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# Impact of Human Rights Abuses on Economic Outlook

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Impact of Human Rights Abuses on Economic Outlook  
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Abstract:

This paper is concerned with measuring, quantifying, and modeling the extent to which governmental human rights abuses influence the Gross Domestic Product per capita adjusted for purchasing power parity of a nation. The intent of this study is to help develop a statistical framework for human rights under which better and more informed governmental policy decisions can be made.

The results of this study suggest strong positive relationships between governmental regulatory quality, mean years of education, and government respect for physical integrity rights and higher GDP per capita (PPP). There is also no statistical relationship between a nation's perceived rule of law and GDP per capita (PPP). However, the study indicates that there is a statistically significant negative relationship between a government's respect for human empowerment rights and its GDP per capita (PPP).

Keywords: Human Rights, Political Rights, Election Law, Labor Law

JEL Codes: K160, K310, K380

## **Section 1 Introduction:**

The intent of this study is to explore the relationship between human rights and economic outlook in terms of Gross Domestic Product per capita adjusted for Purchasing Power Parity. The results of this study would have wide implications in terms of forming a development strategy and the creation of a favorable economic environment. Should developing nations follow the lead of authoritarian China, which received an extremely low score on human rights, but has been experiencing exponential growth, or should developing nations heed the advice of James Robinson, Daron Acemoglu (Acemoglu & Robinson, 2012), and William Easterly (Easterly and Moyo, 2012) who warn against the economic pitfalls of authoritarian regimes? This study will help in providing an empirical and ideological framework for human rights under which better and more informed governmental policy decisions can be made.

The independent variables considered in this study included the Cingranelli-Richards Human Rights Data Project (CIRI) indexes physical integrity rights, empowerment rights, World Governance Indicators (WGI) rule of law and regulation quality, mean years of education, and a binary geographic parameter for the Middle East and Africa. A further explanation of these variables can be found in section two of this essay. The regression revealed that respect of Physical Integrity was positively correlated with GDP per capita (PPP) by a coefficient of 10.3882 percent and was statistically significant at the 95 percent confidence level. Respect of empowerment rights had a coefficient of -7.60447 percent, meaning it has negative correlation with GDP per capita (PPP). Empowerment rights was also statistically significant, but at the 99 percent level. Regulatory quality had the largest impact on increasing GDP per capita (PPP) with a coefficient of 48.79 percent.

These findings indicate that while many countries that are economically successful in terms of high GDP per capita (PPP) possess high levels of respect for human rights, not all rights are necessarily as important to economic viability as others. The data show that governments should prioritize physical integrity rights, mean years of education, and government regulatory quality, as those are shown to be the most statistically and economically significant of our regressors.

Section two of this study covers our data overview, going into further depth about how each of our variables is calculated and what they represent. Section three covers our methodology, highlighting the estimation techniques used as well as discussing the underlying theoretical relationships presented in the form of our hypothesis. Section four further explores our results and interpretation of our data, including our findings and the statistical and economic significance levels of the relationships explored in our hypothesis. Section five is our conclusion, reflecting on the interpretation of the research presented.

## **Section 2 Data Overview:**

The data sources used to conduct this study included multiple metrics from the Cingranelli-Richards (CIRI) Human Rights Data Project, geographic parameters as defined by World Bank, World Governance Indicators, education measures from the Human Development Index, and the World Bank's GDP per capita (PPP). CIRI, developed by Professors David Cingranelli of Binghamton University, David Richards of University of Connecticut, and K. Chad Clay of University of Georgia, assigns a grade to every country on an index in four main categories and several subcategories for each year. The CIRI indexes are based on reports released by the U.S. State Department and Amnesty International. The reports released by the U.S. State Department and Amnesty International are encoded under the direction of CIRI senior

staff using the coding scheme given in paragraphs three and four of this section and under guidelines given in CIRI Human Rights Data Project Coding Manual. The four main categories are “Physical Integrity Rights,” “Empowerment Rights,” “Women’s Rights,” and “Independent Judiciary.”

We will be using two of the four - Physical Integrity Rights and Empowerment Rights. The Physical Integrity Rights Index is the cumulative score of the Torture, Extrajudicial Killing, Political Imprisonment, and Disappearance Indexes. This index has a range of 0 to 8, where 0 represents no observance of these right and 8 represents total observance of these rights by the government.

The Empowerment Rights Index was revised as of 2007. The revised version includes the following indexes - Freedom of Assembly and Association, Freedom of Foreign Movement, Freedom of Domestic Movement, Freedom of Speech, Electoral Self-Determination, Freedom of Religion, and Workers Rights. The Empowerment Rights Index has a range from 0 to 14. In all subcategories a country can receive a score of 0 representing no government respect or extreme lack of respect, 1 representing moderate respect, or 2 representing total respect for the right.

CIRI data is encoded using a quantitative method when possible. If a country receives a score of 0 in Torture, Extrajudicial Killing, Political Imprisonment, or Disappearances it means there were 50 or more instances of that right violation, 1 means there were 1 to 49 instances, and 2 means there was no violation of the right.

**Table 1: Coding Scheme of Physical Integrity Rights Subcategories**

| <u>Code</u> | <u>Instances</u> |
|-------------|------------------|
| 0           | 50+              |
| 1           | 1 - 49           |
| 2           | 0                |

In cases where the right is not measurable such as freedom of assembly and association, a qualitative approach is taken. When a country is scored as 0 the freedom of assembly and

association was severely restricted or entirely denied to all citizens. When the country receives a score of 1 the country restricted the right to all citizens or severely restricted or entirely denied to some citizens. In the case of a country receiving a score of 2 the freedom of assembly and association was nearly or entirely unrestricted for almost all citizens. All of the subcategories under the Empowerment Rights Index are coded in this way.

**Table 2: Coding Scheme of Empowerment Rights Subcategories**

| <u>Code</u> | <u>Level of Restriction</u>     |
|-------------|---------------------------------|
| 0           | severely restricted             |
| 1           | moderately restricted           |
| 2           | low or nonexistent restrictions |

The data for CIRI is collected from reports released by the U.S. State Department and Amnesty International. The U.S. State Department Country Report on Human Rights Practices is used for most indicators, while the Amnesty International Annual Report is used to developed the subcategories of Physical Integrity Rights. CIRI only considers government practices that relate to human rights not official or unofficial policies of governments or conditions on the ground within states. If a more in depth description of CIRI is needed readers are advised to consult the CIRI Human Rights Data Project Coding Manual and the Short Variable Descriptions. As all data used in this project is set in accordance to this data set, only nations that were included in the 2004 edition of CIRI were considered in our research.

Other independent variables include data from the WGI and HDI. The World Governance Indicators report aggregate and individual governance indicators for six dimensions of government on a scale from -2.5 to 2.5 with higher numbers indicating better governance. These aggregate indicators demonstrate the views of enterprises, citizens and expert survey respondents in industrial and developing countries. They are based on over 30 individual data sources. For this study, we will be using two of these indicators: rule of law and regulatory quality. According to the World Bank the WGI rule of law index represents the “...perceptions of the extent to which

agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police and the courts, as well as the likelihood of crime and violence”(World Governance Indicators, 2016). The regulatory quality index represents “... perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development” (World Governance Indicators, 2016).

The HDI is a composite statistic of life expectancy, education, and per capita income indicators. We will just be using the mean education indicator from this data set. This metric measures the mean education level in years of the average adult citizen in any given nation. We used the U.N.’s 2005 HDI education data for this because of the nature in which this statistic is calculated. Much of the data in the five year windows of collection come from a variety of years. Even if the data is titled as being from 2005, it may be from any time over the last five years depending on availability. This is the closest representation of a global calculation of education that was found to be readily available. We are also using a binary variable based on the geographic parameter of Middle Eastern and African countries. Countries that were considered Middle Eastern and African by World Bank’s geographic classification system were considered for this project.

The dependent variable is GDP per capita (current international \$), adjusted for purchasing power parity (PPP) for our selected countries in 2004 from the World Bank.

**Tables 3 & 4: Summary Statistics**

|                    | Rule of Law | Regulatory Quality | Empowerment Rights |
|--------------------|-------------|--------------------|--------------------|
| Mean               | -.043       | -.002              | 9.169              |
| Median             | -.14        | -.245              | 10                 |
| Maximum            | 1.99        | 1.81               | 14                 |
| Minimum            | -1.76       | -2.03              | 0                  |
| Standard Deviation | .961        | .901               | 3.864              |

|                    | Physical Integrity Rights | GDP per capita PPP (2004) | Mean Education |
|--------------------|---------------------------|---------------------------|----------------|
| Mean               | 4.97                      | 13388.7                   | 7.036          |
| Median             | 5                         | 6999.55                   | 7.3            |
| Maximum            | 8                         | 105356.5                  | 12.8           |
| Minimum            | 0                         | 449.4                     | 1.3            |
| Standard Deviation | 2.158                     | 17533.258                 | 2.942          |

The equation we employed was  $\ln Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + u_i$ .

Where Y is GDP growth per capita adjusted for PPP,  $X_1$  is empowerment rights,  $X_2$  is physical integrity rights,  $X_3$  is mean education,  $X_4$  is rule of law,  $X_5$  is regulatory quality, and  $X_6$  is a dummy variable indicating if a country is in the Middle East or Africa.

### **Section 3 Methodology:**

We believe countries that respect human rights as represented and scored by CIRI indexes, WGI indicators and mean years of education will have higher GDP per capita (PPP).

We believe that there is a positive correlation between countries with comparatively higher



scores in the human rights measures presented and that country's GDP per Capita (PPP) as shown in our null hypothesis below. Alternatively, we also believe that there is a negative relationship between countries with relatively low respect of human rights and their respective GDP per capita (PPP).

The theoretical equation we employed was as follows:

$$\ln Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + u_i .$$

Where Y is GDP growth per capita adjusted for PPP, X<sub>1</sub> is empowerment rights, X<sub>2</sub> is physical integrity rights, X<sub>3</sub> is mean education, X<sub>4</sub> is rule of law, X<sub>5</sub> is regulatory quality, and X<sub>6</sub> is a dummy variable indicating if a country is in the Middle East or Africa.

The estimated equation we used is represented by:

$$\ln(\text{GDP growth per capita, PPP}) = \beta_0(\text{constant}) + \beta_1(\text{CIRI empowerment rights}) + \beta_2(\text{CIRI physical integrity rights}) + \beta_3(\text{Mean years of education}) + \beta_4(\text{WGI rule of law}) + \beta_5(\text{WGI regulatory quality}) + \beta_6(\text{Middle East or Africa}) + \square \square$$

These findings were produced using a cross sectional data set. A panel data set would have been ideal, as it would allow an analysis of the long term impacts of human rights on GDP per capita (PPP). However, this was not a viable option due to time and resource restrictions, and missing data points across all variables and years. By using data just from 2004 we were able to retain 116 of the 203 countries included in the CIRI data set from 1981 to 2011. In analyzing the data using GRETL, we decided that a log-linear function best fit the data. This decision was

based on a higher R-square of .725 and an adjusted R-square value of .7099 compared to just .53 and .5045 respectively with the linear function (See Appendix). Furthermore, many variables were far more statistically significant in the log- linear model than in the linear-linear model; particularly the constant which went from being not statistically significant in the linear - linear model to being statistically significant at the 99% level.

We chose to include a binary variable representing Middle Eastern and African countries after noticing that much of the worst offenders in terms of human rights abuse comes from this region. Because of this, we wanted to determine if there was a statistically significant difference between countries from this region and those outside of it in terms of both GDP per capita (PPP) and respect of human rights.

Our CIRI human rights indices were chosen over other measures of human rights for their ability to isolate specific types of rights abuses in ways that other similar indices were not. CIRI's ability to identify the severity and frequency of rights abuses to provide a more nuanced picture of the rights of people living in specific countries is an invaluable tool. The specific indexes of empowerment rights and physical integrity rights were chosen because they were seen as the most apparent and reprehensible violations of rights. While being a valuable resource, the CIRI human rights indexes still do not paint a complete picture when it comes to human rights. In an attempt to create a more complete image, we are also using WGI indicators that focus more on the effectiveness of governance and laws instituted. In other words, how effective the country is in its governance as measured through the power and quality of its lawmaking and regulation. Mean education was included under this same sentiment.

#### **Section 4: Results & Interpretations**

Based on the results of the log-linear function, there are strong positive relationships between governmental regulatory quality, mean years of education, and government respect for physical integrity rights and higher GDP per capita (PPP). There is also no statistical relationship between a nation's perceived rule of law and GDP per capita (PPP). However, the study indicates that there is a statistically significant negative relationship between a government's respect for human empowerment rights and its GDP per capita (PPP).

CIRI empowerment rights, CIRI physical integrity rights, WGI regulatory quality, and HDI mean education are all deemed statically significant at the 95% level. We would also assert that those variables are economically significant. However, WGI rule of law and the binary variable Middle East and Africa were statically insignificant and thereby also economically insignificant. Empowerment rights had the smallest impact on GDP per capita (PPP) with a coefficient of -7.6 percent, but when the average GDP per capita (PPP) is just \$13,388.7 a 7.6 percent difference, or a decrease of \$1017.54 from the average, could tilt the scales for someone struggling to pay rent or buy food. This sentiment is even further shown by some of our other economically significant variables. For example, the 48.79 percent increase in GDP per capita (PPP) seen from a one unit increase in a nation's WGI regulatory score is an astronomical increase in the living wages of families. Our other variables with strong positive relationships with our Y variable follow a similar thought process of economic significance.

Empowerment rights' negative correlation with GDP per capita (PPP) was the biggest surprise of the regression. This however can be explained due to missing data from many failed states such as North Korea, but including data from wealthy such as Saudi Arabia and United Arab Emirates, nations that are also massive violators of empowerment rights receiving a 0 and a 1 respectively on the 2004 CIRI Empowerment Rights Index. Furthermore, because we only

looked at 2004 we can only draw conclusions of the impacts of empowerment rights in the short term. It makes sense that in the short term oppression of certain rights such as freedom of speech, suppressing criticism of government action, can be beneficial in ensuring continuity of government and short term stability. While it is not ideal to do so by any means, nations have shown that this is a sacrifice many are willing to make in order to ensure greater stability.

The statistical insignificance of the rule of law is another unexpected result. The rule of law includes a variety of concerns related to economic well being, and even certain conditions that would seem to be a prerequisite for economic development such as quality contract enforcement or property rights. However per the definition from the World Bank, the rule of law index is a measurement of the “perceptions,” it may not be the reality.

This idea of perception is problematic for several reasons, the first of which being the potential for state control over perception. In many countries with autocratic tendencies, there is high potential to control public sentiment through propagandized media. This could contribute to many countries not traditionally seen as developed in a traditional sense receiving high scores in this category. An example of this would be Syria scoring a -0.37 in this category while being scoring significantly lower in other statistically significant sections. This inconsistency in the relativity of the idea of public perception leads to a high degree of variability that is out of the model’s control. This could also be yet another case of conditions with long term impact in a short term model.

The binary variable Middle East and Africa was included as these regions are often rife with conflict and instability. This variable not only captures negative impacts of conflict on GDP per capita (PPP) within states but also any negative impacts of conflict in neighboring states. However, this variable did not have a statistically significant impact on the dependant variable. It

would seem that natural resources in wealthy Middle Eastern states more than makes up for any negative impacts of conflict on GDP per capita (PPP). In fact the middle eastern country of Qatar was the wealthiest nation in the sample with a GDP per capita (PPP) of \$105,356.

**Table 5: OLS estimates, using log-linear model with robust standard errors (HC1)**

Dependent variable: ln\_GDP\_PC\_PPP

|                        | 1                      | 2                      | 3                       | 4                       |
|------------------------|------------------------|------------------------|-------------------------|-------------------------|
| Constant               | 7.596**<br>(0.2966)    | 8.872**<br>(0.2828)    | 7.175**<br>(0.3349)     | 7.355**<br>(0.3501)     |
| CIRI_NEW_EMPINX        | -0.004891<br>(0.03666) | -0.05039*<br>(0.02614) | -0.06640**<br>(0.02375) | -0.07604**<br>(0.02443) |
| CIRI_PHYS_INT          | 0.2410**<br>(0.06591)  | 0.06844<br>(0.04869)   | 0.08963**<br>(0.03872)  | 0.1039**<br>(0.04117)   |
| Rule_Law               | -                      | 0.1986<br>(0.2506)     | 0.01249<br>(0.2189)     | 0.02342<br>(0.2196)     |
| Regulatory_Quality     | -                      | 0.8806**<br>(0.2482)   | 0.5062**<br>(0.2416)    | 0.4879**<br>(0.2446)    |
| HDI_MEAN_EDU           | -                      | -                      | 0.2459**<br>(0.03593)   | 0.2328**<br>(0.03669)   |
| Middle_East_All_Africa | -                      | -                      | -                       | -0.1658<br>(0.1711)     |
| n                      | 116                    | 116                    | 116                     | 116                     |
| Adjusted R-Squared     | 0.1357                 | 0.5570                 | 0.7104                  | 0.7099                  |

Standard Errors in parenthesis

\* indicates significance at the 10 percent level

\*\* indicates significance at the 5 percent level

ln\_GDP\_PC\_PPP - Natural log of GDP per Capita, PPP

CIRI\_NEW\_EMPINX - CIRI empowerment rights index

CIRI\_PHYS\_INT - CIRI physical rights index

Rule\_Law - WGI rule of law indicator

Regulatory\_Quality - WGI regulatory quality indicator

HDI\_MEAN\_EDUCATION\_2005 - HDI's value for mean education level

Middle\_east\_all\_africa - geographic parameter for middle eastern and african countries

## **Section 5 Conclusion:**

This paper examined the impact of human rights, as measured by the Cingranelli-Richards Human Rights Data Project (CIRI) physical integrity rights and empowerment rights indices, on economic wellbeing, as measured by GDP per capita (PPP). The other explanatory variables used were Worldwide Governance Indicators indices of rule of law and regulatory quality, the mean years of education, and a binary Middle East and Africa variable. After examining the evidence presented in this paper we can conclude that violations of physical integrity rights has a definitive negative impact on GDP per capita (PPP) at least in the short term.

Violations of Empowerment rights surprisingly, increased GDP per capita (PPP). Other unexpected results were the coefficients of the rule of law and Middle East and Africa variable being deemed statistically insignificant. This study could have been improved upon with the use of panel data, which would have allowed us to study the impacts of human rights over a longer period of time, however logistical constraints prevented this. A greater number of explanatory variables could have also given a more fuller picture of what impacts GDP per capita (PPP), granted that the scope and nature of this project lend itself to omitted variable bias purely from the fact that it is nearly impossible to statistically account for human rights in all senses of the word. Although there is still much research to be done in the field of human rights and their relationship to economic prosperity, the results presented in this study will help to establish and develop a statistical framework for human rights under which better and more informed governmental policy decisions can be made.

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## Appendix A

Linear-Linear OLS model referenced in Section 3: Methodology

**Table 6: OLS estimates, linear-linear model using 116 observations and robust standard errors (HC1)**

Dependent Variable: GDP\_PC\_PPP

|                | Coefficient | Standard Error | t-ratio | p-value |
|----------------|-------------|----------------|---------|---------|
| Constant       | 197.894*    | 6157.75        | 0.03214 | 0.9744  |
| CIRI_NEW_EMPIN | -1759.05*** | 599.572        | -2.934  | 0.0041  |

| X                       |            |         |         |        |
|-------------------------|------------|---------|---------|--------|
| CIRI_PHYS_INT           | 2921.68*** | 984.630 | 2.967   | 0.037  |
| Rule_Law                | -1382.97   | 2953.31 | -0.4683 | 0.6405 |
| Regulatory_Quality      | 8181.94**  | 3293.83 | 2.484   | 0.0145 |
| HDI_MEAN_EDU            | 2031.55*** | 611.008 | 3.325   | 0.0012 |
| Middle_East_All_Africa  | 1162.80    | 2919.80 | 0.3983  | 0.6912 |
| Adjusted R-squared      | 0.504504   | -       | -       | -      |
| Mean Dependent Variable | 13395.75   | -       | -       | -      |

\* indicates significance at the 10 percent level

\*\* indicates significance at the 5 percent level

\*\*\* indicates significance at the 1 percent level

GDP\_PC\_PPP - GDP per Capita, PPP

CIRI\_NEW\_EMPINIX - CIRI empowerment rights index

CIRI\_PHYS\_INT - CIRI physical rights index

Rule\_Law - WGI rule of law indicator

Regulatory\_Quality - WGI regulatory quality indicator

HDI\_MEAN\_EDUCATION\_2005 - HDI's value for mean education level

Middle\_east\_all\_africa - geographic parameter for middle eastern and african countries