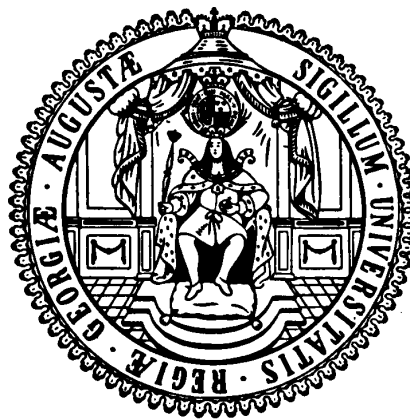# Ibero-Amerika Institut für Wirtschaftsforschung
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**The Construction of the Social Institutions
and Gender Index (SIGI)**

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The Construction of the Social Institutions and Gender Index (SIGI)[*]

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Abstract. In this paper we construct the Social Institutions and Gender Index (SIGI) using variables of the OECD Gender, Institutions and Development database. Instead of measuring gender inequalities in education, health, economic or political participation, the SIGI allows a new perspective on gender issues in non-OECD countries. It is a composite measure of long-lasting social institutions which are mirrored by societal practices and legal norms that produce gender inequalities in non-OECD countries. Methodologically, the SIGI is inspired by the Foster-Greer-Thorbecke poverty measures. It offers a new way of aggregating gender inequality in several dimensions, penalizing high inequality in each dimension. As a multidimensional measure, the SIGI allows only for partial compensation between dimensions. The SIGI is composed of five subindices that represent five dimensions of social institutions related to gender inequality: Family code, Civil liberties, Physical integrity, Son Preference, and Ownership rights. Gender inequalities lead to deprivation of women and imply high costs for society. The SIGI and the subindices are useful tools to identify countries and dimensions of social institutions that deserve attention by policy makers. Empirical results confirm that the SIGI provides additional information to that of other well-known gender-related indices.

Keywords: SIGI, Composite index, Gender inequality, Social institutions, OECD-GID database.

***JEL* codes:** D63, I39, J16

1 Introduction

We propose a new composite measure, the Social Institutions and Gender Index (SIGI) based on variables of the OECD Gender, Institutions and Development database (Morrison and Jütting, 2005; Jütting, Morrison, Dayton-Johnson, and Drechsler, 2008). This index focuses on a new aspect of gender inequality neglected by other gender-related measures that have been proposed in the literature. Instead of measuring gender inequalities in education, health, economic or political participation and other dimensions, the SIGI measures social institutions that are mirrored by societal practices and legal norms that produce inequalities between women and men in non-OECD countries. Empirical results confirm that the SIGI provides additional information to that of other well-known gender-related indices.

Methodologically, the SIGI is inspired by the Foster-Greer-Thorbecke poverty measures (Foster, Greer, and Thorbecke, 1984). It offers a new way of aggregating gender inequality in several dimensions, penalizing high inequality in each dimension. As a multidimensional measure, the SIGI allows only for partial compensation between dimensions.

The five dimensions of social institutions related to gender inequality that are combined by the SIGI are Family code, Civil liberties, Physical integrity, Son Preference, and Ownership rights. These subindices are built using the method of polychoric PCA to extract the common information of the variables corresponding to a subindex.

Gender inequalities do not only lead to deprivation of the women affected. They also imply high costs for society and hinder overall development (World Bank, 2001). The SIGI and the subindices are useful tools to compare the societal situation of women in non-OECD countries from a new perspective, allowing the identification of problematic countries and dimensions of social institutions that deserve attention by policy makers and need to be scrutinized in detail.

This paper is organized as follows. In section 2, we describe the OECD Gender, Institutions and Development Database that captures a neglected but important concept of gender inequality. Then, in sections 3 and 4 we focus on the construction of the subindices and of the SIGI. In section 5, empirical results by country, interesting regional patterns and a comparison between the SIGI and other gender-related measures are presented. The last section concludes with a discussion of the advantages and disadvantages of the SIGI.

2 The OECD Gender, Institutions and Development Database

Gender inequalities have been on the political agenda for many years (World Bank, 2001). Measuring the extent of this problem at the country level is a hard challenge not only due to the lack of consistent data covering a large number of countries, but also because of problems faced when constructing composite measures (Nardo, Saisana, Saltelli, Tarantola, Hoffman, and Giovannini, 2005).

Nevertheless, many gender-related indices have been proposed, e.g. the Gender-Related Development Index (GDI) and the Gender Empowerment Measure (GEM) (United Nations Development Programme, 1995), the Global Gender Gap Index from the World Economic Forum (Lopez-Claros and Zahidi, 2005), the Gender Equity Index developed by Social Watch (Social Watch, 2005) or the African Gender Status Index proposed by the Economic Commission for Africa (Economic Commission for Africa, 2004). These measures focus on gender inequalities in well-being or in agency and they are typically outcome-focused (Klasen, 2006, 2007). The index that comes closest to the SIGI is the Women Social Rights Index (WOSOC) of the CIRI Human Rights Data Project.[1] The WOSOC adds a human rights perspective and measures whether a number of internationally recognized social rights for women are included in law and whether government enforces them. However, this index has only one measure per country with only four possible values to differentiate between countries.

The SIGI is based on variables from the OECD Gender, Institutions and Development Database (Morrison and Jütting, 2005; Jütting et al., 2008) which provides information on social institutions related to gender inequality in over 100 countries.[2] These social institutions are conceived as long-lasting codes of conduct, norms, traditions, informal and formal laws that might contribute to gender inequalities in all spheres of life.

In the database several variables aim at measuring four different dimensions of social institutions. The *Family code* dimension refers to institutions that influence the decision-making power of women in the household. The freedom of social participation is captured by the variables belonging to the *Civil liberties* dimension. *Physical integrity* encompasses different indicators on violence against women. Finally, mea-

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[1] Information is available on the webpage of the project `http://ciri.binghamton.edu/`.

[2] The data are available at the web-pages `http://www.wikigender.org` and `http://www.oecd.org/dev/gender/gid`.

suring the access of women to several types of property is the subject-matter of the dimension *Ownership rights*.

Out of the variables available in the database we choose 12 indicators, each assumed to belong to one of the four categories. The choice is guided by the availability of information so that as many countries as possible can be ranked. Within our sample 102 countries have information for all 12 variables. As the indicators primarily measure social institutions that pose problems in the developing world, we exclude OECD countries.

The *Family code* dimension refers to institutions that influence the decision-making power of women in the household. The following variables are included. *Parental authority* measures whether women have the right to be a legal guardian of a child during a marriage, and whether women have custody rights over a child after divorce. *Inheritance* is based on formal inheritance rights of spouses. *Early marriage* measures the percentage of girls between 15 and 19 years of age who are/were ever married. *Polygamy* measures the acceptance of polygamy in the population. Countries where this information is not available are assigned scores based on the legality of polygamy.[3]

The *Civil liberties* dimension captures the freedom of social participation of women and includes the following variables. *Freedom of movement* indicates the freedom of women to move outside the home. *Freedom of dress* is based on the obligation of women to use a veil or burqa to cover parts of their body in the public.

The *Physical integrity* dimension comprises different indicators on violence against women. *Violence against women* indicates the existence of laws against domestic violence, sexual assault or rape, and sexual harassment. *Female genital mutilation* is the percentage of women who have undergone female genital mutilation. *Missing women* measures gender bias in mortality. Countries were coded by Stephan Klasen based on estimates of gender bias in mortality for a sample of countries (Klasen and Wink, 2003) and on sex ratios of young people and adults.

The *Ownership rights* dimension covers the access of women to several types of property. *Women's access to land* indicates whether women are allowed to own land. *Women's access to bank loans* measures whether women are allowed to access credits. *Women's access to property other than land* covers mainly access to real property such as houses, but also any other property.

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[3] Acceptance of polygamy in the population might proxy actual practices more than the formal indicator legality of polygamy and, moreover, laws might be changed faster than practices. Therefore, the acceptance variable is the first choice for the subindex Family code. The reason for using legality when acceptance is missing is to increase the number of countries.

In all cases, the variables are between 0 and 1. The value 0 means no or very low inequality and the value 1 indicates high inequality. Three of the variables (Early marriage, Female genital mutilation and Violence against women) are continuous. The other indicators measure social institutions on an ordinal categorical scale.

3 Construction of the Subindices

The objective of the subindices is to provide a summary measure for each dimension of social institutions related to gender inequality. In every subindex we want to combine variables that are assumed to belong to one dimension. The first step is to check the statistical association between the variables. The second step consists in aggregating the variables with a reasonable weighting scheme.

3.1 Measuring the association between categorical variables

To check the association between variables, and as most of them are ordinal, we use a statistical measure of rank correlation and Multiple Correspondence Analysis (Greenacre, 2007; Nenadić, 2007).

Rank correlation coefficients are useful when the data are ordinal and thus the conditions for using Pearson's correlation coefficient are not fulfilled. We use Kendall Tau b. For each variable, the values are ordered and ranked. Then the correspondence between the rankings is measured.[4]

Taking into account tied pairs, the formula for Kendall Tau b is

$$\tau_b = \frac{C - D}{\sqrt{\frac{n(n-1)}{2-T_x}\frac{n(n-1)}{2-T_y}}} \tag{1}$$

where C is the number of concordant pairs, D is the number of discordant pairs, n is the number of observations, and $\frac{n(n-1)}{2}$ is the number of all pairs, T_x is the number of pairs tied on the variable x and T_y is the number of pairs tied on the variable y. The notation is taken from Agresti (1984).

As a second method to check the association between variables we examine the

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[4] For calculating Kendall Tau, one counts the number of concordant and discordant pairs of two rankings, builds the difference and divides this difference by the total number of pairs. A value of 1 means total correspondence of rankings, i.e. the rankings are the same. A value of -1 indicates reverse rankings or a negative association between rankings. A value of 0 means independence of rankings. Kendall Tau b is a variant of Kendall tau that corrects for ties, which are frequent in the case of discrete data (Agresti, 1984, chap. 9). We consider Kendall Tau b to be the appropriate measure of rank correlation to find out whether our data are related.

graphics produced by Multiple Joint Correspondence Analysis (MCA) (Greenacre, 2007; Nenadić, 2007), after having discretized the three continuous variables. Correspondence Analysis is a method for analyzing and representing the structure of contingency tables graphically. We use MCA to find out whether variables seem to measure the same.[5]

The results for Kendall tau b (Tables 1- 5) and MCA (Figures 1- 5) are reported in the Appendix 1. A significant positive value of Kendall tau b is a sign for a positive association between two variables. This is the case for all variables belonging to one dimension, except Missing women in the subindex *Physical integrity*.

The graphs produced with MCA can be interpreted in the following way. In most cases, one of the axes represents whether there is inequality and the other axe represents the extent of inequality. If one connects the values of a variable one obtains a graphical pattern. If this is similar to the pattern obtained for another variable, then both variables are associated. The results of MCA also confirm that within every dimension all the variables seem to measure the same dimension, with the exception of Missing women in the dimension *Physical integrity*.

The results for Missing women could be due to the fact that this variable is mainly measuring son preference under scarce resources, while Violence against women and Female genital mutilation measure particularly the treatment of women which is not only motivated by economic considerations. Therefore, we do not include Missing women in the subindex *Physical integrity*. We decide to use the variable Missing women as a new subindex called *Son preference*. This decision is based on the fact that there are around 100 million missing women that should be alive (Sen, 1992; Klasen and Wink, 2003). The artificially higher female mortality is one of the most important and cruel aspects of gender inequality. At the end we have five subindices of social institutions related to gender inequality.

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[5] Correspondence Analysis is an exploratory and descriptive method to analyze contingency tables. Instead of calculating a correlation coefficient to capture the association of variables, the correspondence of conditional and marginal distributions of either rows or columns - also called row or column profiles - is measured using a χ^2-statistic, that captures the distance between them. These row or column profiles then are plotted in a low-dimensional space, so that the distances between the points reflect the dissimilarities between the profiles. Multiple Joint Correspondence Analysis is an extended procedure for the analysis of more than two variables and considers the cross-tabulations of the variables against each other in a so-called Burt matrix but with modified diagonal sub-tables. This facilitates to figure out whether variables are associated. This is the case when they have similar deviations from homogeneity, and therefore get a similar position in a profile space (Greenacre, 2007; Nenadić, 2007).

3.2 Aggregating variables to build a subindex

The five subindices Family Code, Civil liberties, Son preference, Physical integrity and Ownership rights use the twelve variables as input that were mentioned in the previous section. Each subindex combines variables that measure one dimension of social institutions related to gender inequality.

In the case of Son preference, the subindex takes the value of the variable missing women. In all other cases, the computation of the subindex values involves two steps.

First, the method of polychoric principal component analysis is used to extract the common information of the variables corresponding to a subindex.[6] Principal component analysis (PCA) is a method of dimensionality reduction that is valid for normally distributed variables (Jolliffe, 1986). This assumption is violated in our case, as our data include variables that are ordinal, and hence the Pearson correlation coefficient is not appropriate. Following Kolenikov and Angeles (2004, 2009) we use polychoric PCA, which relies on polychoric and polyserial correlations. These are estimated with maximum likelihood, assuming that there are latent normally distributed variables that underly the ordinal categorical data.

We use the First Principal Component (FPC) as a proxy for the common information contained by the variables corresponding to the subindices, measuring each one of the dimensions of social institutions related to gender inequality. The first principal component is the weighted sum of the standardized original variables that captures as much of the variance in the data as possible. In our case, the proportion of explained variance by the first principal component is 70% for Family code, 93% for Civil liberties, 60% for Physical integrity and 87% for Ownership rights.

The standardization of the original variables is done as follows. In the case of continuous variables, one subtracts the mean and then divides by the standard deviation. In the case of ordinal categorical variables, the standardization uses results of an ordered probit model. The weight each variable gets in these linear combinations are obtained by analyzing the correlation structure in the data. For the variables used for building the subindices, the weights are shown in Table 6.

Second, the subindex value is obtained rescaling the FPC so that it is between 0 and 1 to ease interpretation. A country with the best possible performance (no inequality) is assigned the value 0 and a country with the worst possible performance

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[6] We have also computed subindices that are simple arithmetic averages of the corresponding variables. Country rankings are similar but not equal.

(highest inequality) the value 1. Hence, the subindex values of all countries are between 0 and 1. Using the score of the FPC the subindex is calculated using the following transformation. Country X corresponds to a country of interest, Country *Worst* corresponds to a country with worst possible performance and Country *Best* is a country with best possible performance.

$$
\begin{aligned}
\text{Subindex(Country X)} \quad = \quad & \frac{\text{FPC(Country X)}}{\text{FPC(Country Worst)} - \text{FPC(Country Best)}} \\
- \quad & \frac{\text{FPC(Country Best)}}{\text{FPC(Country Worst)} - \text{FPC(Country Best)}}
\end{aligned} \tag{2}
$$

4 The Social Institutions and Gender Index (SIGI)

With the subindices described in the last section as input, we build a composite index named Social Institutions and Gender Index (SIGI) so that countries can be compared. The proposed index is transparent and easy to understand. As in the case of the variables and of the subindices, the index value 0 corresponds to no inequality and the value 1 to complete inequality.

The SIGI is an unweighted average of a non-linear function of the subindices. We use equal weights for the subindices, as we see no reason for valuing one of the dimensions more or less than the others[7]. The non-linear function arises because we assume that inequality related to gender corresponds to deprivation experienced by the affected women, and that deprivation increases more than proportionally when inequality increases. Thus, high inequality is penalized in every dimension. The non-linearity also means that the SIGI does not allow for total compensation among subindices, but permits partial compensation. Partial compensation implies that high inequality in one dimension, i.e. subindex, can only be partially compensated with low inequality on another dimension.[8]

For our specific five subindices, the value of the index SIGI is then calculated as

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[7] Empirically, even in the case of equal weights the ranking produced by a composite index is influenced by the different variances of its components. The component that has the highest variance has the largest influence on the composite index. In the case of the SIGI the variances of the five components are reasonably close to each other, Ownership rights having the largest and Physical integrity having the lowest variance.

[8] Other approaches have been also proposed in the literature, e.g. the non-compensatory approach by Munda and Nardo (2005a,b).

follows.

$$
\begin{aligned}
\text{SIGI} \quad = \quad & \frac{1}{5} \ (\text{Subindex Family Code})^2 + \frac{1}{5} \ (\text{Subindex Civil Liberties})^2 \\
+ \quad & \frac{1}{5} \ (\text{Subindex Physical Integrity})^2 + \frac{1}{5} \ (\text{Subindex Son preference})^2 \\
+ \quad & \frac{1}{5} \ (\text{Subindex Ownership Rights})^2 \tag{3}
\end{aligned}
$$

Using a more general notation, the SIGI $I(X)$ is computed as:

$$
I(X) = \frac{1}{n} \sum_{i=1}^{n} (x_i)^2, \tag{4}
$$

where X is the vector containing the values of the subindices x_i, $i = 1, ..., n$ for a given country. x_i represents the distance to 0 which is the goal of no inequality to be reached on every dimension.

The formula is inspired by the Foster-Greer-Thorbecke (FGT) poverty measures (Foster et al., 1984). The general FGT formula is defined for $y_i \leq z$ as:

$$
FGT(Y, \alpha, z) = \frac{1}{n} \sum_{i=1}^{n} \left(\frac{z - y_i}{z} \right)^{\alpha}, \tag{5}
$$

where Y is the vector containing all incomes, y_i $i = 1, ..., n$ is the income of individual i, z is the poverty line, and $\alpha > 0$ is a penalization parameter.

In our formula, the value 2 chosen for α has the advantage of easy interpretation, as it leads to the square function. Additionally, it has a sound theoretical basis in the poverty literature as it assures that the index fulfills the transfer principle. $\alpha = 2$ is the boundary between poverty measures that satisfy both the transfer principle *and* transfer sensitivity (Foster et al., 1984).

Some differences between the SIGI and the FGT measures must be highlighted. In the case of the SIGI, we are aggregating across dimensions and not over individuals. Moreover, in contrast to the income case, a lower value of x_i is preferred, and the normalization achieved when dividing by the poverty line z is not necessary, as $0 \leq x_i \leq 1$, $i = 1, \ldots, n$.

The SIGI fulfills several properties:

- *Support and range*: The value of the index can be computed for any values of the subindices, and it is always between 0 and 1.

- *Anonymity*: Neither the name of the country nor the name of the subindex have an impact on the value of the index.

- *Unanimity or Pareto Optimality*: If a country has values for every subindex that are lower than or equal to those of another country, then the index value for the first country is lower than or equal to the one for the second country.

- *Monotonicity*: If one country has a lower value for the index than a second country, and a third country has the same values for the subindices as the first country, except for one subindex which is lower, then the third country has a lower index value than the second country.

- *Penalization of dispersion*: For two countries with the same average value of the subindices, the country with the lowest dispersion of the subindices gets a lower value for the index.

- *Compensation*: If two countries have the same index value, and only differ on the values of two dimensions, then it must be that the absolute value of the differences between the countries for both dimensions are not equal. Although the SIGI is not conceived for changes over time this property is more intuitively understood in the following way. If a country experiences an increase in inequality by a given amount on a subindex, then the country can only have the same value of the index as before, if there is a decrease in inequality on another subindex that is higher in absolute value than the increase.

For a formal presentation of the properties and the proofs, see Appendix 2.

5 Results

5.1 Country rankings and regional patterns

In Appendix 3, the results for the SIGI and its five subindices are presented. Among the 102 countries considered by the SIGI[9] (Table 7) Paraguay, Croatia, Kazakhstan, Argentina and Costa Rica have the lowest levels of gender inequality related to social institutions. Sudan is the country that occupies the last position, followed by Afghanistan, Sierra Leone, Mali and Yemen, which means that gender inequality in social institutions is a major problem there.

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[9] The subindices are computed for countries that have no missing values on the relevant input variables. In the case of the SIGI only countries that have values for every subindex are considered.

Rankings according to the subindices are as follows. For *Family code* (Table 8) 112 countries can be ranked. Best performers are China, Jamaica, Croatia, Belarus and Kazakhstan. Worst performers are Mali, Chad, Afghanistan, Mozambique and Zambia. In the dimension *Civil liberties* (Table 9) 123 countries are ranked. Among them 83 share place 1 in the ranking. Sudan, Saudi Arabia, Afghanistan, Yemen and Iran occupy the last five positions of high inequality. 114 countries can be compared with the subindex *Physical Integrity* (Table 10). Hong Kong, Bangladesh, Chinese Taipei, Ecuador, El Salvador, Paraguay and Philippines are at the top of the ranking while Mali, Somalia, Sudan, Egypt and Sierra Leone are at the bottom. In the dimension *Son preference* (Table 11) 88 out of 123 countries rank at the top as they do not have problems with missing women. The countries that rank worst are China, Afghanistan, Papua New Guinea, Pakistan, India and Bhutan. Finally, 122 countries are ranked with the subindex *Ownership rights* (Table 12). 42 countries share position 1 as they have no inequality in this dimension. On the other hand the four worst performing countries are Sudan, Sierra Leone, Chad and the Democratic Republic of Congo.

To find out whether apparent regional patterns in social institutions related to gender inequality are systematic, we divided the countries in quintiles following the scores of the SIGI and its subindices (Table 13). The first quintile includes countries with lowest inequality, and the fifth quintile countries with highest inequality.

For the SIGI, no country of Europe and Central Asia (ECA) or Latin America and the Caribbean (LAC) is found in the two quintiles reflecting social institutions related to high gender inequality. In contrast, countries in South Asia (SA), Sub-Saharan Africa (SSA), and Middle East and North Africa (MENA) rank in these two quintiles. East Asia and Pacific (EAP) has countries with very low as well as very high inequality. It is interesting to note that in the most problematic regions some countries rank in the first two quintiles. These are Mauritius (SSA) and Tunisia (MENA).

Going on with the subindices the pattern is similar to the one of the SIGI. As more information is available for the subindices, the number of countries covered by every subindex is different and higher than for the SIGI. In the following some interesting facts are highlighted, especially countries whose scores are different than the average in the region.

- *Family code*: No country in ECA, LAC or EAP shows high inequality. SA, MENA and SSA remain problematic with countries with social institutions

related to high gender inequality. Exceptions are Bhutan in SA, Mauritius in SSA, and Tunisia and Israel in MENA.

- *Civil liberties*: Only three groups of countries using the quintile analysis can be generated with the first group including the first three quintiles. In SSA over one-half of the countries are now in the first group. Also in MENA there are some countries with good scores (Israel, Morocco and Tunisia). No country in SA is found in the first three quintiles of low and moderate inequality.

- *Physical integrity*: Best cases in the most problematic regions are Botswana, Mauritius, South Africa and Tanzania (SSA), and Morocco and Tunisia (MENA).

- *Son Preference*: Again only three groups of countries can be built by quintile analysis, with the first group including the first three quintiles. As in the case of Civil liberties most of the countries in SSA do not show problems. Missing women is mainly an issue in SA and MENA. But in both regions there are countries that rank in the first group. These are Sri Lanka in SA, and Israel, Lebanon and Occupied Palestinian Territory in MENA.

- *Ownership rights*: Best cases in MENA are Egypt, Israel, Kuwait and Tunisia as they rank in the first quintile. This is also valid for Bhutan in SA, and Eritrea and Mauritius in SSA.

5.2 Comparison with other Gender-related Indices

The SIGI is intended to measure a special aspect of gender inequality, namely social institutions. To check whether the index is empirically redundant, i.e. whether it provides additional information as compared to other measures, we conduct an empirical analysis of the statistical association between the SIGI and other well-known gender-related indices. In the case of well-being measures, McGillivray and White (1993) suggest using two explicit thresholds to separate redundancy from non-redundancy, that is a correlation coefficient of 0.90 and 0.70. We follow this suggestion and use the threshold 0.70 in absolute value.

We calculated Kendall tau b for all available countries between the SIGI and each of the following indices: the Gender-related Development Index (GDI) and the Gender Empowerment Measure (GEM) from United Nations Development Programme (2006), the Global Gender Gap Index (GGG) from Hausmann, Tyson, and Zahidi (2007) and the Women's Social Rights Index from http://ciri.binghamton.edu/.

As the GDI and the GEM have been criticized in the literature (e.g. Klasen, 2006; Schüler, 2006), we also do the analysis for two alternative measures, the Gender Gap Index Capped and a revised Gender Empowerment Measure based on income shares proposed by Klasen and Schüler (2007). For all the measures considered Kendall tau b is lower than 0.60 in absolute value and statistically significant. We conclude that the SIGI is related to these gender measures but is non-redundant. These results as well as the comparison of the country rankings of the SIGI and these other measures can be found in Appendix 5.

6 Conclusion

In this paper we present a new composite index measuring social institutions related to gender inequality, the Social Institutions and Gender Index (SIGI) which is based on variables of the OECD Gender, Institutions and Development Database. The SIGI offers a new way to approach gender inequalities and to compare 102 non-OECD countries that has been neglected in the literature and by other gender measures that mainly focus on well-being and agency. The SIGI is composed of five subindices, each combining variables that measure one of the five dimensions of social institutions related to gender inequality: Family code, Civil liberties, Physical integrity, Son preference and Ownership rights. Together with these five subindices, the SIGI can help policy-makers to detect in what countries and in which dimensions of social institutions problems need to be addressed. Moreover, the SIGI is a valuable instrument to generate public discussion.

Methodologically, the SIGI has the advantage of penalizing high inequality in each dimension and it allows only for partial compensation among its five dimensions. Empirical results show that the SIGI is non-redundant and adds new information to other well-known gender-related measures.

When constructing a composite index one is always confronted with decisions and trade-offs concerning e.g. the choice and treatment of the variables included, the weighting scheme and the aggregation method. In the case of the SIGI, we hope that these choices are transparent and clear. Moreover, the formula to compute the SIGI is easy to understand and to communicate.

However, three caveats must be noted. First, the figures and rankings produced should not substitute a careful investigation of all the components of the SIGI. To understand the situation in a country additional qualitative information could be valuable. Second, as any composite index cannot be better than its components, we

think it is extremely important to invest in the measurement of social institutions related to gender inequality. This includes data coverage, coding schemes and refinement of indicators. As an example, it would be interesting to exploit data available from the Demographic and Health Surveys (DHS)[10] that specifically address the perception that women have of violence against women, and to finance further surveys in countries where data is not available yet. Lastly, one should keep in mind that OECD countries are not included in the SIGI sample as social institutions related to gender inequalities in these countries are not well captured by the variables used for the SIGI. This does not mean that this phenomenon does not exist in OECD countries, but that further research is required to develop appropriate measures to capture it.

The SIGI and its subindices could influence current development thinking as they highlight social institutions that affect overall development. As it is shown in the literature (e.g. Klasen, 2002; Klasen and Lamanna, 2009) gender inequalities in education negatively affect overall development. Economic research investigating these outcome inequalities should consider social institutions related to gender inequalities. Preliminary results show that the SIGI and its subindices are related to health and education of women even after controlling for the usual suspects region, religion and the level of economic development.[11]

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[10] Information is available on the webpage http://www.measuredhs.com/.
[11] Results are available upon request.

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Appendix 1: Building the Subindices:
Kendall tau, MCA, and Weights from Polychoric PCA

Kendall tau b: Dimension Family Code

Table 1:

		earmarr	polyg	parauth	inher
earmarr	Kendall tau b	1			
	Number of obs.	112			
	p-Value				
polyg	Kendall tau b	0.2950	1		
	Number of obs.	112	112		
	p-Value	0.0001			
parauth	Kendall tau b	0.2884	0.4792	1	
	Number of obs.	112	112	112	
	p-Value	0.0001	0.0000		
inher	Kendall tau b	0.234	0.5964	0.5742	1
	Number of obs.	112	112	112	112
	p-Value	0.0020	0.0000	0.0000	

earmarr stands for the variable Early marriage, polyg for Polygamy, parauth is the variable Parental authority and inher is the variable inheritance. For a description of these variables, see section 2. The p-values correspond to the null hypothesis that the respective two variables are independent.

Kendall tau b: Dimension Civil Liberties

Table 2:

		obliveil
freemov	Kendall tau b	0.613
	Number of obs.	123
	p-Value	0.0000

freemov stands for the variable Freedom of movement. obliveil is the variable Obligation to wear a veil in public. For a description of these variables, see section 2. The p-value correspond to the null hypothesis that two variables are independent.

Kendall tau b: Dimension Physical Integrity with Missing Women

Table 3:

		femmut	vio	misswom
femmut	Kendall tau b	1		
	Number of obs.	114		
	p-Value			
vio	Kendall tau b	0.1584	1	
	Number of obs.	114	114	
	p-Value	0.0382		
misswom	Kendall tau b	-0.1041	0.1098	1
	Number of obs.	114	114	114
	p-Value	0.2160	0.1634	

femmut stands for the variable Female Genital Mutilation, vio for Violence against women and misswom is the variable Missing women. For a description of these variables, see section 2. The p-values correspond to the null hypothesis that the respective two variables are independent.

Kendall tau b: Dimension Physical Integrity without Missing Women

Table 4:

		vio
femmut	Kendall tau b	0.1584
	Number of obs.	114
	p-Value	0.0382

femmut stands for the variable Female Genital Mutilation and vio for Violence against women. For a description of these variables, see section 2. The p-value correspond to the null hypothesis that two variables are independent.

Kendall tau b: Dimension Ownership Rights

Table 5:

		womland	womloans	womprop
womland	Kendall tau b	1		
	Number of obs.	122		
	p-Value			
womloans	Kendall tau b	0.5943	1	
	Number of obs.	122	122	
	p-Value	0.0000		
womprop	Kendall tau b	0.6438	0.5975	1
	Number of obs.	122	122	122
	p-Value	0.0000	0.0000	

womland stands for the variable Women's access to land. womloans is the variable Women's access to loans and womprop is the variable Women's access to property other than land. For a description of these variables, see section 2. The p-values correspond to the null hypothesis that the respective two variables are independent.

MCA for the Dimension Family Code

Figure 1:
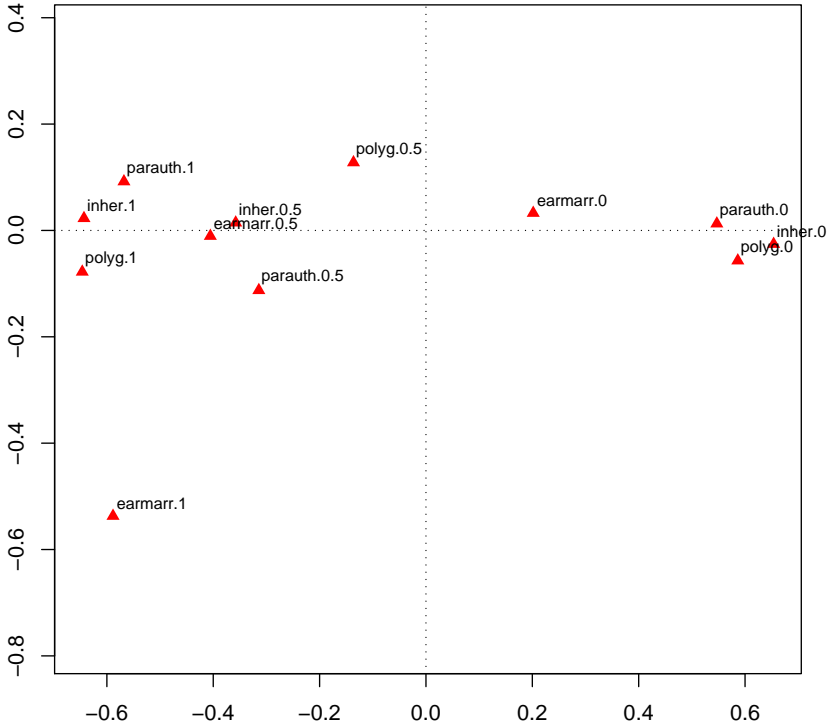
earmarr stands for the variables Early marriage, polyg for Polygamy, parauth is the variable Parental authority and inher is the variable inheritance. For a description of these variables, see section 2.

MCA for the Dimension Civil Liberties

Figure 2:
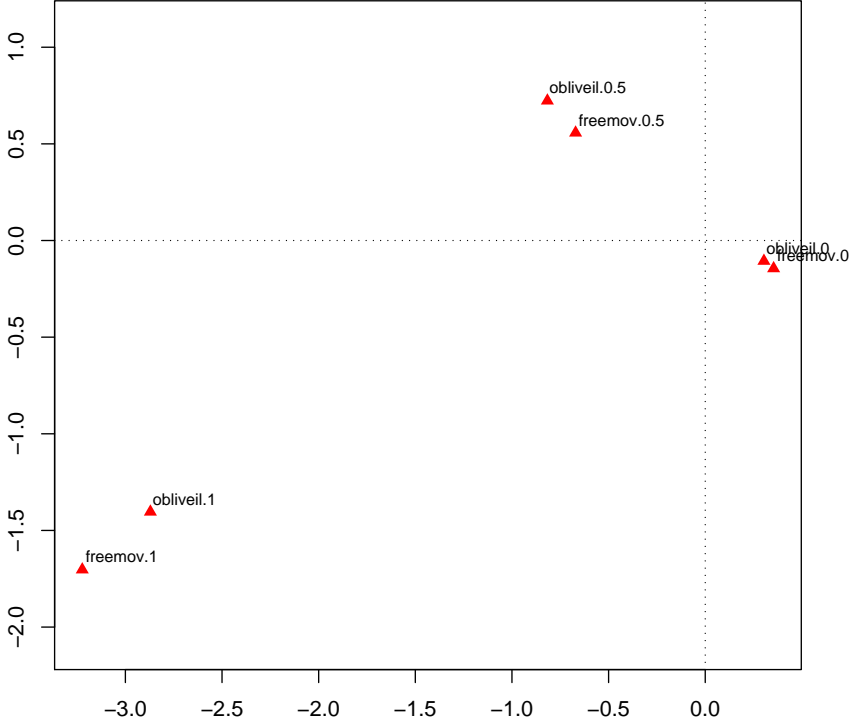
freemov stands for the variable Freedom of movement. obliveil is the variable Obligation to wear a veil in public. For a description of these variables, see section 2.

MCA for the Dimension Physical Integrity with Missing Women

Figure 3:
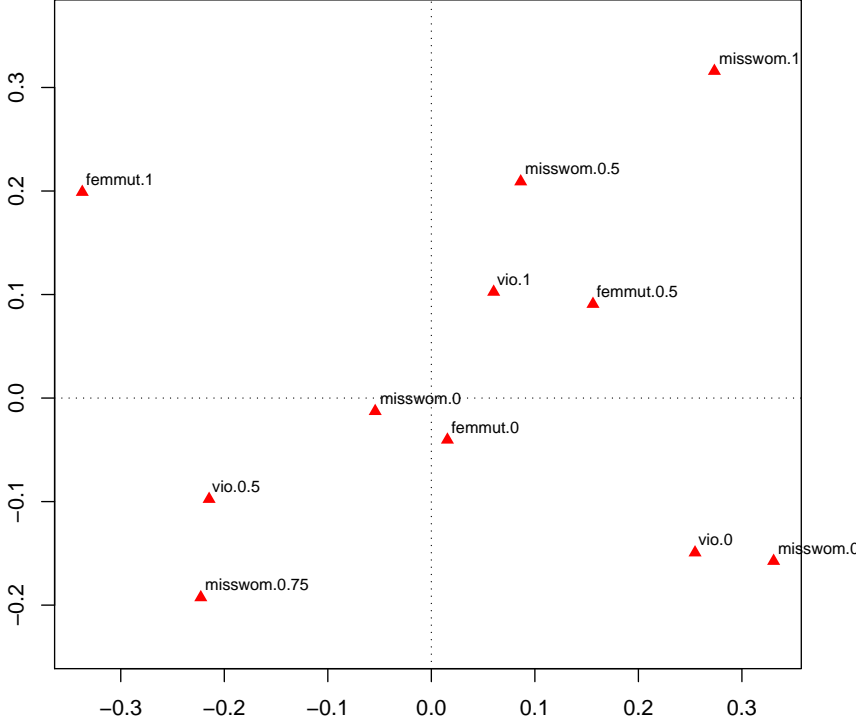
femmut stands for the variable Female Genital Mutilation, vio for Violence against women and misssk is the variable Missing women. For a description of these variables, see section 2.

MCA for the Dimension Physical Integrity without Missing Women

Figure 4:
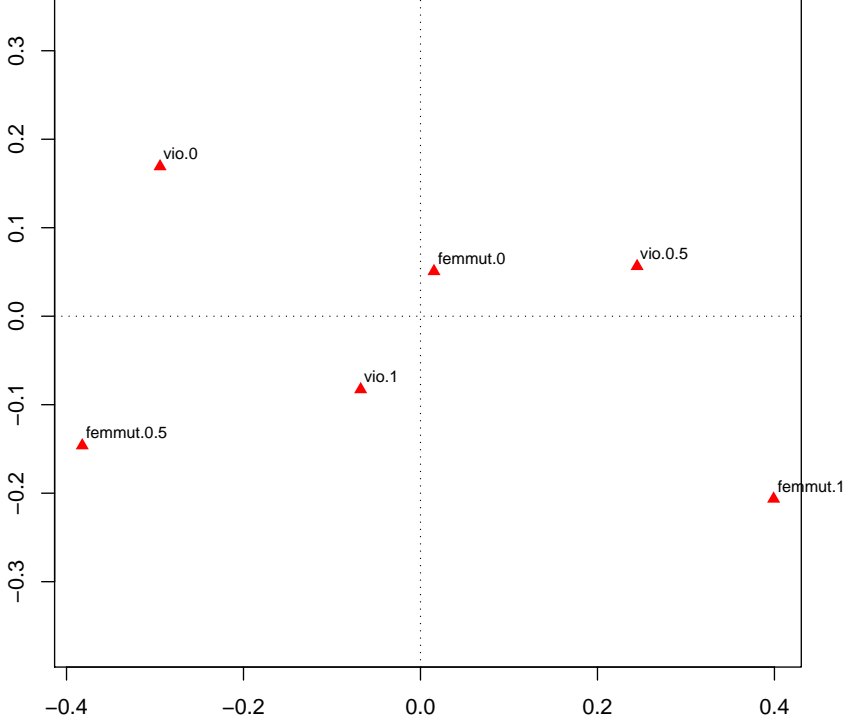
femmut stands for the variable Female Genital Mutilation and vio for Violence against women. For a description of these variables, see section 2.

MCA for the Dimension Ownership Rights

Figure 5:
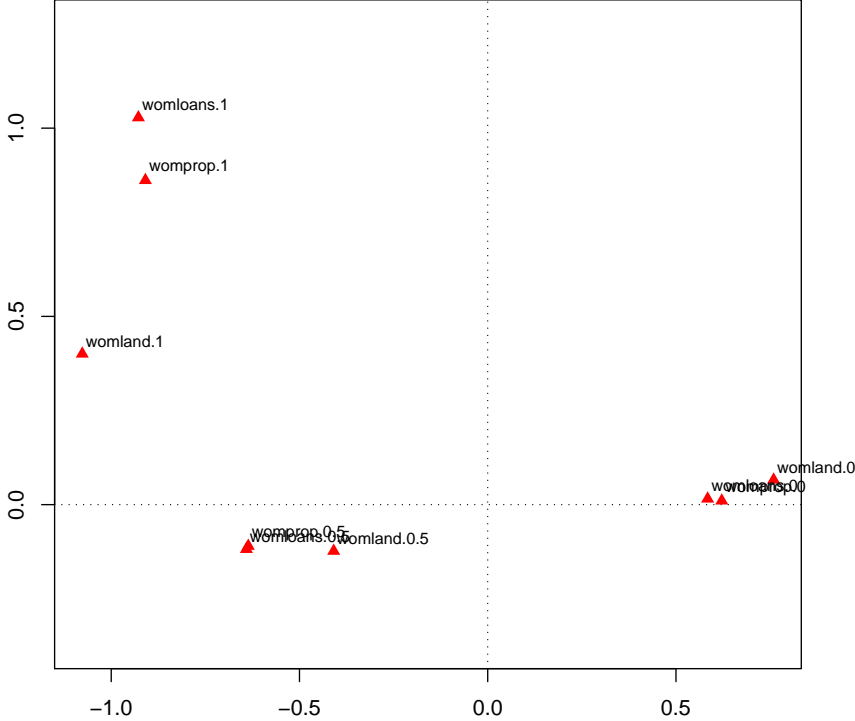
womland stands for the variable Women's access to land. womloan is the variable Women's access to loans and womprop is the variable Women's access to property other than land. For a description of these variables, see section 2.

Weights from Polychoric PCA

<div align="center">

Table 6:

	Weights
Family code	
Parental authority	0.5212
Inheritance	0.5404
Early marriage	0.3877
Polygamy	0.5348
Civil liberties	
Freedom of movement	0.7071
Obligation to wear a veil	0.7071
Physical integrity	
Female genital mutilation	0.7071
Violence against women	0.7071
Ownership rights	
Womens access to land	0.5811
Womens access to loans	0.5665
Womens access to other property	0.5843

</div>

Appendix 2: Objectives, properties and proofs

In this section, we present the objectives and properties that we consider relevant for any composite index related to social institutions related to gender inequality. Moreover, we show that the proposed index fulfills all of them.

We use the following notation. Let X^j, with $j = A, B$, be the vector containing the the values of the subindices x_i^j, with $i = 1, ..., n$, for the country j[12]. $I(X)$ represents the composite index.

Objectives of the index

The objectives of the index are the following:

1. The index $I(X)$ should represent the level of gender inequality, so that countries can be ranked.

2. The interpretation of $I(X)$ should be straightforward. As in the case of the subindices x_i, the value 0 should correspond to no inequality and the value 1 to complete inequality.

3. For any subindex x_i, we interpret the value 0, i.e. no inequality, as the goal to be achieved. The value zero can be thought of as a poverty line (see Ravallion, 1994; Deaton, 1997; Subramanian, 2007, and references therein). We define a deprivation function $\phi(x_i, 0)$, with $\phi(x_i, 0) > 0$ if $x_i > 0$, and $\phi(x_i, 0) = 0$ if $x_i = 0$. Higher values of x_i should lead to a penalization in $I(X)$ that should increase with the distance x_i to zero, i.e. $\frac{\partial I(X)}{\partial x_i} > 0$, and $\frac{\partial^2 I(X)}{\partial x_i^2} > 0$.

4. $I(X)$ should not allow for total compensation among variables, but permit partial compensation. This somehow relates to the transfer axioms that should be fulfilled by inequality as well as poverty measures. A decrease in x_i, i.e. less inequality, is rewarded more in $I(X)$ than an equivalent increase in another variable x_k (see Atkinson, 1970; Kakwani, 1984; Shorrocks and Foster, 1987; Subramanian, 2007; Alkire and Foster, 2008, and references therein).

5. $I(X)$ should be easy to compute and transparent.

Properties of the index

Some of the properties that any index should fulfill are:

---

[12] In what follows, the superscript j will only be used if it is necessary to distinguish countries.

1. **Support and range of $I(X)$:**

    - $I(X)$ must be defined for $0 \le x_i \le 1,\ i = 1, \dots, n$.
    - $0 \le I(X) \le 1$ must hold for any X.
    - If $x_i = 0\ \forall i$, then $I(X) = 0$. If $x_i = 1\ \forall i$, then $I(X) = 1$.

2. **Anonymity (symmetry):** The value of $I(X^j)$ does not depend either on the names of the subindices nor on the name of the country (j).

3. **Unanimity (Pareto Optimality):** If $x_i^A \le x_i^B\ \forall i$, then $I(X^A) \le I(X^B)$.

4. **Monotonicity:** If considering X^A and X^B country A is preferred to country B, and only x_i^A improves (i.e. decreases) for a given i, while $x_i^B\ \forall i$ remains unchanged, then country A should still be preferred over country B.

5. **Penalization of inequality in the case of equal means:** Let the mean of X^A be equal to the mean of X^B. If the dispersion of X^A is smaller than the dispersion of X^B, then $I(X^A) < I(X^B)$.

6. **Compensation property:** In a two-variable example, $\triangle x_1 \le 1 - x_1$, and $\triangle x_2 \le 1 - x_2$.

    a) If x_1 increases by $|\triangle x_1|$ and x_2 decreases by $|\triangle x_2|$ and $|\triangle x_1| = |\triangle x_2|$, then $I(X)$ must increase.

    b) For $I(X)$ to remain unchanged, we must have $|\triangle x_2| > |\triangle x_1|$.

Proofs

The composite index $I(X)$ is defined as

$$I(X) = \frac{1}{n} \sum_{i=1}^{n} (x_i - 0)^2.$$

The index proposed fulfills all the stated properties.

1. **Support and range of $I(X)$**

    - $I(X)$ is defined for $0 \le x_i \le 1,\ i = 1, \dots, n$.
    - For any X, we have that $0 \le I(X) \le 1$.
    - If $x_i = 0\ \forall i$, then $I(X) = 0$. If $x_i = 1\ \forall i$, then $I(X) = 1$.

2. **Anonymity (symmetry)**

    The value of $I(X^j)$ does not depend either on the names of the subindices nor on the name of the country (j).

3. **Unanimity (Pareto Optimality)**

   If we assume that $\forall i$

   $$x_i^A \leq x_i^B,$$

   then we can show that

   $$
   \begin{aligned}
   (x_i^A)^2 &\leq (x_i^B)^2 \\
   \frac{1}{n}\sum_{i=1}^{n}(x_i^A - 0)^2 &\leq \frac{1}{n}\sum_{i=1}^{n}(x_i^B - 0)^2 \\
   I(X^A) &\leq I(X^B).
   \end{aligned}
   $$

4. **Monotonicity**

   We assume that

   $$
   \begin{aligned}
   I(X^A) &\leq I(X^B) \\
   \frac{1}{n}\sum_{i=1}^{n}(x_i^A - 0)^2 &\leq \frac{1}{n}\sum_{i=1}^{n}(x_i^B - 0)^2.
   \end{aligned}
   $$

   Let us suppose, without loss of generality, that subindex x_1 improves (decreases) by $\delta > 0$ for country A. Then we have that

   $$\frac{1}{n}(x_1^A - \delta - 0)^2 + \frac{1}{n}\sum_{i=2}^{n}(x_i^A - 0)^2 \leq \frac{1}{n}\sum_{i=1}^{n}(x_i^A - 0)^2,$$

   and hence

   $$\frac{1}{n}(x_1^A - \delta - 0)^2 + \frac{1}{n}\sum_{i=2}^{n}(x_i^A - 0)^2 \leq \frac{1}{n}\sum_{i=1}^{n}(x_i^B - 0)^2.$$

   This means that

   $$I(X^{A^*}) \leq I(X^B)$$

   with X^{A^*} defined as the vector corresponding to country A with only one variable having improved (decreased) by δ.

5. **Penalization of inequality in the case of equal means**

If we assume equal means, so that

$$\mu = \frac{1}{n}\sum_{i=1}^{n}(x_i^A) = \frac{1}{n}\sum_{i=1}^{n}(x_i^B),$$

then we also have

$$\sum_{i=1}^{n}(x_i^A) = \sum_{i=1}^{n}(x_i^B).$$

If we assume that the variance of X^A is smaller than the variance of X^B so that

$$\frac{1}{n}\sum_{i=1}^{n}(x_i^A - \mu)^2 \quad < \quad \frac{1}{n}\sum_{i=1}^{n}(x_i^B - \mu)^2,$$

we can show that

$$\sum_{i=1}^{n}\left[(x_i^A)^2 - 2\mu x_i^A + \mu^2)\right] \quad < \quad \sum_{i=1}^{n}\left[(x_i^B)^2 - 2\mu x_i^B + \mu^2)\right],$$

$$\sum_{i=1}^{n}(x_i^A)^2 - 2\mu\sum_{i=1}^{n}x_i^A + n\mu^2 \quad < \quad \sum_{i=1}^{n}(x_i^B)^2 - 2\mu\sum_{i=1}^{n}x_i^B + n\mu^2.$$

As $\sum_{i=1}^{n}(x_i^A) = \sum_{i=1}^{n}(x_i^B)$, we have that

$$\sum_{i=1}^{n}(x_i^A)^2 \quad < \quad \sum_{i=1}^{n}(x_i^B)^2$$

$$\frac{1}{n}\sum_{i=1}^{n}(x_i^A - 0)^2 \quad < \quad \frac{1}{n}\sum_{i=1}^{n}(x_i^B - 0)^2$$

$$I(X^A) \quad < \quad I(X^B).$$

6. **Compensation property**

In a two-variable example, let $\triangle x_1 \leq 1 - x_1$, and $\triangle x_2 \leq 1 - x_2$.

a) We can show that if $\triangle x_1 = \triangle x_2 = \delta > 0$, then

$$
\begin{aligned}
x_2 &< x_1 + \delta \\
0 &< x_1 - x_2 + \delta \\
0 &< 2\delta(x_1 - x_2 + \delta) \\
x_1^2 + x_2^2 &< x_1^2 + x_2^2 + 2\delta(x_1 - x_2 + \delta) \\
\frac{1}{2}\left(x_1^2 + x_2^2\right) &< \frac{1}{2}\left(x_1^2 + 2\delta x_1 + \delta^2 + x_2^2 - 2\delta x_2 + \delta^2\right) \\
\frac{1}{2}\left(x_1^2 + x_2^2\right) &< \frac{1}{2}\left[(x_1^2 + \delta)^2 + (x_2^2 - \delta)^2\right] \\
I(x_1, x_2) &< I(x_1 + \delta, x_2 - \delta),
\end{aligned}
$$

and hence we have shown that if x_1 increases by δ and x_2 decreases by δ, then $I(X)$ must increase.

b) Let $x_1 = x_2 = x > 0$. We will show that if x_1 increases by $\triangle x_1$ and x_2 decreases by $\triangle x_1$ and the value of the index remains unchanged, the increase of x_1 must be smaller than the absolute value of the decrease in x_2.

$$
\begin{aligned}
I(x_1, x_2) &= I(x_1 + \triangle x_1, x_2 - \triangle x_2) \\
\frac{1}{2}\left(x_1^2 + x_2^2\right) &= \frac{1}{2}\left[(x_1 + \triangle x_1)^2 + (x_2 - \triangle x_2)^2\right] \\
x_1^2 + x_2^2 &= x_1^2 + 2x_1\triangle x_1 + (\triangle x_1)^2 + x_2^2 - 2x_2\triangle x_2 + (\triangle x_2)^2 \\
0 &= 2x_1\triangle x_1 + (\triangle x_1)^2 - 2x_2\triangle x_2 + (\triangle x_2)^2
\end{aligned}
$$

Using the fact that $x_1 = x_2 = x$, we can rewrite this as

$$
\begin{aligned}
0 &= 2x\triangle x_1 + (\triangle x_1)^2 - 2x\triangle x_2 + (\triangle x_2)^2 \\
0 &= 2x(\triangle x_1 - \triangle x_2) + (\triangle x_1)^2 + (\triangle x_2)^2.
\end{aligned}
$$

As $2x > 0$, $(\triangle x_1)^2 > 0$, and $(\triangle x_2)^2 > 0$, we must have that

$$
\begin{aligned}
\triangle x_1 - \triangle x_2 &< 0 \\
\triangle x_1 &< \triangle x_2.
\end{aligned}
$$

Appendix 3: Rankings of countries according to the SIGI and its subindices

Ranking according to the SIGI and the 5 subindices

Table 7:

Country	SIGI		Family code		Civil liberties		Physical integrity		Missing women		Ownership rights	
	Ranking	Value	Ranking	Value	Ranking	Value	Ranking	Value	Ranking	Value	Ranking	Value
Paraguay	1	0.0024832	19	0.0689011	1	0	3	0.0875702	1	0	1	0
Croatia	2	0.0033300	3	0.0081060	1	0	9	0.1287797	1	0	1	0
Kazakhstan	3	0.0034778	5	0.0283710	1	0	9	0.1287797	1	0	1	0
Argentina	4	0.0037899	13	0.0486361	1	0	9	0.1287797	1	0	1	0
Costa Rica	5	0.0070934	23	0.0810601	1	0	15	0.1699892	1	0	1	0
Russian Federation	6	0.0072524	35	0.1402772	1	0	9	0.1287797	1	0	1	0
Philippines	7	0.0078831	8	0.0405301	1	0	3	0.0875702	1	0	53	0.1735059
El Salvador	8	0.0082581	17	0.0648481	1	0	3	0.0875702	1	0	43	0.1715123
Ecuador	9	0.0091447	24	0.0891661	1	0	3	0.0875702	1	0	53	0.1735059
Ukraine	10	0.0096900	8	0.0405301	1	0	23	0.2163499	1	0	1	0
Mauritius	11	0.0097590	11	0.0445831	1	0	23	0.2163499	1	0	1	0
Moldova	12	0.0098035	12	0.0470149	1	0	23	0.2163499	1	0	1	0
Bolivia	13	0.0098346	13	0.0486361	1	0	23	0.2163499	1	0	1	0
Uruguay	14	0.0099167	15	0.0526891	1	0	23	0.2163499	1	0	1	0
Venezuela, RB	15	0.0104259	21	0.0729541	1	0	23	0.2163499	1	0	1	0
Thailand	16	0.0106770	41	0.1564892	1	0	15	0.1699892	1	0	1	0
Peru	17	0.0121323	15	0.0526891	1	0	33	0.2405940	1	0	1	0
Colombia	18	0.0127270	21	0.0729541	1	0	15	0.1699892	1	0	43	0.1715123
Belarus	19	0.0133856	4	0.0243180	1	0	34	0.2575594	1	0	1	0
Hong Kong, China	20	0.0146549	26	0.1038001	1	0	1	0	89	0.25	1	0
Singapore	21	0.0152573	25	0.0997471	1	0	34	0.2575594	1	0	1	0
Cuba	22	0.0160304	28	0.1175371	1	0	34	0.2575594	1	0	1	0
Macedonia, FYR	23	0.0178696	39	0.1516949	1	0	34	0.2575594	1	0	1	0
Brazil	24	0.0188021	19	0.0689011	1	0	48	0.2987690	1	0	1	0
Tunisia	25	0.0190618	32	0.1273769	1	0	9	0.1287797	89	0.25	1	0
Chile	26	0.0195128	34	0.1390898	1	0	23	0.2163499	1	0	56	0.1772301
Cambodia	27	0.0220188	38	0.1443302	1	0	48	0.2987690	1	0	1	0
Nicaragua	28	0.0225149	33	0.1296962	1	0	34	0.2575594	1	0	43	0.1715123

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Table 7 – continued from previous page

Country	SIGI		Family code		Civil liberties		Physical integrity		Missing women		Ownership rights	
	Ranking	Value	Ranking	Value	Ranking	Value	Ranking	Value	Ranking	Value	Ranking	Value
Trinidad & Tobago	29	0.0228815	39	0.1516949	1	0	15	0.1699892	89	0.25	1	0
Kyrgyz Rep.	30	0.0292419	42	0.1598009	1	0	48	0.2987690	1	0	56	0.1772301
Viet Nam	31	0.0300619	6	0.0324240	1	0	60	0.3863392	1	0	1	0
Armenia	32	0.0301177	7	0.0364770	1	0	60	0.3863392	1	0	1	0
Georgia	33	0.0306926	17	0.0648481	1	0	60	0.3863392	1	0	1	0
Guatemala	34	0.0319271	27	0.1053781	1	0	54	0.3451297	1	0	43	0.1715123
Tajikistan	35	0.0326237	47	0.2595481	1	0	34	0.2575594	1	0	43	0.1715123
Honduras	36	0.0331625	44	0.2160969	1	0	54	0.3451297	1	0	1	0
Azerbaijan	37	0.0339496	37	0.1431428	1	0	60	0.3863392	1	0	1	0
Lao PDR	38	0.0357687	51	0.3203431	1	0	23	0.2163499	1	0	43	0.1715123
Mongolia	39	0.0391165	30	0.1200122	1	0	48	0.2987690	89	0.25	43	0.1715123
Dominican Rep.	40	0.0398379	28	0.1175371	1	0	34	0.2575594	1	0	58	0.3450181
Myanmar	41	0.0462871	35	0.1402772	1	0	60	0.3863392	89	0.25	1	0
Jamaica	42	0.0484293	1	0.0040530	1	0	54	0.3451297	1	0	76	0.3507359
Morocco	43	0.0534361	48	0.2627905	1	0	9	0.1287797	89	0.25	58	0.3450181
Fiji	44	0.0545044	8	0.0405301	1	0	60	0.3863392	1	0	66	0.3487424
Sri Lanka	45	0.0591410	46	0.2340427	98	0.3006851	15	0.1699892	1	0	66	0.3487424
Madagascar	46	0.0695815	70	0.4113796	1	0	60	0.3863392	1	0	43	0.1715123
Namibia	47	0.0750237	58	0.3530730	1	0	34	0.2575594	89	0.25	66	0.3487424
Botswana	48	0.0810172	53	0.3216308	1	0	15	0.1699892	1	0	79	0.5222482
South Africa	49	0.0867689	73	0.4232618	84	0.2980757	23	0.2163499	1	0	58	0.3450181
Burundi	50	0.1069056	57	0.3354503	1	0	60	0.3863392	1	0	79	0.5222482
Albania	51	0.1071956	31	0.1228778	1	0	60	0.3863392	101	0.5	66	0.3487424
Senegal	52	0.1104056	99	0.6024997	1	0	45	0.2645464	1	0	58	0.3450181
Tanzania	53	0.1124419	81	0.4988582	1	0	22	0.2015119	1	0	79	0.5222482
Ghana	54	0.1126940	61	0.3662139	1	0	80	0.3957452	1	0	79	0.5222482
Indonesia	55	0.1277609	59	0.3540548	103	0.5987608	79	0.3936178	1	0	1	0
Eritrea	56	0.1364469	76	0.4553800	1	0	106	0.6891036	1	0	1	0
Kenya	57	0.1370416	63	0.3702669	1	0	46	0.2815227	1	0	111	0.6847302
Cote d'Ivoire	58	0.1371181	79	0.4901204	1	0	85	0.4345464	1	0	77	0.5064994
Syrian Arab Rep.	59	0.1381059	68	0.4026909	98	0.3006851	34	0.2575594	101	0.5	66	0.3487424
Malawi	60	0.1432271	60	0.3608732	84	0.2980757	88	0.4736178	1	0	79	0.5222482

Table 7 – continued from previous page

Country	SIGI		Family code		Civil liberties		Physical integrity		Missing women		Ownership rights	
	Ranking	Value	Ranking	Value	Ranking	Value	Ranking	Value	Ranking	Value	Ranking	Value
Mauritania	61	0.1497032	71	0.4205634	98	0.3006851	103	0.6018251	1	0	58	0.3450181
Swaziland	62	0.1565499	86	0.5214396	84	0.2980757	60	0.3863392	1	0	79	0.5222482
Burkina Faso	63	0.1616069	88	0.5393882	1	0	104	0.6309179	1	0	58	0.3450181
Bhutan	64	0.1625080	43	0.2051253	84	0.2980757	54	0.3451297	118	0.75	1	0
Nepal	65	0.1672252	62	0.3677918	84	0.2980757	48	0.2987690	101	0.5	79	0.5222482
Rwanda	66	0.1685859	56	0.3297368	1	0	91	0.5151189	1	0	111	0.6847302
Niger	67	0.1755873	104	0.6488194	1	0	99	0.5248165	89	0.25	58	0.3450181
Equatorial Guinea	68	0.1759719	82	0.5029112	84	0.2980757	91	0.5151189	1	0	79	0.5222482
Gambia, The	69	0.1782978	103	0.6430297	1	0	102	0.5969762	1	0	66	0.3487424
Central African Rep.	70	0.1843973	92	0.5590215	1	0	101	0.5802916	1	0	79	0.5222482
Kuwait	71	0.1860213	83	0.5052276	103	0.5987608	34	0.2575594	101	0.5	1	0
Zimbabwe	72	0.1869958	80	0.4907522	84	0.2980757	59	0.3693737	1	0	111	0.6847302
Uganda	73	0.1871794	102	0.6369662	84	0.2980757	81	0.4105832	1	0	79	0.5222482
Benin	74	0.1889945	84	0.5063324	1	0	87	0.4687690	1	0	111	0.6847302
Algeria	75	0.1902440	69	0.4050073	103	0.5987608	60	0.3863392	101	0.5	43	0.1715123
Bahrain	76	0.1965476	52	0.3214722	103	0.5987608	60	0.3863392	101	0.5	66	0.3487424
Mozambique	77	0.1995442	109	0.6977612	84	0.2980757	60	0.3863392	1	0	79	0.5222482
Togo	78	0.2025180	96	0.5883301	1	0	86	0.4445249	1	0	111	0.6847302
Congo, Dem. Rep.	79	0.2044817	66	0.3903762	1	0	81	0.4105832	1	0	119	0.8375180
Papua New Guinea	80	0.2093579	50	0.2769745	1	0	60	0.3863392	118	0.75	78	0.5082487
Cameroon	81	0.2165121	89	0.5434412	84	0.2980757	90	0.4833154	1	0	109	0.6817546
Egypt, Arab Rep.	82	0.2176608	49	0.2664667	98	0.3006851	111	0.8227322	101	0.5	1	0
China	83	0.2178559	1	0.0040530	1	0	48	0.2987690	122	1	1	0
Gabon	84	0.2189224	107	0.6838656	84	0.2980757	91	0.5151189	1	0	79	0.5222482
Zambia	85	0.2193876	108	0.6919716	1	0	60	0.3863392	1	0	111	0.6847302
Nigeria	86	0.2199123	71	0.4205634	103	0.5987608	89	0.4784666	89	0.25	79	0.5222482
Liberia	87	0.2265095	87	0.5347034	1	0	107	0.7575595	1	0	79	0.5222482
Guinea	88	0.2280293	105	0.6714008	1	0	105	0.6454643	1	0	79	0.5222482
Ethiopia	89	0.2332508	55	0.3272618	1	0	109	0.7742441	1	0	108	0.6780117
Bangladesh	90	0.2446482	95	0.5833395	103	0.5987608	2	0.0412095	101	0.5	79	0.5222482
Libya	91	0.2601870	67	0.3928483	103	0.5987608	91	0.5151189	101	0.5	79	0.5222482
Unit. Arab Emirates	92	0.2657521	93	0.5619696	103	0.5987608	100	0.5318035	101	0.5	66	0.3487424

Table 7 – continued from previous page

Country	SIGI Ranking	SIGI Value	Family code Ranking	Family code Value	Civil liberties Ranking	Civil liberties Value	Physical integrity Ranking	Physical integrity Value	Missing women Ranking	Missing women Value	Ownership rights Ranking	Ownership rights Value
Iraq	93	0.2752427	77	0.4739084	103	0.5987608	98	0.5199677	101	0.5	79	0.5222482
Pakistan	94	0.2832434	64	0.3782142	103	0.5987608	47	0.2818035	118	0.75	79	0.5222482
Iran, Islamic Rep.	95	0.3043608	91	0.5579166	119	0.7809880	91	0.5151189	89	0.25	79	0.5222482
India	96	0.3181120	100	0.6065527	103	0.5987608	15	0.1699892	118	0.75	79	0.5222482
Chad	97	0.3225771	111	0.7932968	98	0.3006851	84	0.4321167	1	0	120	0.8404936
Yemen	98	0.3270495	97	0.5943937	119	0.7809880	60	0.3863392	101	0.5	79	0.5222482
Mali	99	0.3394930	112	0.7973498	1	0	114	0.9709072	1	0	58	0.3450181
Sierra Leone	100	0.3424468	98	0.6015940	1	0	110	0.7984881	1	0	121	0.8442366
Afghanistan	101	0.5823044	110	0.7159838	121	0.8177727	91	0.5151189	122	1	109	0.6817546
Sudan	102	0.6778067	106	0.6798126	122	1	111	0.8227322	101	0.5	122	1
Angola		NA	89	0.5434412	1	0		NA	89	0.25	79	0.5222482
Bosnia & Herzegovina		NA		NA	1	0	34	0.2575594	1	0	1	0
Chinese Taipei		NA		NA	1	0	3	0.0875702	101	0.5	1	0
Congo, Rep.		NA	101	0.6245013	1	0		NA	1	0	79	0.5222482
Guinea-Bissau		NA		NA		NA	107	0.7575595	1	0	111	0.6847302
Haiti		NA	65	0.3783729	1	0	54	0.3451297	1	0		NA
Israel		NA	45	0.2271240	1	0		NA	1	0	1	0
Jordan		NA	85	0.5173866	103	0.5987608		NA	101	0.5	79	0.5222482
Korea, Dem. Rep.		NA		NA	84	0.2980757	91	0.5151189	1	0	1	0
Lebanon		NA		NA	103	0.5987608	60	0.3863392	1	0	53	0.1735059
Lesotho		NA	94	0.5714864	84	0.2980757		NA	1	0	79	0.5222482
Malaysia		NA	53	0.3216308	103	0.5987608		NA	1	0	1	0
Occup. Palest. Terr.		NA	78	0.4860674	103	0.5987608		NA	1	0	66	0.3487424
Oman		NA	74	0.4536434	84	0.2980757		NA	101	0.5	66	0.3487424
Panama		NA		NA	1	0	8	0.1118143	1	0	1	0
Puerto Rico		NA		NA	1	0	23	0.2163499	1	0		NA
Saudi Arabia		NA	74	0.4536434	122	1		NA	101	0.5	79	0.5222482
Serbia & Montenegro		NA		NA	1	0		NA		NA	43	0.1715123
Somalia		NA		NA	103	0.5987608	113	0.8421274	1	0	111	0.6847302
Timor-Leste		NA		NA	1	0	83	0.4275487	89	0.25	79	0.5222482
Turkmenistan		NA		NA	1	0	60	0.3863392	1	0	79	0.5222482
Uzbekistan		NA		NA	1	0	60	0.3863392	1	0	1	0

Rankings according to the subindex Family Code (weights based on polychoric PCA)

Table 8:

Ranking	Country	Family Code
1	China	0.0040530
1	Jamaica	0.0040530
3	Croatia	0.0081060
4	Belarus	0.0243180
5	Kazakhstan	0.0283710
6	Viet Nam	0.0324240
7	Armenia	0.0364770
8	Fiji	0.0405301
8	Philippines	0.0405301
8	Ukraine	0.0405301
11	Mauritius	0.0445831
12	Moldova	0.0470149
13	Argentina	0.0486361
13	Bolivia	0.0486361
15	Peru	0.0526891
15	Uruguay	0.0526891
17	El Salvador	0.0648481
17	Georgia	0.0648481
19	Brazil	0.0689011
19	Paraguay	0.0689011
21	Colombia	0.0729541
21	Venezuela, RB	0.0729541
23	Costa Rica	0.0810601
24	Ecuador	0.0891661
25	Singapore	0.0997471
26	Hong Kong, China	0.1038001
27	Guatemala	0.1053781
28	Cuba	0.1175371
28	Dominican Republic	0.1175371
30	Mongolia	0.1200122
31	Albania	0.1228778
32	Tunisia	0.1273769
33	Nicaragua	0.1296962
34	Chile	0.1390898
35	Myanmar	0.1402772
35	Russian Federation	0.1402772
37	Azerbaijan	0.1431428
38	Cambodia	0.1443302
39	Macedonia, FYR	0.1516949
39	Trinidad and Tobago	0.1516949
41	Thailand	0.1564892
42	Kyrgyz Republic	0.1598009
43	Bhutan	0.2051253
44	Honduras	0.2160969
45	Israel	0.2271240
46	Sri Lanka	0.2340427
47	Tajikistan	0.2595481
48	Morocco	0.2627905
		Continued on next page

Table 8 – continued from previous page

Ranking	Country	Family code
49	Egypt, Arab Rep.	0.2664667
50	Papua New Guinea	0.2769745
51	Lao PDR	0.3203431
52	Bahrain	0.3214722
53	Botswana	0.3216308
53	Malaysia	0.3216308
55	Ethiopia	0.3272618
56	Rwanda	0.3297368
57	Burundi	0.3354503
58	Namibia	0.3530730
59	Indonesia	0.3540548
60	Malawi	0.3608732
61	Ghana	0.3662139
62	Nepal	0.3677918
63	Kenya	0.3702669
64	Pakistan	0.3782142
65	Haiti	0.3783729
66	Congo, Dem. Rep.	0.3903762
67	Libya	0.3928483
68	Syrian Arab Republic	0.4026909
69	Algeria	0.4050073
70	Madagascar	0.4113796
71	Mauritania	0.4205634
71	Nigeria	0.4205634
73	South Africa	0.4232618
74	Oman	0.4536434
74	Saudi Arabia	0.4536434
76	Eritrea	0.4553800
77	Iraq	0.4739084
78	Occupied Palestinian Territory	0.4860674
79	Cote d'Ivoire	0.4901204
80	Zimbabwe	0.4907522
81	Tanzania	0.4988582
82	Equatorial Guinea	0.5029112
83	Kuwait	0.5052276
84	Benin	0.5063324
85	Jordan	0.5173866
86	Swaziland	0.5214396
87	Liberia	0.5347034
88	Burkina Faso	0.5393882
89	Angola	0.5434412
89	Cameroon	0.5434412
91	Iran, Islamic Rep.	0.5579166
92	Central African Republic	0.5590215
93	United Arab Emirates	0.5619696
94	Lesotho	0.5714864
95	Bangladesh	0.5833395
96	Togo	0.5883301
97	Yemen	0.5943937
98	Sierra Leone	0.6015940
99	Senegal	0.6024997
Continued on next page		

Table 8 – continued from previous page

Ranking	Country	Family code
100	India	0.6065527
101	Congo, Rep.	0.6245013
102	Uganda	0.6369662
103	Gambia, The	0.6430297
104	Niger	0.6488194
105	Guinea	0.6714008
106	Sudan	0.6798126
107	Gabon	0.6838656
108	Zambia	0.6919716
109	Mozambique	0.6977612
110	Afghanistan	0.7159838
111	Chad	0.7932968
112	Mali	0.7973498
	Bosnia and Herzegovina	NA
	Chinese Taipei	NA
	Guinea-Bissau	NA
	Korea, Dem. Rep.	NA
	Lebanon	NA
	Panama	NA
	Puerto Rico	NA
	Serbia and Montenegro	NA
	Somalia	NA
	Timor-Leste	NA
	Turkmenistan	NA
	Uzbekistan	NA

The variables included in the subindex Family Code are
Parental authority, Inheritance, Early marriage, and Polygamy.
For a description of these variables, see section 2.

Rankings according to the subindex Civil liberties (weights based on polychoric PCA)

Table 9:

Ranking	Country	Civil Liberties
1	Albania	0
1	Angola	0
1	Argentina	0
1	Armenia	0
1	Azerbaijan	0
1	Belarus	0
1	Benin	0
1	Bolivia	0
1	Bosnia and Herzegovina	0
1	Botswana	0
1	Brazil	0
1	Burkina Faso	0
1	Burundi	0
1	Cambodia	0
1	Central African Republic	0
1	Chile	0
1	China	0
1	Chinese Taipei	0
1	Colombia	0
1	Congo, Dem. Rep.	0
1	Congo, Rep.	0
1	Costa Rica	0
1	Cote d'Ivoire	0
1	Croatia	0
1	Cuba	0
1	Dominican Republic	0
1	Ecuador	0
1	El Salvador	0
1	Eritrea	0
1	Ethiopia	0
1	Fiji	0
1	Gambia, The	0
1	Georgia	0
1	Ghana	0
1	Guatemala	0
1	Guinea	0
1	Haiti	0
1	Honduras	0
1	Hong Kong, China	0
1	Israel	0
1	Jamaica	0
1	Kazakhstan	0
1	Kenya	0
1	Kyrgyz Republic	0
1	Lao PDR	0
1	Liberia	0
1	Macedonia, FYR	0
		Continued on next page

Table 9 – continued from previous page

Ranking	Country	Civil Liberties
1	Madagascar	0
1	Mali	0
1	Mauritius	0
1	Moldova	0
1	Mongolia	0
1	Morocco	0
1	Myanmar	0
1	Namibia	0
1	Nicaragua	0
1	Niger	0
1	Panama	0
1	Papua New Guinea	0
1	Paraguay	0
1	Peru	0
1	Philippines	0
1	Puerto Rico	0
1	Russian Federation	0
1	Rwanda	0
1	Senegal	0
1	Serbia and Montenegro	0
1	Sierra Leone	0
1	Singapore	0
1	Tajikistan	0
1	Tanzania	0
1	Thailand	0
1	Timor-Leste	0
1	Togo	0
1	Trinidad and Tobago	0
1	Tunisia	0
1	Turkmenistan	0
1	Ukraine	0
1	Uruguay	0
1	Uzbekistan	0
1	Venezuela, RB	0
1	Viet Nam	0
1	Zambia	0
84	Bhutan	0.2980757
84	Cameroon	0.2980757
84	Equatorial Guinea	0.2980757
84	Gabon	0.2980757
84	Korea, Dem. Rep.	0.2980757
84	Lesotho	0.2980757
84	Malawi	0.2980757
84	Mozambique	0.2980757
84	Nepal	0.2980757
84	Oman	0.2980757
84	South Africa	0.2980757
84	Swaziland	0.2980757
84	Uganda	0.2980757
84	Zimbabwe	0.2980757
98	Chad	0.3006851

Ranking	Country	Civil Liberties
98	Egypt, Arab Rep.	0.3006851
98	Mauritania	0.3006851
98	Sri Lanka	0.3006851
98	Syrian Arab Republic	0.3006851
103	Algeria	0.5987608
103	Bahrain	0.5987608
103	Bangladesh	0.5987608
103	India	0.5987608
103	Indonesia	0.5987608
103	Iraq	0.5987608
103	Jordan	0.5987608
103	Kuwait	0.5987608
103	Lebanon	0.5987608
103	Libya	0.5987608
103	Malaysia	0.5987608
103	Nigeria	0.5987608
103	Occupied Palestinian Territory	0.5987608
103	Pakistan	0.5987608
103	Somalia	0.5987608
103	United Arab Emirates	0.5987608
119	Iran, Islamic Rep.	0.780988
119	Yemen	0.780988
121	Afghanistan	0.8177727
122	Saudi Arabia	1
122	Sudan	1
	Guinea-Bissau	NA

The variables included in the subindex Civil Liberties are
Freedom of movement and Freedom of dress.
For a description of these variables, see section 2.

Rankings according to the subindex Physical integrity (weights based on polychoric PCA)

Table 10:

Ranking	Country	Physical Integrity
1	Hong Kong, China	0
2	Bangladesh	0.0412095
3	Chinese Taipei	0.0875702
3	Ecuador	0.0875702
3	El Salvador	0.0875702
3	Paraguay	0.0875702
3	Philippines	0.0875702
8	Panama	0.1118143
9	Argentina	0.1287797
9	Croatia	0.1287797
9	Kazakhstan	0.1287797
9	Morocco	0.1287797
9	Russian Federation	0.1287797
9	Tunisia	0.1287797
15	Botswana	0.1699892
15	Colombia	0.1699892
15	Costa Rica	0.1699892
15	India	0.1699892
15	Sri Lanka	0.1699892
15	Thailand	0.1699892
15	Trinidad and Tobago	0.1699892
22	Tanzania	0.2015119
23	Bolivia	0.2163499
23	Chile	0.2163499
23	Lao PDR	0.2163499
23	Mauritius	0.2163499
23	Moldova	0.2163499
23	Puerto Rico	0.2163499
23	South Africa	0.2163499
23	Ukraine	0.2163499
23	Uruguay	0.2163499
23	Venezuela, RB	0.2163499
33	Peru	0.2405940
34	Belarus	0.2575594
34	Bosnia and Herzegovina	0.2575594
34	Cuba	0.2575594
34	Dominican Republic	0.2575594
34	Kuwait	0.2575594
34	Macedonia, FYR	0.2575594
34	Namibia	0.2575594
34	Nicaragua	0.2575594
34	Singapore	0.2575594
34	Syrian Arab Republic	0.2575594
34	Tajikistan	0.2575594
45	Senegal	0.2645464
46	Kenya	0.2815227
47	Pakistan	0.2818035
		Continued on next page

Table 10 – continued from previous page

Ranking	Country	Physical Integrity
48	Brazil	0.2987690
48	Cambodia	0.2987690
48	China	0.2987690
48	Kyrgyz Republic	0.2987690
48	Mongolia	0.2987690
48	Nepal	0.2987690
54	Bhutan	0.3451297
54	Guatemala	0.3451297
54	Haiti	0.3451297
54	Honduras	0.3451297
54	Jamaica	0.3451297
59	Zimbabwe	0.3693737
60	Albania	0.3863392
60	Algeria	0.3863392
60	Armenia	0.3863392
60	Azerbaijan	0.3863392
60	Bahrain	0.3863392
60	Burundi	0.3863392
60	Fiji	0.3863392
60	Georgia	0.3863392
60	Lebanon	0.3863392
60	Madagascar	0.3863392
60	Mozambique	0.3863392
60	Myanmar	0.3863392
60	Papua New Guinea	0.3863392
60	Swaziland	0.3863392
60	Turkmenistan	0.3863392
60	Uzbekistan	0.3863392
60	Viet Nam	0.3863392
60	Yemen	0.3863392
60	Zambia	0.3863392
79	Indonesia	0.3936178
80	Ghana	0.3957452
81	Congo, Dem. Rep.	0.4105832
81	Uganda	0.4105832
83	Timor-Leste	0.4275487
84	Chad	0.4321167
85	Cote d'Ivoire	0.4345464
86	Togo	0.4445249
87	Benin	0.4687690
88	Malawi	0.4736178
89	Nigeria	0.4784666
90	Cameroon	0.4833154
91	Afghanistan	0.5151189
91	Equatorial Guinea	0.5151189
91	Gabon	0.5151189
91	Iran, Islamic Rep.	0.5151189
91	Korea, Dem. Rep.	0.5151189
91	Libya	0.5151189
91	Rwanda	0.5151189
98	Iraq	0.5199677

Table 10 – continued from previous page

Ranking	Country	Physical Integrity
99	Niger	0.5248165
100	United Arab Emirates	0.5318035
101	Central African Republic	0.5802916
102	Gambia, The	0.5969762
103	Mauritania	0.6018251
104	Burkina Faso	0.6309179
105	Guinea	0.6454643
106	Eritrea	0.6891036
107	Guinea-Bissau	0.7575595
107	Liberia	0.7575595
109	Ethiopia	0.7742441
110	Sierra Leone	0.7984881
111	Egypt, Arab Rep.	0.8227322
111	Sudan	0.8227322
113	Somalia	0.8421274
114	Mali	0.9709072
	Angola	NA
	Congo, Rep.	NA
	Israel	NA
	Jordan	NA
	Lesotho	NA
	Malaysia	NA
	Occupied Palestinian Territory	NA
	Oman	NA
	Saudi Arabia	NA
	Serbia and Montenegro	NA

The variables included in the subindex Physical Integrity are
Violence against women and Female genital mutilation.
For a description of these variables, see section 2.

Rankings according to the subindex Missing women

Table 11:

Ranking	Country	Missing Women
1	Argentina	0
1	Armenia	0
1	Azerbaijan	0
1	Belarus	0
1	Benin	0
1	Bolivia	0
1	Bosnia and Herzegovina	0
1	Botswana	0
1	Brazil	0
1	Burkina Faso	0
1	Burundi	0
1	Cambodia	0
1	Cameroon	0
1	Central African Republic	0
1	Chad	0
1	Chile	0
1	Colombia	0
1	Congo, Dem. Rep.	0
1	Congo, Rep.	0
1	Costa Rica	0
1	Cote d'Ivoire	0
1	Croatia	0
1	Cuba	0
1	Dominican Republic	0
1	Ecuador	0
1	El Salvador	0
1	Equatorial Guinea	0
1	Eritrea	0
1	Ethiopia	0
1	Fiji	0
1	Gabon	0
1	Gambia, The	0
1	Georgia	0
1	Ghana	0
1	Guatemala	0
1	Guinea	0
1	Guinea-Bissau	0
1	Haiti	0
1	Honduras	0
1	Indonesia	0
1	Israel	0
1	Jamaica	0
1	Kazakhstan	0
1	Kenya	0
1	Korea, Dem. Rep.	0
1	Kyrgyz Republic	0
1	Lao PDR	0
1	Lebanon	0
1	Lesotho	0
		Continued on next page

Table 11 – continued from previous page

Ranking	Country	Missing Women
1	Liberia	0
1	Macedonia, FYR	0
1	Madagascar	0
1	Malawi	0
1	Malaysia	0
1	Mali	0
1	Mauritania	0
1	Mauritius	0
1	Moldova	0
1	Mozambique	0
1	Nicaragua	0
1	Occupied Palestinian Territory	0
1	Panama	0
1	Paraguay	0
1	Peru	0
1	Philippines	0
1	Puerto Rico	0
1	Russian Federation	0
1	Rwanda	0
1	Senegal	0
1	Sierra Leone	0
1	Singapore	0
1	Somalia	0
1	South Africa	0
1	Sri Lanka	0
1	Swaziland	0
1	Tajikistan	0
1	Tanzania	0
1	Thailand	0
1	Togo	0
1	Turkmenistan	0
1	Uganda	0
1	Ukraine	0
1	Uruguay	0
1	Uzbekistan	0
1	Venezuela, RB	0
1	Viet Nam	0
1	Zambia	0
1	Zimbabwe	0
89	Angola	0.25
89	Hong Kong, China	0.25
89	Iran, Islamic Rep.	0.25
89	Mongolia	0.25
89	Morocco	0.25
89	Myanmar	0.25
89	Namibia	0.25
89	Niger	0.25
89	Nigeria	0.25
89	Timor-Leste	0.25
89	Trinidad and Tobago	0.25
89	Tunisia	0.25
		Continued on next page

Table 11 – continued from previous page

Ranking	Country	Missing Women
101	Albania	0.5
101	Algeria	0.5
101	Bahrain	0.5
101	Bangladesh	0.5
101	Chinese Taipei	0.5
101	Egypt, Arab Rep.	0.5
101	Iraq	0.5
101	Jordan	0.5
101	Kuwait	0.5
101	Libya	0.5
101	Nepal	0.5
101	Oman	0.5
101	Saudi Arabia	0.5
101	Sudan	0.5
101	Syrian Arab Republic	0.5
101	United Arab Emirates	0.5
101	Yemen	0.5
118	Bhutan	0.75
118	India	0.75
118	Pakistan	0.75
118	Papua New Guinea	0.75
122	Afghanistan	1
122	China	1
	Serbia and Montenegro	NA

For a description of the variable Missing women, see section 2.

Rankings according to the subindex Ownership rights (weights based on polychoric PCA)

Table 12:

Ranking	Country	Ownership Rights
1	Argentina	0
1	Armenia	0
1	Azerbaijan	0
1	Belarus	0
1	Bhutan	0
1	Bolivia	0
1	Bosnia and Herzegovina	0
1	Brazil	0
1	Cambodia	0
1	China	0
1	Chinese Taipei	0
1	Costa Rica	0
1	Croatia	0
1	Cuba	0
1	Egypt, Arab Rep.	0
1	Eritrea	0
1	Georgia	0
1	Honduras	0
1	Hong Kong, China	0
1	Indonesia	0
1	Israel	0
1	Kazakhstan	0
1	Korea, Dem. Rep.	0
1	Kuwait	0
1	Macedonia, FYR	0
1	Malaysia	0
1	Mauritius	0
1	Moldova	0
1	Myanmar	0
1	Panama	0
1	Paraguay	0
1	Peru	0
1	Russian Federation	0
1	Singapore	0
1	Thailand	0
1	Trinidad and Tobago	0
1	Tunisia	0
1	Ukraine	0
1	Uruguay	0
1	Uzbekistan	0
1	Venezuela, RB	0
1	Viet Nam	0
43	Algeria	0.1715123
43	Colombia	0.1715123
43	El Salvador	0.1715123
43	Guatemala	0.1715123
43	Lao PDR	0.1715123
		Continued on next page

Table 12 – continued from previous page

Ranking	Country	Ownership Rights
43	Madagascar	0.1715123
43	Mongolia	0.1715123
43	Nicaragua	0.1715123
43	Serbia and Montenegro	0.1715123
43	Tajikistan	0.1715123
53	Ecuador	0.1735059
53	Lebanon	0.1735059
53	Philippines	0.1735059
56	Chile	0.1772301
56	Kyrgyz Republic	0.1772301
58	Burkina Faso	0.3450181
58	Dominican Republic	0.3450181
58	Mali	0.3450181
58	Mauritania	0.3450181
58	Morocco	0.3450181
58	Niger	0.3450181
58	Senegal	0.3450181
58	South Africa	0.3450181
66	Albania	0.3487424
66	Bahrain	0.3487424
66	Fiji	0.3487424
66	Gambia, The	0.3487424
66	Namibia	0.3487424
66	Occupied Palestinian Territory	0.3487424
66	Oman	0.3487424
66	Sri Lanka	0.3487424
66	Syrian Arab Republic	0.3487424
66	United Arab Emirates	0.3487424
76	Jamaica	0.3507359
77	Cote d'Ivoire	0.5064994
78	Papua New Guinea	0.5082487
79	Angola	0.5222482
79	Bangladesh	0.5222482
79	Botswana	0.5222482
79	Burundi	0.5222482
79	Central African Republic	0.5222482
79	Congo, Rep.	0.5222482
79	Equatorial Guinea	0.5222482
79	Gabon	0.5222482
79	Ghana	0.5222482
79	Guinea	0.5222482
79	India	0.5222482
79	Iran, Islamic Rep.	0.5222482
79	Iraq	0.5222482
79	Jordan	0.5222482
79	Lesotho	0.5222482
79	Liberia	0.5222482
79	Libya	0.5222482
79	Malawi	0.5222482
79	Mozambique	0.5222482
79	Nepal	0.5222482
		Continued on next page

Table 12 – continued from previous page

Ranking	Country	Ownership Rights
79	Nigeria	0.5222482
79	Pakistan	0.5222482
79	Saudi Arabia	0.5222482
79	Swaziland	0.5222482
79	Tanzania	0.5222482
79	Timor-Leste	0.5222482
79	Turkmenistan	0.5222482
79	Uganda	0.5222482
79	Yemen	0.5222482
108	Ethiopia	0.6780117
109	Afghanistan	0.6817546
109	Cameroon	0.6817546
111	Benin	0.6847302
111	Guinea-Bissau	0.6847302
111	Kenya	0.6847302
111	Rwanda	0.6847302
111	Somalia	0.6847302
111	Togo	0.6847302
111	Zambia	0.6847302
111	Zimbabwe	0.6847302
119	Congo, Dem. Rep.	0.837518
120	Chad	0.8404936
121	Sierra Leone	0.8442366
122	Sudan	1
	Haiti	NA
	Puerto Rico	NA

The variables included in the subindex Ownership rights are
Women's access to land, Women's access to bank loans, and
Women's access to property other than land.
For a description of these variables, see section 2.

Appendix 4: Regional pattern of the composite index and subindices

	ECA	LAC	EAP	SA	SSA	MENA	Total
SIGI							
Quintile 1	6	10	4	0	1	0	**21**
Quintile 2	6	8	5	0	0	1	**20**
Quintile 3	1	1	2	1	14	2	**21**
Quintile 4	0	0	1	2	13	4	**20**
Quintile 5	0	0	1	4	10	5	**20**
Total	**13**	**19**	**13**	**7**	**38**	**12**	**102**
Family Code							
Quintile 1	7	11	4	0	1	0	**23**
Quintile 2	5	8	6	1	0	2	**22**
Quintile 3	1	1	4	3	9	5	**23**
Quintile 4	0	0	0	0	15	7	**22**
Quintile 5	0	0	0	3	16	3	**22**
Total	**13**	**20**	**14**	**7**	**41**	**17**	**112**
Civil Liberties							
Quintile 1, 2, 3	17	22	14	0	27	3	**83**
Quintile 4	0	0	1	3	12	3	**19**
Quintile 5	0	0	2	4	3	12	**21**
Total	**17**	**22**	**17**	**7**	**42**	**18**	**123**
Physical Integrity							
Quintile 1	5	13	5	3	4	2	**32**
Quintile 2	4	4	1	0	3	2	**14**
Quintile 3	7	5	7	3	6	4	**32**
Quintile 4	0	0	3	1	13	2	**19**
Quintile 5	0	0	0	0	14	3	**17**
Total	**16**	**22**	**16**	**7**	**40**	**13**	**114**
Missing Women							
Quintile 1, 2, 3	15	21	10	1	38	3	**88**
Quintile 4	0	1	4	0	4	3	**12**
Quintile 5	1	0	3	6	1	12	**23**
Total	**16**	**22**	**17**	**7**	**43**	**18**	**123**
Ownership Rights							
Quintile 1	12	12	11	1	2	4	**42**
Quintile 2	2	4	2	0	1	1	**10**
Quintile 3	2	3	2	1	8	7	**23**
Quintile 4	1	1	2	4	18	6	**32**
Quintile 5	0	0	0	1	14	0	**15**
Total	**17**	**20**	**17**	**7**	**43**	**18**	**122**

ECA stands for Europe and Central Asia, LAC for Latin America and the Caribbean, EAP for East Asia and Pacific, SSA for Sub-Saharan Africa, and MENA for Middle East and North Africa.

Appendix 5: Comparison with other Gender-related Indices

Statistical Association between the SIGI and other Gender-related Measures

Table 14: Kendall tau b between SIGI and selected Gender-related Measures

GDI	Kendall tau b	-0.501
	Number obs.	79
	p-value	0.0000
GGI (capped)	Kendall tau b	-0.5088
	Number obs.	85
	p-value	0.0000
GEM	Kendall tau b	-0.425
	Number obs.	33
	p-value	0.0005
GEM (revised)	Kendall tau b	-0.4402
	Number obs.	33
	p-value	0.0003
GGG	Kendall tau b	-0.4741
	Number obs.	73
	p-value	0.0000
WOSOC	Kendall tau b	-0.4861
	Number obs.	99
	p-value	0.0000

Data for the Gender-related development Index (GDI) and the Gender Empowerment Measure (GEM) are from United Nations Development Programme (2006) and are based on the year 2004. The Gender Gap Index (GGI) capped and the revised Gender Empowerment Measure (GEM revised) are taken from Klasen and Schüler (2007) based on the year 2004. Data for the Global Gender Gap Index (GGG) are from Hausmann et al. (2007). The Women's Social Rights Index (WOSOC) data correspond to the year 2007 and are obtained from `http://ciri.binghamton.edu/`. The p-values correspond to the null hypothesis that the SIGI and the corresponding measure are independent.

Comparison of the SIGI and the Gender-related Development Index (GDI)

Table 15:

Country	SIGI Ranking	SIGI Value	GDI Ranking	GDI Value	GDI rank minus SIGI rank
Croatia	1	0.0033300	6	0.844	5
Kazakhstan	2	0.0034778	18	0.772	16
Argentina	3	0.0037899	2	0.859	-1
Costa Rica	4	0.0070934	7	0.831	3
Russian Federation	5	0.0072524	10	0.795	5
Philippines	6	0.0078831	22	0.761	16
El Salvador	7	0.0082581	29	0.725	22
Ukraine	8	0.0096900	19	0.771	11
Mauritius	9	0.0097590	12	0.792	3
Bolivia	10	0.0098346	35	0.687	25
Uruguay	11	0.0099167	5	0.847	-6
Venezuela, RB	12	0.0104259	17	0.78	5
Thailand	13	0.0106770	16	0.781	3
Peru	14	0.0121323	23	0.759	9
Colombia	15	0.0127270	15	0.787	0
Belarus	16	0.0133856	11	0.793	-5
Macedonia, FYR	17	0.0178696	13	0.791	-4
Brazil	18	0.0188021	14	0.789	-4
Tunisia	19	0.0190618	26	0.744	7
Chile	20	0.0195128	3	0.85	-17
Cambodia	21	0.0220188	45	0.578	24
Nicaragua	22	0.0225149	37	0.684	15
Trinidad and Tobago	23	0.0228815	9	0.805	-14
Kyrgyz Republic	24	0.0292419	34	0.701	10
Viet Nam	25	0.0300619	31	0.708	6
Armenia	26	0.0301177	20	0.765	-6
Guatemala	27	0.0319271	39	0.659	12
Tajikistan	28	0.0326237	40	0.648	12
Honduras	29	0.0331625	38	0.676	9
Azerbaijan	30	0.0339496	28	0.733	-2
Lao PDR	31	0.0357687	47	0.545	16
Mongolia	32	0.0391165	36	0.685	4
Dominican Republic	33	0.0398379	25	0.745	-8
Jamaica	34	0.0484293	30	0.721	-4
Sri Lanka	35	0.0591410	24	0.749	-11
Madagascar	36	0.0695815	53	0.507	17
Namibia	37	0.0750237	43	0.622	6
Botswana	38	0.0810172	46	0.555	8
South Africa	39	0.0867689	41	0.646	2
Burundi	40	0.1069056	72	0.38	32
Tanzania	41	0.1124419	66	0.426	25
Ghana	42	0.1126940	48	0.528	6
Indonesia	43	0.1277609	32	0.704	-11
Kenya	44	0.1370416	57	0.487	13
Cote d'Ivoire	45	0.1371181	68	0.401	23
Syrian Arab Republic	46	0.1381059	33	0.702	-13
Malawi	47	0.1432271	70	0.394	23
Mauritania	48	0.1497032	60	0.478	12
					Continued on next page

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Table 15 – continued from previous page

| Country | SIGI | | GDI | | GDI rank minus |
	Ranking	Value	Ranking	Value	SIGI rank
Swaziland	49	0.1565499	59	0.479	10
Burkina Faso	50	0.1616069	76	0.335	26
Nepal	51	0.1672252	51	0.513	0
Rwanda	52	0.1685859	63	0.449	11
Niger	53	0.1755873	79	0.292	26
Equatorial Guinea	54	0.1759719	42	0.639	-12
Central African Republic	55	0.1843973	75	0.336	20
Kuwait	56	0.1860213	1	0.864	-55
Zimbabwe	57	0.1869958	58	0.483	1
Uganda	58	0.1871794	54	0.498	-4
Benin	59	0.1889945	67	0.412	8
Bahrain	60	0.1965476	4	0.849	-56
Mozambique	61	0.1995442	71	0.387	10
Togo	62	0.2025180	61	0.476	-1
Congo, Dem. Rep.	63	0.2044817	73	0.378	10
Papua New Guinea	64	0.2093579	50	0.521	-14
Cameroon	65	0.2165121	55	0.497	-10
China	66	0.2178559	20	0.765	-46
Zambia	67	0.2193876	69	0.396	2
Nigeria	68	0.2199123	64	0.443	-4
Guinea	69	0.2280293	65	0.434	-4
Bangladesh	70	0.2446482	49	0.524	-21
United Arab Emirates	71	0.2657521	8	0.829	-63
Pakistan	72	0.2832434	51	0.513	-21
Iran, Islamic Rep.	73	0.3043608	27	0.736	-46
India	74	0.3181120	44	0.591	-30
Chad	75	0.3225771	74	0.35	-1
Yemen	76	0.3270495	62	0.462	-14
Mali	77	0.3394930	77	0.329	0
Sierra Leone	78	0.3424468	78	0.317	0
Sudan	79	0.6778067	56	0.492	-23

The data are sorted according to the value of the SIGI. GDI data are from United Nations Development Programme (2006) and are based on the year 2004. Rankings consider only countries for which both the SIGI and the GDI are available.

Comparison of the SIGI and the Gender Gap Index (GGI) capped

Table 16:

| Country | SIGI | | GGI (capped) | | GGI (capped) rank |
	Ranking	Value	Ranking	Value	minus SIGI rank
Croatia	1	0.0033300	16	0.909	15
Kazakhstan	2	0.0034778	1	0.965	-1
Argentina	3	0.0037899	21	0.890	18
Costa Rica	4	0.0070934	40	0.815	36
Russian Federation	5	0.0072524	6	0.940	1
Philippines	6	0.0078831	30	0.865	24
El Salvador	7	0.0082581	35	0.847	28
Ukraine	8	0.0096900	7	0.936	-1
Mauritius	9	0.0097590	46	0.795	37
Bolivia	10	0.0098346	24	0.873	14
Uruguay	11	0.0099167	17	0.903	6
Venezuela, RB	12	0.0104259	23	0.880	11
Thailand	13	0.0106770	8	0.927	-5
Peru	14	0.0121323	24	0.873	10
Colombia	15	0.0127270	11	0.916	-4
Belarus	16	0.0133856	3	0.948	-13
Cuba	17	0.0160304	37	0.835	20
Macedonia, FYR	18	0.0178696	32	0.854	14
Brazil	19	0.0188021	20	0.896	1
Tunisia	20	0.0190618	72	0.685	52
Chile	21	0.0195128	44	0.802	23
Cambodia	22	0.0220188	10	0.918	-12
Nicaragua	23	0.0225149	56	0.749	33
Trinidad and Tobago	24	0.0228815	33	0.852	9
Kyrgyz Republic	25	0.0292419	11	0.916	-14
Viet Nam	26	0.0300619	2	0.949	-24
Armenia	27	0.0301177	4	0.944	-23
Guatemala	28	0.0319271	64	0.718	36
Tajikistan	29	0.0326237	19	0.900	-10
Honduras	30	0.0331625	36	0.836	6
Azerbaijan	31	0.0339496	4	0.944	-27
Lao PDR	32	0.0357687	45	0.798	13
Mongolia	33	0.0391165	27	0.870	-6
Dominican Republic	34	0.0398379	38	0.823	4
Myanmar	35	0.0462871	14	0.912	-21
Jamaica	36	0.0484293	18	0.902	-18
Sri Lanka	37	0.0591410	51	0.763	14
Madagascar	38	0.0695815	15	0.911	-23
Namibia	39	0.0750237	33	0.852	-6
Botswana	40	0.0810172	59	0.743	19
South Africa	41	0.0867689	42	0.806	1
Burundi	42	0.1069056	24	0.873	-18
Tanzania	43	0.1124419	27	0.870	-16
Ghana	44	0.1126940	27	0.870	-17
Indonesia	45	0.1277609	39	0.820	-6
Kenya	46	0.1370416	42	0.806	-4
Cote d'Ivoire	47	0.1371181	80	0.617	33
Syrian Arab Republic	48	0.1381059	63	0.723	15
					Continued on next page

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Table 16 – continued from previous page

| Country | SIGI | | GGI (capped) | | GGI (capped) rank |
	Ranking	Value	Ranking	Value	minus SIGI rank
Malawi	49	0.1432271	41	0.813	-8
Mauritania	50	0.1497032	48	0.789	-2
Swaziland	51	0.1565499	82	0.576	31
Burkina Faso	52	0.1616069	50	0.767	-2
Nepal	53	0.1672252	61	0.728	8
Rwanda	54	0.1685859	9	0.926	-45
Niger	55	0.1755873	78	0.633	23
Equatorial Guinea	56	0.1759719	62	0.727	6
Central African Republic	57	0.1843973	67	0.701	10
Kuwait	58	0.1860213	48	0.789	-10
Zimbabwe	59	0.1869958	57	0.748	-2
Uganda	60	0.1871794	31	0.861	-29
Benin	61	0.1889945	73	0.684	12
Bahrain	62	0.1965476	76	0.660	14
Mozambique	63	0.1995442	47	0.791	-16
Togo	64	0.2025180	70	0.694	6
Congo, Dem. Rep.	65	0.2044817	60	0.739	-5
Papua New Guinea	66	0.2093579	22	0.887	-44
Cameroon	67	0.2165121	54	0.753	-13
China	68	0.2178559	13	0.915	-55
Zambia	69	0.2193876	64	0.718	-5
Nigeria	70	0.2199123	66	0.705	-4
Liberia	71	0.2265095	68	0.698	-3
Guinea	72	0.2280293	58	0.747	-14
Bangladesh	73	0.2446482	52	0.760	-21
Libya	74	0.2601870	69	0.695	-5
United Arab Emirates	75	0.2657521	74	0.683	-1
Iraq	76	0.2752427	84	0.570	8
Pakistan	77	0.2832434	81	0.592	4
Iran, Islamic Rep.	78	0.3043608	54	0.753	-24
India	79	0.3181120	77	0.659	-2
Chad	80	0.3225771	75	0.669	-5
Yemen	81	0.3270495	83	0.573	2
Mali	82	0.3394930	53	0.756	-29
Sierra Leone	83	0.3424468	71	0.687	-12
Afghanistan	84	0.5823044	85	0.493	1
Sudan	85	0.6778067	79	0.620	-6

The data are sorted according to the value of the SIGI. GGI data are from Klasen and Schüler (2007) based on the year 2004. Rankings consider only countries for which both the SIGI and the GGI are available.

Comparison of the SIGI and the Gender Empowerment Measure (GEM)

Table 17:

| Country | SIGI | | GEM | | GEM rank minus |
	Ranking	Value	Ranking	Value	SIGI rank
Croatia	1	0.0033300	6	0.602	5
Argentina	2	0.0037899	2	0.697	0
Costa Rica	3	0.0070934	3	0.675	0
Russian Federation	4	0.0072524	22	0.482	18
Philippines	5	0.0078831	10	0.533	5
El Salvador	6	0.0082581	13	0.529	7
Ecuador	7	0.0091447	14	0.524	7
Ukraine	8	0.0096900	23	0.455	15
Bolivia	9	0.0098346	19	0.499	10
Uruguay	10	0.0099167	15	0.513	5
Venezuela, RB	11	0.0104259	11	0.532	0
Thailand	12	0.0106770	20	0.486	8
Peru	13	0.0121323	8	0.580	-5
Colombia	14	0.0127270	16	0.506	2
Singapore	15	0.0152573	1	0.707	-14
Macedonia, FYR	16	0.0178696	9	0.554	-7
Brazil	17	0.0188021	20	0.486	3
Chile	18	0.0195128	16	0.506	-2
Cambodia	19	0.0220188	28	0.373	9
Trinidad and Tobago	20	0.0228815	4	0.660	-16
Georgia	21	0.0306926	24	0.407	3
Honduras	22	0.0331625	12	0.530	-10
Mongolia	23	0.0391165	25	0.388	2
Sri Lanka	24	0.0591410	29	0.372	5
Namibia	25	0.0750237	5	0.623	-20
Botswana	26	0.0810172	18	0.501	-8
Tanzania	27	0.1124419	7	0.597	-20
Egypt, Arab Rep.	28	0.2176608	32	0.262	4
Bangladesh	29	0.2446482	27	0.374	-2
United Arab Emirates	30	0.2657521	30	0.353	0
Pakistan	31	0.2832434	26	0.377	-5
Iran, Islamic Rep.	32	0.3043608	31	0.326	-1
Yemen	33	0.3270495	33	0.128	0

The data are sorted according to the value of the SIGI. GEM data are from United Nations Development Programme (2006) and are based on the year 2004. Rankings consider only countries for which both the SIGI and the GEM are available.

Comparison of the SIGI and the Gender Empowerment Measure (GEM) revised

Table 18:

| Country | SIGI | | GEM (revised) | | GEM (revised) rank |
	Ranking	Value	Ranking	Value	minus SIGI rank
Croatia	1	0.0033300	7	0.666	6
Argentina	2	0.0037899	3	0.749	1
Costa Rica	3	0.0070934	2	0.751	-1
Russian Federation	4	0.0072524	22	0.565	18
Philippines	5	0.0078831	8	0.654	3
El Salvador	6	0.0082581	14	0.636	8
Ecuador	7	0.0091447	11	0.647	4
Ukraine	8	0.0096900	23	0.562	15
Bolivia	9	0.0098346	15	0.633	6
Uruguay	10	0.0099167	17	0.596	7
Venezuela, RB	11	0.0104259	13	0.637	2
Thailand	12	0.0106770	18	0.581	6
Peru	13	0.0121323	6	0.679	-7
Colombia	14	0.0127270	16	0.607	2
Singapore	15	0.0152573	11	0.647	-4
Macedonia, FYR	16	0.0178696	9	0.653	-7
Brazil	17	0.0188021	19	0.579	2
Chile	18	0.0195128	20	0.569	2
Cambodia	19	0.0220188	26	0.517	7
Trinidad and Tobago	20	0.0228815	5	0.718	-15
Georgia	21	0.0306926	24	0.524	3
Honduras	22	0.0331625	10	0.652	-12
Mongolia	23	0.0391165	25	0.522	2
Sri Lanka	24	0.0591410	28	0.479	4
Namibia	25	0.0750237	4	0.721	-21
Botswana	26	0.0810172	21	0.568	-5
Tanzania	27	0.1124419	1	0.755	-26
Egypt, Arab Rep.	28	0.2176608	31	0.344	3
Bangladesh	29	0.2446482	27	0.504	-2
United Arab Emirates	30	0.2657521	32	0.308	2
Pakistan	31	0.2832434	28	0.479	-3
Iran, Islamic Rep.	32	0.3043608	30	0.409	-2
Yemen	33	0.3270495	33	0.241	0

The data are sorted according to the value of the SIGI. GEM (revised) data are from Klasen and Schüler (2007) and are based on the year 2004. Rankings consider only countries for which both the SIGI and the GEM (revised) are available. The data are sorted according to the value of the SIGI.

Comparison of the SIGI and the Global Gender Gap Index (GGG)

Table 19:

Country	SIGI Ranking	SIGI Value	GGG Ranking	GGG Value	GGG rank minus SIGI rank
Paraguay	1	0.0024832	32	0.6658699	31
Croatia	2	0.0033300	3	0.7210281	1
Kazakhstan	3	0.0034778	10	0.6982515	7
Argentina	4	0.0037899	11	0.6981750	7
Costa Rica	5	0.0070934	8	0.7014174	3
Russian Federation	6	0.0072524	18	0.6866164	12
Philippines	7	0.0078831	1	0.7628856	-6
El Salvador	8	0.0082581	20	0.6852791	12
Ecuador	9	0.0091447	17	0.6880922	8
Ukraine	10	0.0096900	25	0.6790388	15
Mauritius	11	0.0097590	44	0.6487265	33
Bolivia	12	0.0098346	41	0.6573989	29
Uruguay	13	0.0099167	39	0.6607680	26
Venezuela, RB	14	0.0104259	24	0.6796810	10
Thailand	15	0.0106770	22	0.6815194	7
Peru	16	0.0121323	37	0.6623681	21
Colombia	17	0.0127270	7	0.7089566	-10
Belarus	18	0.0133856	6	0.7113424	-12
Singapore	19	0.0152573	38	0.6608524	19
Cuba	20	0.0160304	5	0.7168797	-15
Macedonia, FYR	21	0.0178696	13	0.6967358	-8
Brazil	22	0.0188021	36	0.6636841	14
Tunisia	23	0.0190618	55	0.6282689	32
Chile	24	0.0195128	45	0.6481748	21
Cambodia	25	0.0220188	52	0.6353176	27
Nicaragua	26	0.0225149	49	0.6458469	23
Trinidad and Tobago	27	0.0228815	19	0.6859470	-8
Kyrgyz Republic	28	0.0292419	33	0.6653235	5
Viet Nam	29	0.0300619	15	0.6888862	-14
Armenia	30	0.0301177	34	0.6650599	4
Georgia	31	0.0306926	30	0.6664879	-1
Guatemala	32	0.0319271	58	0.6144147	26
Tajikistan	33	0.0326237	40	0.6578341	7
Honduras	34	0.0331625	31	0.6660513	-3
Azerbaijan	35	0.0339496	26	0.6781064	-9
Mongolia	36	0.0391165	27	0.6730938	-9
Dominican Republic	37	0.0398379	29	0.6704762	-8
Jamaica	38	0.0484293	14	0.6924977	-24
Sri Lanka	39	0.0591410	2	0.7229858	-37
Madagascar	40	0.0695815	48	0.6461332	8
Namibia	41	0.0750237	9	0.7011852	-32
Botswana	42	0.0810172	23	0.6797399	-19
South Africa	43	0.0867689	4	0.7194183	-39
Tanzania	44	0.1124419	12	0.6968800	-32
Ghana	45	0.1126940	28	0.6725178	-17
Indonesia	46	0.1277609	42	0.6550175	-4
Kenya	47	0.1370416	43	0.6508373	-4
Syrian Arab Republic	48	0.1381059	56	0.6215754	8
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Table 19 – continued from previous page

| Country | SIGI | | GGG | | GGG rank minus |
	Ranking	Value	Ranking	Value	SIGI rank
Malawi	49	0.1432271	46	0.6480240	-3
Mauritania	50	0.1497032	60	0.6021667	10
Burkina Faso	51	0.1616069	66	0.5912432	15
Nepal	52	0.1672252	70	0.5575436	18
Gambia, The	53	0.1782978	50	0.6421238	-3
Kuwait	54	0.1860213	51	0.6408719	-3
Zimbabwe	55	0.1869958	47	0.6464230	-8
Uganda	56	0.1871794	21	0.6833161	-35
Benin	57	0.1889945	69	0.5656393	12
Bahrain	58	0.1965476	64	0.5930598	6
Mozambique	59	0.1995442	16	0.6883139	-43
Cameroon	60	0.2165121	65	0.5918857	5
Egypt, Arab Rep.	61	0.2176608	68	0.5809067	7
China	62	0.2178559	35	0.6642505	-27
Zambia	63	0.2193876	54	0.6288354	-9
Nigeria	64	0.2199123	59	0.6122447	-5
Ethiopia	65	0.2332508	62	0.5991186	-3
Bangladesh	66	0.2446482	53	0.6314289	-13
United Arab Emirates	67	0.2657521	57	0.6183912	-10
Pakistan	68	0.2832434	71	0.5509013	3
Iran, Islamic Rep.	69	0.3043608	67	0.5903407	-2
India	70	0.3181120	63	0.5936496	-7
Chad	71	0.3225771	72	0.5381035	1
Yemen	72	0.3270495	73	0.4510129	1
Mali	73	0.3394930	61	0.6018635	-12

The data are sorted according to the value of the SIGI. GGG data are from Hausmann et al. (2007). Rankings consider only countries for which both the SIGI and the GGG are available.

Comparison of the SIGI and the Women's Social Rights Index (WOSOC)

Table 20:

| Country | SIGI | | WOSOC | | WOSOC rank minus |
	Ranking	Value	Ranking	Value	SIGI rank
Paraguay	1	0.0024832	19	1	18
Croatia	2	0.0033300	19	1	17
Kazakhstan	3	0.0034778	19	1	16
Argentina	4	0.0037899	3	2	-1
Costa Rica	5	0.0070934	3	2	-2
Russian Federation	6	0.0072524	19	1	13
Philippines	7	0.0078831	19	1	12
El Salvador	8	0.0082581	19	1	11
Ecuador	9	0.0091447	19	1	10
Ukraine	10	0.0096900	19	1	9
Mauritius	11	0.0097590	3	2	-8
Bolivia	12	0.0098346	3	2	-9
Uruguay	13	0.0099167	19	1	6
Thailand	14	0.0106770	19	1	5
Peru	15	0.0121323	3	2	-12
Colombia	16	0.0127270	3	2	-13
Belarus	17	0.0133856	3	2	-14
Singapore	18	0.0152573	19	1	1
Cuba	19	0.0160304	1	3	-18
Macedonia, FYR	20	0.0178696	19	1	-1
Brazil	21	0.0188021	3	2	-18
Tunisia	22	0.0190618	64	0	42
Chile	23	0.0195128	3	2	-20
Cambodia	24	0.0220188	3	2	-21
Nicaragua	25	0.0225149	19	1	-6
Trinidad and Tobago	26	0.0228815	1	3	-25
Kyrgyz Republic	27	0.0292419	19	1	-8
Viet Nam	28	0.0300619	19	1	-9
Armenia	29	0.0301177	19	1	-10
Georgia	30	0.0306926	19	1	-11
Guatemala	31	0.0319271	19	1	-12
Tajikistan	32	0.0326237	19	1	-13
Honduras	33	0.0331625	19	1	-14
Azerbaijan	34	0.0339496	19	1	-15
Lao PDR	35	0.0357687	3	2	-32
Mongolia	36	0.0391165	3	2	-33
Dominican Republic	37	0.0398379	19	1	-18
Myanmar	38	0.0462871	64	0	26
Jamaica	39	0.0484293	3	2	-36
Morocco	40	0.0534361	19	1	-21
Fiji	41	0.0545044	3	2	-38
Sri Lanka	42	0.0591410	19	1	-23
Madagascar	43	0.0695815	19	1	-24
Namibia	44	0.0750237	19	1	-25
Botswana	45	0.0810172	64	0	19
South Africa	46	0.0867689	19	1	-27
Burundi	47	0.1069056	64	0	17
Albania	48	0.1071956	19	1	-29
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Table 20 – continued from previous page

| Country | SIGI | | WOSOC | | WOSOC rank minus |
	Ranking	Value	Ranking	Value	SIGI rank
Senegal	49	0.1104056	64	0	15
Tanzania	50	0.1124419	19	1	-31
Ghana	51	0.1126940	19	1	-32
Indonesia	52	0.1277609	19	1	-33
Eritrea	53	0.1364469	19	1	-34
Kenya	54	0.1370416	64	0	10
Cote d'Ivoire	55	0.1371181	64	0	9
Syrian Arab Republic	56	0.1381059	64	0	8
Malawi	57	0.1432271	19	1	-38
Mauritania	58	0.1497032	64	0	6
Swaziland	59	0.1565499	64	0	5
Burkina Faso	60	0.1616069	64	0	4
Bhutan	61	0.1625080	3	2	-58
Nepal	62	0.1672252	64	0	2
Rwanda	63	0.1685859	3	2	-60
Niger	64	0.1755873	19	1	-45
Equatorial Guinea	65	0.1759719	19	1	-46
Gambia, The	66	0.1782978	19	1	-47
Central African Republic	67	0.1843973	19	1	-48
Kuwait	68	0.1860213	64	0	-4
Zimbabwe	69	0.1869958	19	1	-50
Uganda	70	0.1871794	19	1	-51
Benin	71	0.1889945	64	0	-7
Algeria	72	0.1902440	64	0	-8
Bahrain	73	0.1965476	64	0	-9
Mozambique	74	0.1995442	64	0	-10
Togo	75	0.2025180	64	0	-11
Congo, Dem. Rep.	76	0.2044817	64	0	-12
Papua New Guinea	77	0.2093579	19	1	-58
Cameroon	78	0.2165121	64	0	-14
Egypt, Arab Rep.	79	0.2176608	64	0	-15
China	80	0.2178559	64	0	-16
Gabon	81	0.2189224	64	0	-17
Zambia	82	0.2193876	64	0	-18
Nigeria	83	0.2199123	64	0	-19
Liberia	84	0.2265095	19	1	-65
Guinea	85	0.2280293	19	1	-66
Ethiopia	86	0.2332508	64	0	-22
Bangladesh	87	0.2446482	64	0	-23
Libya	88	0.2601870	64	0	-24
United Arab Emirates	89	0.2657521	64	0	-25
Iraq	90	0.2752427	64	0	-26
Pakistan	91	0.2832434	64	0	-27
Iran, Islamic Rep.	92	0.3043608	64	0	-28
India	93	0.3181120	19	1	-74
Chad	94	0.3225771	64	0	-30
Yemen	95	0.3270495	64	0	-31
Mali	96	0.3394930	19	1	-77
Sierra Leone	97	0.3424468	64	0	-33
Afghanistan	98	0.5823044	19	1	-79
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Table 20 – continued from previous page

| Country | SIGI | | WOSOC | | WOSOC rank minus |
	Ranking	Value	Ranking	Value	SIGI rank
Sudan	99	0.6778067	64	0	-35

The data are sorted according to the value of the SIGI. WOSOC data correspond to the year 2007 and are obtained from http://ciri.binghamton.edu/. Rankings consider only countries for which both the SIGI and the WOSOC are available.