested by Morrison and Jütting (2005), assuming that there are significant regional differences in regard to social institutions dealing with women's rights. The percentage of the total population which is Muslim in a country is also included because women's rights are closely associated with religion (Dollar and Gatti 1999) and Islamic practice is known to be negatively related to women's rights (Donno and Russett 2004; Ross 2008).

Turning to the estimation with son preference, the model takes the following form:

$$SonPreference_i = \alpha_1 + \theta_3 Globalization_i + \varphi_4 Z_i + u_i \qquad (2)$$

where *SonPreference*$_i$ reflects the level of son preference in a country. *Globalization*$_i$ is the main variable(s) of our interest. Z is a vector containing control variables and $u_i$ is the error term. Son preference is known to be a persistent problem in the developing world but not necessarily in developed countries (Sen 1988) and therefore the Son Preference Index is only available for developing countries. As a consequence, our analysis includes 90 developing countries. Given that the data, taken from the OECD SIGI Index, is cross-sectional and collected in the year of 2000, we conduct a cross-sectional analysis and drop values after the year 2000 in our dataset in order to avoid a potential reverse-feedback. As the dependent variable has an ordinal structure with a five-point scale from 0 to 1, where a higher score indicates a higher level of missing women due to son preference, we employ an ordered probit estimation and cluster standard errors at the country level. Following the pioneer studies on son preference (Klasen 1994, 2008; Klasen and Wink 2003; Das Gupta 2005, 2006), we control for female education and labor force participation as indicators of women's empowerment. Life expectancy at birth is included to control for the effects of general health conditions on son preference and fertility rates are included because the number of children a family has may also affect son preference. Additionally, (logged) per capita income is controlled for in order to capture the impact of economic development. Regional dummies are also included. Lastly, we specify our model to test the impact of globalization on human trafficking as follows:

$$\text{HumanTrafficking}_i = \alpha_1 + \theta_2\, \text{Globalization}_i + \varphi_3\, Z_i + u_i \qquad (3)$$

$$\text{HumanTrafficking}_{it} = \beta_1 + \rho_2\, \text{Globalization}_{it} + \omega_3\, Z_{it} + \mu_i + \nu_t + u_{it} \qquad (3´)$$

In equation (3) *HumanTrafficking*$_i$ reflects the incidence levels of human trafficking inflows, taken from the UNODC Incidence Reporting Index, and *Globalization*$_i$ is the main variable(s) of our interest. Taking into account that the UNODC Index is cross-sectional, reflecting the level of human trafficking flows during the1996 - 2003 period, we use values from the prior period (i.e. 1981 to 1995) in order to avoid reverse-feedback effects. Z is a vector containing control variables and $u_i$ is the error term. As the dependent variable has an ordinal structure ranging from 0 to 5 (0 being no reported inflows of human trafficking and 5 being very high flows), we employ an ordered probit estimation and cluster standard errors at the country level. Additionally, by using panel data, coded from the US Trafficking in Persons Annual Report, we are able to conduct a panel analysis, covering the years 2000-2008. The specification is shown in equation (3´). *HumanTrafficking*$_{it}$ is a dummy variable, with 1 indicating a country that had more than 100 cases of human trafficking inflows and 0

otherwise. $Globalization_{it}$ represents the main variable(s) of our interest. Z is a vector containing control variables. $\mu_i$ represents unobserved individual effects and $\nu_t$ captures time-fixed effects. $u_i$ is the idiosyncratic error term. Given the dependent variable is a dummy, we employ probit estimations and cluster standard errors at the country level. Additionally, we conduct probit random effects estimations in order to control for unobserved heterogeneous effects.

As empirical studies on human trafficking are scarce, we utilize both theoretical predictions and empirical (qualitative and quantitative) findings focusing on pull factors of human trafficking in order to select control variables. First, we include (logged) per capita income as income level is seen as a dominant pull factor of human trafficking (Cameron and Newman 2008). As human trafficking is largely operated by organized criminal groups, the level of (control of) corruption that affects the level of organized criminal activities, taken from the World Bank Governance Indicator (Kaufmann et al. 2009) is also controlled for (Agbu 2003). Women's rights in a country are included because human trafficking is a gender-based problem, with women making up the majority of victims (Bartilow 2010). (Logged) population sizes are also controlled for because incidences reported in the UNOCD database are not normalized by population sizes (UNODC 2006), therefore the index may penalize countries with large populations. Additionally, we control for regional and religion effects[8].

### 4.1. Endogeneity Concern

We address whether our main model – equation (1) – is subject to reverse feedback effects, i.e. improvements in women's economic and social rights are causes of global integration rather than outcomes. Arguably, greater women's rights might also lead to higher globalization. For example, the active participation of women in society may increase information and personal exchanges across countries because there will be a larger pool of internet users, travelers etc. Table 2 shows the results of the Granger causality tests which were conducted to address this issue. According to Granger (1969), a variable x is Granger-causing a variable y if past values of x helps to explain y, once the past influence of y has been accounted for. We follow Dreher and Siemers (2009) and Dreher et al. (2010) to account for Granger causality in a panel setting as:

[8] Data sources and descriptive statistics are presented in Appendix 1 and 2.

$$y_{it} = \sum^{\rho}_{j=1} \psi_j \; y_{it-1} + \sum^{\rho}_{j=1} \xi_j \; x_{it-1} + \delta_i + \zeta_t + \omega_{it} \qquad (4)$$

Where i=1,….,N and t=1,….T. The parameters are denoted $\psi_{it}$ and $\xi_{it}$ for country *i* during year *t*, the maximum lag length is represented by *p*. $y_{it}$ represents each of the globalization indicators for country i during the year t, while $x_{it}$ represents women's social and economic rights, respectively. While $\delta_i$ represents unobserved individual effects, $\zeta_t$ is the unobserved time effects. $\omega_{it}$ denotes the idiosyncratic error term[9]. As the time period of our panel is 28 years, this is sufficiently long enough for the tests. We determine the optimal number of lags to be included using Ng and Perron's (1995) sequential t-test on the highest order lag coefficient, with a lag length of one being appropriate. We employ two-way fixed effects least square estimations, when the dependent variables are the five indicators of economic and social globalization, as well as clustering standard errors at the country level. When the dependent variables are women's rights, ordered probit estimations with clustered standard errors are employed. To test whether x Granger-causes y in equation 4, we check for joint significance using an F-test on $\xi_{it}$. The results are shown in Table 2. The null hypothesis to be tested is that x does not Granger-cause y. The first and third columns indicate that two variables of social globalization are Granger-caused by women's rights: *information flows* by women's economic rights and *personal contact* by both women's economic and social rights (p-values 0.0273, 0.0815, 0.0211 respectively). *Trade*, *FDI* and *Cultural Proximity* are not Granger-caused by women's rights. On the other hand, the second and fourth columns show that all of the three social globalization indicators Granger-cause women's rights, as we fail to reject $H_0$, while the Granger causal effects of economic globalization are somewhat mixed, i.e. there is no evidence suggesting that trade Granger-cause women's social rights.

The results essentially indicate that granger causality runs from globalization to women's rights, except for *information flows* (to women's economic rights) and *personal contact* (to both economic and social rights), in which reverse effects are also detected. In order to address the endogeneity of these two variables, we employ an instrumental variable (IV) approach. The estimation methods are a two-stage least square technique with two-way fixed effects (2SLS) and an instrumental variable ordered probit (oprobit IV). For oprobit IV, we conduct OLS with two-way fixed effects for the first stage regressions because the dependent variables, social globalization indicators, are continuous variables, ranging from 1 to 100. For the second stage, we run ordered probit regressions and correct standard errors by

[9] As the Granger causality tests rely on the assumption that the series are stationary, we test the null hypothesis that all series are non-stationary Maddala and Wu (1999). The unit root tests suggest that our data are stationary.

bootstrapping[10]. Given the ordinal structure of the dependent variables, the instrumental variable ordered probit estimation is more efficient than 2SLS (Long 1997), while 2SLS estimations have advantages of controlling for unobserved individual effects. Thus, we employ both methods and compare the results.

Our main choice of instrument is 'voting in line with G-7 countries in the UN General Assembly on key issues', suggested by Dreher and Sturm (2010)[11]. The justification for the selection of this instrument is that countries which agree with policies of the global major powers are likely to be more exposed to the outside world. In order to increase the explanatory power of our instrument, we combine the main instrument with two other instruments reflecting degrees of globalization: the number of McDonald's in a country and restrictions to trade and capital flows. The first variable is part of cultural proximity, which turns out to have no explanatory power for women's rights in the empirical testing shown in the next section, while being closely related to other dimensions of social globalization (when we include the number of McDonald's variable in the first stage regression, we do not include the cultural proximity variable in the second stage). The level of restrictions to trade and capital flows is closely associated with *information flows* and *personal contacts* because such restrictions are obstacles to receiving information, as well as human flows from other countries. While these two instruments are clearly associated with social globalization, it is hard to think of direct linkage between women's rights and the number of McDonald's in a country and restrictions to trade and capital flows.

The validity of the selected instruments depends on relevance and exclusion restriction criteria. Table 5 shows the validity of the instruments. First, instrument relevance determines whether the selected instrument has a strong explanatory power on the endogenous explanatory variable of interest. The conventional first-stage F-statistics, proposed by Bound, Jaeger and Baker (1995), suggest that the selected instrument is relevant when the first stage F-statistic on the excluded instrument is above 10. However, the Bound, Jaeger and Baker F-statistics have been criticized in the literature for not being powerful enough in measuring the degree of instrument relevance in the presence of multiple endogenous variables (Stock et al. 2002, Hahn and Hausman 2002, 2003). The Cragg-Donald's first-stage F-test (Cragg and

[10] As there is no function to command an instrumental variable ordered probit regression in STATA or other software programs, we manually program a command: run the first stage regression; predict the value; use the predicted value in the second stage regression; and finally correct the standard errors by bootstrapping with 100 replications. As we employ OLS with two-way fixed effects for the first stage regressions, we do not include time-invariant control variables, *share of Muslim in population*, and *OECD membership* in the IV estimations.
[11] We take the voting behavior index based on the definition of Thacker (1999), who codes votes in agreement with the United States as 1, votes in disagreement as 0, and abstentions as 0.5.

Donald 1993; Stock et. al. 2002) is known to be a more powerful test to deal with such a problem. This test reports the statistic used to test the null hypothesis, i.e. whether the parameter estimate for the instrument in the first stage regression is equal to zero. A Cragg-Donald's statistic above the critical value (10% maximal test size) indicates the rejection of weak instruments. Additionally, we also employ Anderson canon LR statistics for underidentification tests. The results in Table 5 show that our instruments are strongly correlated with the instrumented endogenous variables, *information flows* and *personal contacts*, at conventional level of significance in all specifications.

Second, the selected IV should not vary systematically with the disturbance term in the second stage equation, i.e. $\left[\omega_{it} \mid IV_{it}\right] = 0$. In other words, the instruments cannot have independent effects on the dependent variable and can only explain y through a linkage with the endogenous independent variable. As far as our instruments are concerned, it is hard to think of any empirical arguments linking the system-wide direct effects of UN voting behavior (and the number of McDonald's and restrictions to trade/capital flows) with the degree of women's rights in a country. To justify the exclusion restrictions of our instruments, we employ the Sargan-Hansen test, which shows that the null-hypothesis of exogeneity cannot be rejected at conventional level of significance.

Turning to son preference and human trafficking, to the best of our knowledge, there is no literature suggesting causal effects running from son preference and human trafficking to globalization. However, we design our models to statistically minimize any suspicion of reverse-causality. For the cross-sectional estimations, we take the values of all the independent variables from the period prior to that in which the values consisting of the dependent variables were collected, as described above. For the panel analysis on human trafficking (see equation 3´), we check for potential endogeneity by employing the Wald test for a maximum likelihood variant. The Wald test is run to test the null hypothesis that the correlation parameter rho is equal to zero – i.e. whether the error terms in the structural equation and the reduced-form equation for the endogenous variable are correlated (Wooldridge 2002). Our results show that we fail to reject the null hypothesis of exogeneity at conventional level of significance in all of the specifications.

## 5. Empirical Findings

Table 3 shows the results for women's economic rights, based on more than 3,000 observations from 146 countries in the last 28 years. In our estimations, we include the independent variables of interest with different combinations. First, we include only two of the economic globalization variables, and secondly one social globalization variable is added. Each estimation model includes only one social globalization variable because of the high correlation amongst the three social globalization variables, as shown in Table 1. Column (1)-(4) in Table 3 report results by ordered probit estimations, while column (5)-(8) show the results by Newey-West estimations, correcting for autocorrelation and heteroscadascity in the error terms.

*Trade openness* positively affects women's economic rights with conventional level of significance without controlling for social globalization, while the effect of FDI is largely insignificant. However, the positive effect of trade disappears when we control for *information flows* and *personal contact*[12]. While these two indicators of social globalization have positive, significant effects on women's economic rights at the 1-5% level, cultural proximity is found to be insignificant. When we include cultural proximity as an indicator of social globalization in the estimation, the positive effect of trade is maintained. The control variables mostly behave as expected. The lagged dependent variable has high explanatory power at the 1% level, regardless of the choice of variables and the estimation method used, confirming the habituated and cultural nature of women's rights. Economic and political development – income and democracy – also positively affect women's economic rights in most specifications. Having a higher proportion of Muslims in a country decreases women's economic rights but the effect is insignificant. Finally, being a member of the developed countries' club, the OECD, has a positive impact on women's economic rights.

Turning to the impact on women's social rights (shown in Table 4), the main findings are in line with those for women's economic rights. Social globalization, particularly through *information flows* and *personal contact*, improves the level of women's social rights, while economic globalization is widely insignificant. Additionally, cultural proximity has a positive effect on women's social rights when the Newey-West estimation is applied, while this variable is insignificant to women's social rights with the other estimation. Overall, social globalization, measured by the three indicators, has a more pronounced effect on women's

[12] An exception is column (6) in Table 3. Trade still positively affects women's economic rights after controlling for information flows, however, at the marginal level of significance, 10%.

social rights compared to that of economic globalization. Furthermore, the impact of economic globalization is less noticeable in women's social rights compared to that on women's economic rights. The lagged dependent variable is significant and positive at the 1% level and democracy is also positively associated with women's social rights. Different from the findings on women's economic rights, the *Muslim* variable is negative and significant to women's social rights, while the income level does not have any significant effect. The OECD membership is again positively linked to women's social rights at conventional level of significance.

As shown in Table 5, we address the reverse-causality effect by instrumenting the endogenous variables. For women's economic rights, we instrument *information flows* and *personal contact* with the three instrumental variables (*voting in line with G7*; *the number of McDonald's*; *restrictions to trade and capital flows*) and for women's social rights, *personal contact* is instrumented, as suggested by the Granger-causality tests. Estimated by using instrumental variable ordered probit and two-stage least squares regressions, we find that personal contact increases women's economic rights and the effect is significant at the 5% level. However, the positive effects of *information flows* on women's economic rights and *personal contact* on women's social rights are not confirmed. Taking endogeneity into account, the personal contact component of social globalization positively affects women's economic rights, in addition to the positive impact of information flows on women's social rights.

To highlight the significant effects of social globalization in a quantitative manner, we estimate the marginal effect (probability). The results in Table 8 show that increasing *personal contact* by one standard deviation increases the probability of achieving higher women's economic rights – score 2 and 3 – by 6% and 0.01% respectively, while decreasing the probability to be in the bottom levels of women's economic rights, score 0 and 1, by 0.2% and 6.4% respectively. A one standard deviation increase in *information flows* increases the probability of having a higher level of women's social rights – score 2 and 3 – by 4.7% and 0.02%, respectively[13], and decreases the probability to be score 0 and 1 by 0.7% and 4.7%. It seems that the marginal effects of social globalization are sizeable in determining either relatively high women's rights (score 2) or relatively low women's rights (score 1).

[13] The marginal probability for score 3 of women's social rights does not turn out to be statistically significant (p-value 0.116).

Turning to the impact on son preference (Table 6), we find that being closer to western culture, i.e. *cultural proximity*, decreases the problem of favoring sons over daughters, while other variables of both economic and social globalization are widely insignificant. It suggests that son preference is a problem prevailing in certain cultures more distance to the western mainstream culture. Women's empowerment – female education and labor force participation – decreases son preference, as expected. A better general health condition, proxied with life expectancy, also decreases son preference, while the number of children (per woman) does not have any additional bearing on son preference if controlling for women's education and employment. One interesting finding is that a higher income leads to higher son preference in developing countries. This puzzling finding can be explained with the expected non-linear effect of income on son preference (Oster 2008). In other words, when people have an insufficient yet higher level of resources (food and health care) relative to fellow citizens, gender inequality between sons and daughters would increase because parents would first distribute the available resources to sons, while in the poorest countries with scarce resources, both sons and daughters suffer (rather equally) from malnutrition and poor health care. This positive association between income and son preference is expected to diminish when income reaches a sufficiently high level (i.e. a high income, developed country) where both sons and daughters can benefit. These findings are consistent regardless of whether or not the sample includes China and India, where son preference is most responsible for the highest proportion of 'missing women' in the world (Klasen 2008). Table 8 shows the quantitative marginal effect of cultural proximity on son preference. Through an increase by one standard deviation in cultural proximity, the probability of having no son preference (score 0) increases by 33%, while decreasing the probability of having a higher level of son preference (score 0.25 or higher) by a maximum of 20%. .

Finally, Table 7 shows the results for human trafficking, a proxy of respect for marginalized foreign women. It suggests that social globalization (personal contact) tends to increase human trafficking inflows into a country, while other indicators of globalization do not have any significant effect. This result seems to support a positive linkage between migration and human trafficking, which is suggested in the literature (Mahmoud and Trebesch 2009). This result indicates that while social globalization is beneficial to domestic women's rights and status, it does not increase respect for foreign women without a legal standing in a country. In fact, globalization can even be detrimental to them. This argument can be supported with the finding that the level of women's rights in a country is unanimously insignificant to human trafficking inflows. When we include the women's economic rights

variables in the estimation instead of women's social rights, the result remains the same. With respect to control variables, a higher control of corruption reduces human trafficking inflows, while a higher level of income induces more human trafficking. The population size also increases human trafficking inflows, as expected. The results are consistent when employing different datasets on human trafficking flows and regardless of estimation techniques, except for some minor changes in significance levels of control variables. Table 8 shows the marginal effects (probabilities) of *personal contact* on human trafficking. Through an increase of one standard deviation in personal contact, the probability of a country having 'a medium level of flows', 'high flows' and 'very high flows' – i.e. score 3, 4 and 5 – increase by 25.5%, 15% and 2.1% respectively (although the effect for score 5 is not significant at conventional level). At the same time, the probability of having low, very low or no (reported) flows – score 2, 1 and 0 – decrease by 15%, 19% and 8.5%.

## 6. Robustness of Findings

We examine the robustness of our main findings by employing variants of the extreme bound analysis (EBA), proposed by Leamer (1983) and Levine and Renelt (1992). In order to perform EBA, the following equation is estimated.

$$y_{it} = \delta_C C + \delta_E E + \delta_Z Z + \omega \qquad (5)$$

where *y* indicates women's economic and social rights, respectively, and vector C includes 'commonly accepted' explanatory variables which are also referred to in the literature as 'focus variables'. In our case, this is (logged) income, following the literature. This variable is always included in our estimations here. The vector E contains the 'variable(s) of interest' that one would like to examine (in our case, the globalization variables). The vector *Z* contains up to three possible additional explanatory variables. These are the variables in which there is no consensus in the literature, however according to the broader literature, they are related to the dependent variable (Levine and Renelt 1992; Folster and Henrekson 2001). While $\delta$ denotes the coefficient of the respective variables, $\omega$ denotes the idiosyncratic error term.

The main advantage of the EBA is that it reduces the multicolinearity problem as it only allows for three variables at a time from vector Z, along with the variable of interest in vector E, to perform estimations. Apart from this, the EBA also significantly reduces the under-specification problems associated with typical regression models. However, it can also lead to biased results due to misspecification or reduction in observations. Thus we use the

results of the EBA only to check whether the main findings can still hold in different specifications.

The basic EBA test for the main variable of interest(s) in E states that if the lower extreme bound for $\delta_E$ – i.e. the lowest value for $\delta_E$ minus two standard deviations – is negative, while the upper extreme bound for $\delta_E$ – i.e., the highest value for $\delta_E$ plus two standard deviations – is positive, the variable E is not robustly related to women's rights (Levine and Renelt 1992). Sala-i-Martin (1997) argues that this criterion is far too restrictive for any variable to pass the test. Thus, we report not only the extreme bounds, but also the percentage of the regressions (i.e. % sign column) in which the coefficient of the variable *F* is statistically different from zero at the five percent level. Moreover, we follow Sala-i-Martin's (1997) recommended procedure and analyze the entire distribution. Accordingly, we also report the unweighted parameter estimate of $\beta_F$ and its standard error, as well as the unweighted cumulative distribution function, CDF(0). The CDF(0) shows the larger portion of the area under the density function either above or below zero, i.e. whether this happens to be CDF(0) or 1-CDF(0). Thus the CDF(0) always lies between 0.5 and 1.0. We use a CDF(0) value of 0.90 as the threshold above which we consider variables to be robust, following Sala-i-Martin (1997). We estimate the EBA using ordered probit for set 1, 2 and 3 and probit for set 4[14].

Table 9 shows the results of the EBA. Set 1 and 2 correspond to the estimations on women's economic and social rights and the results are consistent with the main results in section 5. *Personal contact* increase women's economic rights and *information flows* women's social rights. Also, all of the control variables have significant effects with an expected sign. Set 3 shows the results on son preference. Cultural proximity decreases son preference problems at the significant level. Female education and employment also reduce the problem, while life expectancy and fertility rates turn out to be insignificant in the EBA estimation. In contrast to them, findings in set 4 do not confirm the detrimental effect of personal contact on human trafficking, calling for a cautious interpretation of the main result.

## 7. Conclusion

In this paper, we have analyzed how different dimensions of globalization affect various aspects of women's status and rights. As our theory predicts, it is social globalization that improves women's rights and empower women both in the economic and social dimensions.

[14] For set 1, 2 and 4, time-fixed effects are included. Regional dummies are also included in each specification but not reported here. Robust standard errors are employed and clustered at the country level (except set 4). For set 4, the dependent variable is a dummy, whether a country belongs to destination in the given year.

Economic globalization – trade and FDI – has no impact to women's empowerment when controlling for the effects of social globalization. Although generally disregarded in the previous literature, the positive impact of social globalization seems to be logical given that improving women's rights and value in society is closely related to changes in perceptions, attitudes and ideas. Our main findings suggest that information flows – exchanges of ideas and images – are beneficial to women's social rights, while personal contact – direct communication amongst people in different countries – enhances women's economic empowerment. Additionally, being closer to the mainstream western culture, reduces son preference problems in developing countries. How (and why) these three aspects of social globalization affect different dimensions of women's rights is still an open question, leaving room for further research. Last, our analysis suggests that the beneficial effect of social globalization on local women's rights is not necessarily passed on to marginalized foreign women's group, proxied as human trafficking inflows. As we have shown, globalization does not reduce human trafficking inflows and the associated exploitation of women without a legal standing in a country, if not increasing its incidence in some cases. It seems that the impact of globalization on women's rights is still confined, with its effects not yet having global penetration for cosmopolitan citizens.

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Table 1. Correlation Matrix.

| | Trade | FDI | Information flows | Personal contact | Cultural proximity |
|---|---|---|---|---|---|
| Trade | 1.0000 | | | | |
| FD | 0.1117 | 1.0000 | | | |
| Information flows | 0.3625 | 0.5295 | 1.0000 | | |
| Personal contact | 0.4873 | 0.3056 | 0.7192 | 1.0000 | |
| Cultural proximity | 0.0908 | 0.5584 | 0.6856 | 0.5720 | 1.0000 |

Table 2. Granger Causality Test

| | {wecon}Not Granger causes{glo} | {wecon}Not Granger-caused by{glo} | { wosoc}Not Granger causes{glo} | {wosoc}Not Granger-caused by{glo} |
|---|---|---|---|---|
| | Women's Economic Rights | | Women's Social Rights | |
| Trade | 0.7693 | 0.0035 | 0.2497 | 0.2361 |
| FDI | 0.1481 | 0.0003 | 0.4173 | 0.0007 |
| Information flows | 0.0273 | 0.0000 | 0.4036 | 0.0000 |
| Personal contact | 0.0815 | 0.0000 | 0.0211 | 0.0015 |
| Cultural proximity | 0.1788 | 0.0000 | 0.6052 | 0.0000 |

Note: The table reports p-values for Granger causality tests using one lag. The null-hypothesis is that variable A does not Granger-cause B. The first and third columns indicate whether women's rights Granger-cause globalization, while vice versa for the second and fourth columns.

Table 3. Women's Economic Rights, 1981-2008, 146 countries

| | (1) oprobit | (2) oprobit | (3) oprobit | (4) oprobit | (5) oprobit NW | (6) oprobit NW | (7) oprobit NW | (8) oprobit NW |
|---|---|---|---|---|---|---|---|---|
| Trade | **0.002**** | 0.001 | 0.0002 | **0.002**** | **0.001*** | **0.0004*** | 6.98e-05 | **0.001***** |
| | **(0.001)** | (0.001) | (0.001) | **(0.001)** | **(0.0002)** | **(0.0002)** | (0.0002) | **(0.0002)** |
| FDI (stock) | -0.517 | -0.638 | -0.404 | -0.538 | -0.139 | -0.174 | -0.10 | -0.148 |
| | (0.599) | (0.604) | (0.673) | (0.597) | (0.126) | (0.128) | (0.134) | (0.126) |
| Information flows | | **0.009**** | | | | **0.003***** | | |
| | | **(0.004)** | | | | **(0.001)** | | |
| Personal contact | | | **0.009**** | | | | **0.003***** | |
| | | | **(0.004)** | | | | **(0.001)** | |
| Cultural proximity | | | | 0.0005 | | | | 0.0002 |
| | | | | (0.002) | | | | (0.0005) |
| Lagged dependent variable | 1.928*** | 1.919*** | 1.909*** | 1.927*** | 0.651*** | 0.647*** | 0.645*** | 0.651*** |
| | (0.094) | (0.094) | (0.095) | (0.094) | (0.017) | (0.017) | (0.017) | (0.017) |
| democracy | 0.013** | 0.012** | 0.011* | 0.013** | 0.004 | 0.003*** | 0.003** | 0.004*** |
| | (0.006) | (0.006) | (0.006) | (0.006) | (0.001) | (0.001) | (0.001) | (0.001) |
| (log) Income | 0.111** | 0.048 | 0.015 | 0.107** | 0.033*** | 0.015 | 0.004 | 0.031*** |
| | (0.045) | (0.059) | (0.057) | (0.048) | (0.009) | (0.011) | (0.012) | (0.010) |
| Muslim | -0.001 | -0.001 | -0.001 | -0.001 | -0.0004 | -0.0004 | -0.0004 | -0.0004 |
| | (0.001) | (0.001) | (0.001) | (0.001) | (0.0003) | (0.0003) | (0.0003) | (0.0003) |
| OECD | 0.735*** | 0.630*** | 0.761*** | 0.723*** | 0.2134*** | 0.181*** | 0.218*** | 0.208*** |
| | (0.160) | (0.156) | (0.155) | (0.174) | (0.040) | (0.041) | (0.040) | (0.042) |
| Regional dummies | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Time dummies | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Observations | 3,078 | 3,061 | 3,035 | 3,077 | 3078 | 3,061 | 3,035 | 3,077 |
| Countries | 146 | 145 | 144 | 146 | 146 | 145 | 144 | 146 |
| (pseudo) R-sq | 0.48 | 0.48 | 0.48 | 0.48 | | | | |
| F-stat. | | | | | 146.73*** | 144.56*** | 145.40*** | 142.67*** |

Note: Parentheses are standard errors. The standard errors are clustered at the country level in column (1) - (4). In Column (5) - (8) Newey-West standard errors are applied. */***/*** indicates significance at 10/5/1% level.

Table 4. Women's Social Rights, 1981-2008, 146 countries

| | (1) oprobit | (2) Oprobit | (3) oprobit | (4) oprobit | (5) oprobit NW | (6) oprobit NW | (7) oprobit NW | (8) oprobit NW |
|---|---|---|---|---|---|---|---|---|
| Trade | 0.001 | 0.001 | 0.0001 | 0.001 | **0.00039**** | 0.0002 | -6.69e-05 | **0.0004*** |
| | (0.001) | (0.001) | (0.001) | (0.001) | **(0.0002)** | (0.0002) | (0.0003) | **(0.0002)** |
| FDI (stock) | -0.076 | -0.228 | -0.017 | -0.163 | -0.043 | -0.085 | -0.016 | -0.083 |
| | (0.588) | (0.589) | (0.625) | (0.595) | (0.134) | (0.135) | (0.138) | (0.135) |
| Information flows | | **0.008**** | | | | **0.002***** | | |
| | | **(0.003)** | | | | **(0.001)** | | |
| Personal contact | | | **0.007*** | | | | **0.002***** | |
| | | | **(0.004)** | | | | **(0.001)** | |
| Cultural proximity | | | | 0.003 | | | | **0.001**** |
| | | | | (0.002) | | | | **(0.0005)** |
| Lagged dependent variable | 2.018*** | 2.013*** | 2.012*** | 2.012*** | 0.724*** | 0.721*** | 0.719*** | 0.720*** |
| | (0.089) | (0.089) | (0.089) | (0.089) | (0.016) | (0.016) | (0.016) | (0.016) |
| Democracy | 0.014** | 0.013** | 0.013** | 0.014** | 0.004*** | 0.004*** | 0.004** | 0.004*** |
| | (0.006) | (0.006) | (0.006) | (0.006) | (0.001) | (0.001) | (0.001) | (0.001) |
| (log) Income | 0.035 | -0.023 | -0.032 | 0.013 | 0.015 | -0.002 | -0.01 | 0.005 |
| | (0.044) | (0.057) | (0.059) | (0.048) | (0.01) | (0.012) | (0.013) | (0.011) |
| Muslim | -0.003** | -0.002* | -0.003** | -0.002** | -0.001*** | -0.001** | -0.001*** | -0.001*** |
| | (0.001) | (0.001) | (0.001) | (0.001) | (0.0003) | (0.0003) | (0.0003) | (0.0003) |
| OECD | 0.899*** | 0.809*** | 0.924*** | 0.840*** | 0.291*** | 0.263*** | 0.298*** | 0.266*** |
| | (0.169) | (0.165) | (0.165) | (0.182) | (0.043) | (0.044) | (0.043) | (0.044) |
| Regional dummies | Yes | Yes | Yes | Yes | | Yes | Yes | Yes |
| Time dummies | Yes | Yes | Yes | Yes | | Yes | Yes | Yes |
| observations | 2,606 | 2,592 | 2,569 | 2,605 | | 2,592 | 2,569 | 2,605 |
| countries | 145 | 144 | 143 | 145 | | 144 | 143 | 145 |
| (peudo) R-sq | 0.57 | 0.57 | 0.57 | 0.56 | | | | |
| F-stat. | | | | | | 287.3*** | 273.79*** | 271.90*** |

Note: Parentheses are standard errors. The standard errors are clustered at the country level in column (1) - (4). In Column (5) - (8) Newey-West standard errors are applied. */***/*** indicates significance at 10/5/1% level.

Table 5. Women's Economic and Social Rights, 1981-2008, 145 countries, instrumental variable approach

| | (1) Women's Economic Rights | | (2) Women's Economic Rights | | (3) Women's Social Rights | |
|---|---|---|---|---|---|---|
| | 2SLS | Oprobit IV | 2SLS | Oprobit IV | 2SLS | Oprobit IV |
| Trade | 0.0005 | 0.005 | -0.001 | 0.0002 | -7.20e-05 | -0.0001 |
| | (0.001) | (0.022) | (0.001) | (0.038) | (0.001) | (0.001) |
| FDI (stock) | 0.411 | -0.007 | -0.496 | -1.479 | -0.333 | -1.649 |
| | (0.322) | (0.769) | (0.509) | (1.123) | (0.540) | (1.219) |
| Information_flows | -0.012 | 0.005 | | | | |
| | (0.010) | (0.022) | | | | |
| Personal_contact | | | **0.040**** | **0.082**** | 0.010 | 0.068 |
| | | | **(0.016)** | **(0.038)** | (0.02) | (0.048) |
| Lagged dependent variable | 0.426*** | 1.955*** | 0.419*** | 1.935*** | 0.496*** | 2.233*** |
| | (0.019) | (0.078) | (0.020) | (0.085) | (0.021) | (0.082) |
| Democracy | -0.003 | 0.024*** | 0.0004 | 0.035*** | 0.002 | 0.0437*** |
| | (0.003) | (0.004) | (0.003) | (0.006) | (0.004) | (0.008) |
| (log) Income | 0.088 | 0.171 | -0.129* | -0.027 | 0.067 | -0.098 |
| | (0.062) | (0.133) | (0.066) | (0.116) | (0.068) | (0.151) |
| Country-fixed effects | Yes | No | Yes | No | Yes | No |
| Time effects | Yes | Yes | Yes | Yes | Yes | Yes |
| Observations | 2,566 | 2566 | 2,268 | 2294 | 1,932 | 1929 |
| Countries | 145 | 145 | 144 | 144 | 143 | 143 |
| R-sq. | 0.659 | 0.45 | 0.646 | 0.47 | 0.805 | 0.56 |
| Cragg-Donald F-Stat. | 23.11** | | 21.44*** | | 15.90*** | |
| Anderson canon LR stat. | 48.21*** | | 66.60*** | | 50.04*** | |
| Sargan stat. (p-value) | 0.52 | | 0.802 | | 0.741 | |
| Replication | | 100 | | 100 | | 100 |

Note: Parentheses are standard errors. In column (1) and (2), the dependent variable is women's economic rights and in column (3), women's social rights. Instruments are voting in line with G-7 countries in the UN General Assembly on key issues, the number of McDonald's outlets and restrictions to trade and capital flows. Instrumented endogenous variables are *information_flows* (column 1) and *personal-contact* (column 2 and 3). The standard errors are clustered at the country level. */***/*** indicates significance at 10/5/1% level.

Table 6. Son Preference, cross-sectional (2000), 91 developing countries, ordered probit

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Trade | 0.003 | | 0.005 | | 0.004 | | 0.005 | | 0.005 | | 0.006 | |
| | (0.006) | | (0.005) | | (0.006) | | (0.006) | | (0.005) | | (0.006) | |
| FDI (stock) | 0.738 | 0.812 | 0.451 | 0.544 | 0.829 | 0.863 | 0.364 | 0.493 | 0.075 | 0.197 | 0.369 | 0.455 |
| | (2.430) | (2.479) | (2.438) | (2.526) | (2.194) | (2.218) | (2.431) | (2.492) | (2.491) | (2.584) | (2.231) | (2.263) |
| Information flows | 0.003 | 0.005 | | | | | 0.004 | 0.007 | | | | |
| | (0.020) | (0.019) | | | | | (0.020) | (0.020) | | | | |
| Personal contact | | | -0.009 | -0.002 | | | | | -0.004 | 0.003 | | |
| | | | (0.018) | (0.017) | | | | | (0.017) | (0.017) | | |
| Cultural proximity | | | | | **-0.042*** ** | **-0.041*** ** | | | | | **-0.044*** ** | **-0.042*** ** |
| | | | | | **(0.014)** | **(0.015)** | | | | | **(0.014)** | **(0.015)** |
| (log) Income | 0.842*** | 0.868*** | 0.911*** | 0.860*** | 1.236*** | 1.281*** | 0.856*** | 0.894*** | 0.876*** | 0.827*** | 1.265*** | 1.323*** |
| | (0.243) | (0.266) | (0.278) | (0.273) | (0.289) | (0.306) | (0.245) | (0.268) | (0.274) | (0.272) | (0.293) | (0.311) |
| Female schooling | -0.152 | -0.141 | -0.119 | -0.106 | -0.206** | -0.182* | -0.171* | -0.153 | -0.136 | -0.121 | -0.229** | -0.192* |
| | (0.010) | (0.100) | (0.098) | (0.094) | (0.101) | (0.098) | (0.102) | (0.102) | (0.099) | (0.094) | (0.104) | (0.100) |
| Fertility rate | 0.166 | 0.192 | 0.314 | 0.326 | 0.0653 | 0.107 | 0.196 | 0.231 | 0.341 | 0.355 | 0.087 | 0.142 |
| | (0.213) | (0.207) | (0.221) | (0.222) | (0.203) | (0.202) | (0.220) | (0.215) | (0.229) | (0.230) | (0.210) | (0.208) |
| Life expectancy | -0.106* | -0.105** | -0.082 | -0.085 | -0.111* | -0.108* | -0.102* | -0.101* | -0.081 | -0.083 | -0.106* | -0.103* |
| | (0.055) | (0.053) | (0.059) | (0.058) | (0.058) | (0.057) | (0.055) | (0.053) | (0.058) | (0.06) | (0.058) | (0.057) |
| Female labor force | -0.026** | -0.026* | -0.028** | -0.027* | -0.0293** | -0.028** | -0.025* | -0.024* | -0.026* | -0.025* | -0.028** | -0.026* |
| | (0.013) | (0.013) | (0.014) | (0.014) | (0.014) | (0.013) | (0.013) | (0.013) | (0.014) | (0.014) | (0.014) | (0.013) |
| Countries | 90 | 90 | 88 | 88 | 91 | 91 | 88 | 88 | 86 | 86 | 89 | 89 |
| (peudo) R-sq. | 0.42 | 0.42 | 0.43 | 0.43 | 0.46 | 0.45 | 0.41 | 0.41 | 0.43 | 0.43 | 0.45 | 0.45 |

Note: Parentheses are standard errors. The dependent variable has an ordinal score, consisting of 0, 0.25, 0.5, 0.75 and 1, a higher score indicating higher son preference in a country. Column (7)-(12) are results of estimations without China and India. The standard errors are clustered at the country level. */***/*** indicates significance at 10/5/1% level.

Table 7. Human Trafficking, 1981-1995 (cross-sectional) and 2000-2008 (panel), 150 countries

| | (1) oprobit | (2) oprobit | (3) oprobit | (4) probit | (5) probit | (6) probit | (7) probit RE | (8) probit RE | (9) probit RE |
|---|---|---|---|---|---|---|---|---|---|
| Trade | -0.003 | -0.011 | -0.003 | -0.004 | -0.005 | -0.004 | -0.007 | -0.008 | -0.004 |
| | (0.006) | (0.007) | (0.006) | (0.004) | (0.004) | (0.004) | (0.006) | (0.007) | (0.006) |
| FDI (stock) | 2.232 | 2.143 | 1.836 | 2.676 | 3.048 | 2.408 | 5.145 | 5.010 | 3.812 |
| | (2.546) | (2.581) | (2.464) | (2.805) | (2.825) | (2.493) | (5.099) | (5.008) | (4.67) |
| Information flows | -0.007 | | | -0.005 | | | -0.001 | | |
| | (0.012) | | | (0.014) | | | (0.023) | | |
| Personal contact | | **0.051*** ** | | | **0.028** ** | | | **0.0379*** | |
| | | **(0.014)** | | | **(0.012)** | | | **(0.0211)** | |
| Cultural proximity | | | 0.007 | | | 0.0103 | | | 0.013 |
| | | | (0.007) | | | (0.007) | | | (0.014) |
| Women's social rights | 0.245 | 0.150 | 0.227 | -0.107 | -0.095 | -0.087 | -0.001 | -0.036 | 0.036 |
| | (0.244) | (0.250) | (0.244) | (0.138) | (0.142) | (0.139) | (0.206) | (0.206) | (0.204) |
| Control of corruption | -0.469** | -0.638*** | -0.521** | 0.376 | 0.121 | 0.259 | 0.888* | 0.604 | 0.842* |
| | (0.207) | (0.203) | (0.205) | (0.232) | (0.244) | (0.225) | (0.454) | (0.460) | (0.460) |
| (log) Population | 0.259* | 0.455*** | 0.274** | -0.101 | -0.012 | -0.125 | -0.167 | -0.034 | -0.127 |
| | (0.138) | (0.159) | (0.139) | (0.116) | (0.119) | (0.113) | (0.230) | (0.239) | (0.213) |
| (log)Income | 0.739*** | 0.262 | 0.650*** | 0.521** | 0.312 | 0.426** | 0.726** | 0.454 | 0.640** |
| | (0.172) | (0.175) | (0.135) | (0.210) | (0.213) | (0.192) | (0.350) | (0.340) | (0.313) |
| Time dummies | cross-sectional | cross-sectional | cross-sectional | Yes | Yes | Yes | Yes | Yes | Yes |
| Regional dummies | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Religion dummies | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| observations (countries) | 122 | 121 | 123 | 537(149) | 532(148) | 540 (150) | 537(149) | 532(148) | 540(150) |
| (peudo) R-sq. | 0.22 | 0.25 | 0.23 | 0.25 | 0.26 | 0.24 | | | |
| Chi-stat. | | | | | | | 100.07*** | 88.74*** | 96.19*** |

Note: Parentheses are standard errors. The standard errors are clustered at the country level. */***/*** indicates significance at 10/5/1% level.

Table 8. Marginal Effects

**Women's Economic Rights**

| Index value | 0 | 1 | 2 | 3 | E[Y] |
|---|---|---|---|---|---|
| Sample frequency | 0.069 | 0.572 | 0.326 | 0.033 | 1.322 |
| Probability at means | 0.004 | 0.719 | 0.277 | 0.0002 | 1.273 |
| Personal contact | -0.0001 | -0.003 | 0.003 | 6.719e-06 | 0.003 |
| p-value | 0.04 | 0.019 | 0.019 | 0.093 | 0.019 |

**Women's Social Rights**

| Index value | 0 | 1 | 2 | 3 | E[Y] |
|---|---|---|---|---|---|
| Sample frequency | 0.162 | 0.534 | 0.213 | 0.091 | 1.232 |
| Probability at means | 0.013 | 0.815 | 0.172 | 0.0003 | 1.159 |
| Information flows | -0.0003 | -0.002 | 0.002 | 7.730e-06 | 0.002 |
| p-value | 0.027 | 0.02 | 0.02 | 0. 116 | 0.02 |

**Son Preference**

| Index value | 0 | 0.25 | 0.5 | 0.75 | E[Y] |
|---|---|---|---|---|---|
| Sample frequency | 0.703 | 0.098 | 0.154 | 0.044 | 0.134 |
| Probability at means | 0.811 | 0.135 | 0.054 | 0.0001 | 0.061 |
| Cultural proximity | 0.011 | -0.007 | -0.0045 | -0.00002 | -0.004 |
| p-value | 0.007 | 0.025 | 0.063 | 0.603 | 0.011 |

**Human Trafficking**

| Index value | 0 | 1 | 2 | 3 | 4 | 5 | E[Y] |
|---|---|---|---|---|---|---|---|
| Sample frq. | 0.124 | 0.165 | 0.174 | 0.331 | 0.132 | 0.074 | 2.40 |
| Prob. at means | 0.034 | 0.128 | 0.229 | 0.523 | 0.080 | 0.006 | 2.50 |
| Personal contact | -0.004 | -0.009 | -0.007 | 0.012 | 0.007 | 0.001 | 0.045 |
| p-value | 0.011 | 0.003 | 0.004 | 0.007 | 0.001 | 0.174 | 0.00 |

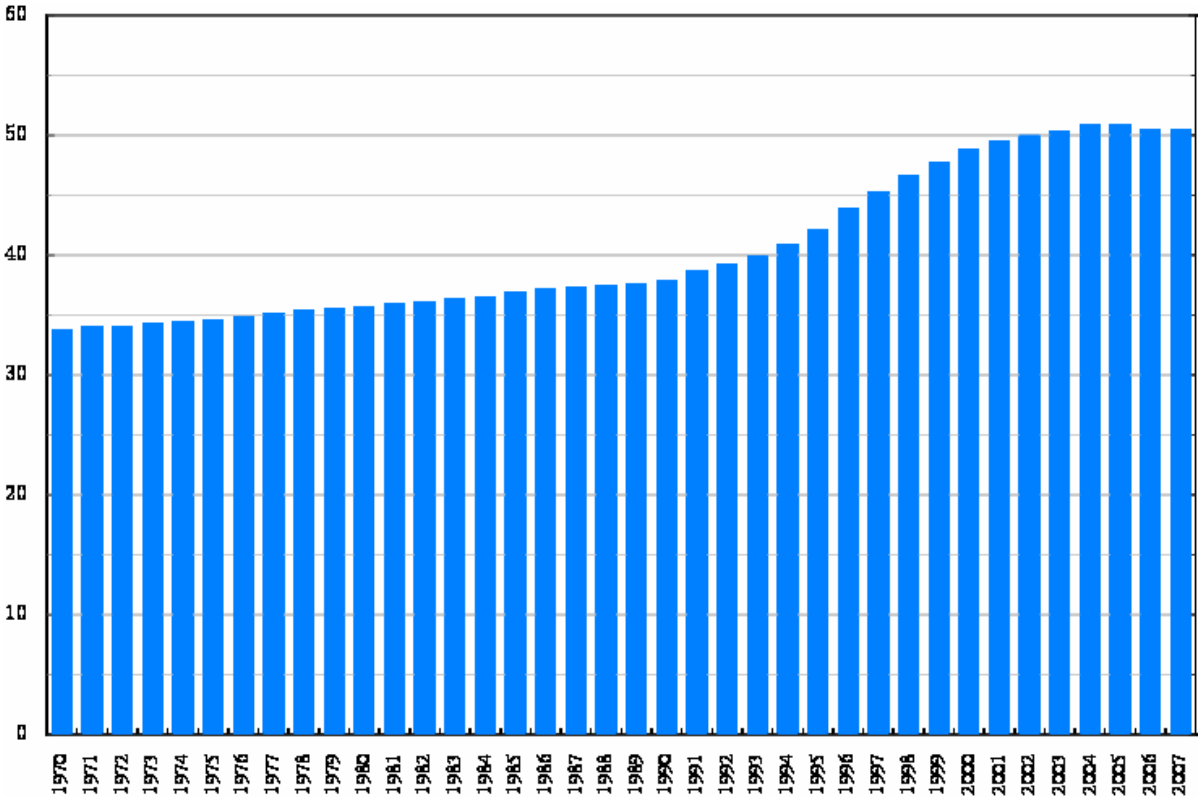
Note: The table reports the marginal effects corresponding to Table 3, 4, 6 and 7. The row 'sample frequency' reports the observed frequency in the sample, while 'probability at means' yields the probability for observing a given index value according to the estimated model.

Table 9. Results of EBA

| Variables | Average Beta | Average Std. errors | % of Sign | CDF-U | Lower Bound | Upper Bound |
|---|---|---|---|---|---|---|
| **Set 1: Women's Economic Rights** | | | | | | |
| Trade | 0.002 | 0.001 | 0.438 | 0.909 | -0.003 | 0.008 |
| FDI | -0.286 | 0.843 | 0.002 | 0.694 | -3.468 | 3.154 |
| Personal Contact | 0.008 | 0.005 | 0.336 | 0.915 | -0.011 | 0.027 |
| Information flows | 0.02 | 0.006 | 0.997 | 0.998 | -0.003 | 0.04 |
| Cultural proximity | 0.006 | 0.003 | 0.603 | 0.943 | -0.006 | 0.018 |
| LDV | 1.923 | 0.094 | 1.000 | 1.000 | 0.000 | 2.268 |
| Democracy | 0.035 | 0.011 | 0.990 | 0.998 | -0.004 | 0.078 |
| Muslim | -0.007 | 0.002 | 0.965 | 0.995 | -0.017 | 0.001 |
| OECD | 0.864 | 0.213 | 1.000 | 0.999 | 0.000 | 2.075 |
| **Set 2: Women's Social Rights** | | | | | | |
| Trade | 0.001 | 0.002 | 0.061 | 0.732 | -0.007 | 0.007 |
| FDI | 0.186 | 0.991 | 0.000 | 0.697 | -3.848 | 4.457 |
| Personal Contact | 0.004 | 0.005 | 0.030 | 0.765 | -0.017 | 0.026 |
| Information Flows | 0.021 | 0.006 | 0.998 | 0.999 | -0.001 | 0.434 |
| Cultural proximity | 0.011 | 0.003 | 0.904 | 0.993 | -0.003 | 0.025 |
| LDV | 2.168 | 0.083 | 1.000 | 1.000 | 0.000 | 2.420 |
| Democracy | 0.049 | 0.011 | 0.998 | 0.999 | -0.003 | 0.099 |
| Muslim | -0.010 | 0.002 | 0.977 | 0.997 | -0.022 | 0.001 |
| OECD | 1.380 | 0.245 | 1.000 | 0.999 | 0.000 | 3.252 |
| **Set 3: Son Preference** | | | | | | |
| Trade | -0.003 | 0.004 | 0.068 | 0.780 | -.0240 | 0.015 |
| FDI | 0.148 | 2.304 | 0.000 | 0.629 | -8.862 | 6.757 |
| Personal Contact | -0.003 | 0.011 | 0.005 | 0.708 | -0.043 | 0.058 |
| Information Flows | -0.026 | 0.013 | 0.066 | 0.958 | -0.074 | 0.032 |
| Cultural Proximity | -0.025 | 0.011 | 0.617 | 0.970 | -.0086 | 0.012 |
| Female school | -0.208 | 0.070 | 0.961 | 0.995 | -0.525 | 0.062 |
| Fertility rate | 0.124 | 0.133 | 0.183 | 0.804 | -0.525 | 0.798 |
| Life expectancy | -0.007 | 0.309 | 0.109 | 0.783 | -0.209 | 0.134 |
| Female labor | -0.029 | 0.010 | 0.863 | 0.983 | -0.066 | 0.024 |
| **Set 4: Human Trafficking** | | | | | | |
| Trade | -0.001 | 0.002 | 0.013 | 0.733 | -0.012 | 0.007 |
| FDI | 1.438 | 2.043 | 0 | 0.751 | -5.680 | 8.744 |
| Personal Contact | 0.011 | 0.009 | 0.120 | 0.846 | 0.018 | 0.054 |
| Information Flows | -0.028 | 0.011 | 0.807 | 0.982 | -0.070 | 0.017 |
| Cultural Proximity | 0.003 | 0.006 | 0 | 0.699 | -0.018 | 0.023 |
| Women's econ | -0.174 | 0.121 | 0.220 | 0.882 | -0.638 | 0.315 |
| Women's social | -0.124 | 0.119 | 0.040 | 0.823 | -0.577 | 0.370 |
| Control corruption | 0.285 | 0.184 | 0.240 | 0.896 | -0.445 | 1.062 |
| (log) population | 0.052 | 0.066 | 0.013 | 0.763 | -0.189 | 0.340 |
| Catholic | -0.004 | 0.003 | 0.148 | 0.858 | -0.018 | 0.009 |
| OECD | 0.475 | 0.384 | 0.050 | 0.875 | -1.372 | 1.701 |

Note: Results are based on 575 (women's economic and social rights and son preference), and 833 (human trafficking) regressions, respectively. Set 1, 2 and 4 include time-fixed effects. Regional dummies are included in the regressions but not reported. For set 1, 2 and 3, ordered probit estimations are used and for set 4, probit estimations. Robust standard errors are applied and clustered at the country level for set 1, 2 and 3. 'Average beta' and 'Average std. errors' report the unweighted average coefficient and standard error, respectively. '% of sign' refers to the percentage of regressions in which the respective variable is significant at least the 5% level. 'CDF-U' is the unweighted CDF as detailed in section 6. The threshold to consider a variable robust is 0.90. 'Lower bound' and 'Upper bound' give the lowest and highest value of point estimate minus/plus two standard deviations.

Figure1: Trends of Social Globalization in the World , KOF Globalization Index




Source: KOF Globalization Index, http://globalization.kof.ethz.ch/aggregation/display

## Appendix 1. Data Source

| Variables | Data Sources |
|---|---|
| Women's Economic Rights | Cingranelli-Richards Human Rights Dataset (2008) |
| Women's Social Rights | Cingranelli-Richards Human Rights Dataset (2008) |
| Son Preference Index | OECD Social Institutions and Gender Index (2009) |
| Human Trafficking Index | UNODC Incidence Reporting Index (2006) |
| Trade | World Development Indicator (2008) |
| FDI (stock) | World Development Indicator (2008) |
| Information flows | Dreher (2006) |
| Personal contact | Dreher (2006) |
| Cultural proximity | Dreher (2006) |
| Restrictions to trade and capital | Dreher (2006) |
| Number of McDonald | Dreher (2006) |
| UN Voting in line with G7 (Thacker definition) | Dreher and Sturm (2010) |
| Democracy | Marshall and Jaggers, 2009 |
| Income | World Development Indicator (2008) |
| Female schooling | World Development Indicator (2008) |
| Female labor force participation | World Development Indicator (2008) |
| Fertility rate | World Development Indicator (2008) |
| Life expectancy | World Development Indicator (2008) |
| Population size | World Development Indicator (2008) |
| Control of corruption | Kaufmann, Kraay and Mastruzzi (2009) |
| Share of Muslim in population | Encyclopedia Britannica Book of the Year 2001 |
| Share of Catholic in population | Encyclopedia Britannica Book of the Year 2001 |
| OECD membership | http://www.oecd.org |
| Regional dummies | World Bank Classification |

## Appendix 2. Descriptive Summaries of Data

| Variable | Observation | Mean | Std. Dev. | Minimum | Maximum |
|---|---|---|---|---|---|
| Women's Economic Rights (index) | 3078 | 1.32 | 0.65 | 0 | 3 |
| Women's Social Rights (index) | 2729 | 1.24 | 0.84 | 0 | 3 |
| Son Preference (index) | 1418 | 0.13 | 0.24 | 0 | 1 |
| Human Trafficking (index) | 1105 | 2.33 | 1.48 | 0 | 5 |
| Human Trafficking (dummy) | 884 | 0.71 | 0.46 | 0 | 1 |
| Trade (% of GDP) | 3078 | 74.67 | 40.72 | 6.32-0.14 | 438.09 |
| (log) FDI (stock/GDP) | 3078 | 0.33 | 0.08 | 0 | 0.52 |
| Information flows (index) | 3061 | 51.59 | 23.51 | 1 | 98.29 |
| Personal contact (index) | 3035 | 45.28 | 21.27 | 8.30 | 94.59 |
| Cultural proximity (index) | 3077 | 29.50 | 29.77 | 1 | 97.24 |
| Restrictions to trade/capital | 2767 | 52.39 | 23.48 | 5.44 | 97.11 |
| Number of McDonald | 2579 | 184.10 | 1106.47 | 0 | 13862 |
| UN Voting in line with G7 (index) | 2871 | 0.52 | 0.15 | 0 | 0.86 |
| Democracy (index) | 3078 | 2.78 | 7.03 | -10 | 10 |
| (log) Income | 3078 | 7.48 | 1.59 | 4.38 | 11.25 |
| (expected) female schooling (years) | 1330 | 11.87 | 4.10 | 1.26 | 20.81 |
| Female share in labor force (%) | 3078 | 39.43 | 9.27 | 6.35 | 53.58 |
| Fertility rate | 3033 | 3.60 | 1.85 | 1.08 | 8.06 |
| Life expectancy | 3019 | 65.01 | 10.65 | 26.41 | 82.51 |
| (log)Population size | 3078 | 16.23 | 1.47 | 12.68 | 21.00 |
| Control of corruption (index) | 1347 | -0.06 | 1.00 | -1.76 | 2.58 |
| Share of Muslim in population (%) | 3078 | 24.58 | 35.95 | 0 | 99.93 |
| Share of Catholic in population (%) | 3078 | 30.81 | 35.46 | 0 | 96.90 |
| OECD membership (dummy) | 3078 | 0.20 | 0.40 | 0 | 1 |

Appendix 3. KOF Social Globalization Index

1. Personal Contact (33%)

Telephone Traffic (26%)
Transfers (percent of GDP) (3%)
International Tourism (26%)
Foreign Population (percent of total population) (20%)
International letters (per capita) (25%)

2. Information Flows (36%)

Internet Users (per 1000 people) (36%)
Television (per 1000 people) (36%)
Trade in Newspapers (percent of GDP) (28%)

3. Cultural Proximity (31%)

Number of McDonald's Restaurants (per capita) (43%)
Number of Ikea (per capita) (44%)
Trade in books (percent of GDP) (12%)

*Source: Dreher, Axel. 2006. Does Globalization Affect Growth? Empirical Evidence from a new Index. Applied Economics 38, 10: 1091-1110.*

Appendix 4.Women's Economic and Social Rights (CIRI Index)

1. 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 police force

2. 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

*Source: Cingranelli-Richards Human Rights Dataset (2008)*

Appendix 5. Human Trafficking: Incidence of Reporting of Countries of Destination

5.1. Distribution of Ranking for Countries of Destination *(Source: UNODC, 2006, p.118)*

| Number of Sources | Index Ranking | Total Number of Countries |
|---|---|---|
| 0* | 0 (No) | 24 |
| 1 | 1 (Very low) | 29 |
| 2-3 | 2 (Low) | 27 |
| 4-10 | 3 (Medium) | 50 |
| 11-24 | 4 (High) | 21 |
| 25-40 | 5 (Very high) | 10 |

* The Index does not explicitly specify ranking for countries with no inflow of human trafficking.

Appendix 5.2. Country List *(Source: UNODC, 2006, p.20)*

| **Very High** | **High** | **Medium** | **Low** | **Very Low** |
|---|---|---|---|---|
| Belgium | Australia | Albania | Aruba | Algeria |
| Germany | Austria | Argentina | Bangladesh | Bhutan |
| Greece | Bosnia and Herzegovina | Bahrain | Belize | Brazil |
| Israel | Cambodia | Benin | Brunei Darussalam | Burundi |
| Italy | Canada | Bulgaria | Congo, Republic of | Chad |
| Japan | China | Burkina Faso | Costa Rica | Chile |
| Netherlands | Hong Kong, China SAR | Cameroon | Ecuador | Congo, Democratic Republic of |
| Thailand | Taiwan Province of China | Cote d'Ivoire | Egypt | Djibouti |
| Turkey | Cyprus | Croatia | Haiti | Dominica |
| United States of America | Czech Republic | Curacao | Indonesia | Ethiopia |
| | Denmark | Dominican Republic | Iraq | Fiji |
| | France | El Salvador | Ireland | Gambia |
| | India | Equatorial Guinea | Kyrgyzstan | Georgia |
| | Kosovo, (Serbia and Montenegro) | Estonia | Lao People's Democratic Republic | Honduras |
| | Pakistan | Finland | Libyan Arab Jamahiriya | Jamaica |
| | Poland | Gabon | Luxembourg | Liberia |
| | Saudi Arabia | Ghana | Mali | Malawi |
| | Spain | Guatemala | Niger | Maldives |
| | Switzerland | Hungary | Oman | Morocco |
| | United Arab Emirates | Iceland | Paraguay | Mozambique |
| | United Kingdom | Iran | Romania | Republic of Moldova |
| | | Kazakhstan | Slovenia | Senegal |
| | | Kenya | Sri Lanka | Sierra Leone |
| | | Kuwait | Uganda | Slovakia |
| | | Latvia | United Republic of Tanzania | Sudan |
| | | Lebanon | Uzbekistan | Tajikistan |
| | | Lithuania | Yemen | Trinidad and Tobago |
| | | Macao, China SAR | | Zambia |
| | | Malaysia | | Zimbabwe |
| | | Mexico | | |
| | | Myanmar | | |
| | | New Zealand | | |
| | | Nigeria | | |
| | | Norway | | |
| | | Panama | | |
| | | Philippines | | |
| | | Portugal | | |
| | | Qatar | | |
| | | Republic of Korea | | |
| | | Russian Federation | | |
| | | Serbia and Montenegro | | |
| | | Singapore | | |
| | | South Africa | | |
| | | Sweden | | |
| | | Syrian Arab Republic | | |
| | | The former Yugoslav Macedonia | | |
| | | Togo | | |
| | | Ukraine | | |
| | | Venezuela | | |
| | | Viet Nam | | |