Restricted Freedom of Foreign Movement:
An Examination of the Connection to Causal Factors

Teri Mueller
Wartburg College
Abstract

In the current era of globalization, a lot of communication occurs between states and numerous factors encourage persons to travel between states. The right to leave one’s country (as well as the right to return) are basic human rights. However, throughout the course of history freedom of movement has been limited in various ways. This study seeks correlations and cause and effect relationships between restricted freedom of foreign movement and other pertinent variables including economic development, freedom of expression, functionality of the government, freedom of religion, and gender inequality. By seeking out the cause and effect relationship between the dependent variable and the independent variables, information is obtained that addresses the research question what factors contribute to the restricted freedom of movement of persons outside of their countries? This study suggests that gender equality, economic development, and certain social freedom restrictions play a role in the freedom of foreign movement.
Restricted Freedom of Foreign Movement: An Examination of the Connection to Causal Factors

I. Introduction

The concept of freedom of foreign movement as a human right has become increasingly relevant in our modern world due to. However, restrictions placed upon this right plague people all across the globe. In order to properly examine what factors relate to restrictions on freedom of movement, it is pertinent to examine why people migrate in the first place. While the literature about restricted freedom of foreign movement is relatively slim, a lot of research has been done on the related topic of migration. No central theory regarding migration has been developed and holistically agreed upon by the academic and policy making community. However, the diversity in theoretical approaches can be seen as a strength that leads to discussions of the complex relationships between migration and other factors such as socioeconomic conditions, gender, political environments, and social freedoms. Van Hear (2010) clearly points to the complex relationships when he states the following:

Migration is linked in complex ways to class, gender, generation, ethnicity and other social cleavages, which are embodied in hierarchies of power and social status, in positions in home and host communities, and in work and domestic relationships all of which may be transformed in the course of the migratory process. (p. 1531)

Furthermore, it is explained that researchers are still lacking enough total knowledge to explain the reasoning behind movement and its effect on societies (Castles, 2010, p.1566).

Because of the complexity of migration, numerous theories have been developed which are often broken down into an optimist versus pessimist context. Some of the most prominent theories center on economics and are known as economic migration theories. Migratory cumulative causation theory (MCCT) falls into the pessimist category of economic theories.
Basically, “…migration is expected to undermine regional and national economies by depriving them of their valuable human and material capital resources, which are exploited for the benefit of industrialized countries” (Haas, 2010, p. 234). It correlates with the concept of “brain drain” in that “…economic activities in areas and countries with an initial advantage drain investment and encourage the out-migration of the most talented populations from peripheral area and countries” (Haas, 2010, p. 233). Furthermore, MCCT fits in with mercantilist theory in which human beings are seen as part of a state’s capital. MCCT sees migration as an effect of societal disparities and low economic conditions (Haas, 2010, p.234). Switching viewpoints, neo-classical migration theory (NCMT) is an optimistic theory that integrates economic and social individual components. Unlike MCCT, this theory sees migration as a positive for both the country that looses people and the country that gains people. The focus is primarily on the individual. “Migrants are believed to be seeking their greatest personal good. Factors outside of their pursuit of utility are generally ignored” (Haas, 2010, p. 232). NCMT contends that the free movement of labor will eventually result in price stabilization and more stable economies (Haas, 2010, pp. 230-231). Numerous additional theories about migration also exist. Many recent theories focus on the growing ease of communication, transit, transactions, etc., and are referred to as globalization theories. Every theory discusses important attributes of migration, but it is difficult to pinpoint the exact reasons people migrate in one central theory because of complex situational factors (Belton & Morales, 2009).

The reasoning behind people’s desire to migrate leads into an investigation about the relationship between migration politics and emigration and movement restrictions. Emigration restrictions are not a new phenomenon. They have existed in many forms throughout human history. However, the recently declared right of freedom of movement brought about fierce
criticism and objection to emigration restrictions. The specific right to freedom of movement was formally developed in the mid-20th century. Specifically, the right was officially declared by the United Nations in the Universal Declaration of Human Rights (UDHR). Article 13 notes that “everyone has the right to freedom of movement and residence within the borders of each state” and “…everyone has the right to leave any country, including his own, and to return to his country.” The declaration goes on in Article 14 to say that “…everyone has the right to seek and to enjoy in other countries asylum from persecution” and “…this right may not be invoked in the case of prosecutions genuinely arising from non-political crimes or from acts contrary to the purposes and principles of the United Nations.” The UDHR is not the only place where freedom of movement is interpreted as a right. The International Covenant of Civil and Political Rights (ICCPR) also focuses on freedom of movement in Article twelve. Everyone is granted the right to leave and return to his/her country.

Freedom of Movement was also the focus of “The Right to Leave and The Right to Return” which was adopted by the Uppsala colloquium in Sweden in 1972. The colloquium consisted of professionals from 25 countries who focused on human rights and legal issues. The declaration they adopted expanded upon the right to freedom of movement as discussed in the UDHR by breaking the concept down into four chapters. The chapters discussed the right to leave, the right to return, travel documents, and general provisions concerning the movement of persons. Article four of chapter one on the Right to Leave discusses how a person should not be penalized for exercising or trying to exercise his/her right to leave. Specifically, the article states:

(a) No state shall subject a person or his family to reprisals, sanctions, penalties or harassment, for seeking to exercise or for exercising the right to leave a country.
(b) Every state shall ensure that no person or his family is subjected to private or other unofficial reprisals or harassment for seeking to exercise or for exercising his right to leave a country (The Right to Leave, 1972).

In spite of the numerous declarations that have been formulated regarding freedom of movement, the enforcement of the freedom is difficult and many states impose harsh movement restrictions. One notable struggle is achieving a balance between the right to freedom of movement as outlined in the UDHR and the concept of state sovereignty (Belton & Morales, 2009, p. 198). Many states impose well-known emigration and immigration restrictions. Consider the case of the border between Mexico and the United States. Regardless of the ethical nature of the restrictions, people are simply not free to move at will from one country to another.

Structurally wise, this research paper will continue with further study of restricted freedom of foreign movement via the examination of scholarly literature of freedom of movement and other related subjects. Next will come a thorough explanation of the research design, structure, and format. The findings of the study related to factors that impede movement will also be discussed and evaluated. In closing, conclusions will be made concerning the relationship or lack there of between variables and limitations and implications will be discussed.

II. Literature Review

The right to leave a country has been examined closely by numerous scholars in regards to the origin of the right and its implications (Whelan, 1981; Dowty, 1987). Numerous scholars trace the roots of restricted movement back to ancient Greece concerning Delphic freedoms and Plato’s laws (Dowty, 1987; McAdam, 2011; Westermann, 1945; Whelan, 1981). The ancient biblical story of when Pharaoh refused to let the Hebrew slaves leave Egypt as recorded in Exodus is also mentioned (Dowty, 1987). Various works of literature also mention mercantilist
theory and reasoning as a cause of movement restrictions because of the strong belief that a large population was an asset to a state’s economy and overall well-being (McAdam, 2011; Dowty, 1987).

A key study conducted by the United Nations discusses discrimination in regards to freedom of movement and the right to leave. The report notes that discrimination based on human rights and fundamental freedoms is often correlated with a “…disregard of the right of everyone to leave any country” (Ingles, 1962, p. 22). Discrimination is examined in regards to race, sex, language, religion, political opinions, national origins, social origins, and property ownership. Concerning gender, the study shows that married women may lose certain civil rights and may not be permitted to migrate without their husbands. Women’s passports are limited in some respects. Also, it is specifically noted that “individuals are sometimes directly restricted in the exercise of their right to leave a country on the grounds of religion” (Ingles, 1962, p. 34). Multiple cases concerning Jewish migration are directly referenced (Ingles, 1962).

Dr. Alan Dowty, one of the key figures in emigration studies, notes that emigration restrictions were often focused on during times of social conflict and/or revolutions. He states, “Countries with stable social situations seldom have significant emigration pressure, whatever the economic level” (Dowty, 1988, p. 91). He considers the social stability of the country to be a key factor and also cites political factors as carrying more weight than economic factors in the role of emigration regulations. This viewpoint relates to an examination of heightened passport controls in the French, Russian, and Chinese revolutions (Torpey, 1997). However, the revolution examination includes economic conditions in its investigation that correspond well with literature examining restricted travel from Israel (Eozin, 2010). The literature written on these case studies suggests that peaceful conditions and secure economics encourage less
movement restrictions. A recent overview of Cuban human rights also documented various civil and human rights infractions and showed that restricted freedom of foreign movement occurred along side numerous other factors like restricted freedom of press, trial rights violations, and poor government handling of prisoners (Cuba and Human Rights, 2013). The literature additionally indicates the presence of strong movement restrictions and regulations in fascist and communist regimes (Dowty, 1987; Chalidze, 1974).

Though numerous scholars have examined the evolution of movement restrictions, less scholarly literature is available about freedom of movement as a human right. The idea of freedom of movement as an international right came about in the 16th and 17th centuries from the writings of Francisco de Vitoria and Hugo Grotius and was included under the umbrella of a “right to liberty” in the 18th century (McAdam, 2011, pp. 33-36). Literature traces the development of freedom of movement as a human right up through recent history (McAdam, 2011).

In addition to literature discussing factors that affect freedom of movement, there have also been a few authors who have addressed the merits of the concept of freedom of movement in and of itself. Over the course of history, some individuals in the academic community have felt that freedom of foreign movement is too difficult to implement effectively because of the complexities of migration (Belton & Morales, 2009). Others cite reasons why humanity is not ready for freedom of movement to be a universal right (Nett, 1971). Additional literature shows that this debate is not a new one as Paul Fauchille addressed the delicate balance between the right of emigration (a form of foreign movement) and state sovereignty in the early 20th century (Paul Fauchille, 2005).
A somewhat unique study was done in regards to the effects of freedom of movement on people’s psychology (Laurin, Shepherd, & Kay, 2010). The literature showed a strong correlation between restricted freedom of movement and system justification in regards to gender equality and other factors. Systems of societal oppression were seen as more acceptable and normal when restricted freedom of movement was present. On a broader spectrum, the relationship between gender and overall migration has also been brought up in numerous works of feminist literature (Kofman, 2004; De Jong 2000; Pedreza, 1991). It is argued that gender has not been adequately considered in the formation of migration theories and evaluations of migration traffic. Pedreza (1991) hints at a link between gender and restricted migration when she mentions, “…government policy can create imbalanced migration flows by legally restricting the migration of males or females” (p. 310). This idea fits into feminism’s underlying belief that humanitarian problems affect women more than men and that societal oppression is more common among the female population. One specific study points to the Thai population and shows that women cited lower income, low comfort, and low work satisfaction with the desire to migrate (De Jong, 2000).

III. Methodology

Before continuing with the methodology behind the study, it is necessary to acknowledge that changes occurred due to data and analyses restrictions. The original plan is explained in the following paragraphs. The reasoning for changes and justification for variable alterations are covered after the original plan is discussed.

The objective of this research study is to investigate what factors contribute to the restricted freedom of movement of persons outside of their countries. In order to best address the issue, a large pool of countries is included. One hundred and forty-nine countries are referenced
in order to make the findings more generally encompassing. By examining the history of migration restrictions and studies conducted on various countries and situational aspects, the factors of economic development, freedom of expression, functionality of the government, freedom of religion, and gender equality have been chosen for investigation as independent variables.

Four different databases are utilized in the gathering of information about the 149 countries that are referenced. The CIRI Human Rights database provides the data for the dependent variable of freedom of foreign movement and the independent variable of freedom of religion. Data for freedom of the press is gathered from Freedom House. The Center for Systemic Peace and Global Policy provides the data for government functionality via the use of the state fragility index. The World Bank’s information about GNI per capita is utilized for economic development and the United Nation’s Development Program (UNDP) provides data on gender equality.

The original research study is designed to employ ordinal regression analysis via the use of the SPSS system in order to see if there is a correlation and causal relationship between the dependent variable of restricted freedom of foreign movement and the independent variables of economic development, freedom of expression, functionality of the government, and gender equality. All of the variables are looked at for each of the countries in the base year of 2008. Freedom of foreign movement in each of the countries is examined for 2009 and 2010. The three-year span enables one to consider the immediate relationship between freedom of movement and the independent variables along with the lagged effect that occurs in the next two years. It is important to look beyond the immediate impact because some variables may affect
freedom of foreign movement more slowly. Variables are collapsed into narrower categories in order to facilitate the ordinal regression analysis.

The analysis tests multiple research hypotheses in order to examine the correlation and cause effect relationship between variables. The following are the five research hypotheses and their corresponding null hypotheses that are being investigated:

1. A direct relationship exists between economic development and freedom of foreign movement.
   
   a) Null hypothesis: There is no relationship between economic development (GNI per capita) and freedom of foreign movement.

   
   a) Null hypothesis: No relationship exists between freedom of the press and freedom of foreign movement.

3. A direct relationship exists between the inverse of state fragility and freedom of movement.
   
   a) Null hypothesis: There is no relationship between the inverse of state fragility and freedom of foreign movement.

4. A direct relationship exists between levels of gender equality and freedom of foreign movement.
   
   a) Null hypothesis: No relationship exists between levels of gender equality and freedom of foreign movement.

5. A direct relationship exists between freedom of religion and freedom of foreign movement.
a) Null hypothesis: No relationship exists between freedom of religion and freedom of movement.

If the study reveals no grounds for the validity of the null hypotheses, then there will be supportive evidence for the existence of a cause and effect relationship between the dependent variable of freedom of movement and the independent variables.

Each of the variable measures is obtained through a process utilized by the individual research organizations. Freedom of foreign movement is determined by examining numerous factors like passport withholdings/delays, exit visa requirements, travel time restrictions, citizen revocation requirements, and group repression. After thorough examination, countries are assigned a number from zero to two. A zero represents that freedom of foreign movement is severely limited meaning that almost all of foreign travel is restricted. A one represents that foreign movement and travel is modestly restricted. Countries receiving a one may limit the travel of certain individuals and/or groups. They also might restrict the amount of time a person may stay abroad or restrict a person from visiting a particular country. Countries receiving a two rating have essentially free foreign movement and travel. All citizens are allowed to openly emigrate and travel without fear of penalties and/or repercussions.

Similarly, the independent variable of freedom of religion is determined via the examination of numerous factors. Aspects like the ability to advocate political views, publish religious materials, and attempt to convert (proselytize) others are considered in the scoring determination. Like freedom of foreign movement, countries are assigned a zero, one, or two. A zero represents severe religious restrictions, a one represents partially repressed religion, and a two represents fairly holistic freedom of religion.
The independent variable of economic development is measured via examining the GNI per capita of each country. The World Bank explains GNI per capita as:

...the gross national income, converted to U.S. dollars using the World Bank Atlas method, divided by the midyear population. GNI is the sum of value added by all resident producers plus any product taxes (less subsidies) not included in the valuation of output plus net receipts of primary income (compensation of employees and property income) from abroad” (World Bank, 2011).

GNI per capita is used to determine economic development because it provides figures that can be equitably compared across countries of varying sizes with varying populations. It basically represents the GDP (gross domestic product) of a country plus its net primary income from work in other countries divided by the population of the country. In its simplest form, GNI per capita can be seen as the average income of a state’s population. The variable of GNI per capita was logarithmically transformed for the study in order to avoid fractionalization and validate the usage of the data.

The independent variable of gender equality is obtained via the usage of information from the UNDP Human Development Report. The 2010 report contained the gender inequality index for the year 2008. Countries were given a value from zero to one with zero indicating complete equality between men and women and one signaling the worst conditions of inequality. The value is constructed via examining three different categories of reproductive health, empowerment, and the labor market. The UNDP states “The index shows the loss in potential human development due to inequality between female and male achievements in these dimensions.” The data factors utilized in the index are maternal mortality ratio, adolescent fertility rate, share of parliamentary seats held by each sex, attainment at secondary and higher
education levels, and labor market participation rate. A five-step process of complex aggregation techniques and calculations is used to come up with the final number. In order to facilitate the statistical analysis, gender equality is mathematically broken down into three ordinal categories. The range of values was .605 as the country with the most equality that was represented earned a score of .248 and the country with the least equality earned a score of .853. The numbers were then inverted to facilitate the formation of the proposed positive relationship between gender equality and freedom of foreign movement. If the higher decimals (representing low gender equality) were left as is, the proposed relationship would look negative and the interpretation of the data would be more confusing.

Freedom House provides the data for freedom of the press. Freedom of press is an index that encompasses multiple aspects of free communication and media regulations. Freedom House states, “Ratings are determined through an examination of three broad categories: the legal environment in which media operate; political influences on reporting and access to information; and economic pressures on content and the dissemination of news.” A ranking between zero and 100 is assigned to each country that is examined in regards to the three categories. A zero signifies the most free and 100 signifies the least free. The 2009 Freedom of the Press release is utilized for the data because it covers the base year of 2008. In a similar fashion to GII, the data was inverted in order to allow for the potential of a positive relationship which helps to clarify the interpretation of the data.

The functionality of government is the independent variable addressed through the examination of state fragility as calculated by the Center for Systemic Peace. The state fragility index represents the stability and functionality of state governments. Each country is scored in regards to its effectiveness and legitimacy in security, political, economic, and social categories.
The numbers are added together to come up with the state fragility score. The Center for Systemic Peace describes the process as follows:

Each of the Matrix indicators is rated on a four-point fragility scale: 0 “no fragility,” 1 “low fragility,” 2 “medium fragility,” and 3 “high fragility” with the exception of the Economic Effectiveness indicator, which is rated on a five-point fragility scale (including 4 “extreme fragility”). The State Fragility Index, then, combines scores on the eight indicators and ranges from 0 “no fragility” to 25 “extreme fragility.”

Basically, the lower the composite score, the more functional and successful a government is in its operations. The data was once again inverted to allow for the examination of the predicted positive relationship.

The analysis was originally run using ordinal regression analysis and collapsing the data from the independent variables into ordinal form. However, the study had to be adjusted because of the lack of data (leading to an abundance of zeros) in some of the ordinal categories. The zeros created warnings that indicated around 50% of the ordinal categories contained no cases. When further investigated, it was discovered that the lack of data in the one category of Freedom of the Press led to an exponential spread of zeros throughout the analysis. The study needed serious revision as ordinal regression analysis could not adequately used to adequately conduct the study. As a result, further research was done concerning an alternate variable to use in place of the ordinal dependent variable of freedom of foreign movement. Freedom of foreign movement is closely related to the restriction of visas. Henley and Partners has created a Visa Restrictions Index that can be effectively utilized as a proxy measure for freedom of movement.

The index reveals the number of countries that can be entered without a visa by a citizen of the country in question. Henley and Partners notes “In today's globalized world, visa restrictions
RESTRICTED FREEDOM OF FOREIGN MOVEMENT

play an important role in controlling the movement of foreign nationals across borders.” (Henley & Partners, 2013). Visa requirements can be the result of the country of origin, the entrance country, and/or the relationship between both countries. The role of the entrance country calls into question the validity of using visa restrictions index as a measure of freedom of movement. However, visa restrictions is actually a high quality proxy variable due to the high correlation between freedom of movement and visa restrictions as supported by a statistical bivariate correlation analysis. The analysis showed that the two variables are highly correlated and therefore supported the use of visa restrictions as the dependent variable in the place of freedom of foreign movement (see Table 1). The visa restrictions index allowed for a linear regression analysis to be utilized in place of the problematic ordinal regression analysis. The use of linear regression analysis also permitted greater variation due to the use of the original data for GNI, inverted GII, inverted Freedom of Press, and inverted State Fragility data instead of their collapsed ordinal values.

The study was also slightly altered concerning the years utilized to determine the lag factor of the independent variables. Rather than looking at visa restrictions in 2008, 2009, and 2010 as was originally intended when examining freedom of foreign movement, visa restrictions are examined in the base year of 2008 as well as 2010 and 2012. Doing so enables one to evaluate the two and four year lag effects which are relevant as the independent variables do not change radically from one year to the next. These years were also chosen due to the lack of available data for visa restrictions in 2009. In essence, there are three models being looked at. By

<table>
<thead>
<tr>
<th>Table 1: Bivariate correlation between Freedom of Foreign Movement and Visa Restrictions</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOM 2008</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Table 1 | Visa Freedom (VR) 2008 | Freedom of Movement (FOM) 2008 | Correlation Coefficient | Significance (2-tailed) | N |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.362**</td>
<td>.000</td>
<td>146</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
doing so the study will accomplish the intended goal of investigating if the independent variables change in importance as time progresses.

**IV. Analysis and Findings**

The primary linear regression analysis was run based on the 2008 dependent variable of visa restrictions and the 2008 independent variables of freedom of religion, gender equality, freedom of the press, GNI per capita (logarithmically transformed), and state fragility. The adjusted R-square value of the model indicated that it explained 71.6% of the variation in the dependent variable. Furthermore, the model has an F score 51.901. The beta weights, t-scores, significance scores, and variance inflation factor (VIF) scores are shown in table two. The VIF of the variables ranged from 1.501 to 4.721. However, the primary model was questionable. The collinearity diagnostics showed that state fragility and gender equality had high variance proportions loading on similar dimensions indicating a high degree of collinearity. Given the high VIF and factor loading, the state fragility variable was thrown out in order to make for a better model. The resulting model was further revised when it was discovered that Freedom of Religion did not significantly contribute to the model and thus was thrown out.

The final synchronic linear regression analysis was run based on the dependent variable of visa restrictions and the independent variables of gender equality, freedom of the press, and
transformed GNI per capita. The R squared value improved to 79.4% and the F score was 33.03. Table 3 shows the statistical results of the analysis. No significant problems existed within the collinearity diagnostics. One case (Malaysia) was thrown out of the model because it was a statistical outlier. The final base year analysis showed that significant evidence existed that a positive correlation exists between visa restrictions and gender equality and restricted freedom of the press. Though not quite significant, Transformed GNI per capita was included in the model because taking it out results in a model of lesser overall significance. Therefore, it is likely significant in the way it covaries with the other independent variables. Though its significance may be disputed, it does play an important role in the model and should be further explored in future studies.

A secondary linear regression analysis was run based off of the dependent variable of visa restrictions in 2010 and all five 2008 independent variables in order to examine the two year lag relationship. Similarly to the synchronic analysis, state fragility was thrown out of the model due to it loading high with gender equality. Freedom of Religion was also thrown out as it did not contribute to the model in a helpful manner. The resulting model yielded an adjusted R-square value of 76.4% and an F score of 115.280 which indicated that the
model was significant. Table 4 indicates the statistical results of the analysis. The VIF statistic for all variables was under three and no significant problems existed in the collinearity diagnostics. Malaysia was thrown out as an outlier again. This model showed that gender equality and freedom of press increase in significance after two years. It also shows that the transformed GNI per capita value became significant though it was not originally in the synchronic analysis. Such suggests that economic factors may not immediately affect freedom of movement but that they do play a role.

A third model was run based on the dependent variable of visa restrictions in 2012 in order to observe the four-year lag effect. All of the original base year independent variables were included in the initial run, but then state fragility and freedom of religion were once again thrown out due to covarying problems and lack of significance. The resulting four-year lag model produced an R-square value of 77.9% and an F score of 126.843. Thus, the model was more significant than the 2010 model.

Table 5 shows the statistical results of the final linear regression analysis. Once again, the variance inflation factor for all of the variables was under two and no notable problems existed within the collinearity diagnostics. As expected, Malaysia was thrown out as an outlier. This model showed that gender equality and freedom of the press continued to increase in significance after four years based on the higher t score. Transformed GNI per capita also gained a little significance as its significance number went from .035 to .032 and its t score also improved.

| Table 5: Linear regression four year lag analysis based off of Visa Restrictions in 2012 |
|---|---|---|---|
| | Beta Weight | t score | Significance |
| (Constant) | -- | -4.049 | .000 |
| IFOP2008 | .397 | 7.570 | .000 |
| IGI2008 | .482 | 6.359 | .000 |
| TransformedGNI2008 | .164 | 2.172 | .032 |
Out of the variables examined in the study, freedom of the press appeared to have the largest impact on freedom of movement through gender equality followed it closely. Both of these variables significance seemed to increase as time passed. Therefore, evidence exists that the extent of freedom of the press and the degree of gender equality in a state may contribute to the degree that freedom of foreign movement is restricted at the time of the inequality as well as in future years. Though not as statistically important as the previous mentioned variables, GNI per capita also is evidenced as playing a role as it became significant in the two and four year lag models (2010 and 2012). The role of the GNI per capita also appears to increase with the passage of time as indicated by the change in significance. The combination of the three significant variables appeared to have a solid impact on restricted visas in all three models.

**V. Conclusion**

In conclusion, evidence exists that a positive relationship exists between gender equality and foreign movement restrictions, freedom of the press and freedom of foreign movement, and GNI per capita and freedom of foreign movement. The high significance of gender equality supports the feminist theory that women’s role in migration patterns and policy is not taken into enough consideration. Gender likely plays an important role in the ability to migrate. This also fits into part of the findings of the UN report done in the 1960s in which discrimination based upon sex (gender) was correlated with movement restrictions (Ingles, 1962). This study suggests that gender inequality still plays a role in freedom of movement considerations even though 50 years have passed. Dowty’s research on the political and social factors related to emigration restrictions is not clearly supported by the study as state fragility was thrown out of the model. However, it is possible that state fragility was too broad of a variable for the model as it was an index that encompassed political, security, economic and social factors. Furthermore, despite the
lack of evidence surrounding the impact of holistic government functionality, the social freedom of freedom of the press was shown to play a role. Similarly to the studies of Israel and the French, Russian, and Chinese revolutions, this study supported that economic development level may play a role in movement restrictions as a positive relationship existed between GNI per capita and visa restrictions in both the two year and four year lag analyses.

The models used account for many of the key factors that likely effect freedom of foreign movement, but they are not completely holistic as the adjusted R-squared value of all the models is in the 70th percentile. Therefore, other variables likely exist that have an impact on freedom of foreign movement which are not encompassed within the proposed model. Further study is needed to determine those factors. However, in the end, the study does clearly support the existence of a positive relationship between restricted freedom of foreign movement and gender equality, restricted freedom of the press, and levels of economic development.
Appendix A: Variable Measures

Dependent variable of freedom of movement (FOM): FOM is obtained from the CIRI Human Rights Database. FOM is determined by CIRI through the examination of numerous factors like passport withholdings/delays, exit visa requirements, travel time restrictions, citizen revocation requirements, and group repression. Based off of the findings, countries are assigned a number from 0 to 2. A 0 represents that freedom of foreign movement is severely limited meaning that almost all of foreign travel is restricted. A 1 represents that foreign movement and travel is modestly restricted. Countries receiving a 1 may limit the travel of certain individuals and/or groups. They also might restrict the amount of time a person may stay abroad or restrict a person from visiting a particular country. Countries receiving a two rating have essentially free foreign movement and travel. All citizens are allowed to openly emigrate and travel without fear of penalties and/or repercussions.

Revised dependent variable of restricted visas (VR): Henley and Partners has created a Visa Restrictions Index that can be effectively utilized as a proxy measure for freedom of movement. The index reveals the number of countries that can be entered without a visa by a citizen of the country in question. Henley and Partners notes “In today's globalized world, visa restrictions play an important role in controlling the movement of foreign nationals across borders.” (Henley & Partners, 2013). VR can be the result of the country of origin, the entrance country, and/or the relationship between both countries. VR are examined in the base year 2008 as well as 2010 and 2012 to investigate existence of lack of a lag relationship.

Independent variable of economic development (GNI): Economic development is determined via GNI per capita as obtained from the World Bank. It is defined as
“...the gross national income, converted to U.S. dollars using the World Bank Atlas method, divided by the midyear population. GNI is the sum of value added by all resident producers plus any product taxes (less subsidies) not included in the valuation of output plus net receipts of primary income (compensation of employees and property income) from abroad” (World Bank, 2011).

The variable of GNI per capita was logarithmically transformed for the study in order to avoid a skew in the data and to validate its usage.

**Independent variable of freedom of the press (IFOP):** Freedom House provides the data for freedom of the press. Freedom of press is an index that encompasses multiple aspects of free communication and media regulations. Freedom House states, “Ratings are determined through an examination of three broad categories: the legal environment in which media operate; political influences on reporting and access to information; and economic pressures on content and the dissemination of news.” A ranking between 0 and 100 is assigned to each country that is examined in regards to the three categories. A 0 signifies the most free and 100 signifies the least free. For this study these numbers are inverted so that 0 signifies least free and 100 signifies most free. The 2009 FOP release is utilized for the data because it covers the year of 2008.

**Independent variable of state fragility (ISF):** ISF is calculated by the Center for Systemic Peace. The state fragility index represents the stability and functionality of state governments. Each country is scored in regards to its effectiveness and legitimacy in security, political, economic, and social categories. The numbers are added together to come up with the state fragility score. The Center for Systemic Peace describes the process as follows:

Each of the Matrix indicators is rated on a four-point fragility scale: 0 “no fragility,” 1 “low fragility,” 2 “medium fragility,” and 3 “high fragility” with the exception of the
Economic Effectiveness indicator, which is rated on a five-point fragility scale (including 4 “extreme fragility”). The State Fragility Index, then, combines scores on the eight indicators and ranges from 0 “no fragility” to 25 “extreme fragility.”

This study takes the inverse of the numbers (i.e. 0 represents extreme fragility and 25 represents no fragility) in order to allow for a direct relationship to be investigated.

**Independent variable of gender equality (IGII):** Gender equality is obtained through the inverse of the Gender Inequality Index from the 2010 United Nations Development Program Human Development Report. (The 2010 report contained the index for the year 2008.) Countries were given a value from 0 to 1 with 0 indicating complete equality between men and women and 1 signaling the worst conditions of inequality. The value is constructed via examining three different categories of reproductive health, empowerment, and the labor market. The data factors utilized in the index are maternal mortality ratio, adolescent fertility rate, share of parliamentary seats held by each sex, attainment at secondary and higher education levels, and labor market participation rate. A five-step process of complex aggregation techniques and calculations is used to come up with the final number. The numbers are then inverted in order to demonstrate the level of gender equality instead of the level of gender inequality. (i.e. 0 indicates the most inequality and 1 indicates complete equality.)

**Independent variable of freedom of religion (FOR):** FOR is obtained from the CIRI Human Rights Database. FOR is determined via the examination of numerous factors like the ability to advocate political views, the ability to publish religious materials, and the attempt to convert (proselytize) others are considered in the scoring determination. Countries are assigned a 0, 1, or 2. A 0 represents severe religious restrictions, a 1 represents partially repressed religion, and a 2 represents fairly holistic freedom of religion.
Appendix B: Data Tables

Table 1: Bivariate correlation between Freedom of Foreign Movement and Visa Restrictions

<table>
<thead>
<tr>
<th>Visa Freedom (VR) 2008</th>
<th>Freedom of Movement (FOM) 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correlation Coefficient</td>
<td>.362**</td>
</tr>
<tr>
<td>Significance (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>146</td>
</tr>
</tbody>
</table>

Table 2: Initial linear regression analysis based off of Visa Restrictions in 2008

Adjusted R-squared: 71.6%
F-score: 51.901

<table>
<thead>
<tr>
<th>Beta Weight</th>
<th>t score</th>
<th>Significance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>--</td>
<td>-4.049</td>
<td>.000</td>
</tr>
<tr>
<td>IGII2008</td>
<td>.467</td>
<td>4.899</td>
<td>.000</td>
</tr>
<tr>
<td>ISF2008</td>
<td>-.051</td>
<td>-.438</td>
<td>.662</td>
</tr>
<tr>
<td>IFOP</td>
<td>.392</td>
<td>5.332</td>
<td>.000</td>
</tr>
<tr>
<td>FOR2008</td>
<td>.049</td>
<td>.754</td>
<td>.452</td>
</tr>
<tr>
<td>TransformedGNI2008</td>
<td>.193</td>
<td>1.830</td>
<td>.070</td>
</tr>
</tbody>
</table>

Table 3: Final synchronic linear regression analysis based off of Visa Restrictions in 2008

Adjusted R-squared: 79.4%
F-score: 33.03

<table>
<thead>
<tr>
<th>Beta Weight</th>
<th>t score</th>
<th>Significance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>--</td>
<td>-2.470</td>
<td>.022</td>
</tr>
<tr>
<td>IFOP2008</td>
<td>.359</td>
<td>2.967</td>
<td>.007</td>
</tr>
<tr>
<td>IGII2008</td>
<td>.612</td>
<td>5.067</td>
<td>.000</td>
</tr>
<tr>
<td>TransformedGNI2008</td>
<td>.174</td>
<td>1.899</td>
<td>.071</td>
</tr>
</tbody>
</table>

Table 4: Final linear regression analysis based off of Visa Restrictions in 2010

Adjusted R-squared: 76.4%
F-score: 115.280

<table>
<thead>
<tr>
<th>Beta Weight</th>
<th>t score</th>
<th>Significance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>--</td>
<td>-3.877</td>
<td>.000</td>
</tr>
<tr>
<td>IFOP2008</td>
<td>.400</td>
<td>7.358</td>
<td>.000</td>
</tr>
<tr>
<td>IGII2008</td>
<td>.467</td>
<td>5.934</td>
<td>.000</td>
</tr>
<tr>
<td>TransformedGNI2008</td>
<td>.168</td>
<td>2.134</td>
<td>.035</td>
</tr>
</tbody>
</table>

Table 5: Final linear regression analysis based off of Visa Restrictions in 2012

Adjusted R-squared: 77.9%
F-score: 126.843

<table>
<thead>
<tr>
<th>Beta Weight</th>
<th>t score</th>
<th>Significance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>--</td>
<td>-4.049</td>
<td>.000</td>
</tr>
<tr>
<td>IFOP2008</td>
<td>.397</td>
<td>7.570</td>
<td>.000</td>
</tr>
<tr>
<td>IGII2008</td>
<td>.482</td>
<td>6.359</td>
<td>.000</td>
</tr>
<tr>
<td>TransformedGNI2008</td>
<td>.164</td>
<td>2.172</td>
<td>.032</td>
</tr>
</tbody>
</table>
REFERENCES


*Universal Declaration of Human Rights*, General Assemble Resolution 217A (III), UN GAOR, 3rd session, UN Doc A/810 (10 December 1948) articles 13-14


