

# Human Trafficking: The Role of Culture

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## Abstract

Human trafficking, like any market, involves both a supply and a demand. In reference to the demand side, wealth has been generally recognized as the significant 'pull' factor to human trafficking; however, a debate remains, with exception to income, as to the significant 'push' or supply factors. It is argued here that culture is an important, overlooked push factor. Using Hofstede's (1980) four dimensions of national culture, the primary purpose of this study is to empirically test to role of culture as a 'push' factor in human trafficking. An ordered probit regression is estimated using the UNODC's (2006) scaled measure of national human trafficking outflows across countries. While controlling for economic development, the impact of Hofstede's (1980) four cultural dimensions on human trafficking outflows are examined. The analysis provides empirical evidence that two of the four Hofstede (1980) cultural dimensions significantly affect the likelihood that a country has a higher outflow of people being trafficked. The results suggest that efforts to combat human trafficking should include educational campaigns that are tailored to address the cultural dimensions within a country.

**Keywords:** Human Trafficking, Push Factors, Culture, Individualism, Power Distance

## 1. Introduction

Human trafficking is arguably one of the most disturbing forms of organized crime. Victims of human trafficking are subjected to gross assaults of their personal freedoms varying from forced labor, prostitution, bonded labor, domestic servitude, pornography, organized begging, and organ harvesting (Agbu, 2003; U.S. Department of State, 2016). In the United Nations Office of Drugs and Crime (UNODC) Trafficking Protocol (2004, p. 42), the UNODC defines human trafficking as "the recruitment, transport, transfer, harbouring or receipt of a person by such means as threat or use of force or other forms of coercion, of abduction, of fraud or deception for the purpose of exploitation." While such practices are almost universally abhorred, human trafficking is rampant throughout the globe.

Human trafficking affects every country in the world and is the fastest growing form of organized crime (UNODC, n.d.). Perhaps even more alarming, crime experts have forecasted that human trafficking will surpass both drug and arms trafficking in incidence in the next ten years, becoming the largest form of organized crime (Wheaton, Schauer, and Galli, 2010). The statistics are staggering as the U.S. Department of State Trafficking in Persons Report (2012) estimates that each year approximately 600,000 to 800,000 men, women, and children fall victim to traffickers, joining the 27 million people who are estimated to be living as human trafficking victims (U.S. Department of State, 2012). The majority of victims tend to be impoverished, living in unstable, conflict areas and are in search of low-skilled labor opportunities. Traffickers prey on these vulnerable individuals, many of whom are single mothers and children, with promises of respectable work and a better life; however, once deceived and relocated, the victims' passports and identification are typically seized (Adepoju, 2005; Gajic-Veljanoski & Stewart, 2007). Victims often find themselves without identification in a foreign country and without an understanding of their legal rights (if any), nor the means to communicate with authorities due to language or physical barriers. Under these conditions victims are controlled through violence, coercion, and threats (Sigmon, 2008).

Despite its growth and relevance to policy makers, academic research on human trafficking is in the early stages and extensive studies are relatively scarce (Cho, 2015; Mahmoud and Tresbesch, 2009). Nonetheless, a few empirical studies have identified both human trafficking 'pull' and 'push' factors. In terms of the 'pull' factors, or the demand side of human trafficking, Cho (2015) offers empirical evidence that wealthier countries are more likely to be the 'destination' countries, or the recipients of human trafficking victims compared to lower income countries. The reasoning for this result is that wealthier countries tend to have a greater need for low-skilled labor and the means to pay the traffickers. While there are exceptions, there is a general acknowledgement that the majority of victims are trafficked to relatively wealthier countries.

The 'push' factors are akin to the supply side of human trafficking, or the factors that drive persons to seek employment and a better life elsewhere, thus creating a pool of potential victims. Using varying empirical measures, Bales (2007), Cho (2015), and Rao and Presenti (2012) have identified one or more of the following as significant push factors; poverty, crime, institutional quality, information, and conflict. The push factors are generally considered to be low income levels and various forms of instability; however, with the exception of income, the significance of the other instability measures tend to vary by study and even within studies. In sum, poverty has been the most widely identified push factor and there is general consensus in the literature that a low

income level is a significant factor driving individuals to seek better employment opportunities. Nonetheless, while poor economic conditions can clearly create the impetus for people to seek work and a better life elsewhere, not every impoverished country has a high prevalence of human trafficking victims. Jac-Kucharski (2012, p. 151) states, “there are many poor and autocratic countries in the world, (but) not all of them have high numbers of human trafficking victims.” As Jac-Kucharski (2012) suggests, there are likely to be other factors beyond poverty that affect a person’s decision to leave their home and seek a better life elsewhere. Thus, while wealth has been generally recognized as the significant ‘pull’ factor to human trafficking, a debate remains, with exception to income, regarding the other significant ‘push’ factors.

It is argued here that culture is an important push factor that has been possibility overlooked. While poor economic conditions lay the foundation to seek better work opportunities, the decision to leave one’s home and, in many cases, one’s family arguably involves a multitude of factors, many of which are tied to cultural values. When contemplating the decision to migrate in search of a better life, individuals are likely to consider how their move will be supported or shunned by their community. Are decisions to better oneself accepted? Is it permissible to leave one’s community and possibly break away from traditions? Cultural values are likely to influence not only whether an individual even considers relocating, but also the decision to act and leave one’s home in search of a better life. As Goldschmidt (2006, p. 181) states, “culture should be the prime focus for explaining individual actions in society and for describing economic phenomena” and Guiso et al. (2006) argue that cultural-based explanations can enhance our understanding of economic outcomes. Further, Granato et al. (1996, p. 607) state that, “it is not an either/or proposition: culture and economic factors play complementary roles.” These studies suggest that culture plays a significant role in an individual’s economic decision making and ignoring the effect of culture leaves us with an incomplete picture of economic outcomes.

It is theorized here that cultural values play a significant role in supply side of human trafficking. Using a cross-country data set, the primary purpose of this study is to empirically test to role of culture as a ‘push’ factor in human trafficking while controlling for income levels. The next section offers a more extensive review of the human trafficking and cultural values literature and presents a theoretical argument for the role of culture as a push factor.

## **2. Background on Human Trafficking and Culture**

As noted above, the academic research on human trafficking is scarce, especially in economics (Mahmoud and Tresbesch, 2009; Rao and Presenti, 2012). Much of the existing research has identified the intrinsic link between human trafficking and migration (Cho, 2015; Mahmoud and Tresbesch, 2009; Rao and Presenti, 2012). Migrating populations tend to be vulnerable populations as they are often poor, less informed, and face language barriers. In their weakened state traffickers are more likely to prey on migrating populations, or those who are seeking to migrate. Given the established link between human trafficking and migration in the literature, researchers have recently considered the preceding step to identify the factors that drive people to seek a better life.

In this vein, in an extensive cross-country analysis, Cho (2015) finds that income, fertility rates, information flows, percentage of Muslims in the total population, transitioning economies, and the share of food, beverage, and tobacco industries in GDP are the most robust human trafficking push factors. In reference to female victims, Jac-Kucharski (2012) identifies income inequality and poor protection of women’s rights as factors that are likely to create a pool of human trafficking victims and, in a sub-Saharan Africa study, Adepoju (2005, pg. 83) describes how women are often victimized by traffickers “...as a result of poverty, rural-urban migration, unemployment, broken homes, displacement, and peer influence.” Further, in a regression analysis Bales (2007) finds that poverty, conflict, and the prevalence of corruption are all predictors of human trafficking. Bales (2007, pg. 269) summarizes the broad factors that cause human trafficking as “...the greed of criminals, economic pressures, political instability, and social and cultural factors.” With the notable exception of poverty or income levels, the other factors identified as drivers of human trafficking tend to vary by study and even within studies.

### *2.1 Culture as a Push Factor*

Mahmoud and Tresbesch (2009, pg. 4) state, “(t)hese factors certainly exacerbate the trafficking problem, but may not explain it at its core.” This sentiment is echoed by Jac-Kucharski (2012) who notes that there are many countries in which the conditions are ripe for human trafficking, but not all of these countries have a high prevalence of human trafficking victims. Thus, in regard to the drivers or push factors of human trafficking, there is a missing piece. Mahmoud and Tresbesch (2009, pg. 4) suggest that this underlying push factor “...is first and foremost the wish for a better life abroad that puts millions of people at risk for exploitation.” This asks the question, what are the factors that drive some living in poor economic conditions to seek a better life abroad, while others living in similar conditions choose to stay? It is hypothesized here that cultural values play a critical role in this decision. Further, with the exception of income, the other push factors identified in the

literature vary by study, which can mean that these factors are serving as proxies for other unidentified factor(s) such as culture. For example, Cho (2015) finds that the percentage of Muslims in the total population negatively affects a country's outflow of human trafficking victims and it is possible that the percentage of Muslims within a country is serving as a proxy for cultural values.

Culture has been defined by a multitude of researchers and there is not a single, agreed upon definition in the literature. Guiso et al. (2006, pg. 2) define culture as, "...those customary beliefs and values that ethnic, religious, and social groups transmit fairly unchanged from generation to generation." Granato et al. (1996, pg. 608) refer to culture as "...a system of basic common beliefs that help shape the behavior of people in a given society." Kroeber and Kluckhohn (1952, pg. 13) describe culture as, "...patterns, explicit and implicit, of and for behavior acquired and transmitted by symbols, constituting the distinctive achievement of human groups." Further, Hofstede (1980, pg. 21) defines national culture as the "...collective programming of the mind which distinguishes the members of one human group from another." While the definitions clearly differ, a common thread appears to be that culture is considered to be a system of beliefs and/or values within a group that influence the behavior of individuals in this groups. Further, these beliefs and/or values differ from group to group and are passed down generationally to group members. Although the definitions suggest an intrinsic link between cultural values and individual decision making, Getz and Volkema (2001) explicitly state that culture affects both individual and organizational behavior and that cultural values influence decisions.

In regards to the push factors of human trafficking and the decision to leave one's home in search of better employment opportunities, the previous research has identified a connection between culture and work decisions. Specifically, Fernández and Fogli (2005) provide empirical evidence that cultural values play a significant role in work and fertility choices of American women. In a cross-country study, Sagie et al. (1996a) find that differences in cultural values affect individuals' attitudes toward personal of shared responsibilities in the work place. Sagie et al. (1996b) define work values as the importance an individual gives to an outcome obtained at work and note that culture plays a significant role in the pattern of work values. Further, Sagie et al. (1996b) describe culture as the background data, or the antecedent to work values. In reference to making decisions in which individuals lack previous experience, Guiso et al. (2006) note that in these situations, which include work related decisions, choices must be based on prior beliefs and that culture plays an important role.

In reference to work values literature, Sagie et al. (1996b) state that the literature tends to overlook cross-cultural dimensions that they argue are most relevant to the work domain. In sum, researchers such as Goldschmidt (2006) and Granato et al. (1996) argue that culture is an integral part of socio-economic outcomes and that models that include both culture and economic values are superior to those that emphasize only one of the two. As Granato et al. (1996, pg. 626) describe, both cultural and economic arguments matter and "(n)either supplants the other." In summary, Granato et al. (1996) state that future research needs to treat these two explanations – economic and culture – as complementary rather than separate.

### **3. Measuring Human Trafficking and Culture**

#### *3.1 Human Trafficking*

Many researchers such as Cho (2015), Crane (2013), Gajic-Veljanoski and Stewart (2007), and Mahmoud and Trebesch (2009) have noted the exceptional challenge of obtaining reliable, representative data on human trafficking. By its very nature, human trafficking is an underground, criminal activity. Traffickers exert much effort to conceal the crime and the victims are often unable to report the crime due to a lack of information and physical and/or language barriers. Cho (2015) notes that it is very difficult to distinguish incidents of human trafficking from illegal migration and forced labor. As Aronowitz (2009, pg. 15) states, "(b)ecause of its clandestine nature and the hidden economies in which trafficked victims are forced to work, accurate statistics on the magnitude of the problem are elusive and available statistics are notoriously unreliable." Thus, obtaining reliable data on human trafficking is remarkably difficult and any measure of human trafficking should be considered an estimate.

Despite these challenges, the UNODC (2006) offers an incident reporting index that grades the level of human trafficking in/outflows by country on a scale of 1 to 5, where 5 indicates the highest degree of human trafficking in/outflows. The index is based on incidences codes in international reports and media that are aggregated over the period 1996 to 2003 and the indices are available for up to 161 countries. Given the focus on the 'push' factors of human trafficking, the UNODC (2006) scaled data on country outflows is used to proxy the level of human trafficking supply. The UNODC (2006) provides scaled, outflow data for 127 countries.

In reference to the outflow data, the UNODC places eleven countries (Albania, Belarus, Bulgaria, China, Lithuania, Nigeria, Moldova, Romania, Russia, Thailand, and Ukraine) at the 'Very High' end of the origin country scale, representing the countries with the greatest number human trafficking victims. Armenia, Cambodia, Mexico, Philippines, and Poland are examples of countries listed on the 'High' origin country scale and examples of countries at 'Medium' level are Cameroon, Indonesia, Singapore, and Turkey. Examples at the 'Low' end are Argentina, Botswana, Canada, Rwanda, and the United States and examples at the 'Very Low'

scale are Brunei, Chili, Uruguay, and Yemen. These countries are offered for example purposes and a complete list of countries is provided by the UNODC (2006).

### 3.2 Culture

In reference to culture, Hofstede's (1980) dimensions of national culture are used to proxy cultural values. Hofstede (1980) originally identified four statistically independent cultural dimensions through an analysis for survey data on work related values given to more than 117,000 IBM employees working in 40 different countries from 1967 to 1973. Hofstede later extended his analysis to cover approximately 70 countries. Hofstede's (1980) labeled the four dimensions of national culture as 'power distance', 'individualism', 'masculinity', and 'uncertainty avoidance'. Researchers such as Brett and Okumura (1998), Schwartz (1994), and Steenkamp (2001) have criticized Hofstede's cultural dimensions; however, as Drogendijk and Slangen (2006) discuss, over time the cultural dimensions have been validated by several studies (Van Oudenhoven, 2001 and Søndergaard, 1994). A discussion of each of the four national cultural dimensions follows with a hypothesized relationship to the prevalence of human trafficking victims.

#### 3.2.1 Power Distance

Hofstede (2010, pg. 61) defines the power distance dimension as "the extent to which the less powerful members of institutions and organizations within a country expect and accept that power is distributed unequally." Hofstede (2010) notes that institutions are defined as family, school, and the community and organizations are places of work. In regard to high power distance countries, Husted (2000) notes that these countries are prone to paternalism, referring to a system in which those in power provide favors to subordinates in exchange for their loyalty. In these environments, Husted (2000) suggests that subordinates are more likely to tolerate a superior's unethical or questionable behavior. Cohen et al. (1996) take this argument one step further and suggest that those living in high power distance countries are more likely to view any questionable business practice as ethical. Further, in high power distance countries Getz and Volkema (2001) theorize that, although the underclass are more likely to accept large disparities in power and wealth, this situation is unlikely to be preferred by the underclass. Getz and Volkema (2001) argue that in these environments, the underclass may try to find creative ways for raising their standard of living and this is likely to intensify in times of economic hardship.

Power distance should play a role in the decision to migrate in search of a better life elsewhere. Specifically, if those living in high power distance countries are more likely to view any questionable or suspect business practice as ethical, they are more likely to be unaware that they could be getting involved in activities that are illegal or criminal. Further, following Getz and Volkema (2001), in high power distance countries the underclass accept their condition; however, there must also be the acknowledgement that by accepting their condition, the underclass must also recognize that in order to elevate their standard of living, they need to consider innovative methods outside of their institutional structure. In other words, in high power distance countries, the underclass accept the unequal distribution of power and wealth, but as Getz and Volkema (2001) discuss, this does not mean this is the underclass' preferred state. Further, if the underclass desire to change their economic state, they are less likely to consider ways to advance within their society as there is an understanding of the class system and there is little to no means for movement from under to upper class. Thus, in order to improve their standard of living, the underclass are more likely to consider methods outside of their institutional structure, which can include migrating elsewhere in search of better employment opportunities. Thus it is hypothesized that:

*H1: The greater the power distance within a country, the greater its human trafficking outflow.*

#### 3.2.2 Individualism

Hofstede (2010, pg. 92) defines the individualism dimension as pertaining to "societies in which the ties between individuals are loose: everyone is expected to look after him- or herself and his or her immediate family." On the other end of the scale, Hofstede (2010, pg. 92) defines collectivism as pertaining to "societies in which people from birth onward are integrated into strong, cohesive in-groups, which throughout people's lifetime continue to protect them in exchange for unquestioning loyalty." Ralston et al. (1997) state that the individualism-collectivism dimension has widely been recognized as a powerful indicator of differences among societies. Further, both Sagie et al. (1996) and Husted (2000) note that this dimension is particularly related to the work values domain and Husted (2000) states that this dimension is one of the most widely used cultural dimensions in cross-cultural management research. In individualistic cultures, Getz and Volkema (2001) note that individuals set their objectives based on what is best for themselves. Alternatively, in collectivist societies, Triandi and Bhawuk (1997) argue that deviations from group norms and customs are considerably less tolerated relative to such deviations in individualistic societies.

The degree of individualism within a country should be closely linked to the decision to migrate in search of a better life. Following Hofstede (2010) and Getz and Volkema (2001), in individualistic societies, decisions are made based on what is best for the individual and their immediate family. In other words, in individualistic societies, there is an expectation that an individual will place their needs and desires above that of the group or the community. In these societies and in times of economic hardship, the desire to better oneself and their

immediate family by migrating in search of better employment opportunities is more likely to be an accepted and perhaps even expected. Further, as Triandi and Bhawuk (1997) describe, individualistic societies are more tolerant of decisions to deviate from the group. In reference to migration, individuals are not only deviating from their group, but they are physically leaving their community. A country with a strong individualistic culture is more likely to support an individual's decision to migrate in search of a better life, while this same decision is likely to be shunned in a collective society. In sum, those facing economic hardship in an individualistic society are more likely to consider the possibility of leaving their community in pursuit of a better life and, considering that a decision to migrate is more likely to be supported in such societies, individuals facing these decisions are more apt to act on their desires and chose to migrate. Thus, it is hypothesized that:

*H2: The greater the individualism within a country, the greater its human trafficking outflow.*

### 3.2.3 Masculinity

Hofstede (2010, pg. 140) defines a society as masculine “when emotional gender roles are clearly distinct: men are supposed to be assertive, tough, and focused on material success, whereas women are supposed to be more modest, tender, and concerned with the quality of life.” Further, Hofstede (2010, pg. 140) defines a society as feminine “when emotional gender roles overlap: both men and women are supposed to be modest, tender, and concerned with the quality of life.” In masculine societies, Getz and Volkema (2001) discuss the importance of material success and the emphasis on competition. In feminine societies, Getz and Volkema (2001) describe the emphasis on values such as helpfulness, nurturance, and humility.

In reference to the decision to seek a better life, the above suggests that individuals in masculine societies should be more willing to migrate to search for material success, or at least better economic conditions. Nonetheless, researchers have been divided on the role of masculine culture in work related situations. Specifically, Cohen et al. (1996) are divided on the directional effect of masculinity on the likelihood of a culture to view questionable business practices as ethical. On the one hand, a masculine society triumphs achievement and competition and it would appear that, in a masculine society, those faced with economic hardship would be expected to do anything within their means to obtain better economic conditions. Alternatively, feminine societies value quality of life, which decreases with economic hardship. While an argument can be made that individuals from feminine cultures are likely to seek a better quality of life, it is theorized here that masculine societies are more likely to migrate in search of economic success. Considering that essentially all of the values in a masculine society are linked to material success, it is hypothesized that:

*H3: The greater the masculinity within a country, the greater its human trafficking outflow.*

### 3.2.4 Uncertainty Avoidance

Hofstede (2010, pg. 191) defines the uncertainty avoidance dimension as the “extent to which the members of a culture feel threatened by ambiguous or unknown situations.” Husted (2000) refers to uncertainty avoidance as an intolerance of ambiguity. Getz and Volkema (2001) describe that during times of economic hardship, the structure of high uncertainty avoidance cultures are likely to support measures of economic austerity and individuals facing risks to their essential needs are more likely to work through informal channels to meet their needs. Interestingly, Husted (2000) states that greater tolerance for ambiguity, or low uncertainty avoidance, fosters flexibility, creativity, and innovation.

Getz and Volkema (2001) and Husted (2000) suggest competing hypotheses for the role of uncertainty avoidance in the decision to migrate in search of a better life. Following Getz and Volkema (2001), in high uncertainty avoidance cultures, individuals facing the uncertainty associated with economic hardship are more likely to consider other channels to improve their economic state and create the desired stability. Alternatively, Husted (2000) suggests that those living in high uncertainty avoidance cultures may not have the flexibility needed to consider migration as it can be considered radical or innovative solution. While the literature suggests opposing effects of uncertainty avoidance on the decision to seek a better life elsewhere, it is hypothesized that those living in high uncertainty avoidance cultures are less likely to migrate as there is considerable uncertainty and ambiguity associated with migration. Thus, the fourth hypothesis is stated:

*H4: The greater the uncertainty avoidance within a country, the lesser its human trafficking outflow.*

Each of Hofstede's (1980) cultural dimensions are scaled from zero to 100. Higher values indicate a greater degree of the cultural dimension and lower values suggest less of the cultural dimension. For example, a country with an Individualism score close to 100 would be considered highly individualistic, whereas a country with an Individualism score closer to zero would be considered to be strongly collective.

## 4. Methodology

### 4.1 Ordered Probit Model and Assumptions

As described above, the UNODC grades the level of human trafficking outflows by country on a scale of 1 to 5 with a value of 1 representing a ‘Very Low’ level of human trafficking outflow, 2 representing a ‘Low’ level, 3 a ‘Medium’ level, 4 a ‘High’ level, and 5 a ‘Very High’ level. Given the discrete and ordered nature of the outflow data, an ordered probit model is selected to test the above hypotheses. A few assumptions are required for an

ordered probit model and warrant discussion. First, it is assumed that the error term is normally distributed and maximum likelihood is used to estimate the coefficients.

Second, and perhaps more importantly, the proportional odds ratio, or parallel regression, is also assumed. This assumption presumes that the relationship between all pairs of groups is same, yielding only one set of coefficients across all groups. In other words, the set of coefficients that describe the relationship between the variables in the “Very Low” human trafficking outflow group is assumed to be the same as the set of coefficients that describe the relationship between the variables in all other groups; ‘Low’, ‘Medium’, ‘High’, and ‘Very High’, which returns only one set of coefficients across all cut-off points in the ordered probit model. The proportional odds ratio assumption is made in recognition of the relatively small data set and the imperfect nature of human trafficking data. Specifically, the UNODC (2006) ranks countries on their human trafficking outflows based on aggregated incidences codes in international reports and media and while this approach and methodology is sound, it must be acknowledged that given the clandestine nature of the activity, any measure of human trafficking should be considered an estimate of a true, but unknown value. Assuming a unique set of coefficients for each of the UNODC (2006) groups presumes that the categories or groups are perfectly defined and clearly distinct from each other, which, given the relatively small data set and challenges with accurately measuring human trafficking data, is difficult to justify. Given the nature of the data, the proportional odds ratio assumption is made.

#### 4.2 Control Factors

Although the cultural variables described above of are of primary interest, it is important to control for other factor(s) identified as significant ‘push’ factors. As discussed above, with the exception of income, other human trafficking push factors tend to vary by study and even within studies, which can mean that these factors are correlated with other unidentified factor(s) such as culture. Given the focus on the role that culture plays as a push factor, the level of income, or the level of economic development, is used as the primary control factor. Specifically, the (ln) GDDPC is used as the measure of income, or the overall level of economic development at the country level as this factor has been consistently identified by researchers as a significant driver of human trafficking. Further, many of the arguments regarding the effect of the cultural dimensions on the decision to migrate are based on economic conditions, thus controlling for income levels is necessary.

#### 4.3 Descriptive Statistics

Table 1. Descriptive Statistics and Correlation Matrix

	<i>PDI</i>	<i>IDV</i>	<i>MAS</i>	<i>UAI</i>	<i>LnGDPPC</i>
Mean	67.65	34.04	47.24	65.73	8.88
St. Deviation	16.98	20.65	17.15	22.49	1.18
Minimum	35	6	9	8	5.87
Maximum	100	91	100	98	10.89
Count	51	51	51	51	51
	<i>PDI</i>	<i>IDV</i>	<i>MAS</i>	<i>UAI</i>	<i>LnGDPPC</i>
<i>PDI</i>	1				
<i>IDV</i>	-0.54	1			
<i>MAS</i>	0.315	0.056	1		
<i>UAI</i>	0.06	-0.1	-0.21	1	
<i>LnGDPPC</i>	-0.26	0.478	-0.02	0.119	1

Table 1 provides the summary statistics and correlation estimates for each of the variables included in the analysis. As indicated in Table 1, the data is available for 51 countries, with the culture data generally being the limiting factor. The correlation matrix indicates that the independent variables are not highly correlated. Further, Table 2 provides a list of the countries used in the analysis divided into the UNODC’s (2006) five categories. Given the relatively few observations in some of the categories, two models are estimated. The first model uses all five categories of the UNODC (2006) data in the dependent variable; however, the first model has a limited number of observations in some of the categories, which lessens confidence in the estimation results. Thus, a second model is estimated using a reduced number of UNODC (2006) groupings. Specifically, the second model reduces the five categories to three by collapsing the groupings of ‘Very Low’ and ‘Low’ into one category and collapsing the groupings of ‘Very High’ and ‘High’ into one category, while maintaining the ‘Medium’ category.

Table 2. Countries by UNODC (2006) Outflow Category

Very High	High	Medium	Low	Very Low
Bulgaria	Bangladesh	Croatia	Argentina	Chile
China	Brazil	Ecuador	Canada	Costa Rica
Lithuania	Colombia	El Salvador	Iran	Jamaica
Nigeria	Czech Rep	Ethiopia	Korea South	Netherlands
Romania	Estonia	Hong Kong	Panama	Uruguay
Russia	Ghana	Indonesia	U.S.A.	
Thailand	Guatemala	Kenya		
	Hungary	Malaysia		
	India	Peru		
	Latvia	Serbia		
	Mexico	Singapore		
	Morocco	Slovenia		
	Pakistan	Tanzania		
	Philippines	Turkey		
	Poland	Venezuela		
	Slovak Rep	Zambia		
	Vietnam			

#### 4.4 Ordered Probit Model

Model 1 is defined as:

$$y^* = \beta_0 + \beta_1 \ln GDPPC + \beta_2 PDI + \beta_3 IDV + \beta_4 MAS + \beta_5 UAI + \epsilon$$

Where  $y^*$  is the UNODC's scaled incident reporting index for human trafficking origin countries with values of 5 representing those countries with the greatest human trafficking outflow, or the countries from which the most human trafficking victims originated, and 1 the least. Further,  $\ln GDPPC$  is the natural log of GDP per capita,  $PDI$  is the power distance cultural dimension,  $IDV$  the individualism dimension,  $MAS$  is the masculinity dimension, and  $UAI$  is the uncertainty avoidance dimension. The estimate of  $\beta_1$  is expected to be negative as lower income, or greater economic hardship, encourages migration, thus increasing the pool of potential victims. Further, the hypotheses suggest a positive sign on the estimates of  $\beta_2$ ,  $\beta_3$ , and  $\beta_4$ , and a negative sign on  $\beta_5$  as cultures that tend to have greater power distance, individualism, masculine values, and lower uncertainty avoidance are theorized to encourage individuals to migrate in search of a better life. Model 2 is defined similarly to Model 1 with the exception that  $y^*$  contains the reduced number of categories of 'Low', 'Medium', and 'High'.

## 5. Results

The estimated results for Model 1 are presented in Table 3 below.

Table 3: Model 1 Estimation Results

Parameter	Estimate	Standard Error	Chi-Square	p-value
$\mu_5$ (Intercept 5)	-1.8990	1.5429	1.5149	0.2184
$\mu_4$ (Intercept 4)	-0.7759	1.5283	0.2578	0.6117
$\mu_3$ (Intercept 3)	0.2609	1.5286	0.0291	0.8645
$\mu_2$ (Intercept 2)	0.9057	1.5364	0.3475	0.5555
$\ln GDPPC$	-0.3037*	0.1516	4.0125	0.0452
$PDI$	0.0368**	0.0124	8.8507	0.0029
$IDV$	0.0224**	0.0103	4.7564	0.0292
$MAS$	-0.00270	0.00987	0.0747	0.7846
$UAI$	0.00332	0.00702	0.2239	0.6361
<b>Likelihood Ratio Test</b>			13.5741*	0.0186
<b>Mean Marginal Effects</b>				
$\ln GDPPC$	-0.3087966			
$PDI$	0.0347263			
$IDV$	0.0206330			
$MAS$	-0.0014239			
$UAI$	0.0028941			

\* Significant at 95% \*\* Significant at 99%

As expected, for Model 1, the estimated sign on  $\beta_1$  is negative and significant, indicating that countries with

lower income per capita are more likely to be associated with a greater prevalence of human trafficking outflows. In other words, low income per capita countries are more likely to be the countries of origin for human trafficking victims. In reference to the hypothesized relationships, H1 is supported as the estimated coefficient for  $\beta_2$  is positive and significant, offering evidence that high power distance countries are more likely to be countries of origin for human trafficking victims. Further, H2 is also supported given the positive and significant sign on  $\beta_3$ , which indicates that individualistic countries are more likely to be countries of origin for human trafficking victims. H3 and H4 are not supported as the estimated coefficients on  $\beta_4$  and  $\beta_5$  are insignificant. However, as discussed above, there are opposing arguments for the directional effect of both the masculinity and uncertainty avoidance dimensions on the prevalence of human trafficking victims, making it possible for these competing effects to negate each other in this analysis.

The (mean) marginal effects of each of the variables are also provided in Table 3. Given the continuous nature of the independent variables, the (mean) marginal effects measure the instantaneous rate of change in  $y^*$  given a one unit increase in the (respective) independent variable. For example, for *PDI*, if a country's *PDI* value increases by 1 (recall the Hofstede variables are scored on a zero to 100 scale), the dependent variable is estimated to increase by 0.0348 points on the one to five scale. The mean marginal effects for the remaining culture variables are interpreted similarly. For *LnGDPPC* the interpretation is slightly different as it is in log form. Specifically, a ten percent increase in a country's GDPPC is estimated to decrease the dependent variable's value by 0.026 points on the one to five scale.

Although the estimation results from Model 1 offer some support of the hypotheses, there are a limited number of observations in each of the five categories. Model 2 is estimated with the reduced number of categories and the estimated results are provided in Table 4. As described above, the dependent variable for Model 2 represents only three categories as the bottom two and top two UNODC (2006) categories are collapsed. This model uses increased sample sizes across the categories and yields results that closely mirror those of Model 1. Specifically, the estimated results indicate support of H1 and H2 with positive and significant coefficients for  $\beta_2$  and  $\beta_3$ , and  $\beta_1$  remains negative and significant. Thus, reducing the number of categories did not significantly affect the overall hypothesized results; however, the increased sample size within the categories offers more support for the findings.

Table 4: Model 2 Estimation Results

Parameter	Estimate	Standard Error	Chi-Square	p-value
$\mu_3$ (Intercept 3)	-0.5300	1.8162	0.0852	0.7704
$\mu_2$ (Intercept 2)	0.5489	1.8179	0.0912	0.7627
<i>LnGDPPC</i>	-0.4270*	0.1765	5.8536	0.0155
<i>PDI</i>	0.0407**	0.0148	7.6035	0.0058
<i>IDV</i>	0.0291*	0.0119	5.9200	0.0150
<i>MAS</i>	0.00508	0.0112	0.2073	0.6489
<i>UAI</i>	0.00358	0.00788	0.2065	0.6495
<b>Likelihood Ratio Test</b>				
			16.5114**	0.0055
<b>Mean Marginal Effects</b>				
<i>LnGDPPC</i>			-0.2665557	
<i>PDI</i>			0.0213528	
<i>IDV</i>			0.0153001	
<i>MAS</i>			0.0017785	
<i>UAI</i>			0.0026445	

\* Significant at 95% \*\* Significant at 99%

## 6. Summary and Discussion

Human trafficking is a vile crime that exists in every region of the world and it is growing and spreading at an alarming rate. Efforts to combat human trafficking must consider both the supply and the demand side of the crime. In reference to the demand side, or the 'pull' factors, wealth has been identified as playing a key role with the general consensus being that wealthier countries are more likely to have the demand for low-skilled labor and the means to pay traffickers. Alternatively, the supply side, or 'push' factors are not as clearly defined as the results tend to vary across studies, with the exception of economic hardship. Researchers such as Mahmoud and Tresbesch (2009) and Jac-Kucharski (2012) have implied that there is a missing piece to the factors driving the supply side of human trafficking.

It is hypothesized here that the decision to leave one's home to seek a better life elsewhere depends on more variables than poor socio-economic conditions. While economic hardship certainly contributes to the decision to

migrate, it is argued that the individual decision is affected by cultural values. As discussed above, cultural values have been empirically linked to work values and decision making and, logically, must come into play as one considers the possibility of migrating in search of a better life. Specifically, does the cultural environment support and even encourage individual achievement and economic success? Will the individual be supported or shunned for leaving their homeland? As most individuals contemplate significant life decisions, how their decision will be perceived and supported by their community tends to factor into the decision process.

Using Hofstede's four dimensions of national culture, the effect of culture on human trafficking outflows is empirically tested. Controlling for economic development, two of the four cultural dimensions – power distance and individualism – significantly affected the trafficking outflow from a country. The results suggest that countries with poorer economic conditions that have a high degree of the power distance and individualism within their cultures are more likely to be the originating countries of human trafficking victims. In other words, individuals coming from less developed countries with greater power distance and individualism are more likely to make the decision to migrate in search of a better life. As discussed above, a state of economic hardship clearly creates the conditions in which individuals will consider the possibility of migrating, but it is argued here that other cultural and social values impact this decision and this study provides empirical evidence to this end.

### *6.1 Policy Implications*

Human trafficking is especially difficult to combat given the clandestine nature of the crime, the difficulties victims face in reporting it, and a general lack of awareness of the crime. Sigmon (2008) notes that most people are unaware of the crime and believe that the atrocities of human trafficking such as forced labor and servitude are practices of the past and do not exist in modern day. This lack of awareness, as Sigmon (2008) discusses, exacerbates efforts to fight the crime in two ways. First, general ignorance of the crime increases the vulnerability of the populations who are targeted by traffickers as they are less likely to be on guard against the possibility of being lured into a trap. Second, a general ignorance of the crime also makes the identification of the crime more difficult as members of the community are less likely to recognize the signs of potential victims. Further, Adepoju (2005), Logan, Walker, and Hunt (2009), and Sigmon (2008) all discuss ignorance of the crime as one of the main obstacles in fighting the crime.

In reference to policy implications, it is suggested that policy makers develop educational campaigns to create awareness of the crime; however, in order to be most effective, these campaigns need to address the underlying cultural values and attitudes that are inherent within the region. As discussed above, cultural values can impact an individual's beliefs that questionable practices are actually ethical and make them less likely to be able to identify or be aware of a variety of crimes, including human trafficking. Further, the results of this study suggest that those living in high power distance and individualistic societies are more prone to migrate and fall victim to traffickers and educational campaigns need to take into consideration these underlying factors in their messaging. In sum, it is suggested that educational campaigns that are tailored to the underlying cultural values and norms within a country can be instrumental in slowing the supply side of human trafficking.

### *6.2 Limitations*

Finally, it should be noted that this analysis is not without its limitations. First, although Hofstede's national cultural dimensions have been used extensively in the literature to proxy culture and there is empirical evidence to suggest that these dimensions are valid, it should be noted that any quantitative measure of qualitative values cannot be constructed perfectly and these measures should be considered as estimates. Second, reliable human trafficking data is very difficult to obtain given the hidden nature of the crime, the difficulties victims face in reporting the crime, and the general lack of public awareness of the crime. While the UNODC's human trafficking incident reporting scales have been used in many previous studies, it should be noted that any measure of human trafficking should be considered an estimate of a true, but unknown value. Finally, and perhaps most importantly, the data for this study is available for a relatively small number of countries, which yielded small sample sizes across the categories. While Model 2 is estimated in an effort to increase the sample size across the categories and the results generally supported the hypotheses, it should be noted that even in Model 2, the sample size was relatively small. The results of this study should be considered in the light of these limitations.

In sum, human trafficking is a global crisis that requires a global effort to stop its spread and free its victims. In this vein, future research is needed to further explore the drivers, or the supply-side, of human trafficking. A greater awareness of the underlying drivers of human trafficking in different global communities - those that vary in regard to economic, political, and geographic conditions as well as social and cultural norms – is needed to better target potential victims with educational campaigns. Through such targeted educational campaigns, the supply-side of human trafficking can be slowed. As Agbu (2003) pointedly states, human trafficking is the 'commercialization of humanity' and it includes practices most would deem intolerable. By recognizing the role that culture plays in human trafficking, we are better equipped to fight the crime. Nonetheless, to the best of the

authors' knowledge, this is the first study to consider the impact of culture on the supply side of human trafficking and future research is needed to test the robustness of these results and further explore other supply-side drivers.

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