This research analyses and attempts to improve upon statistical models formulated in a recently published article on globalization and women's rights. In the original article, "Women's Status and Economic Globalization" by David L. Richards and Ronald Gelleny, the researchers use a cross-sectional, time-series data set covering 187 countries for the period of 1982-2005. They use ordered-logit estimation on ten models to measure the impact of globalization, as measured by trade and investment flows, portfolio investment and participation in structural adjustment policies, on women's economic, political and social rights. In our paper, we replicate the original models and extend them to include two additional control variables: concentration of industry and agriculture. Theoretically, the addition of these two variables is justified in the sense that women's rights, particularly economic rights, may partially be a function of the industrial structure and pervasiveness of agriculture in an economy independent of the various components of globalization. Empirically, the addition of these control variables improves the fit of the original models, in some cases substantially, thereby demonstrating a more robust analysis.

Abstract

Model Fit (Cross Validation)

Results

Results Cont.

Objectives

- Disaggregate the relationship between factors of economic globalization and women's economic, political and social rights.
- Evaluate existing models in Richards and Gelleny's analysis.
- If possible, improve the explanatory and predictive power of their models.
- PROMOTE the use of visual representations of statistical tests and the use of out-of-sample cross-validation techniques to assess the predictive power of quantitative models.

Methods

- We base our analysis on models constructed by Richards and Gelleny who use an ordered-logit model to test the effects of the various measures of globalization on women's economic, political, and social rights. The cross-sectional, time-series data set covers 187 countries for the period 1982-2005.
- The primary independent variables are foreign direct investment, portfolio investment, participation in structural adjustment policies, level of democracy, and GDP. In addition to the primary independent variables, they include a lagged dependent variable to account for serial correlation. They further divide the data into two eras, 1982-1991 and 1992-2002, which they refer to as the pre-globalization and globalization eras.
- The dependent variables in this analysis are taken from the Cingranelli-Richards Human Rights Dataset (CHR) and measure women's economic, political, and social rights. The variables are ordered categorical variables ranging from 0, indicating a low level of rights, to 3, indicating a high level of rights. We replicated and improved upon Richards and Gelleny's models by adding variables measuring the concentration of industry and the concentration of agriculture. A four-fold, out-of-sample cross-validation technique demonstrates that the inclusion of these additional variables increases the predictive power of the models.

Model diagnostics indicate that both the pre-globalization and the globalization era models for economic, political, and social rights perform reasonably well in terms of predictive power. With the addition of variables controlling for the proportion of industrial and agricultural concentration in an economy, the predictive power improved for all models except for social rights in the globalization era, which did not change.

In addition, the ordered-logit graphs demonstrate that, with the addition of the two variables, the impact of the independent variable of interest on the dependent variable changed.