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Does globalization enhance countries' ability to combat human trafficking?

Yewen Zeng
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Abstract

There is much literature that argues that human trafficking (HT) is actually a down side of globalization since HT increased dramatically with globalization during the mid-1980s. However, it must be acknowledged that globalization is not the inherent cause of HT but an intermediary that helps to achieve it. Although much literature studies the nexus of globalization and human trafficking, there is a lack of publications to analyze the future impact of globalization on combating human trafficking. This project aims to fill the gap by providing an empirical analysis of whether globalization enhances countries' ability to combat HT or not. This paper uses Tier Placement from the US Department of State's *Trafficking in Persons Reports* as measurement of nations' capacity of combating HT (dependent variable) and trade openness, net FDI and globalization index as measurements of globalization (independent variable). Since the dependent variable is ordinal number with a certain order, this analysis uses ordered logit regression as the model. This paper finds that both globalization index and net FDI have a positive relationship with nations' ability to combat HT, and therefore confirms that globalization enhances countries' capacity to prevent HT.

Key words: human trafficking, globalization, ordered logit regression, transnational crime, illicit market

JEL codes: C30, D49, F01, K14

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Yewen Zeng 05/02/2017

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Chapter I: Introduction

Human trafficking has been a problem since the late 1980s but this issue did not really enter into the mainstream until the 1990s. Most of the publications on this subject did not appear until the latter part of 1990s, when more and more parties started to regard HT as a serious threat (Christine, 2002). Combating human trafficking then has become an increasingly important political priority for many governments around the world. At the national level, greater efforts and resources are being devoted to combating this problem, and there is also universal agreement in the international community on the need for a multilateral response. Such a response is reflected in the UN Protocols on trafficking and smuggling signed in Palermo, Italy, in 2000.

Numerous root causes could explain the existence of human trafficking. The causes include high unemployment rates, poverty, economic inequality, gender and ethnic discrimination, and political instability and conflict. These factors are associated with pull factors of demand for cheap labor, the possibilities of higher standards of living, and flourishing illegal sexual business among the world. Although these causes have always existed, HT has flourished only since recent decades. There is much literature that argues that human trafficking is actually a down side of globalization since human trafficking increased dramatically with globalization during the mid-1980s (Alexis, 2009). Free markets, free trade, greater economic competition, and a decline in the state intervention in the economy has been a symbol of the contemporary globalizing process (Louise, 2003). This globalization process creates increasing communication among countries and greater mobility of goods and people. Therefore, it not only provides convenience to international trade and multinational corporations' foreign investments, but also provides convenience to traffickers. It has facilitated speedy, low-cost and anonymous communications that are beneficial to the activities of HT. Moreover, increased speed and ease of

international financial flows facilitate money laundering and bribery (Joseph, 2003). Behind the poor, vulnerable, and isolated trafficking victims, there often exists an elaborate communication system that links the human traffickers with the global market for their goods. In general, free trade, free markets, and decline of border controls could be one of the push factors of HT.

However, it must be acknowledged that globalization is not the inherent cause of HT but an intermediary that helps to make it possible. Rapidly advancing information, communication, and transportation technologies also drive economic growth, which is a factor in preventing human trafficking. The process of globalization is especially pronounced and entrenched in the world economy. Furthermore, globalization facilitates globalized law-enforcement networks. International Institutions, such as Interpol, the UN, and NGOs, associated with local governments are teaming up to combat human trafficking. Following the adoption of the Palermo Protocol initiated by the United Nations Convention against Transnational Organized Crime, many states have enacted new anti-trafficking laws or sought to bring their laws in line with international standards. Therefore, globalization could also be a determining factor in combating human trafficking.

Although there is numerous literature studying the nexus of globalization and human trafficking, there is a lack of publications and empirical evidence to analyze the future impact of globalization on human trafficking. Topics like whether increasing global integration will enhance a nation's ability to combat HT or will create more international organized criminal groups that conduct HT, are under discussed. This project aims to fill the gap by providing an empirical analysis on the relationship between globalization and countries' capacity to prevent human trafficking.

The Matter of Definitions

Definitions of HT

At the outset, the issue of the trade in human beings received attention first and foremost in relation to the trade in women (Bertone, 2000). It was associated with the phenomenon of the "white slave trade" that had been vigorously condemned by human rights fighters and feminists in the late nineteenth century. During that period, the issue of the "white slave trade" coincided with an increase in the number of migrant prostitutes in Europe (Guy, 1992). In the late twentieth century, with industrialization and globalization, the activities of the sexual exploitation of women reappeared (Barry, 1995). This time, the "white slave trade" was transformed into "trafficking in women", with the focus being on third world and non-western women (Kempadoo, 1998). The concept of "trafficking in women" was considered as a modern form of slavery or confined to the phenomenon of prostitution. However, Chuang notes, "The narrow portrayal of trafficking as necessarily involving forced recruitment for the purposes of forced prostitution thus belies the complexity of the current trafficking problem, and overlooks numerous victims whose experiences diverge from more traditionally recognized forms of trafficking." (Chuang, 1998, page 66))

Chuang's conception of HT rejected the old-fashioned idea of simply conceiving of human trafficking as a form of slavery or forced prostitution. However, he still focuses on trafficking in women for sexual exploitation and ignores the trafficking of women in the agricultural or industrial sectors, or with respect to mail-order brides or human organs. Moreover, this conception emphasizes only trafficking in women but does not take into account the much broader question of the migration of cheap labor, both male and female. Many definitions of HT start to appear due to the fact that more and more people realize the activity of HT. Finally, the

United Nation provides the most prominent definition of HT in its 2000 trafficking protocol, also referred to as the Palermo Protocol.

> "*Trafficking in persons" shall mean the recruitment, transportation, transfer, harbouring or receipt of persons, by means of the threat or use of force or other forms of coercion, of abduction, of fraud, of deception, of the abuse of power or of a position of vulnerability or of the giving or receiving of payments or benefits to achieve the consent of a person having control over another person, for the purpose of exploitation. Exploitation shall include, at a minimum, the exploitation of the prostitution of others or other forms of sexual exploitation, forced labor or services, slavery or practices similar to slavery, servitude or the removal of organs*." (Palermo, 2000)

The Protocol provides a significant foundation for a general definition of HT; however, some scholars argue that this definition does not give a well explained distinction between human trafficking and human smuggling.

Human Trafficking & Smuggling

The terms "human trafficking" and "human smuggling" are often thought of as interchangeable due to their similar characteristics of irregular migration and the clandestine movement of people. UN Protocols are the first attempts to differentiate between human trafficking and human smuggling, and provide a significant foundation for a general definition of these terms. Although the Protocols highlight fundamental differences, they fail to expand further specific distinctions between HT and human smuggling. UN defines smuggling as "the procurement, in order to obtain, directly or indirectly, a financial or other material benefit, of the illegal entry of a person into a State Party of which the person is not a national or a permanent resident." (Palermo, 2000) This protocol establishes smuggling as a mutual financial agreement, between the smuggler and migrant. The agreement is to allow illegal transport of a person across an international border.

Comparing to HT, the most distinct characteristic of human smuggling is that human smuggling contains individual's voluntaries. Smuggling definitions imply a voluntary nature

where the smuggler and migrant enter into some kinds of a contract to illegally transport migrants for a profit. On the contrary, trafficking definitions imply a significant involuntary nature where the trafficker and the victim only enter an arrangement through coercion, force or exploitation. UN definitions provide a great foundation for understanding the basic difference between these two terms. However, UN's definitions neglect the different organizational dynamics in which smuggling and trafficking operate (Carolyn, 2010).

Transnational crime is usually associated with the notion of hierarchical organized crime structures that execute operations. However, smuggling is different, it operates on an individual level or within loosely structured smuggling networks (Carolyn, 2010). These small-scale operations are carries out by independent actors. Smugglers assist migrants, migrants assist relatives, and relatives return to the smuggler to emigrate. The smuggler is encouraged to do his or her job well in order to retain business.

As Carolyn (2010) notes that, in comparison, trafficking uses highly organized crime structures. Instead of operating within a loose framework of one or two individuals who carry out operations on a small-scale level, trafficking operates within a complicated system of varying levels of power. Comparing to smuggling, trafficking is more like a business. In addition to their organizational differences, smuggling and trafficking further vary in their purposes. Human smuggling has a mutually voluntary participation from both the migrant and the smuggler. Individuals involved are looking for either a better life or political asylum. A smuggler enters into a contract with a migrant to receive compensation for his or her services during the illegal immigration. Whether it is for the purpose of better work or political asylum, smuggled migrants voluntarily enter into a contract with a smuggler to escape from their home countries and to embrace a better life.

However, human trafficking always occurs within the forms of forced sex and forced labor. Women and children are the most vulnerable to being trafficked for sex. They are transported illegally, unwillingly, and sometimes unknowingly within a specific country or across international borders (Carolyn, 2010, p105). Labor trafficking is similarly conducted, but with a wider pool of victim, which includes male, female, and child labor. HT is based on deception, bribery, and bondage, making traffickers the only beneficiaries.

Another flaw in UN definitions of smuggling and trafficking is that the trafficking protocols address the exploitative nature of trafficking but the smuggling protocols fail to address the potential for smuggling to use exploitation to increase profits, blackmail migrants, or get involved into involuntary trafficking. This broad generalization of human trafficking and human smuggling is only further reinforced by current literature's failure to recognize that smuggled migrants are highly vulnerable to exploitation as well. Either in the case of human smuggling or in the case of human trafficking, smuggled individuals or trafficked individuals are always more vulnerable than smugglers or traffickers. Ultimately, the line between these two crimes cannot be easily drawn, no matter how great the differences between the two crimes are. This paper will focus on well-organized transnational human trafficking groups that transport victims who are unwillingly and unknowingly to gain huge profits.

Patterns of HT

Trafficking of human beings or a contemporary manifestation of slavery has been a global problem for decades. The problem of human trafficking is not limited in certain countries like India, Romania and Bangladesh, but a more general global issue occurred in countries in Western Europe, Asia, Africa, the US, the Middle and Eastern Europe. According to UNDOC's

(United Nations Office on Drugs and Crime) 2016 report, the crime of trafficking in persons affects virtually every country in every region of the world. More than 500 different trafficking flows were detected between 2012 and 2014. Between 2010 and 2012, victims with 152 different citizenships were detected in 124 countries across the globe. Most HT victims hold different citizenships in the country where they are identified as victims. There are 34% of overall victims were trafficked within national borders, 37% of them were trafficked cross-border within same sub region, 3% of them were trafficked form nearby sub region, and 26% of them are transregional. These victims, more than 6 in 10 of all victims, have been trafficked across at least one national border and this fact indicates that human trafficking is more like an international crime rather than domestic criminal activity. Due to its clandestine nature, the data collected of HT victims is probably highly underrated.

Over the last 10 years, the profile of detected trafficking victims has changed. Although most detected victims are still women, children and men now make up larger shares of the total number of victims than they did a decade ago. In 2014, children comprised 28 per cent of detected victims, and men comprised 21 per cent. With the significant increases in the share of men among detected trafficking victims, the share of victims who are trafficked for forced labor has also increased. About 4 in 10 victims detected between 2012 and 2014 were trafficked for forced labor, and 63 per cent were men. People are trafficked for many exploitative purposes. Trafficking for sexual exploitation and for forced labor are the most prominently detected forms, but trafficking victims can also be used as beggars, for forced marriages, benefit fraud, production of pornography or for organ removal (UNODC, 2016). The increasing diversity of HT victims indicates that the trafficking crime has evolved with expanding forms of exploitation and more complicated transnational crime organization.

The actions of combating HT

The number of countries, with laws that criminalize most forms of trafficking in persons with the definition used by the UN Protocol 2000, increased from 33 in 2003 (18 per cent) to 158 (88 per cent) in 2016 (UNODC). This rapid progress means that more countries start to be aware of the problem of HT and are willing to put effort into combatting HT. As the world's second largest destination/maker (after Germany) for women and children trafficked for purpose of sexual exploitation in the sex industry (Mizus, 2003), the United States has taken steps to combat HT. In October 2001, the US State Department created the Office to Monitor and Combat Trafficking in Persons, which published an annual report assessing global efforts to combat trafficking in persons. Funding for counter-trafficking programs has also increased substantially in recent years. For instance, in 2003, the US Government alone supported 190 anti-trafficking programs in 92 countries, totaling US $72 million (US Government, 2004).

Europe, as another crucial HT destination, is actively devoting efforts into the process of preventing human trafficking as well. The organization of the largest European Union (EU) conference on Preventing and Combating Trafficking in Human Beings, was held in Brussels in September 2002. The conference is one example of the political priority being accorded to combating HT, bringing together more than 1,000 representatives of European institutions, EU Member States, candidate countries, and relevant developing countries drawn from local governments, international organizations, and NGOs. The conference outlines a set of policy recommendations for the EU in the area of HT. The Commission subsequently appointed an Experts Group on Trafficking in Human Beings and is currently preparing a new Communication on Trafficking in Human Beings, which will set out the Commission's approach to prevent HT.

During the past decade, trafficking has also become a growing problem in South-East

Asia. It has been conservatively estimated that at least 200-225,000 women and children from South-East Asia are trafficked annually (Aslihan, 2012). China, as the leading power in the region of South-East Asia, has taken positive actions in order to fight against HT. Trafficking offences is described in Chines legal frameworks, and is criminalized under Article 240 of the Criminal Law of the People's Republic of China. To improve cooperation between various government departments, an Inter-Ministerial Joint Meeting Mechanism was established, comprising 31 members of the Communist Party and government ministries. An Anti-Trafficking Office was also set up by the Ministry of Public Security to lead its anti-trafficking work and coordinate IMJMM members. Cooperative mechanisms at the local, provincial and country level, are gradually being established. Moreover, with the support of other ministries and NGOs, the Ministry of Public Security and Ministry of Civil Affairs had begun to provide protection and shelter to HT victims. China has a total of 1,375 administration and relief shelters and over 200 Child Protection Centers located in cities across the country, which provide temporary support for trafficking victims.

However, although in a global-scale, countries begin to take actions to combat human trafficking, most national legislation is recent, having been introduced during the last 8 to 10 years. As a result, the average number of convictions still remains low, indicating that the majority countries are still in the early stage of combating human trafficking. It takes time and dedicated resources for a national criminal justice system to acquire sufficient expertise to detect, investigate and successfully prosecute cases of trafficking in persons. Not to mention the problem of corruption and government enforcement of certain legislative framework. In general, there is a long way to go in the issue of combating HT.

Chapter II: Literature Review & Theoretical Framework

Literature Reviews

There is plenty of literature that addresses the issue of globalization and human trafficking but they mainly focus on the nexus of these two phenomena. Bales (2004) highlights a modern form of a slavery attributable to three interrelated factors: 1) a population explosion, 2) economic globalization and modernized agriculture, and 3) rapid economic change in developing countries. Bales (2005) further provides a working definition of globalization, which is a process that, in part, disseminates practices, values, technology, and other human products throughout the globe. He indicates that economic globalization and the facilitation of trade internationally has contributed a great deal to the trafficking of humans across state boundaries. Joshi (2002) discusses that the economic "toll" on the third world created by globalization and industrialization of former agriculture societies, and that how women in particular become more vulnerable in transitional economies of developing countries. Therefore, capitalist globalization is in part responsible for the increasing incidence of HT. Chastain (2006) also points out that free trade agreements between nation states exacerbate the existing deficiencies in underdeveloped countries where state institutions are weak and economic performance is poor. The author presents statistics indicating that both poverty and number of victims of HT increased in Mexico after a free trade agreement that was signed with the US. The economic globalization has downsides for underdeveloped countries.

Polakoff (2007) discusses the impact of economic globalization on low income families in the underdeveloped regions of the world. The article underscores the crucial role that children in the third world play in supporting their families, and assigns blame for this undesirable phenomenon to underlying processes of economic globalization. Children have become

commodities on the global labor, agriculture, and sex markets. The author further argues that economic globalization has created a form of "global apartheid" resulting in a fourth world where it has millions of homeless, incarcerated, impoverished, and otherwise socially excluded people. Jonathan (2007) proposed the startling notion that slavery may be one of the most representative consequences of global capitalism. He highlights a basic supply and demand phenomenon of the global market. There is a surplus of individuals that are trafficked to more affluent regions of the world to perform highly demanding duties or jobs at minimal expense.

Biemann (2002) suggests that globalization is a "gendered" process that, in particular, makes women the most vulnerable to exploitation and trafficking. Barid (2007) reports on the trafficking of women sold into sexual slavery, and describes the cunning tactics used to trick women into sex slaves. The author believes that the sex trade, a worldwide epidemic, has developed since the mid-1990s and conveys the negative consequences of economic globalization and its potential promotion of sex trafficking. The author provides a comprehensive analysis of globalization and its detrimental socio-economic repercussions that increase vulnerability to trafficking within certain demographics. Kantarci (2007) asserts that improved communication and transportation due to globalization has facilitated the emergence of sexual trafficking since sex work is the only available work for poor women in third world countries, and that prostitution for them is a survival strategy. All of the above scholars believe that either globalization is the determinate cause for HT to happen, or it makes the crime easier to conduct. The following literature, on the other hand, argues that globalization actually is a determinate factor of combating HT.

Bertone (2004) focuses on transnational efforts to combat trafficking. He mentions three themes: 1) sex trafficking vs. labor trafficking, 2) legalization vs. abolition, and 3) supply vs.

demand. He gives credit to international NGOs for campaigns to clamp down on violence against women for having a positive effect in the global campaign to combat trafficking. Moreover, he believes that the cooperation between different international organizations makes the action of combating HT more efficient. However, he is also concerns that hierarchical global governance structure and corrupt local governments will impede the progress of global anti-human trafficking. Mameli (2002) addressed that transnational police organizations can play the role to prevent and investigate activities of the global HT industry. Specifically, he proposes how domestic governments and international governmental organizations, like the UN, are working together and bringing this issue from a local scale to a global perspective. Ndiaye (2007) also states how the International Organization of Migration (IOM), and its many partners worldwide provide assistance with shelters for physical and psychological health care, legal consulting, and voluntary return and reintegration assistance to empower victims once they have returned home.

However, these publications neither analyze the role of globalization in the HT industry nor provide solid evidence on whether the increasing global integration can enhance a nation's ability to combat HT. The following chapter will discuss the role of globalization on HT, using a general demand & supply model.

Understand the HT industry

In order to understand the operations of HT industry, we should first understand the organization and steps of HT. Different types of buyers constructed a huge base of demand for HT market. However, without the flaws of law enforcement and networks in the destination countries, it is unlikely for traffickers to illegally transport HT victims from original countries to destination countries. In the border migration literature, scholars often aim to establish path for migration or networks influencing the cost-benefit analysis. Following this logic, there should be

some types of connections or networks that also have an impact on the location from which people are trafficked. In this case, countries that have a more established immigrant network in the host state will have higher numbers of human trafficking victims than those that do not have established immigration networks. Geographical proximity and the corruption level in the destination countries also affect the operation of human trafficking since these factors may influence the decisions of the traffickers by altering operational and criminal costs. (Wheaton, 2010) Under such mechanism, a country with open borders or a more flexible travelling Visa policy in destination countries should be easier to operate HT. Noted that a more flexible traveling Visa policy and relatively open border do not necessary represent that it is easy to conduct legal migration, since if the legal migration is easy to achieve, there would be no reason for HT activities occurred. Finally, the countries that exert anti-trafficking policies and have strong capacity of achieving law empowerment should be tough for traffickers to conduct HT operations.

Recruitment is the first step in trafficking. It is at stage to make those unemployed women become victims. Transportation is the second step in trafficking that exports the victims from source countries to destination countries. The methods of transporting depend upon geographical conditions and include illegally crossing borders. In this stage, traffickers have to be confident that their benefit will be substantial as to pay the cost of using transportations like ships or cars, accommodation, and most importantly the fee of false documents, bribery for officials and potential criminal punishments. The third and final stage of trafficking occurs when the victim reaches the destination, allowing her exploitation to begin and from this stage, and this is the stage that allows the traffickers start to earn money. Exploitation is the main objective of trafficking and can take the form of sexual exploitation, forced labor, slavery and household

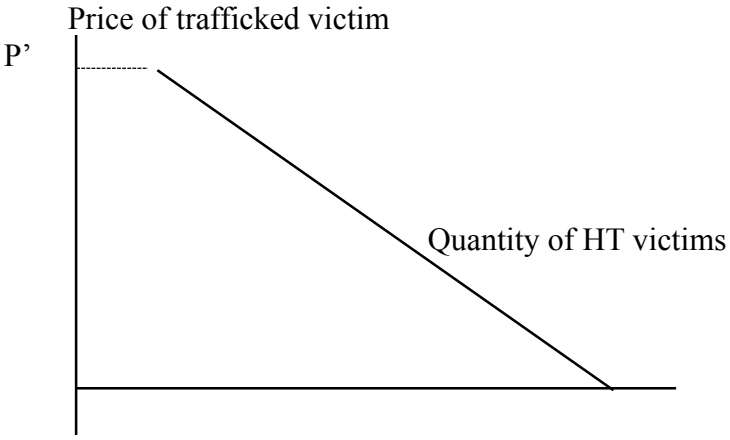
servitude. In the case of sexual exploitation, traffickers usually rely on networks of trusted hotel owners or people who are willing to rent accommodations to them and started the business by providing sexual services.

Economic Model

Economists model the labor supply decisions based on the individual's choice of whether to supply labor. In the market of human trafficking, the labor supply focuses on the outcome of the commercial exploitation rather than individual's choice, but this fact does not change the principle and theory of the economic model. This paper will mainly focus on the market of commercial sex exploitation and will use Wheaton (2010)'s model of human trafficking as an illumination. Since the economic model is a simplification of reality and due to the complex nature of human trafficking for instance, variables like moral standard, cultural impact, and corruption could be difficult to address. This model is more like a general guideline of the illicit market.

Economic models are by necessity based on assumptions. Wheaton addresses the human trafficking market as a monopolistic competition with the following assumptions: 1) the human trafficking market is a single market, 2) There are many producers (traffickers) and many consumers (buyers), 3) There is a product differentiation- competition is strong and consumer switching occurs. 4) Traffickers have some control over price – they are price makers not price takers; however, the elasticity of demand is higher than monopoly. 5) The barriers to entry and exit the human trafficking market are low. The monopolistic competition model well explained the HT (human trafficking) market and some assumptions are reasonable since first of all there are many traffickers in this illicit market and these traffickers could choose to enter the market or exit the market based on the revenue of trafficking with a very low cost. Secondly as Bales

(2005) points out that the human trafficking market could be characterized by product differentiation since the "attributes vary according to the jobs or economic sectors in which the retail consumer intends to use the trafficked person." Moreover, the nature of product differentiation empowers traffickers with some control power over negotiation and price (Bales, 2005).



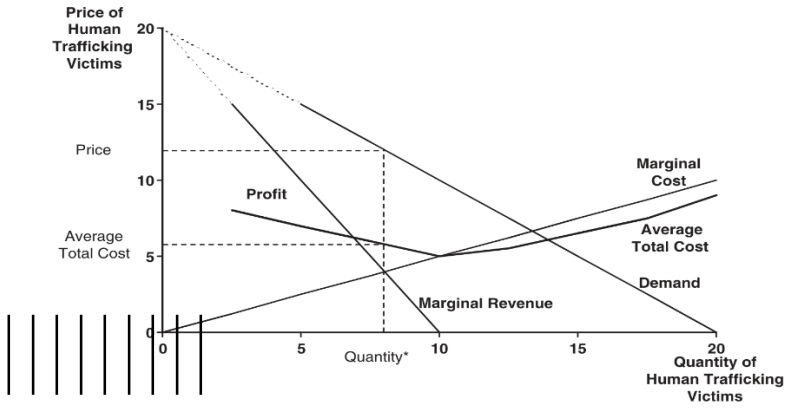
Graph-1

Shown as graph one, like every other demand curve, the demand of trafficking victims has a downward sloping demand curve since buyers are more likely to buy trafficking victims' service when the price of the service is low and there is no supply curve since the traffickers are price makers but not price takers. In figure one at or above the P', the buyers could use legitimate labor since they could not gain benefit from using illegal trafficked labor. As a result, the buyers would only be willing to buy service from trafficked victims when the price is below P'.

Like traditional costs of producing a product, human trafficking also faces monetary and physical cost but unlike traditional market, it also faces psychological and criminal (risk of being caught and severity of punishment) cost, cost of moving individuals from source countries to destination countries, transportation cost (traveling fee for victims and their household) and cost for falsified documents. In sum, the total cost for traffickers to traffic victims includes total fix

cost, which is the cost of establishing network and routes, recurring bribes, and forged falsified government document and total variable cost, which is the cost of transportation, traveling and household. Due to the high fix cost, ATC would be high at the low quantity of trafficking and would decrease as the operations increase to a certain point. Because the average variable cost would increase with the operations and size of trafficked victims, the AVC curve would be upward sloping. Following this logic, the ATC should first be downward sloping and then be upward sloping. Moreover, the marginal cost for trafficking an additional individual victim should be upward sloping since MC increases with the number of victims due to the fact that it is more difficult and costly to commit illegal migration with a larger group of people rather than a single one.

In the short run, any price offered to buy an individual victim above the ATC would encourage traffickers to continue their trafficking activities. A trafficker will choose the quantity of individuals to traffic based upon maximizing profit. In the monopoly competition model, economists model the maximizing profit as the point when marginal cost meets marginal benefits. The marginal revenue, the additional revenue from the last unit supplied, curved for the HT market should be downward sloping. This is because at a low quantity, the trafficker could set a high price for the trafficked victim and with the more trafficked labor occurred in the market, the buyer would be less willing to pay a higher price for the trafficked people. The equilibrium or profit maximizing quantity shows as graph 2 as Q*. The equilibrium price of HT in a monopolistic competitive model is when the Q* meets the demand curve of HT, shown in graph 2 as P*. The profit under this circumstance is Q* times P* subtract ATC times Q*, shown in graph 2 as shadowed area.

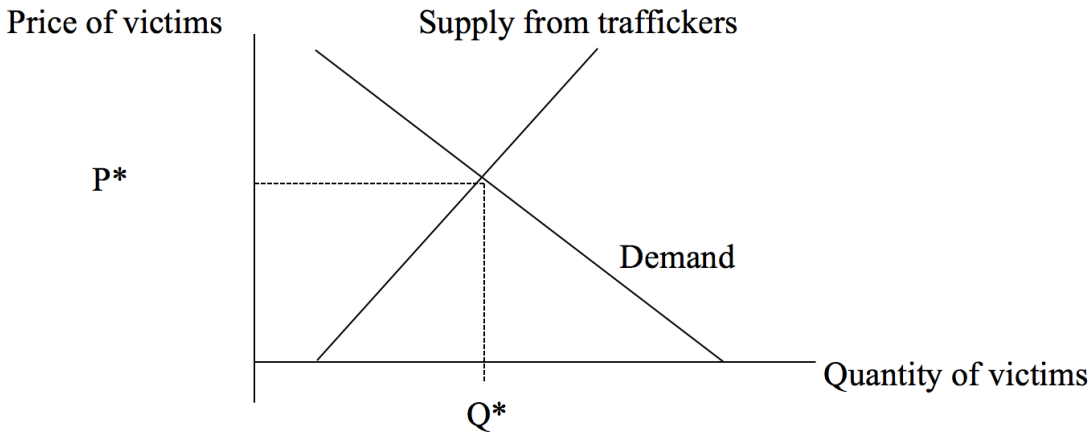


Graph-2

However, there are certain flaws of Wheaton's monopolistic competitive model: 1) they do not address a supply curve due to the nature of monopoly but in practice even with certain product differentiation, the traffickers could not set up their own prices since there are too many traffickers exert the similar exploitations, 2) The "business" of human trafficking has a high fix cost since a human trafficking conduct requires sources of victims, a network within destination countries for letting victims illegally pass the border of destination countries, a demand side, transportation and household. It should not be easy for traffickers to enter the market, but it should be relatively easy to exit the market because the high fix cost is due to HT's criminal nature and the cost for traffickers of getting out of the business is not unreachable.

This paper will address the model of demand and supply in human trafficking market with the assumptions (1) to (3) from Wheaton's model and a supply curve. The illicit market should be represented as Graph 3, where the price of victims of HT is represented on the vertical axis and where the quantity of victims is represented on the horizontal axis. As always, the demand curve is downward sloping since with the increase of price of HT victims, the demand would decrease. The supply curve is upward sloping since with the increase of price of HT victims, the traffickers are more willing to conduct HT. The supply and demand would adjust to

the equilibrium level, where the demand equals to the supply, and the equilibrium point is where demand curve meets supply curve, shown as Q* and P*. This fact indicates that all supplied of victims from traffickers would be efficiently sold to brothel-owners or consumers.



Graph-3

It is important to note that in this framework, the demand and supply model is a general equilibrium model, in which the market is a single market and traffickers (suppliers) behave competitively. It means that they take prices as given. In theory, this market could be estimated empirically $q_s = \alpha + \beta P$, where β is positive and the partial derivative of P should also be positive. However in reality, it is almost impossible at the present stage to estimate this equation because first of all, in practice the assumption of competitive market could not be held. Secondly, more crucially, the observable transaction, between "selling" and "buying" HT victims, is very obscure. Recruiters and the exploiters often belong to the same trafficking networks and organizations that involve investors, transporters, corrupt officials, informers, guides, debt collectors, money launderers and commercial sex establishments. (Aronositz, 2001) The whole process of HT is illegal and clandestine. There is no solid empirical evidence that could be used to analyze the price of victims so that this model cannot be interpreted by data and cannot be

estimated.

However, the principle and logic of this model still stand, and since HT is a market it is a rational choice for traffickers to maximize the profits. The profit of the HT is generated by the economic exploitation of victims throughout the traffic chain, including debt payment, as well as revenues from the commercial sexual activities of the victims. The profit applied to the equation we had in the previous paper should be:

$$\pi = pq - c(q) - f$$

The Role of Globalization in the Economic Model of HT

Supply Side

- For Victims

  The globalization will have three major impacts on human trafficking victims:

  1) Increased information of global situation and potential destination countries allows potential trafficking victims to have incentive to migrate and therefore provides traffickers the opportunity to deceive them. However, increased information also allows potential trafficking victims to be aware of the risk of being trafficked.
  2) Increased international cooperation between the local government and international governmental organizations will help to protect potential vulnerable victims.
  3) Global integration will change the economic performance of certain source countries; however, the impact remains ambiguous.

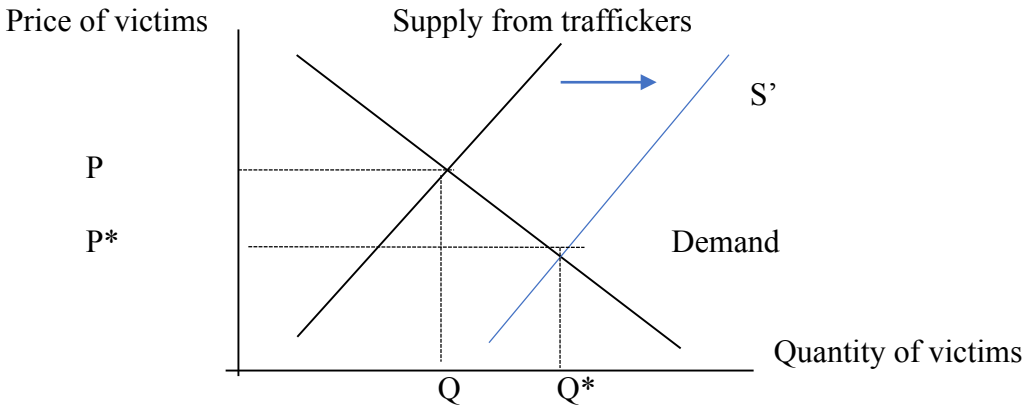
In general, the impact of globalization on potential victims is not straightforward, however, victims are not the "producer" of the human trafficking industry. Traffickers are the decisive decision makers of supply side in the HT industry.

– For Traffickers

Globalization will have four major impacts on human trafficking

1) Increased information will help traffickers target venerable victims.
2) Convenient communication among countries helps to build migrant networks in the destination countries. Moreover, with a more open border, the cost of traffickers to send victims to destination countries will decrease.
3) Increased international cooperation between the local government and international governmental organizations will make crime of HT relatively hard to conduct.
4) Globalization will increase trafficker's incentive to traffic sine each additional victim is more valuable[1].

In general, globalization will increase trafficker's incentive to traffic more potential victims. Therefore, the supply curve in the Graph-3 should shift to the right, as the following graph.



Graph-4

From above graph, the new equilibrium should be at P* & Q*. Therefore, it

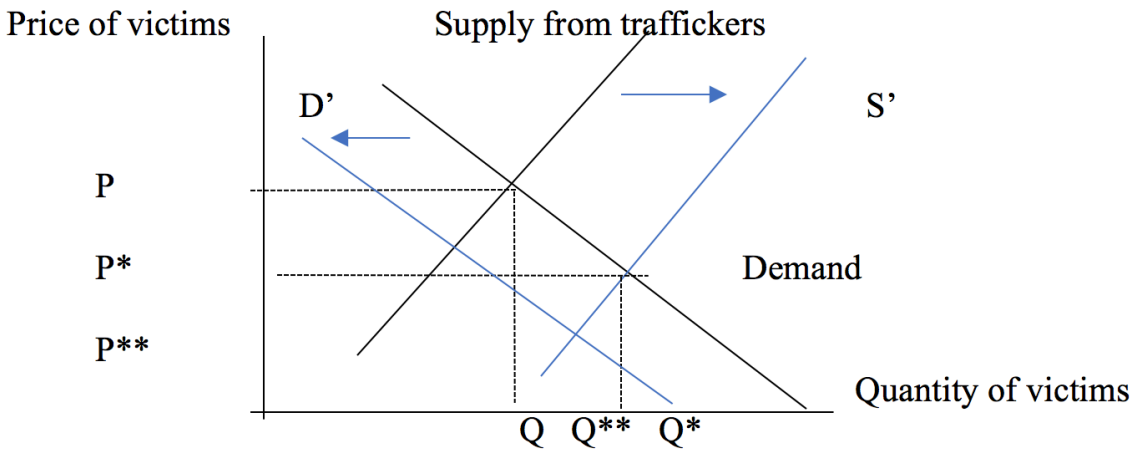
[1] Although the risk of being detected has increased, the actual cost of trafficking humans does not increase. Moreover, due to the fact that the risk of detected has increased, the value of trafficking one additional victim will increase.

represents that globalization will cause an incense in quantity of HT victims and a decrease in price of HT victims.

Demand Side

Traditional market theory operates on the presumption that demand creates supply, however in the case of the market of HT, the relationship between supply and demand is ambiguous and they are intricately interwoven. Whether the demand for sexual exploitation creates HT supply or the large amount of unskilled illegal immigrated women and girls who could provide certain services generates the demand for such services and labor, there is a large demand side to the market of human trafficking existed. And the factors on this side, the large demand push for greater number of people to be forced into the trafficking industry.

Inter-Agency Coordination Group against Trafficking in Persons (ICAT) in its 2014 *Preventing Trafficking in Persons by Addressing Demand,* highlights that end consumers are generally not directly complicit in supporting sexual or labor exploitation, usually lacking sufficient knowledge on which to make an informed choice. Similarly, many companies may not be aware of exploitative labor practices that are conducting in their organizations. Increased global integration represent increased international information, which will help them to better distinguish HT victims. Moreover, since if a country is more open, it would be easier to conduct regular legal migration in the country. The legal migrants, from underdeveloped countries and poor living conditions, will create a large supply side in the field of cheap labor and even sexual businesses. Therefore, globalization will cause a decrease in the demand side of HT industry, indicating that the Demand curve from Graph shifts to the left.



Graph-5

From the above graph, the final equilibrium point is where new demand curve (D') meets new supply curve (S'), shown as Q** and P**. It is obvious in the graph that demand and supply curve shift to opposite directions. Since the final equilibrium point depends on the magnitude of how much the two curves shift, theoretically we could not conclude the final impact of globalization in the industry of HT. Therefore, we need a solid empirical research to show the role of globalization in the HT market.

Chapter III: Empirical Research

How to measure a country's ability to stop Human Trafficking --- the dependent variable

This empirical analysis aims to study whether increasing global integration enhances the ability of nations to combat Human Trafficking. Since Human Trafficking is a criminal and illegal organized activity, it is therefore not overly surprising that the available data has been found to be limited due to its nature of concealment. Thus, in this project, the measurement of nation's differential ability to combat HT does not come from accurate numbers of HT victims and traffickers. This paper will use the tier placements from the Trafficking in Persons Report that is released from the U.S. Department of State to measure a country's ability to combat HT.

The U.S. Department of State, has released *Trafficking in Persons Report* annually from 2001 to 2016. In the annual report, the Department placed each country into one of four tiers, as mandated by the TVPA (The Trafficking Victims Protection Act of 2000). This placement is based more on the extent of government action to combat trafficking rather than on the size of the country's problem. The analyses are based on the extent of the government's efforts measured against the TVPA's minimum standards for the elimination of human trafficking, which are generally consistent with the Palermo Protocol. TVPA requires the government of a country:

(1) to prohibit severe forms of trafficking in persons and punish acts of such trafficking.

(2) to make serious and sustained efforts to eliminate severe forms of trafficking in persons.

(3) to prescribe punishment for the knowing commission of any act of sex trafficking involving force, fraud, coercion, victims of sex trafficking that are children incapable of giving meaningful consent, or of trafficking which includes rape or kidnapping or which causes a death.

(4) to prescribe punishment that is sufficiently stringent to deter and that adequately reflects the

heinous nature of the offense of the knowing commission of any act of severe forms of trafficking in persons. (Trafficking Victims Protection Act of 2000, Div. A of Pub. L. No. 106-386, § 108, as amended.)

Tier rankings and narratives reflect an assessment of: enactment of laws prohibiting severe forms of trafficking in persons, strict penalties for traffickers, implementation of HT laws, providing government funding and partnerships with NGO, protection provided to HT victims, governmental measures to prevent HT, and efforts to reduce the demand for commercial sex acts and international sex tourism. There are in general four tiers in the report. Tier 1 rankings indicate that a government has acknowledged the existence of human trafficking, has made efforts to address the problem, and meets the TVPA's minimum standards. Each year, governments need to demonstrate appreciating progress in combating trafficking to maintain a Tier 1 ranking. Tier 2 rankings indicate that a government does not fully meet TVPA's minimum standards but are making significant efforts to meet those standards. Tier 2 watch list rankings indicate that a government tries to make significant efforts to meet the standards; however, the country's absolute number of victims of severe forms of trafficking is large or is significantly increasing, there is a failure to provide evidence of increasing efforts to combat HT from the previous year, or country is planning to make the progress in the following years. Tier 3 rankings indicate that a government does not fully meet the TVPA's minimum standards and is not making significant efforts to do so.

For the dependent variable, I use the U.S. Trafficking in Person Report from 2002 to 2008 to generate a list of all the countries (total 198 countries) in alphabetical order with their tier placements. The following graphs show that the tier placement based on region[2] and the

[2] In order to show the tier placement in different regions, I first I sorted different countries as their continent and then took the average of every country's tier placement from 2002 to 2016.

worst five countries that, according to TVPA, have to take more actions to eliminate human trafficking in person.

According to Graph 6 & 7 (see Appendix), European countries have the best performance regarding to the issue of combating human trafficking and none of the worst five performing countries is from Europe. On the contrary, the majority countries in Asia and Africa do not meet the TVPA's requirements and need to demonstrate greater effort in the issue of combating human trafficking. This is especially for African countries since three out of five of five worst performing countries are from Africa.

Measurements of globalization

Global integration is a broad concept and has been used to describe a variety of phenomena, which includes the economic, social and even political interdependence of countries (Devin, 2010). There is no universally accepted measurement for global integration. In order to have an unbiased result, this paper will use three different measurements of globalization, which are trade openness, net FDI and globalization index. Both trade openness and net FDI are measured from the economic perspective and the globalization index is a more general measurement.

Trade openness measures how large the influence of trade is on domestic activities. In other words, it is the trade percentage of GDP, calculated as the sum of imports and exports and divided by GDP. It is a measurement that observes whether a country has an outward-oriented economy or an inward-oriented economy and it thus could be a valuable measurement of global integration since a country with an outward-oriented economy would be more globalized.

Another possible measurement in this case is net FDI. According to the IMF's Balance of

Payments Manual (1993), the FDI (Foreign Direct Investment) has three components: equity investment, reinvested earnings, and short- and long-term inter-company loans between parent firms and foreign affiliates (IMF, 1993). FDI is recorded on a directional basis. FDI net inflows by definition are the value of inward direct investment made by non-resident investors in the reporting economy. In other words, inward FDI is when foreign capital is invested locally. Only a country with a stable and healthy economy and political environment would attract more foreign investments. FDI net inflows is a reasonable measurement of global integration since it shows the country's international financial flows and its economy status[3].

The globalization index comes from KOF Globalization Index where they measure the three main dimensions of globalization: economic, social and political. Table – 1 in Appendix, presents the general statistical characters of these three measurements.

Ordered Logit Regression & Panel Data Analysis

Four Tiers represent four different levels of the actions a country takes regarding to the issue of combating HT. This paper will use this measurement as the dependent variable to analyze the relationship between global integration and the nation's action of preventing HT. Since the tier placement is ordinal variables and when dependent variables are ordinal rather than continuous, conventional OLS regression techniques are inappropriate. The logit model, also known as the proportional odds model, is a popular method in such cases. Moreover, in the case of the tier placement, tier one to tier three represent the level of combating HT from "satisfied" to "unsatisfied". The ordinal variables going down the ordinal scale and therefore the ordinal variables are in a certain order. Hence, this project will use the ordered logit regression as the

[3] Both data of trade openness and net FDI come from World Bank database.

model.

The model is based on the cumulative probabilities of the response variable. In particular, the logit of each cumulative probability is assumed to be a linear function of the covariates with regression coefficients constant across response categories (Schaafsma and Osoba, 1994). This model is first considered by Peter McCullagh (1980), in order to use statistical method to analyze qualitative measurement, which whether subjective or objective, usually take values in a limited set of categories which may be on an ordinal or on a purely nominal scale (McCullagh, 1980). As noted by McCullagh, ologit is tempting to analyze ordinal outcomes with the linear regression model, assuming equal distances between categories.

The model is based on consideration of the cumulative distribution probabilities, $\gamma_j =$ Pr $(y \leq j)$ and takes the form:

$$\text{logit } (\gamma_j) = \text{logit}(\gamma_j/(1-\gamma_j))$$

In the ordered logit model, the ordinal dependent variable, denoted here by y, is viewed as the realization of an underlying, latent continuous random variable, y^*. Moreover, y^* would satisfy a linear regression model, that is:

$$y^* = \beta x + \varepsilon$$

This paper aims to find whether globalization can help to prevent HT or not. In this way, the independent variable should be the measurements of globalization, which are trade openness, globalization index and net FDI. The equations should thus be:

(1) $y^* = \alpha + \beta_1 trade\ openness + \varepsilon$

(2) $y^* = \alpha + \beta_1 globalization\ index + \varepsilon$

(3) $y^* = \alpha + \beta_1 net\ FDI + \varepsilon$

Since the impact of globalization shows with the changing of time and this paper aims to

conclude a rather general conclusion that is not limited in one country, neither time-series nor cross-section alone could answer the question proposed by this paper. Thus, this paper will use panel data, which consists of comparable time series data observed on a variety of units and which is one that follows a given sample of individuals over time, and thus provides multiple observations on each individual in the sample. The panel data analysis methods applied in the study of comparative political economy, where the units are countries and where for each country we observe annual data on a variety of political and economic variables. Panel data involves two dimensions: a cross-sectional dimension N, and a time-series dimension T. Panel data provides the possibility of generating more accurate predictions for individual outcomes than time-series data or cross-sectional data alone (Cheng Hsiao, 2003). As noted by Hsiao (1995), if individuals' behaviors are similar in their conditions which are related to certain variables, panel data provides the possibility of learning an individual's behavior by observing the behavior of others. Thus, a more accurate description of an individual's behavior can be obtained by using both cross-section and the time-series.

This data set is a micro-panel data set that is a panel for which the time dimension T is largely less than the individual dimension N (with 198 countries observed since 2002), T << N. Since the panel data have two-dimensions, the equations we generalized above should be modified as:

$$y_{it}^{*} = \alpha_i + \beta_1 x_{it} + \varepsilon_{it}$$

where, i = 1, …., 198, t = 1, …, 14

Simple Ordered Logit Regression

According to the above statement, the equation for the circumstances that globalization is the only independent variable in the model, should be:

(1) $y_{it}^{*} = \alpha_i + \beta_1 trade\ openness_{it} + \varepsilon_{it}$

(2) $y_{it}^{*} = \alpha_i + \beta_1 \text{globalization index}_{it} + \varepsilon_{it}$

(3) $y_{it}^{*} = \alpha_i + \beta_1 \text{net FDI}_{it} + \varepsilon_{it}$

The results of equation (1) is showing by Table-2 in Appendix.

The first section of this table is literation log. Ordered logistic regression, like binary and multinomial logistic regression, uses maximum likelihood estimation, which is an iterative procedure. The first iteration that called iteration 0 is the log likelihood of the "null" model, which is a model with no explanatory variables. At the next iteration (iteration 1), the explanatory variables are included in the model. The log likelihood increases with the increase of the iterations, and when the difference between successive iteration is very small, the iterating stops, and the results are displayed. As this table shows, iteration 2 & 3 have the same log likelihood.

According to Table-2, Prob > chi2 is equal to 0.000, which is smaller than 0.05, showing that at least one of the regression coefficients in this model is not equal to zero, which represents that there is a statistical relationship between the explanatory variable and response variable. The coefficient between trade openness and tier placement is -0.0033726. Unlike conventional OLS model where the coefficient indicates that for every additional changing in the explanatory variable there is a certain expected change in the dependent variable, the interpretation of the ordered logit coefficient is that for every additional changing in the explanatory variable, the dependent variable level is expected to change by its respective regression coefficient in the ordered log-odds scale while the other variables in the model are held constant. In other words, the numeral number of the coefficient is not important, the sign shows the relationship between the explanatory variable and dependent variable. From Table-2, trade openness has a positive

relationship with the tier placement. Since tiers are placed in a degrading order of behaviors, with the higher the tier, the lower the nation's capacity of preventing HT and therefore, the trade openness has a positive impact of combating HT.

Before generating the conclusion, we also have to observe the test statistics and p-value to see whether the result is statistically significant or not. The test statistic z is the ration of coefficient to the standard error of the explanatory variable. The z value follows a standard normal distribution which is used to test against a two-sided alternative hypothesis that the coefficient is not equal to zero. Two-tail p-values test the hypothesis that each coefficient is different from 0. To reject this, the p-value has to be lower than 0.05 (for a 95% confidence), and as showing as Table-2, the P-value is 0.000 that represents the result is statistically significant or to say that the explanatory variable has a significant influence on the dependent variable. In conclusion, trade openness has a positive relationship with the nation's ability of combating HT.

The results of equation (2) & (3) show in Table 3 & 4 in Appendix. As the Table-2, the P value and chi2 test in Table-3 & 4 also show that the results are statically significant and according to the coefficient, it is clear that both globalization index and net FDI have a positive relationship with nation's capacity of preventing HT. All three measurements of globalization show the positive relationship with the nation's effort of combating HT. However, we could not conclude that global integration would enhance the nation's ability to combat HT in this stage since this paper acknowledges that global integration is not the only factor that could affect the country's capacity of preventing HT. Therefore, the following section will introduce control variables to this model.

Control Variables

Extreme poverty, lack of economic opportunities, civil injustice, and political uncertainty,

are factors that all contribute to an environment that encourages human trafficking and smuggling. Economic push factors are always addressed as the decisive factors of human trafficking due to its nature of expressing fundamental living conditions. These factors are that people experience around them where they live: lack of economic opportunities, low living standards, demographic growth, and political repression (Castles 2003). And these factors highly augment people's willingness to pursue a better living condition, the desire of living in richer countries and the strong eagerness of moving away from the old poor living environment misguides people to believe traffickers' fraud. The economic push factors influence all types of migrations in general and human trafficking in particular since a poor living condition is decisive to inciting trafficking. Economic factors not only enhance the possibility of conducting HT but also are determinations of a country's ability of combating HT.

GPD per capita & GDP annual growth rate

One prevalent way to measure a country's overall economic performance is the measurement of gross domestic product per capita. Although both Ivan (2013) and Jac-Kucharski (2012) found that there is only a weak statistically non-important negative relationship between GDP per capita of source countries and identified HT victims, they could only address the result that GDP per capita alone offer only an incomplete explanation for the numbers of human trafficking victims from source country but not conclude that the economic performances of source countries have no impact on HT. GDP annual growth rate is another measurement of a country's recent economy performance. It measures how fast the economy is growing and is a significant indicator of economic health and the future trend of the country's economy. A country with greater GDP per capita and GDP annual growth rate should be more capable of preventing HT.

Economic disparity and inequality

Besides the overall economic performance, the economic disparity in a state would also be a decisive pushing factor, which stimulates HT activities. Inequality as a whole has great impact on human rights violations in general and is also a strong motivation for victims to migrate. Higher economic disparity in a state should be associated with higher numbers of HT victims. Jack-Kucharski (2012) found a statistically positive relationship between 2002 Gini Index, which rangers from zero to 100, where zero represents perfect equality and 100 represents perfect inequality, and number of HT victims. The more inequality occurred in a source country, the more HT victims are trafficked from the source country. The overall poor economic performance combined with high unemployment rate and huge economic disparity integrate people's willingness to migration and traffickers to recruit victims. The country with greater inequality rate should be less capable of combating HT.

However, the pure economic factors could not fully explain the human trafficking supply since not all poor countries have large number victims of HT, such as Bhutan and even some "developed" countries could be a source country for human trafficking like Russia. The government, which plays both the role of decision maker and the role of executor regarding the issue of HT, is a crucial determination of whether a country could take strong and powerful movement to combat HT.

This paper will use the Gini index to calculate inequality. The Gini index is a measurement of the income distribution of a country's residents. This number, which ranges between 0 and 1 and is based on residents' net income, helps define the gap between the rich and the poor, with 0 representing perfect equality and 1 representing perfect inequality. Since this

paper will use data from World Bank database, World Bank has another estimate of the Gini index, which they range from 0 to 100, where 0 represents perfect equality, while and index of 100 implies perfect inequality.

Institutional Disparity

Country's institutional and historical disparity also contribute to their ability to combat HT. Under its French colonial, Vietnam period had large trafficking networks that sold women and children within Vietnam or to China and Hong Kong, where they would ultimately be sold into marriage, prostitution, or domestic servitude. Lessard (2015) argues that colonialism exacerbates the human trafficking since it causes war, state monopolies on goods and opium, and social norms in which women and girls could be both priced and exploited, and therefore caused a black market that trade kidnapped women and girls flourished. Although there is a lack of other empirical evidence to show whether colonial history and human trafficking have a positive correlation in a wide range or not, following the case in Vietnam, similar grabber friendly colonial institutions will likely create a pool of victims of women and girls.

Russia is another country that suffers from HT due to its historical institutional factors. Unlike other countries, which are either major destination countries or major source countries, Russia is a source, transit and destination country. A report of migration policy center in 2013 exposed that there are approximately 30,000-60,000 women and children are taken from Russia mostly for prostitution. Moreover, according to the Office of United Nations High Commissioner for Human Rights, over the past two decades after the collapse of Soviet Union, over 500,000 women were sold from Russia to other countries. Russia not only provides a huge amount of HT victims to global communities but also imports "human commodities", primarily from the countries of the former Soviet Union (UNDOC, 2015). These "commodities" are used for slave

labor exploitation, in sweatshops, in the informal and shadow economy, and in the household. With its convenient position between east and west, the relative ease of crossing borders in the post-Soviet space, government official corruption, and the existences of criminal gangs, Russia has become a suitable transit spot for international criminal networks involved in smuggling and human trafficking. The traffickers use Russia for illegal migrant transit, primarily from Central, South and Southeast Asia to European Union member states.

The human trafficking activities started to flourish with the collapse of the Soviet Union, which ended seventy years of centralized political and economic controls and fifty years of the social contract that guaranteed employment and social security for all. Half of Russian adults are out of work and only a quarter of those employed are getting paid on a regular basis. (Stoecker, 2000) The population suffered from high unemployment and poverty, especially among women and children. These unemployed women and their kids flowed into the hands and coffers of criminal organizations, which sought to exploit the chaotic and tough situation by luring those desperate jobless women into forced prostitution, sweatshop labor and domestic servitude. Moreover, with the emergent of globalization, criminal organizations actively used the trend of international trade to export their "human capitals". Human trafficking in Russia and the former Soviet Republics is a complex issue that is difficult to address. But, without question, the complex history of the Soviet Union, and relationships between Russia and Post-Soviet states are the dominant factors causing human trafficking.

Since there is no numeral measurement of institutional disparity, this paper will use different political systems to express different forms of governments. There are five most common political systems around the world, which are democracy, republic, monarchy, communism and dictatorship. Within the five most common political systems, a democratic

political system is the system that least supports HT, since trafficking destroys the central tenets of democracy. Democracy establishes the right to protection under the law, guarantees human freedom, and establishes rights to citizens. HT is against all of these principles. Therefore, democracy and combating HT should have a positive relationship: where democratic political system would demonstrate greater effort to combat HT.

Corruption

Skeldon (2000) states that bureaucratic complexity and government corruption are factors that impede the legal mobility of labor and encourage human trafficking. An institution with incomplete legislation, an instable political environment and corruption government officials without a doubt would cause more human trafficking (Skeldon, 2000). Human trafficking is always considered as a high profit and relatively low risk venture. This cost-benefit equation exists because the traffickers have profound monetary gains compared to the limited risk of getting caught and being brought to trial (Nautze, 2006). Institutional corruption allows this perverse incentive to survive. Corruption allows the trafficking process to remain protected from prosecution and even helps traffickers to recruit victims. According to the Global Coalition Against Corruption's 2011 working paper, Corruption assists the movements of victim within a country and across borders when trafficking is discovered, and corruption results in laws and judicial processes being disregarded. Corruption, especially governmental corruption weakens institutional safeguards that are rooted in basic human rights and other international norms which were originally made in order to protect the victims (Nick, 2011, p19).

Moreover, corruption also helps traffickers and their accomplices to hide profits generated by human trafficking like laundered money that makes bribery possible Louise Shelley, in her book *Human Trafficking: A global perspective,* states in recent decades the

growth of public sector corruption has correlated closely with the rise in human trafficking. Numerous countries that are ranked poorly on Transparency International's Corruption Perceptions Index, such as also including Indonesia, Thailand, Nigeria, the Philippines, and Pakistan, tend to become the largest source countries for human trafficking victims (Shelley, 2010). Lyday (2000) found a strong positive correlation between a country's Transparency International's Corruption Perception Index (CPI) and Trafficking in Person's Index (TIP).

Corruption and human trafficking involve numerous institutions among source countries and destination countries, and might extend to ministries, legislatures and law enforcement bodies, and mutate into state capture. For instance, the Global Coalition against Corruption (2010) found evidence in Cameroon that local police commissioners allegedly blocked investigations of child trafficking and refused to exert the formal legal process of proper investigations. Even developed countries that are universally considered to have a control over corruption are involved in human trafficking. Philip Gounev (2010) points out that high-level staff members at the Belgian and French embassies in Bulgaria were found to be issuing numerous visas, often to prostitutes and organized crime networks, in return for payment (Philip, 2010, p6). Moreover, highly democratic governments like the US may contract out services to third party vendors that are then implicated in the employment of trafficked victims. Corruption undermines justice, human rights and dignity, and highly encourages the transregional criminal activities of human trafficking. Therefore, a country with high corruption level would not be likely to prevent HT.

Region Conflicts

Region conflicts have produced devastating situations conducive to human smuggling and diverse forms of trafficking. Armed conflicts and wars create millions of refuges who are

uprooted from their traditional societies with no viable means of support. Many of them are forced into the abysmal conditions of refugee camps and are dependent on the handouts of foreign aid organizations or NGOs. Their willingness to leave the refugee camps and the lack of ways to leave provide opportunities for traffickers. Children are trafficked in many regions to provide soldiers for rebel armies. Under the extremely unstable political environments and chaotic domestic social status, the government would not be willing to put their efforts into issues like HT. Moreover, trafficking in men and women also provides financial support for regional conflicts in Africa, Europe, Latin America and Asia (Sonja Wolte, 2007).

The local governments are not willing to fight against HT and the involvement of UN only makes the problem worse (Corinna, 2006). Peacekeeping missions has been increasingly deployed in the last two decades to police conflicts and therefore numerous youthful male soldiers are placed in dangerous conditions far from their homelands, without adequate oversight, creating a large demand market for trafficked women (Sarah, 2005). Because of the loose control of the young soldiers, the abuse of women in the bars and brothels around the missions has become routine in the UN peacekeeping missions. Although the UN develops new policies that intend to eliminate peacekeepers' exploitation of trafficked women, the problem still persists since enforcement of these policies has been intermittent and there has been an absence of political will to address the problem (Mendelosn, 2007).

Therefore, a country that has armed conflicts would lose its political willingness and capacity to combat HT. This paper will consider the regional conflict as an important explanatory variable.

Data Summary

Table-5 summarizes the control variables that will be used in this model.

(a) GDP per capita comes from the World Bank data bank of GDP per capita[4], calculated as taking a country's gross domestic product divided by the country's population.

(b) GDP annual growth comes from World Bank data bank of GDP annual growth[5], calculated as $(\text{GDP}_{year\ one} - \text{GDP}_{year\ zero})/\ \text{GDP}_{year\ zero}$ and represents as percentages.

(c) The Gini index that comes from the World Bank data bank of inequality[6], is scaled from 0 (perfect equality) to 100 (perfect inequality); indicating with higher the Gini index, the country is more unequal. However, there is lots of missing data in World Bank database. Therefore, the data set is not well established.

(d) Transparency International has released the Corruption Perceptions index annually since 2001. I use their reports from 2002 to 2016 and generate a list of all the countries (total 176 countries) in alphabetical order with their corruption perceptions index. The index ranges from 0 (highly corrupt) to 100 (very clean), indicating that with higher scores, the country is less corrupted.

(e) Jose Antonio Cheibub's dataset is a classification of political regimes as democracy or dictatorship. This paper uses democracy as a dummy variable where 0 means not democratic and 1 represents democracy.

(f) The conflict data is from Uppsala Conflict Data Program's (UCDP) armed conflict dataset version 4-2016. The main unit in this dataset is an "Armed Conflict" that is defined by UCDP[7]. They define four types of armed conflict: 1) extra systemic armed conflicts that

[4] For the original database, see http://databank.worldbank.org/data/reports.aspx?source=2&series=NY.GDP.PCAP.PP.CD&country=

[5] For the original database, see http://databank.worldbank.org/data/reports.aspx?source=2&series=NY.GDP.PCAP.PP.CD&country=

[6] For the original database, see http://databank.worldbank.org/data/reports.aspx?source=2&series=NY.GDP.MKTP.KD.ZG&country=

[7] For a more specific and clear definition see http://www.pcr.uu.se/research/ucdp/definitions/

occur between a state and a non-state group outside its own territory, 2) interstate armed conflict that occurs between two or more states, 3) internal armed conflict that occurs between the government of a state and one or more internal opposition groups without intervention from other states, and 4) internationalized internal opposition groups with intervention from other states. This paper will take the regional conflict as a dummy variable, and make countries with interstate and internal armed conflicts as 1, others as 0.

Ologit regression with control variables

Equations:

(1) $y_{it}^{*} = \alpha_i + \beta_1 trade\ openness_{it} + \beta_2 GDP\ per\ capita_{it} + \beta_3 GDP\ annual\ growth_{it} + \beta_4 Inequalitey_{it} + \beta_5 Corruption\ level_{it} + Dummy\ Conflicts + Dummy\ Democracy + Dummy\ Regions$[8] $+ \varepsilon_{it}$

(2) $y_{it}^{*} = \alpha_i + \beta_1 globalization\ index_{it} + \beta_2 GDP\ per\ capita_{it} + \beta_3 GDP\ annual\ growth_{it} + \beta_4 Inequalitey_{it} + \beta_5 Corruption\ level_{it} + Dummy\ Conflicts + Dummy\ Democracy + Dummy\ Regions + \varepsilon_{it}$

(3) $y_{it}^{*} = \alpha_i + \beta_1 net\ FDI_{it} + \beta_2 GDP\ per\ capita_{it} + \beta_3 GDP\ annual\ growth_{it} + \beta_4 Inequalitey_{it} + \beta_5 Corruption\ level_{it} + Dummy\ Conflicts + Dummy\ Democracy + Dummy\ Regions + \varepsilon_{it}$

Results

In order to make the results more straightforward and readable, this paper uses esstab (ssc install estout) to generate summary statistics by groups, with columns for the coefficient and P-

[8] This model also includes the dummy regions variable since from Graph-1 & 2, there is a significant region differential occurs in the nation's behavior of combating HT.

value where * represents that the result is statistically significant (95%), ** shows that the result is very statistically significant (99%), and *** represents that the result is statistically crucial (99.9%). With more * in the table, the explanatory variable can better explain the dependent variable.

From Table-6, both net FDI and globalization index have a strong positive relationship with a nation's ability of combating HT, which is statistically significant; however, trade openness does not have a statistical relationship with a country's capacity for preventing HT. Even if the results show that trade openness is not statistically significant, it does not necessarily mean that trade openness is not a determining factor on combating HT. The reason why the result is not statistically significant could be that trade openness has a strong correlation with GDP per capita. It implies a further analysis on this issue. For the control variable, GDP per capita, GDP annual growth, and dummy democracy, they all have a significant positive relationship with nations' behaviors of preventing HT in all cases. Region dummy of Asia has a negative relationship with a nation's effort to combat HT and it is statistically significant. Inequality, corruption level, dummy conflict, region dummy of Africa, and region dummy of Europe do not have a statistically significant relationship with a state's action of combating HT.

In general, according to the results above, increasing global integration would enhance a country's ability to combat HT. However, this model still needs to consider the problems of multicollinearity, heteroscedasticity and serial correlation.

Examine the Test

- Multicollinearity

One of the classic assumptions to ensure that the OLS estimators are unbiased is that none of the independent variables are constant, and there are no exact linear relationships among

the independent variables, and this assumption persists in the Ologit regression model. Therefore, I run the VIF (variance inflation factors), which describes how much multicollinearity (correlation between predictors) exists in a regression analysis, and the results are shown in Table-7.

From the table, the mean of vif is 1.72, which shows that the predictors in this model are moderately correlated. Although it shows that the predictors in this model are moderately correlated, the coefficients are still strong and statistically significant, and therefore, the multicollinearity problem should not be considered as a serious flaw.

– Serial Correlation & Heteroscedasticity

The standard error component panel data model assumes that the disturbances have homoscedastic variance and constant serial correlation in the random individual effects (Hsiao, 2003). However, these may be restrictive assumptions for a lot of panel data applications. For instance, the cross-sectional units may be varying in size and therefore, resulting heteroscedasticity. Moreover, in the context of time series, the error in a period might influence the error in a subsequent period – the next period or beyond. This phenomenon is called serial correlation, which is a common manner in which the assumption of independence of errors is violated[9].

One way to deal with both serial correlation and heteroscedasticity is to use robust estimation of the variance covariance matrix of the reported estimates. Therefore, this paper will use vce (robust) regression to eliminate the problem of heteroscedasticity and serial correlation, showing in Table – 8 & Table – 9.

From above tables, the globalization index and net FDI are still statistically significant, as

[9] One of the assumptions of both simple and multiple regression analysis is that the error terms are independent from one another – they are uncorrelated.

well as GDP per capita, GDP annual growth, dummy democracy, and region dummy of Asia.

– Robustness Analysis

Robustness analysis or sensitivity analysis is an analysis aimed at checking if a certain method is robust. Statistics considers here a set of tools aimed at ascertaining the degree of dependence of a statistical model on single or groups of observations (Chatterjee, 1988). A lack of sensitivity to such aspects is known as robustness. This paper's sensitivity analysis looks for influential observations mostly affecting some or all of the aspects of the model considered. In order to guarantee that the results do not depend on one particular model, this paper will therefore do a robust analysis. The sequence shows as following:

(1) $y_{it}^{*} = \alpha_i + \beta_1 globalization\ index_{it} + \beta_2 GDP\ per\ capita_{it} + \varepsilon_{it}$

(2) $y_{it}^{*} = \alpha_i + \beta_1 globalization\ index_{it} + \beta_3 GDP\ annual\ growth_{it} + \varepsilon_{it}$

(3) $y_{it}^{*} = \alpha_i + \beta_1 globalization\ index_{it} + \beta_2 GDP\ per\ capita_{it} + +\beta_3 Inequalitey_{it} + \varepsilon_{it}$

(4) $y_{it}^{*} = \alpha_i + \beta_1 globalization\ index_{it} + \beta_2 Inequalitey_{it} + \varepsilon_{it}$

(5) $y_{it}^{*} = \alpha_i + \beta_1 globalization\ index_{it} + Dummy\ Democracy + \varepsilon_{it}$

(6) $y_{it}^{*} = \alpha_i + \beta_1 globalization\ index_{it} + \beta_2 Inequalitey_{it} + Dummy\ Democracy + \varepsilon_{it}$

(7) $y_{it}^{*} = \alpha_i + \beta_1 globalization\ index_{it} + \beta_2 GDP\ annual\ growth_{it} + \beta_3 Inequalitey_{it} + \varepsilon_{it}$

(8) $y_{it}^{*} = \alpha_i + \beta_1 globalization\ index_{it} + \beta_2 GDP\ per\ capita_{it} + \beta_3 GDP\ annual\ growth_{it} + \beta_4 Inequalitey_{it} + \varepsilon_{it}$

(9) $y_{it}^{*} = \alpha_i + \beta_1 globalization\ index_{it} + \beta_2 GDP\ per\ capita_{it} + +Dummy\ Democracy + Dummy\ Regions + \varepsilon_{it}$

(10) $y_{it}^{*} = \alpha_i + \beta_1 globalization\ index_{it} + \beta_2 GDP\ per\ capita_{it} + \beta_3 GDP\ annual\ growth_{it} + Dummy\ Conflicts + Dummy\ Democracy + Dummy\ Regions + \varepsilon_{it}$

From the Table – 10, the globalization index has a positive relationship with the country's ability to combat human trafficking in all ten models and therefore, our model is robust and the results do not depend on one particular model. As the same logic, we will then do the test with net FDI as the independent variable.

(11) $y_{it}^{*} = \alpha_i + \beta_1 net\ FDI_{it} + \beta_2 GDP\ per\ capita_{it} + \varepsilon_{it}$

(12) $y_{it}^{*} = \alpha_i + \beta_1 net\ FDI_{it} + \beta_3 GDP\ annual\ growth_{it} + \varepsilon_{it}$

(13) $y_{it}^{*} = \alpha_i + \beta_1 net\ FDI_{it} + \beta_2 GDP\ per\ capita_{it} + +\beta_3 Inequalitey_{it} + \varepsilon_{it}$

(14) $y_{it}^{*} = \alpha_i + \beta_1 net\ FDI_{it} + \beta_2 Inequalitey_{it} + \varepsilon_{it}$

(15) $y_{it}^{*} = \alpha_i + \beta_1 net\ FDI_{it} + Dummy\ Democracy + \varepsilon_{it}$

(16) $y_{it}^{*} = \alpha_i + \beta_1 net\ FDI_{it} + \beta_2 Inequalitey_{it} + Dummy\ Democracy + \varepsilon_{it}$

(17) $y_{it}^{*} = \alpha_i + \beta_1 net\ FDI_{it} + \beta_2 GDP\ annual\ growth_{it} + \beta_3 Inequalitey_{it} + \varepsilon_{it}$

(18) $y_{it}^{*} = \alpha_i + \beta_1 net\ FDI_{it} + \beta_2 GDP\ per\ capita_{it} + \beta_3 GDP\ annual\ growth_{it} + \beta_4 Inequalitey_{it} + \varepsilon_{it}$

(19) $y_{it}^{*} = \alpha_i + \beta_1 net\ FDI_{it} + \beta_2 GDP\ per\ capita_{it} + +Dummy\ Democracy + Dummy\ Regions + \varepsilon_{it}$

(20) $y_{it}^{*} = \alpha_i + \beta_1 net\ FDI_{it} + \beta_2 GDP\ per\ capita_{it} + \beta_3 GDP\ annual\ growth_{it} + Dummy\ Conflicts + Dummy\ Democracy + Dummy\ Regions + \varepsilon_{it}$

Like the globalization index, the net FDI has a positive relationship with the country's ability to combat human trafficking in all ten models and therefore, our model is robust and the results do not depend on one particular model.

Conclusion

The relationship between globalization and human trafficking is ambiguous and complicated. Lots of scholars have studied the nexus between these two phenomena. Some argue that transnational criminals have been major beneficiaries of globalization. Human trafficking has been among the fastest growing forms of transnational crime because current world conditions have created an unbalanced world economy and living standards. The supply exists because globalization has caused increasing economic and demographic disparities between the developing and developed world (Louise, 2012). Migration flows are enormous, and this illicit trade is hidden within the massive movement of people. Others argue that globalization helps to build international laws that criminalize human trafficking and also build global network between international governmental organizations and local governments to combat human trafficking. However, there is little academic study to show whether the increase in global integration can help to combat human trafficking or not. This paper provides empirical evidence to show that the increase in globalization will enhance a country's ability to combat human trafficking.

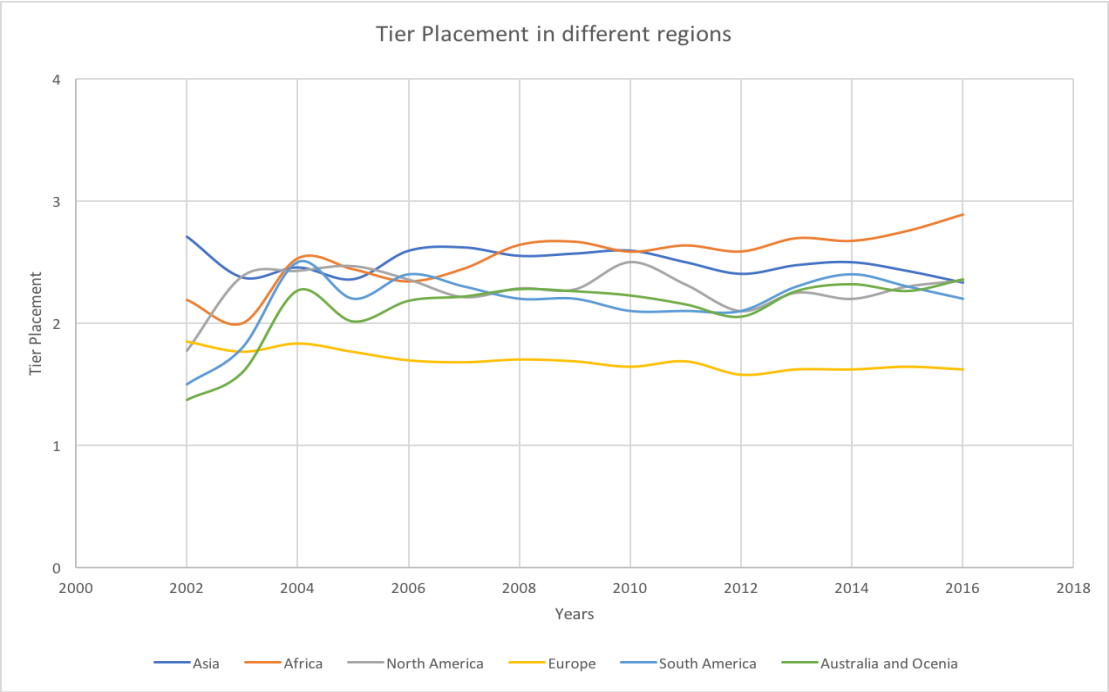
This paper uses tier placement as the independent variable in the ordered logit regression model and has three measurements of globalization. From the results, both globalization index and the net FDI have a positive relationship with a nation's ability to combat human trafficking, as well as GDP per capita, GDP annual growth, and Dummy democracy while region dummy of Asia has a negative impact on country's capacity of combating HT. This paper further deals with the problems of multicollinearity, heteroscedasticity and serial correlation and does a robustness analysis to guarantee the robustness of the model.

However, as every other statistics model, this model has certain limitations as well. For

example, GDP per capita might be an endogenous variable since it is influenced by other variables in the model like Dummy conflicts. Therefore, for further analysis, it is necessary to introduce an instrumental variable, for instance, energy consumption per capita, to identify the hidden (unobserved) correlations, and to show the correlation between the globalization and nations' capacity of combating human trafficking.

Appendix

Graph – 6



Graph – 7

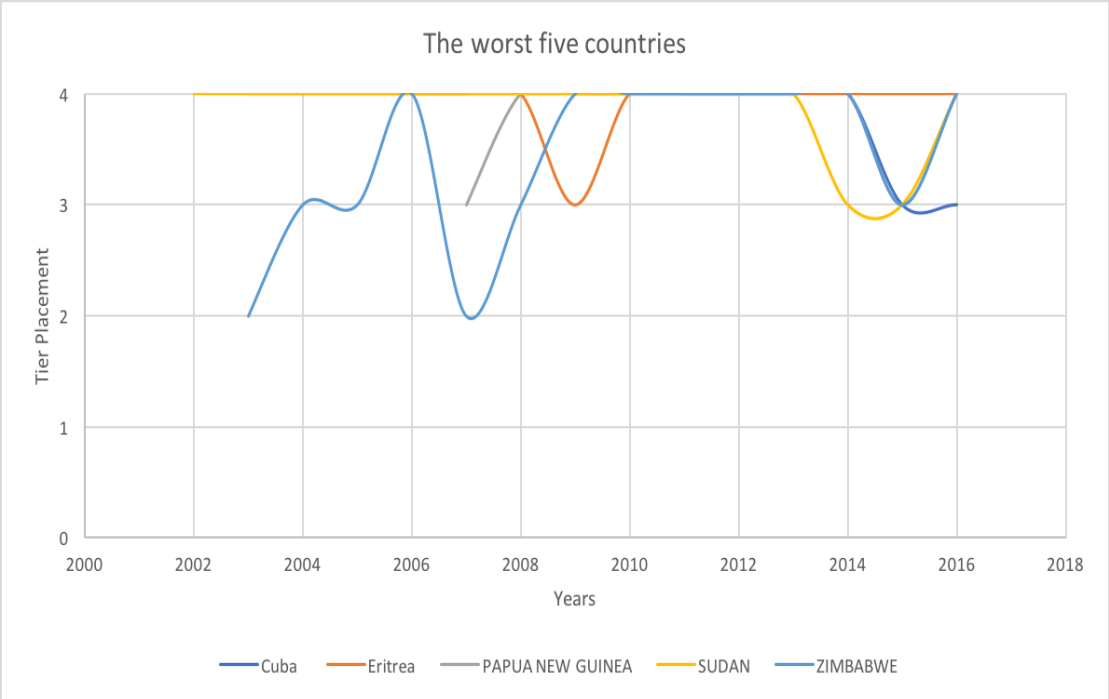


Table – 1

Variable	Obs	Mean	Std. Dev.	Min	Max
tradeopenn~s	2,400	92.81243	54.71501	19.1008	455.4151
netfdi	2,509	9.70e+09	3.58e+10	-2.97e+10	7.34e+11
globalizat~x	1,990	56.55067	17.40252	22.02	92.63

Table – 2

```
Iteration 0:   log likelihood = -2537.4445
Iteration 1:   log likelihood = -2526.6287
Iteration 2:   log likelihood = -2526.6085
Iteration 3:   log likelihood = -2526.6085

Ordered logistic regression                     Number of obs     =      2,111
                                                LR chi2(1)        =      21.67
                                                Prob > chi2       =     0.0000
Log likelihood = -2526.6085                     Pseudo R2         =     0.0043
```

ranking	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
tradeopenness	-.0033726	.000724	-4.66	0.000	-.0047917	-.0019535
/cut1	-1.778511	.0898961			-1.954704	-1.602318
/cut2	.4935325	.080195			.3363532	.6507118
/cut3	2.136949	.1019421			1.937146	2.336751

Table – 3

```
Iteration 0:   log likelihood = -2096.7837
Iteration 1:   log likelihood = -1822.8059
Iteration 2:   log likelihood = -1809.8523
Iteration 3:   log likelihood = -1809.8123
Iteration 4:   log likelihood = -1809.8123

Ordered logistic regression                     Number of obs     =      1,718
                                                LR chi2(1)        =     573.94
                                                Prob > chi2       =     0.0000
Log likelihood = -1809.8123                     Pseudo R2         =     0.1369
```

ranking	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
globalizationindex	-.0718122	.003256	-22.06	0.000	-.0781939	-.0654305
/cut1	-6.011591	.2294324			-6.46127	-5.561912
/cut2	-3.104463	.1790729			-3.455439	-2.753486
/cut3	-1.420973	.1804576			-1.774664	-1.067283

Table – 4

```
Iteration 0:   log likelihood = -2657.6109
Iteration 1:   log likelihood = -2561.9412
Iteration 2:   log likelihood = -2561.2148
Iteration 3:   log likelihood = -2561.2137
Iteration 4:   log likelihood = -2561.2137

Ordered logistic regression                     Number of obs     =      2,192
                                                LR chi2(0)        =     192.79
                                                Prob > chi2       =          .
Log likelihood = -2561.2137                     Pseudo R2         =     0.0363
```

ranking	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
netfdi	-2.62e-11	2.57e-12	-10.21	0.000	-3.13e-11	-2.12e-11
/cut1	-1.797312	.0634625			-1.921696	-1.672928
/cut2	.600056	.0476078			.5067464	.6933656
/cut3	2.201717	.0760253			2.05271	2.350724

Table – 5

Variable	Sources	Obs	Mean	Std. Dev.	Min	Max
GDP per capita	World Bank database[a]	2,485	12087.9	17783.59	106.017	116612.9
GDP Annual Growth	World Bank database[b]	2,484	3.97937	5.065562	-62.07592	54.15778
Inequality	Word Bank database[c]	796	38.04647	9.237032	16.23	64.79
Corruption Level	Transparency International[d]	2,300	17.99459	22.12625	1.2	92
Democracy	José Antonio Cheibub[e]	2,625	.5931429	.4913414	0	1
Conflict	Uppsala Conflict data program[f]	1,274	.1059655	.3079143	0	1

Table – 6

	(1) ranking	(2) ranking	(3) ranking
ranking			
tradeopenn~s	−0.000499		
	(−0.16)		
gdppercapita	−0.0000634***	−0.0000531***	−0.0000447***
	(−6.82)	(−5.54)	(−4.24)
gdpannualg~h	−0.0658*	−0.0599*	−0.0660*
	(−2.13)	(−1.97)	(−2.01)
inequality	−0.00486	0.00252	−0.0234
	(−0.22)	(0.12)	(−1.03)
corruption~l	−0.0105	−0.0103	−0.00824
	(−1.40)	(−1.38)	(−1.03)
dummydemoc~y	−1.648***	−1.723***	−0.853*
	(−4.80)	(−5.02)	(−2.14)
dummyconfl~t	−0.197	−0.276	−0.173
	(−0.46)	(−0.64)	(−0.40)
dummyregio~n	1.010**	1.028**	0.716*
	(3.03)	(3.08)	(1.97)
dummyregio~a	0.917	0.731	0.406
	(1.76)	(1.43)	(0.73)
dummyvaria~e	0.0831	0.0475	0.171
	(0.23)	(0.13)	(0.38)
netfdi		−9.79e−12*	
		(−2.39)	
globalizat~x			−0.0503**
			(−3.11)
cut1			
_cons	−3.498**	−3.295**	−6.606***
	(−2.90)	(−3.08)	(−4.55)
cut2			
_cons	−0.315	−0.0965	−3.276*
	(−0.27)	(−0.09)	(−2.38)
cut3			
_cons	1.874	2.126*	−1.332
	(1.55)	(1.99)	(−0.96)
N	357	361	337

t statistics in parentheses
* p<0.05, ** p<0.01, *** p<0.001

.

Table – 7

Variable	VIF	1/VIF
inequality	2.67	0.374416
dummyvaria~e	2.49	0.402081
gdppercapita	1.97	0.507073
dummyregio~n	1.72	0.581171
dummydemoc~y	1.63	0.611973
dummyregio~a	1.51	0.662280
dummyconfl~t	1.46	0.682652
tradeopenn~s	1.32	0.759894
gdpannualg~h	1.31	0.764942
corruption~l	1.07	0.932712
Mean VIF	1.72	

Table – 8

```
Iteration 0:   log pseudolikelihood = -367.99942
Iteration 1:   log pseudolikelihood = -271.49998
Iteration 2:   log pseudolikelihood = -264.46393
Iteration 3:   log pseudolikelihood = -264.32031
Iteration 4:   log pseudolikelihood = -264.31991
Iteration 5:   log pseudolikelihood = -264.31991

Ordered logistic regression                     Number of obs     =        337
                                                Wald chi2(10)     =     152.63
                                                Prob > chi2       =     0.0000
Log pseudolikelihood = -264.31991               Pseudo R2         =     0.2817
```

ranking	Coef.	Robust Std. Err.	z	P>|z|	[95% Conf.	Interval]
globalizationindex	-.0502768	.0205809	-2.44	0.015	-.0906147	-.009939
gdppercapita	-.0000447	.0000139	-3.21	0.001	-.0000719	-.0000174
gdpannualgrowth	-.0660292	.0375436	-1.76	0.079	-.1396132	.0075549
inequality	-.0233977	.0231238	-1.01	0.312	-.0687196	.0219241
corruptionlevel	-.0082408	.0080526	-1.02	0.306	-.0240236	.0075419
dummydemocracy	-.8528763	.421345	-2.02	0.043	-1.678697	-.0270552
dummyconflict	-.1729397	.4234854	-0.41	0.683	-1.002956	.6570764
dummyregionasian	.7162398	.416792	1.72	0.086	-.1006575	1.533137
dummyregionafrica	.4064895	.5691353	0.71	0.475	-.7089952	1.521974
dummyvariableeurope	.1712926	.5030131	0.34	0.733	-.8145949	1.15718
/cut1	-6.606326	1.572373			-9.688119	-3.524532
/cut2	-3.276294	1.521399			-6.258182	-.2944058
/cut3	-1.331971	1.459488			-4.192514	1.528572

Table – 9

```
Iteration 0:   log pseudolikelihood =   -406.459
Iteration 1:   log pseudolikelihood = -296.97164
Iteration 2:   log pseudolikelihood =   -287.621
Iteration 3:   log pseudolikelihood = -287.41412
Iteration 4:   log pseudolikelihood = -287.41407
Iteration 5:   log pseudolikelihood = -287.41407

Ordered logistic regression                     Number of obs     =        361
                                                Wald chi2(9)      =          .
                                                Prob > chi2       =          .
Log pseudolikelihood = -287.41407               Pseudo R2         =     0.2929
```

ranking	Coef.	Robust Std. Err.	z	P>|z|	[95% Conf.	Interval]
netfdi	-9.79e-12	4.89e-12	-2.00	0.046	-1.94e-11	-1.95e-13
gdppercapita	-.0000531	.0000128	-4.14	0.000	-.0000782	-.000028
gdpannualgrowth	-.0598926	.0342341	-1.75	0.080	-.1269901	.0072049
inequality	.0025228	.0203861	0.12	0.902	-.0374333	.0424788
corruptionlevel	-.0102988	.0075263	-1.37	0.171	-.02505	.0044525
dummydemocracy	-1.722995	.338456	-5.09	0.000	-2.386357	-1.059633
dummyconflict	-.2756011	.4352189	-0.63	0.527	-1.128615	.5774123
dummyregionasian	1.027634	.3532818	2.91	0.004	.3352141	1.720053
dummyregionafrica	.7309282	.5200306	1.41	0.160	-.2883129	1.750169
dummyvariableeurope	.0475077	.3934805	0.12	0.904	-.7236998	.8187153
/cut1	-3.294945	1.124107			-5.498155	-1.091736
/cut2	-.0964636	1.127457			-2.306238	2.113311
/cut3	2.126069	1.143058			-.1142838	4.366422

Table – 10

	(1)	(2)	(3)	(4)	(5)	(6)
	(7)	(8)	(9)	(10)		
	ranking	ranking	ranking	ranking	ranking	ranking
	ranking	ranking	ranking	ranking		
ranking						
globalizat~x	−0.0544***	−0.0687***	−0.0367***	−0.0762***	−0.0358***	−0.0440***
	−0.0367***	−0.0795***	−0.0613***	−0.0741***		
	(−13.38)	(−20.56)	(−4.37)	(−11.62)	(−4.22)	(−9.85)
	(−5.53)	(−12.67)	(−17.86)	(−10.02)		
gdppercapita	−0.0000241***	−0.0000565***		−0.0000557***	−0.0000267***	
	−0.0000478***					
	(−6.17)		(−6.80)		(−6.68)	(−6.25)
	(−6.79)					
gdpannualg~h		0.0182		0.0331	0.0145	−0.00790
	−0.0406*					
		(1.74)		(1.69)	(0.73)	(−0.73)
	(−2.41)					
inequality			0.00917	0.0247*	0.00965	
	0.0240*		0.0285**			
			(0.93)	(2.57)	(0.98)	
	(2.50)		(2.82)			
dummydemoc~y						−1.011***
	−1.171***	−1.138***	−0.484			
						(−8.80)
	(−6.71)	(−10.30)	(−1.93)			
dummyregio~n						0.553***
	0.791***					
						(4.67)
	(4.96)					
dummyconfl~t						
	−0.637**					
	(−2.82)					
cut1						
_cons	−5.312***	−5.733***	−4.145***	−5.134***	−3.999***	−5.364***
	−5.200***	−5.509***	−6.189***	−5.395***		
	(−21.50)	(−23.41)	(−6.14)	(−7.50)	(−5.68)	(−19.62)
	(−12.64)	(−8.48)	(−25.81)	(−7.99)		
cut2						
_cons	−2.345***	−2.827***	−0.900	−1.980**	−0.749	−2.218***
	−1.959***	−2.368***	−3.135***	−2.185***		
	(−11.38)	(−14.09)	(−1.41)	(−3.05)	(−1.11)	(−9.55)
	(−5.54)	(−3.89)	(−16.90)	(−3.43)		
cut3						
_cons	−0.630**	−1.088***	1.037	−0.0103	1.188	−0.465*
	−0.221	−0.395	−1.390***	−0.229		
	(−3.02)	(−5.34)	(1.57)	(−0.02)	(1.72)	(−1.99)
	(−0.62)	(−0.63)	(−7.42)	(−0.35)		
N	1695	1693	663	663	663	1670
	862	663	1681	656		

t statistics in parentheses
* p<0.05, ** p<0.01, *** p<0.001

Table – 11

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	ranking	ranking	ranking	ranking	ranking	ranking	ranking	ranking	ranking	ranking
ranking										
netfdi	−8.42e−12***	−2.47e−11***	−8.69e−12***	−3.20e−11***	−2.23e−11***	−2.73e−11***	−9.43e−12*	−2.95e−11***	−1.18e−11**	−4.46e−12*
	(−4.09)	(−9.84)	(−4.22)	(−6.83)	(−8.53)	(−6.07)	(−2.31)	(−6.34)	(−2.78)	(−2.24)
gdppercapita	−0.0000575***		−0.0000555***				−0.0000734***		−0.0000617***	−0.0000790***
	(−16.89)		(−16.15)				(−10.35)		(−8.51)	(−14.19)
gdpannualg~h		0.0554***	0.0258**				0.0869***	0.0193	−0.0530***	
		(5.94)	(2.65)				(4.91)	(1.02)	(−3.49)	
inequality				0.0609***		0.0669***	0.0200*	0.0583***	0.0354***	
				(7.39)		(7.80)	(2.22)	(7.07)	(3.68)	
dummydemoc~y					−1.672***	−1.902***			−1.608***	
					(−17.87)	(−9.57)			(−10.44)	
dummyregio~n								1.073***	0.717***	
								(5.29)	(5.05)	
dummyconfl~t									−0.839***	
									(−4.07)	
cut1										
_cons	−2.534***	−1.549***	−2.411***	0.849**	−2.937***	−0.494	−1.662***	1.086***	−0.720	−3.888***
	(−29.82)	(−21.18)	(−25.15)	(2.69)	(−30.43)	(−1.40)	(−4.31)	(3.39)	(−1.68)	(−18.65)
cut2										
_cons	0.251***	0.894***	0.379***	3.555***	−0.275***	2.474***	1.451***	3.869***	2.521***	−0.692***
	(4.71)	(13.69)	(5.27)	(10.21)	(−4.08)	(6.69)	(3.77)	(10.85)	(5.63)	(−4.57)
cut3										
_cons	1.997***	2.608***	2.130***	5.492***	1.450***	4.537***	3.408***	5.822***	4.513***	1.140***
	(23.90)	(27.80)	(21.93)	(13.92)	(17.15)	(11.02)	(8.04)	(14.45)	(9.31)	(6.91)
N	2154	2153	2152	751	2107	729	751	751	751	1053

t statistics in parentheses
* p<0.05, ** p<0.01, *** p<0.001

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