INTERNATIONAL MIGRATION
Edited by Elzbieta Gozdziak, Georgetown University
IOM International Organization for Migration

doi:10.1111/j.1468-2435.2009.00592.x

Economics of Human Trafficking

Elizabeth M. Wheaton*, Edward J. Schauer** and Thomas V. Galli***

ABSTRACT

Because freedom of choice and economic gain are at the heart of productivity, human trafficking impedes national and international economic growth. Within the next 10 years, crime experts expect human trafficking to surpass drug and arms trafficking in its incidence, cost to human well-being, and profitability to criminals (Schauer and Wheaton, 2006: 164–165). The loss of agency from human trafficking as well as from modern slavery is the result of human vulnerability (Bales, 2000: 15). As people become vulnerable to exploitation and businesses continually seek the lowest-cost labour sources, trafficking human beings generates profit and a market for human trafficking is created.

This paper presents an economic model of human trafficking that encompasses all known economic factors that affect human trafficking both across and within national borders. We envision human trafficking as a monopolistically competitive industry in which traffickers act as intermediaries between vulnerable individuals and employers by supplying differentiated products to employers. In the human trafficking market, the consumers are employers of trafficked labour and the products are human beings. Using a rational-choice framework of human trafficking we explain the social situations that shape relocation and working decisions of vulnerable populations leading to human trafficking, the impetus for being a trafficker, and the decisions by employers of trafficked individuals. The goal of this paper is to provide a common ground upon which policymakers and researchers can collaborate to decrease the incidence of trafficking in humans.

INTRODUCTION

This paper identifies and models human trafficking according to the United States *Victims of Trafficking and Violence Prevention Act of 2000*

* Equip the Saints, Red Oak, Texas.
** Prairie View A&M University, Prairie View, Texas.
*** Chaminade University of Honolulu, Honolulu, Hawaii.

International Migration Vol. 48 (4) 2010
ISSN 0020-7985
Published by Blackwell Publishing Ltd.,
9600 Garsington Road, Oxford OX4 2DQ, UK,
and 350 Main Street, Malden, MA 02148, USA.

(TVPA) definition of the severe forms of human trafficking (Office on Violence Against Women [OVAW], 2000). In this document, severe human trafficking is either:

> "(A) sex trafficking in which a commercial sex act is induced by force, fraud, or coercion, or in which the person induced to perform such act has not attained 18 years of age; or
>
> (B) the recruitment, harboring, transportation, provision, or obtaining of a person for labor or services, through the use of force, fraud, or coercion for the purpose of subjection to involuntary servitude, peonage, debt bondage, or slavery."

We also adhere to Article 3, paragraph (a) of the United Nations *Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children* (U.N. Protocol), (2000) that defines trafficking in persons as:

> "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 labour or services, slavery or practices similar to slavery, servitude or the removal of organs."

In this paper, the supply in the market for human trafficking refers to labour provided by individuals trafficked for both labour and commercial sexual exploitation. Economics models the labour supply decisions made by vulnerable individuals. Thus the individual's decision of whether to supply labour is of vital importance to the economic model. Whether the outcome of the individual's choice in the human trafficking market is labour or sexual exploitation is of importance for policy determination, but does not change the economic model.

One term needing clarification is "agency". This term has been much discussed and debated in the literature of trafficking: In his book, *Good News About Injustice*, Gary Haugen speaks of agency in broad terms when he states, "Injustice occurs when power is misused to take from others . . . namely, their life, dignity, liberty or the fruits of their . . . labor" (1998: 72). This agency debate is hotly contested, especially so in the ideologically polarized sex trafficking discourse (Farley, 2003; Raymond, 2004; Doezema, 1998; and Kempadoo, 2007).

The question of agency is a question of the relative amount of personal decisionmaking ability a trafficking victim retains. It is assumed that some personal agency is limited when a person is trafficked. This loss of agency by the victim is noted by the language of both the UN Protocol in its statement, "having control over another person" (UN Protocol, 2000: 3); and by the TVPA, in Article 3, paragraph (a), using the words "induced to perform", and in subparagraph (B) "for the purpose of subjection to involuntary servitude, peonage, debt bondage, or slavery" (OVAW, 2000: 5).

Decreasing the incidence of human trafficking requires collaboration across professional fields to discover and handle limited agency. Examples of this include law enforcement that deals with coercion by traffickers during transportation, infractions of immigration law, and the use of exploited labour. Some criminal justice studies focus on prostitution and illegal immigration (some of which is trafficked). Sociological research makes legislation more effective for different countries and situations as it increases the knowledge of cultural norms and responses.

Economics complements the law enforcement, criminal justice, and sociology research and practices by analyzing the choices individuals and organizations make in the human trafficking market. The inclusion of the emotional (psychic) costs of criminal behavior (Hellman and Apler, 2006: 2) connects economics with criminology and the other social sciences. Economic models are useful for the modeling of labour markets, and thus the market for human trafficking created by the supply and demand of exploitable labour.

Economic models are by necessity based on assumptions. Variables such as cultural norms, corruption, and household time allocation among individual family members can be difficult to model. Because an economic model is a simplification of reality, the exclusion of certain determinants from the model may not fully explain the human trafficking market in its complexity. The model will, however, provide a general guideline for informing policymaking decisions.

An economic market is a place (physical or virtual) that connects buyers ("demand") and sellers ("supply") either directly or through an intermediary. A main theme in the human trafficking literature is the role of intermediaries in connecting employers (the source of "labour demand") needing compliant labour with vulnerable individuals seeking employment.

The market for trafficked people involves labour supply decisions by vulnerable populations (possibly migrants), labour demand decisions by employers, and the intermediary decisions by human traffickers. This paper discusses the decisions of these groups. We model human trafficking as a monopolistically competitive industry with many sellers (human traffickers) offering many buyers (employers) differentiated products (vulnerable individuals) based on price and preferences of the individual employers.

This paper uses rational-choice theory. We assume that individuals use all available information (are economically "rational") and compare costs and benefits (employ cost-benefit analysis) to obtain the highest level of wellbeing or profit. We define all key terms for those unfamiliar with economic rhetoric.

Unlike Becsi (1999), who divides the participants in the human trafficking market into criminals (human traffickers), non-criminal households (vulnerable population), businesses, and the government, we look at the agents making economic choices in the market: (1) vulnerable individuals, (2) traffickers, (3) employers, and (4) users of slave-produced products or services. Both the efforts of and corruption of government and law enforcement officials are widely noted in the criminal justice literature on human trafficking (Kyle and Dale, 2001: 33). This paper does not specifically analyse government policy. Instead, it discusses the implications of government policy within the human trafficking market and suggests areas of policy improvement.

As with the international drug trade and the illicit arms trade, profit is the driving motive for human trafficking. Chuang (2006: 140) refers to human trafficking as "'an opportunistic response' to the tensions between the economic necessity to migrate, on the one hand, and the politically motivated restrictions on migration, on the other." Human traffickers connect the supply of labour in source areas with the demand for labour in destination areas. Corruption in politicians and law enforcement officers contribute to both the lack of accurate information on human trafficking and the ease with which traffickers transport and exploit victims.

International human trafficking has been identified in most nations. A country may serve as a source of trafficked human beings, a transit country through which people are trafficked, or a destination country where the trafficked individuals' labour is used (Under Secretary for Democracy and Global Affairs, 2007: 10; Salt and Stein, 1997: 467). While there is substantial evidence that trafficking takes place within the United States (Schauer and Wheaton, 2006: 146; Mizus, et al., 2003: 4; Venkatraman, 2003; Estes and Wiener, 2001; Campagna and Poffenberger, 1988), as in the rest of the world, it is hard to quantify the number of trafficked individuals. According to US government estimates, 600,000 to 800,000 persons are trafficked across international borders annually (GAO, 2006). The United Nations Office on Drugs and Crime estimates that around 2.5 million people are being trafficked around the world at any given time. It is thought that approximately 80 per cent of trafficked individuals are women and girls while around 50 per cent are minors (Under Secretary for Democracy and Global Affairs, 2007: 8).

Estimates involving human trafficking are imprecise due to disparities in governmental and non-governmental definitions and the underground nature of human trafficking. For a number of reasons those who have been victimized by traffickers or who have illegal alien status are often reluctant to provide information. All agencies and researchers cite the need for more information in order to understand and reduce trafficking in humans.

THE HUMAN TRAFFICKING MARKET

Understanding the market for human trafficking

This paper models the human trafficking market as a monopolistic competition consisting of many sellers and buyers dealing in differentiated products. Traffickers encounter few barriers to entering the market when they see profit being made by other traffickers or exiting the market if they find they are not making a profit. The ease of entry and exit precludes a monopoly or oligopoly. Despite the large number of suppliers in the market, product differentiation (in this market, trafficked individuals with different personal attributes) allows monopolistically competitive sellers to have some control over the price at which they sell their products.

The monopolistic competition model best fits the market for human trafficking for a number of reasons. First, there are many sellers in the market. Whether human trafficking is by organized groups of criminals (Office on Violence against Women., 2000) or by small, loose networks of entrepreneurs (Klueber, 2003; Zhang and Chin, 2002a, 2002b; Bush, 2004; Kwong, 1997), the benefits so greatly outweigh the costs that a willing cadre of traffickers is assured. As Bales (2005: 89) states, "Criminals are inventive. They work in a context of intense competition, they must be flexible, and they must adapt quickly or (at times literally) die".

Second, many buyers demand human trafficking victims for employment for a variety of reasons. Employing trafficked individuals is by nature exploitative. In many cases, the trafficked individual does not have the right to decide whether to work, how many hours to work, or what kind of work to do (Bales, 1999: 9).

Third, the human trafficking market is characterized by product differentiation. Bales (2005: 158) points out that "attributes vary according to the jobs or economic sectors in which the retail consumer intends to use the trafficked person. Different attributes are needed for prostitution or agricultural work or domestic service, though these will overlap as well". Because there are so many different uses for trafficked individuals, the economic model in this paper assumes that the trafficker and employer negotiate over price so that the trafficker has some control of selling price.

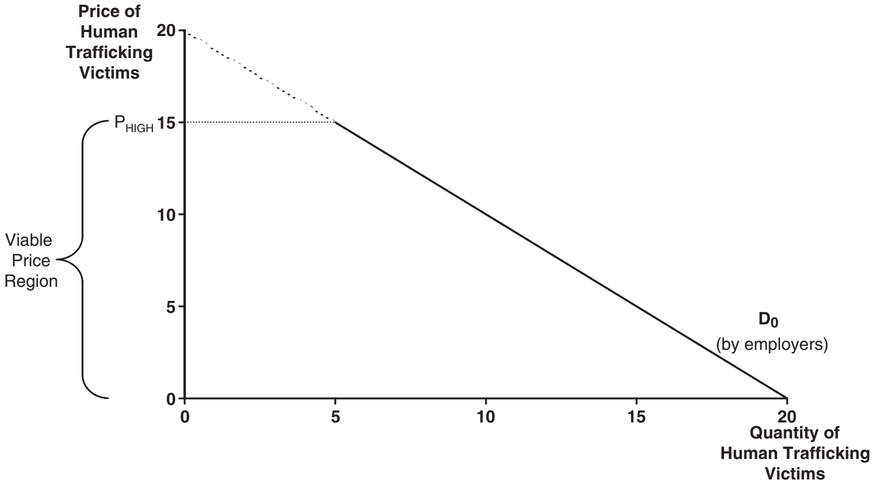
Supply and demand in the human trafficking market

Human traffickers participate in a monopolistically competitive market supplying a product in many forms. The price the trafficker will receive is based on availability of the desired product, characteristics of the product, the number of similar products available, and the negotiating acumen of the human trafficker. At very low prices, human traffickers will be unwilling and unable to supply trafficked individuals because costs exceed revenue. If the trafficker's costs do not change, an increase in the price received leads to increased profit and thus an increase in the number of trafficked individuals supplied.

Employers willing to employ trafficking victims face the traffickers' upward sloping supply curve. Because the employer is trying to decrease labour costs, the employer's downward sloping demand curve is zero at high. In Figure 1, at a price above P_{HIGH} employers can employ legitimate labourers because they do not benefit from using trafficked labour. This is shown by the dotted part of the demand curve. The viable price region in which those employers who use trafficked labour would be willing to employ trafficked victims would be at a price below P_{HIGH}.

FIGURE 1

DEMAND FOR HUMAN TRAFFICKING



Vulnerable Individuals

Most economic research deals with legal goods and services, perhaps due to the difficulty of getting reliable data on illegal markets (Reynolds, 1986: 8). In a legal labour market, money flows from businesses to households for the use of the households' time. An individual or household can determine how much labour to provide ("labour supply") based in part upon the compensation offered for the hours of labour. To work, a labourer must give up time that could otherwise be used for leisure activities or to gain education and training ("human capital" investment). Earned and unearned income allows individuals to buy combinations of goods and services. Individuals maximize wellbeing (economic "utility") by deciding how much labour to provide (to generate income) and how much leisure time to retain, based on the time and energy needed for each activity.

Economists typically model the number of hours devoted to labour market activity (labour supply) as dependent upon the wage rate offered, unearned income, and a host of personal characteristics (many of which Othman (2006: 52) calls "push factors") that include gender, age, education, composition of household, number of own children, social status, and family wealth. Labour supply decisions may also be affected by the local economy, culture, political instability, globalization, and information availability (which Othman (2006: 53–54) calls "pull factors"). These variables and others are determinants of the type and location of work a person chooses, given agency.

Criminal justicians and sociologists believe these push and pull factors make populations vulnerable to labour market exploitation and, possibly, human trafficking. Research looks at characteristics of those who choose to relocate such as gender (Ehrenreich and Hoschild, 2006; Klueber, 2003), education (Richard, 2000; Kelly, 2002; Klueber, 2003), and age (Green, 1998). Other studies focus on political instability (Derks, 2000; Hughes, 2000 and 2002), globalization (Bales, 2005), income differentials between developed and developing countries (Bales, 2000, 2003), worldwide capitalism and transnational corporations (Anderson and Davidson, 2003), and the universal devaluation and marginalization of women and children (Demleitner, 2001). Ejalu (2006: 171–173) suggests poverty, lack of education, urbanization and centralization of educational and employment opportunities, cultural thinking and attitude, traditional practices, domestic violence, corruption, conflicts, and difficulty in acquiring visas as causes of human trafficking.

In both the international and national markets, decisions to relocate (across or within national borders) are based on the perception that wages and opportunities in other areas are higher than those within the area of origin. Roy's model "describes how workers sort themselves among employment opportunities" (Borjas, 2008: 341) depending upon their skill level or human capital. Positive selection occurs when persons with higher levels of education decide to migrate because wages for high-skill jobs are higher in another area. Negative selection occurs when less educated persons migrate because wages for low-skilled jobs are higher in another area. Borjas (2008: 343) states the key implication of the Roy model as, "the relative payoff for skills across countries determines the skill composition of the immigrant flow". This is also true of the relative payoff for skills across different areas within a country.

In general, both human trafficking and human smuggling literature point out the low education and skill levels of the majority of those migrating illegally. This is likely due to the fact government immigration restrictions are aimed at the low-skilled migrants (Bales, 2007: 137). This means that negative selection is occurring and low-skilled workers are migrating in hopes of higher wages in destination areas.

Relocating is often seen as a means of helping the family, either by enabling the person to contribute financially to, or by eliminating the individual's financial burden on the family. In addition, television opens up a new world to impoverished people, contributing to their desire for opportunities, goods, and services.

Costs of relocating depend upon the individual's circumstances and include being away from family and friends, fees for relocation services, possible exploitation, and adapting to a new culture, language, and rules. The large number of people relocating from developing to developed countries suggests that for many the perceived benefits of relocation outweigh the known costs.

In the international labour market, problems develop when migration is not legal. Skeldon (2000) cites bureaucratic complexity and government corruption as factors that impede the legal mobility of labour. As legal migration is reduced due to stricter immigration rules and increased border security, illegal migration becomes more prevalent. The United National Office of Drugs and Crime (UNODC) reports that "irregular migrants are increasingly resorting to services offered by migrant smugglers..." (UNODC, 2009). Human traffickers offer new options for those wishing to migrate by facilitating illegal border crossings and providing false papers and funds needed to cover the cost of travel and relocation (Demleitner: 263; Kelly, 2003). Kwong (1997) argues that as legal immigration is made more difficult, the profit for traffickers rises proportionately. While there are a number of immigration rules, few countries have anti-trafficking laws in place to impede the flow of illegal migration. Those countries with anti-trafficking laws tend to have little enforcement of those laws (Salt, 2000).

While money flows relatively freely from businesses to households in legal markets; in the human trafficking market money flow is disrupted. The targeted victims receive little or no income, and further, lose some agency. Once agency is limited, the person is by definition a trafficked individual and is thus "commodified."

A variety of circumstances reportedly lead to the limiting of a person's agency, including being kidnapped or being misled by a seemingly genuine employment offer (Klueber, 2003). The individual may be aware that she will have to perform certain tasks but is kept ignorant of the scale of degradation awaiting her (Hughes, 2002). Jobs using human trafficking victims include "prostitution, domestic service, agricultural work,

work in small factories and workshops, mining, land clearance, selling in the market, and begging" (Bales, 2005: 146–150). Due to the diversity of usage, trafficked individuals who have some similar characteristics may be sold to different types of employers.

Bales (2000: 83–130) identifies several types of trafficked labour and reports the way trafficked individuals "…are used and the part they play in the world economy is increasingly similar wherever they are." For example, debt bondage, one of the oldest forms of slavery and the most prevalent form of modern human trafficking, uses a worker's labour to pay off a debt owed by that individual or the individual's family, often at a highly inflated rate of interest (Zakhari, 2005: 141). The amount of the loan could include inflated fees for trafficking victims across international borders (Kwong, 1997) and for food, clothing, and shelter required in transit.

Human traffickers

In the human trafficking market, traffickers act as intermediaries to provide employers, who use trafficked labour, with workers who have the desired characteristics. The successful human trafficker's business is dynamic, adapting as populations become vulnerable and as areas of demand shift. The trafficker may never meet the ultimate users of the trafficked victims. This follows Bales' (2005: 169) definition of business-to-business (trafficker to business owner) rather than business-to-consumer marketing. Human traffickers take advantage of the disparity between low wages and lack of employment opportunities in some areas and the seemingly abundant jobs and high wages in other areas.

When describing the rational-choice approach to crime, Becker (1995) states, "people decide whether to commit crime by comparing the benefits and costs of engaging in crime." Becker cites income from illegal work (1968) and psychic benefits ("getting away with something") (1995) as benefits of crime.

Human traffickers offer differentiated products; limiting the number and type of individuals they traffic to employers (or use as employers). This means that each human trafficker faces an individual demand curve for his product. This demand curve depends partly upon how unique consumers perceive the supplier's product to be in comparison with similar products available from other suppliers.

The revenue from human trafficking is large, an annual estimated average of US$ 13,000 per trafficked victim totaling US$ 32 billion (Belser, 2005: 18). Trafficked individuals are assessed as much as US$ 100,000 each in the United States (Zakhari, 2005). Bales (1999: 23) reports that slavery is a US$ 13 billion industry. Vulnerable populations exist in every part of the world due to such factors as globalization, economic and political instability, disease, disintegration of families, and war. This has increased labour movement both within countries and across international borders resulting in a steady supply of vulnerable individuals available to traffickers. Schloenhardt (1999) says the demand for slave labour is an impetus for criminals to create an illegal market.

Human traffickers face monetary (operational), physical (risk to life and health), psychological, and criminal (risk of being caught and severity of punishment) costs. In addition to the cost of moving individuals from one place to another, transportation costs include the costs of outfitting individuals for travel and falsified documents. There are also reports of traffickers presenting a sum of money to the families of children they traffic as signs of goodwill. Hughes (2000) weighs the low risk faced by traffickers with the potentially high profits due to "computer communication of international financial transactions, political and economic weakening and collapse, and the desire to migrate".

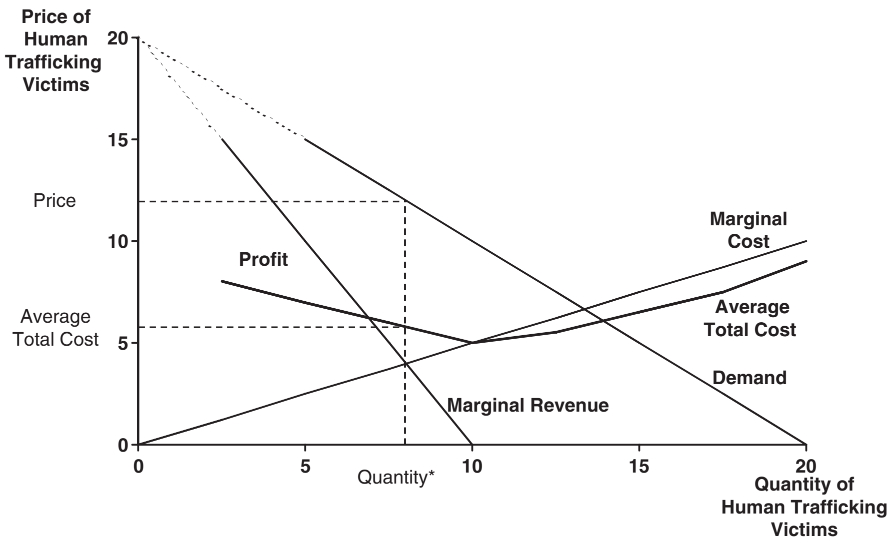
In the short run, the human trafficker gains economic profit (total revenue minus total cost, including the opportunity cost of using inputs) by selling at a price above average total cost (ATC) of trafficking persons. Average total cost includes average fixed costs (an average of those costs that have been paid and cannot be recovered) and average variable costs (costs that vary depending upon the individuals and circumstances necessary for trafficking). Average fixed cost includes the cost of establishing routes, recurring bribes, and forged travel documents. Because of these high fixed costs, average total cost is high at low quantities of trafficked individuals and decreases as operations increase in size, up to a certain point. Average variable cost consists of specific travel arrangements that vary based upon the individuals and changing characteristics of transportation. As the quantity of trafficking by an individual trafficker increases, the average total cost begins to rise due to the increase in average total costs brought about by the complicated logistics of illegally transporting larger numbers of people. Thus the average total cost curve is at first downward sloping and then upward sloping.

The marginal revenue (additional revenue from the last unit supplied) curve for a human trafficker is downward sloping. At very low quantities, the trafficker can charge very high prices to those employers who demand trafficked workers. Employers are willing to pay lower prices as more trafficked workers become available in the human trafficking market. Thus the marginal revenue curve is downward sloping.

Marginal cost is the additional cost to the trafficker of the last unit (trafficked person) supplied. The cost of supplying the first unit of trafficking is high because of the (fixed) costs of setting up the trafficking network in addition to the variable costs of transporting the individual. The additional cost of supplying the second trafficked person is much lower because the fixed costs have already been taken into account with the first person. We assume therefore that the marginal cost is very low for each of the first few trafficked individuals after the first one. As the trafficker increases the number of individuals supplied, marginal cost increases to account for the increased costs of providing documentation, housing, and transportation to a larger group of people. This means that the marginal cost curve in Figure 2 is upward sloping.

FIGURE 2

THE SHORT-RUN SUPPLY OF HUMAN TRAFFICKING BY AN INDIVIDUAL TRAFFICKER IN A MONOPOLISTICALLY COMPETITIVE MARKET



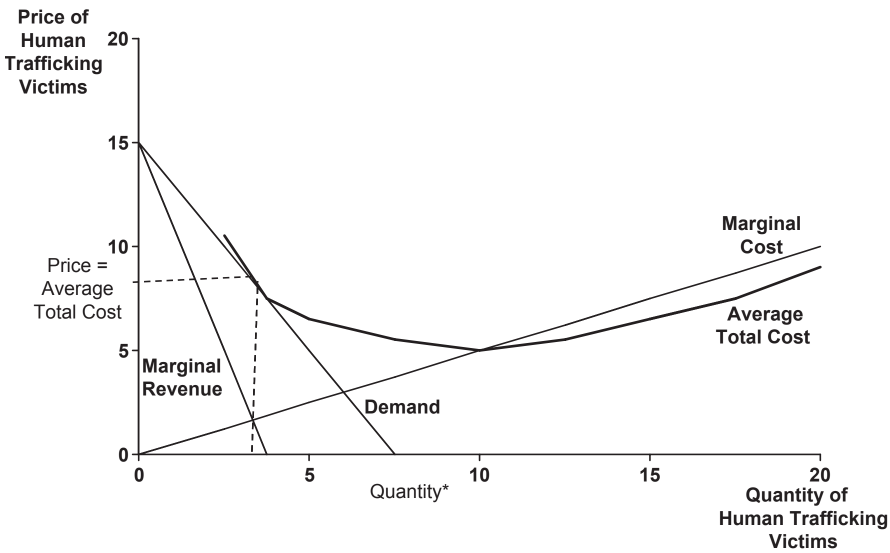
A trafficker will choose the quantity of individuals to traffic based upon maximizing profit. This occurs at the point (Q* on Figure 2) where marginal revenue equals marginal cost. At any quantity above this point, the cost of supplying the individual is greater than the revenue received from the sale of the individual, thus driving down profit. The profit is shown as the area below the demand curve between price and average total cost. Faced with an average total cost greater than price, suppliers will exit the market.

When other entrepreneurs see that there is economic profit in the human trafficking market, more suppliers enter the market. When there is an influx of a certain type of trafficked individuals (an increase in supply), there is greater competition and differentiated products become more similar, which drives down prices. In the long run, this means the individual trafficker's demand curve will shift left showing a decrease in the part of the entire human trafficking market provided by that trafficker. Suppliers will continue to enter and exit the market based on the possibility of profit until economic profit (which takes into account the opportunity cost of using inputs) is zero. Although economic profit is zero, accounting profit (revenue minus monetary costs, excluding opportunity costs) is positive for those traffickers remaining in the market. For an individual supplier, this is the point where price equals average total cost for the individual trafficker as shown in Figure 3. It is reasonable to assume that traffickers who accept the lower profit include those who have the lowest costs, are desperate for money, have networks in which the victims can be resold, or are involved in multi-stage operations in which there are different uses of the trafficked victims.

A trafficker knows that he is taking a risk in his chosen business and that his liberty and safety are constantly threatened. For example, victims' family members and communities may seek to punish the trafficker or other traffickers may use force to protect their recruitment areas or to take over someone else's area. Local, national, or international authorities threaten the trafficker's freedom and livelihood, but conviction rates show that the risks of human trafficking are lower than the risks of trafficking illegal drugs or arms. For example, with only a few hundred federal prosecutions since January 2001, the TVPA has had little impact on human traffickers in the United States (Venkatraman, 2003: 2); and beyond those identified, arrested, and prosecuted, much trafficking goes unrecognized or undiscovered.

FIGURE 3

THE LONG-RUN SUPPLY OF HUMAN TRAFFICKING BY AN INDIVIDUAL TRAFFICKER IN A MONOPOLISTICALLY COMPETITIVE MARKET



Human trafficking requires specific knowledge of vulnerable populations, recruitment tactics, and methods of finding and bribing corrupt officials. In addition, access to safe migration routes and ways to obtain the documents needed to cross borders are needed if trafficking internationally. Trafficked individuals may be sold to other traffickers for further transport, sold directly to employers who demand trafficked labour, or used as labour supply by the trafficker. Because many people have some knowledge of the techniques of trafficking, traffickers are easily replaced. Feingold (2005: 28) describes these individuals as ranging from "truck drivers and village 'aunties' to labor brokers and police officers."

A trafficker may be responsible for only part of the transportation of vulnerable individuals or for identifying and procuring individuals. Kelly (2002) and Schloenhardt (1999) consider different groups under the heading "traffickers". On the frontlines are organizers (entrepreneurs, planners, arrangers, and investors) and middlemen (recruiters, transporters, sellers, guides, and crew members). At the trafficked victims' destinations are the business operators (including enforcers, support personnel, and specialists). Corrupt government and law enforcement officials (protectors and informers) help the process.

Employers

A firm's goal is to maximize profit. Employers are willing and able to hire different amounts of labour at varying wages. The Bureau of Economic Analysis reports compensation of employees was 56.5 per cent of US GDP in 2006 (often including minimum wage requirements, overtime pay, hazard pay, or benefits). Because labour is such a large part of business costs, a small increase in the cost of labour can significantly increase the cost of production and decrease profit. Employers may seek trafficked individuals as a cheaper labour source, a part of what Salt (2000) calls the "commodification of migration". Bales (1999: 22) reports that trafficked individuals "…constitute a vast workforce supporting the global economy."

For example, throughout the history of the United States, American business, agriculture, and industry have minimized labour costs as a way to maximize profit. Surges of immigrants supplied much of the low-cost labour needed to dig Southern canals, to fight for the United States in its conflicts, to provide labourers and strikebreakers for industry. Long before 1776, Africans were coerced to immigrate and common European labourers were brought to America in one of several forms of debt-bondage known collectively as "indentured servitude".

In the early twenty-first century, American industry continues to rely on immigrants as the source of the least expensive labour. Suppressing wages is a way for business and industry to compete with ubiquitous subcontracting and outsourcing of production (Kwong, 1997: 10). The low cost of illegal immigrant labour and trafficked labour in such enterprises as agriculture and construction tends to depress wages for legal immigrants as well as for citizen labourers.

Employers maximize the return on their investments by providing a minimum level of wellbeing for trafficked labour and do not have to be concerned about government-regulated human rights, constitutional rights, safety issues, or benefits for workers. Businesses may require trafficked individuals with unique selling points (USPs) (Bales, 2005: 159). For example, young labourers may be needed for long work hours or exotic, young females may be desired for prostitution. In the sex trafficking industry, different parts of the world demand trafficked individuals based upon hair and skin colour. For example, Kempadoo (2004) notes that in the Caribbean, yellow-skinned females are desired for prostitution. While employers demand labour for the production of goods or services, individuals and households use a large number of trafficked labourers for such jobs as domestic service (Bales, 2005: 146). In this case the individual or household is the employer.

An additional benefit to employers is the very low cost of discarding trafficked victims after they can no longer contribute to profits due to disease or other health issues, age, noncompliance, or for other reasons. As with human traffickers, employers may use coercion, threats to family, and confiscation of documentation to keep individuals from complaining to officials. If the costs of maintaining a worker exceed the revenue he or she generates, he or she is discarded and replaced. This process may be as easy as setting the trafficked victim out on a street corner to be picked up by Immigration and Customs Enforcement (ICE) or disposed of in other ways (Bales, 1999: 31).

There are a number of monetary costs to employers of trafficked labour. These include paying the human trafficker for workers; housing, clothing, and feeding workers; and may also pay police and other officials to turn a blind eye on their activities. Today a trafficked individual is a very low-cost item (a few thousand dollars) compared to an estimated US$ 100,000 (2003 dollars) for a strong, young male Creole Mulatto slave on the DuParc Plantation in Louisiana in May, 1808, before emancipation.

While trafficked labour is monetarily cheaper to employers than legal labour, there are additional costs involved including physical, psychological, and criminal costs. For example, there is the possible loss of social status (and therefore income) if it becomes public that the firm uses trafficked labour. In terms of criminal costs, using trafficked labour poses little risk of prosecution to employers. Penalties (including prison time and fines) for trafficking in human beings are stiff, but only if the traffickers can be caught and convicted (USDOJ, 2003: 8). Due to the underground and coercive nature of human trafficking, it is difficult for legal authorities to find and indict employers who use trafficked labour.

Several businesses along the manufacturing chain are at least partially dependent upon trafficked labour (Bales, 1999: 23–24; Bales, 2007: 126). At a low level, employers use trafficked labour for production in sweatshops, agriculture, and domestic labour. On the next level, producers subcontract jobs out to lower cost producers. A third level includes the intermediaries who obtain the goods from producers to supply to large corporations. At the top, international corporations demand the lowest priced goods for resale to consumers and to increase shareholder dividends (Bales, 1999: 9).

Consumers and fautors

The consumers have the same goal as employers: Paying the lowest price to receive the highest benefit. This means that consumers weigh the costs and benefits of consuming items and services and make purchasing decision based on the item's or service's net benefit.

The most commonly described form of human trafficking is sex trafficking. Reynolds (1986: 4) states, "As long as some people demand prostitution services and are willing to pay for them, there will be someone else who will emerge and supply that demand." A "fautor" is defined as the ultimate consumer of the services of a prostitute or sex-trafficked victim (Schauer and Wheaton, 2006); although knowledge of the victim's trafficked status may not be known. If in general consumers do not know about the trafficked-labour content of their purchases, it follows that fautors may be unaware that the prostitutes they frequent are held in bondage. When those profiting from the use of forced labour in the orange juice industry (Bowe, 2007) are not under suspicion, people who consume orange juice may be unaware, or may not wish to be aware, of its use. As an example, during the time of his research, Bowe reports that there were only two officers assigned to the whole southern area of Florida to check on orange juice production and harvesting.

IMPACTING THE MARKET FOR HUMAN TRAFFICKING

As previously stated, economics analyses the choices made by individuals and organizations. Within the labour market for human trafficking, these choices are made by vulnerable individuals, traffickers, and employers. The economic model of the human trafficking market can be used to inform policymaking by presenting a theoretical and visual representation of the effects of policy on the quantity and price of trafficked individuals.

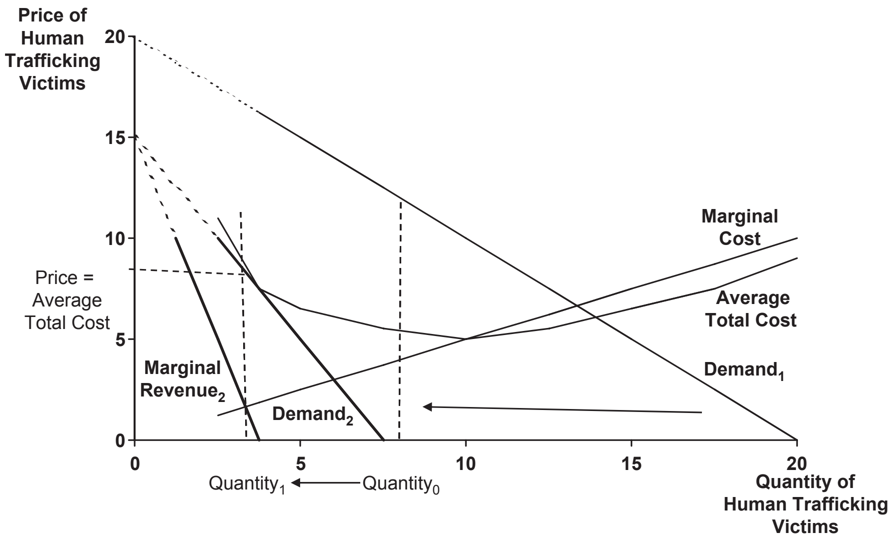
Increasing costs to human traffickers is the main way to affect the supply side of the market. Coordinated international law enforcement and legal cooperation as well as increased punishment for those caught transporting individuals illegally and against their will would increased the expected cost of trafficking (Naim, 2005: 106). In addition, creating job opportunities where people have previously despaired of making a living by legal means would effectively increase the opportunity cost of engaging in criminal activity. Throughout the literature it is clear that crime prevention rather than crime control and policing is needed to decrease human trafficking.

Until 2007, the UK plan of action against human trafficking had targeted the supply side of the market (UK Action Plan, 2007: 31). They are now moving toward tackling the demand side of the human trafficking equation, calling for a "more sophisticated approach and understanding of the demand factors".

Reducing the demand for trafficked humans means decreasing benefits to employers of employing trafficked labour, whether on-site or through subcontracting. If information is used to educate consumers about the horrors trafficked individuals face, consumer boycotts of certain products and services can be used to decrease benefits to employers. Another way is to increase police administration intent to prioritize enforcement of trafficking offences. Laws can be reworked to more

FIGURE 4

A DECREASE IN THE DEMAND FOR HUMAN TRAFFICKING



severely punish those caught knowingly using trafficked labour, including fautors and consumers of trafficked victim-produced products and services.

Figure 4 shows a decrease in the demand for trafficked individuals by a specific trafficker as a leftward shift in the demand curve (from $Demand_1$ to $Demand_2$). This leads to a decrease in the quantity of trafficked victims exchanged in the market (from Q_0 to Q_1) and a decrease in the price charged by the trafficker. Figure 4 shows the case in which the price drops until it is equal to average total cost. Employers left in the market will be those who are desperate for trafficked labour, have a network to resell victims, or have multi-stage operations in which there are a variety of uses for human trafficking victims.

CONCLUSIONS

Productivity resulting from individual agency and economic gain is a key to national and global economic growth. Human trafficking tears apart the structure of local economies, adds to the bureaucratic and law enforcement burden at all levels of government, and destroys people's lives. It leads to increased crime and immigration problems, decreased safety for vulnerable populations, and decreased welfare for nations (Bertone, 2000). Human trafficking affects the global economy as source countries lose part of their labour supplies and transit and destination countries deal with the costs of illegal immigration. Breakdowns in international trade relations can occur when human trafficking becomes a bargaining issue. Reducing the incidence of human trafficking must therefore become a global response goal and a top priority of communities, law enforcement, and policymakers.

What needs to be done? Bales (2007: 19) gives a list of anti-trafficking policies including ending world poverty, eradicating corruption, slowing the population explosion, halting environmental destruction and armed conflicts, canceling international debts, and getting governments to keep the promises they make every time they pass a law. While this metamorphosis seems unrealistic in the short term, economic analysis of the human trafficking market points to initial steps needed at each level of involvement. The research presented calls for a system of international cooperation to decrease benefits to employers of using trafficked labour to increase costs to traffickers of transporting vulnerable individuals, and to lower the net benefit to persons for relocating illegally.

Scarce funding leads governments to focus resources on reducing the demand for human trafficking which would in turn decrease both the price and numbers of trafficked victims. Because of the continuous supply of vulnerable populations, international border issues, and crime prevention obstacles, decreasing the supply of human trafficking is economically less efficient, although vitally necessary. In addition to the previous discussion of decreasing benefits to employers of trafficked labour and increasing costs to human traffickers, there are major areas that need to be strengthened to effectively decrease the incidence of human trafficking.

Other important steps are the global cooperation needed to reduce human trafficking and the creation of a concise and worldwide definition of human trafficking. Presently the terminology of human trafficking, and hence reporting by regional, national, and international entities, is imprecise and misleading. A felony lacking definition cannot be controlled, nor can it be counted or measured. The US TVPA leads the world in its definitions of human trafficking and in its insightful responses to the criminal acts and victimizations of human trafficking. The TVPA can be improved through the inclusion of the knowledge gained through empirical studies. Only with precise definitions can researchers begin to gather data and apply empirical analysis. The human trafficking literature is almost entirely anecdotal at this point in time.

Bales (2007: 231) says the two major tools for fighting human trafficking are awareness and resources. Data collection and analysis are needed to facilitate accurate information for law enforcement officials and those witnessing human trafficking. There is a need for more information about the methods of traffickers and structures of trafficking (Aronowitz, 2003). It is also important to get information on trafficked individuals and business practices from the users of trafficked services. For example, one part of the UK plan of action against human trafficking calls for raising awareness of men who frequent establishments where sex trafficking is in operation. In deterring the demand for forced labour, the UK action plan looks to the Gangmaster Licensing Authority and the 2006 Immigration, Asylum and Nationality Act for criminal penalties involving the employment and labour exploitation of illegal migrants. Additionally, the UK Action Plan calls for specific measures when dealing with trafficking victims who are children stating, "They have very special needs, a reduced capacity to assess risk and an increased dependence on others" (UK Action Plan, 2007: 31, 40, 60).

Decreasing human trafficking requires both international and domestic solutions. Nations (as well as individual states within the United States) should create anti-trafficking laws consistent with the TVPA. What shall Europe do? Interstate and international law enforcement coordination is needed to reduce human trafficking. Law enforcement officers also need to improve their ability to identify and intervene in human trafficking. Schauer and Wheaton (2006: 166) state, "Police must receive training in trafficking law enforcement, how to identify trafficking, how to perceive the paradigm shift [from criminal to victim], how to rescue victims and how to make contacts for victim services, and how to deal with victims who may willingly serve as witnesses in the prosecution of traffickers".

Another issue, one requiring a paradigm shift, is for nations and states to recognize that persons who have been illegally trafficked are not themselves criminals. Rather, trafficked persons are the victims of traffickers, of employers of trafficked labour, and of end-users of trafficked labour. With the rapidly-increasing anti-immigration activism in first world countries and the resultant rapid fortification of borders against illegal entry, laws and law enforcement have tended to identify anyone who has entered a country illegally as a criminal. The United National Office of Drugs and Crime states, "Police and criminal justice staff needs standard working procedures to guarantee the physical safety of victims, protect their privacy and make it safe for them to testify against their abusers" (United National Office of Drugs and Crime, 2009).

Once realistic crime definitions are created, and once laws are created that engage police at all levels in the enforcement of human trafficking laws, policing agencies must give human trafficking highest enforcement priority. Human trafficking must receive high enforcement priority; for without agency encouragement, human trafficking will be difficult to identify and enforce. The seizure of the property of human traffickers and employers of trafficked individuals would serve to not only discourage the practice of human trafficking but also to push human trafficking into a higher enforcement priority category as the proceeds of asset forfeiture seizures would be applied to funding needs of policing agencies. The United National Office of Drugs and Crime states, "…successful convictions depend on the police and others making the right decisions. This can only happen if they have the knowledge and capacity to respond to human trafficking" (United National Office of Drugs and Crime, 2009).

Historically and economically, prohibition has not decreased the trade in illegal goods and services. Bales (2005: 166) suggests a better solution would be to increase workers' ability to emigrate legally. Restrictions, he adds, push the trade underground, where it is more violent and harder to discover. Becker, et al. (2004: 31) point out that the United States' prohibition on alcohol caused illegal producers to replace legal ones. Bales (2007: 2) notes, ''…making something illegal doesn't make it cease to exist; making it illegal only causes it to vanish from view''. Restricting immigration therefore leads to increased revenue for traffickers.

While victim services are being made available to trafficking victims by various social agencies under the provisions of the TVPA and UK Action Plan, further research is necessary to identify the services required to provide necessary help for victims of human trafficking. With faulty definitions and cases being brought forward in small numbers and piecemeal, many questions still exist about the availability and type of victim's services required to meet the needs.

Both law enforcement and citizens of countries around the globe must be educated to understand trafficking as the international crisis it has become. In *Ending Slavery: How we free today's slaves*, Kevin Bales (2007: 94) presents several recommendations for community education and action responses. He suggests that community groups and schools get information about human trafficking (available at, http://www.freetheslaves.net). In addition, staff and volunteers of international organizations need training to recognize warning signs of trafficking and the steps of responding. Support is needed to provide the finances and recognition needed to provide antislavery workers on the front lines with the training in conflict resolution, community building, and victim services to transform people from victims into productive wage earners. Funders and funding agencies should be encouraged to work toward providing stable funding for groups working on antislavery projects in the field. Inter-agency and inter-organizational dialogue and cooperation would also help in the fight against human trafficking. When local populations recognize human trafficking, the crime comes out of hiding and effective responses can be created.

If accurately informed about the tactics of human traffickers (when documented and published), persons considering relocating gain a more realistic view of illegal migration and the perceived net benefit of illegally migrating decreases. Effective deterrence of human trafficking means targeting every stage of human trafficking involvement (Bales, 2007: 31), with increased legal pressure placed upon the demand side predicted to be most effective.

Extensions to the economics of human trafficking model

This paper presents the economic model of human trafficking as one in which the traffickers procure vulnerable individuals and sell them to employers. There is evidence that in some human trafficking cases, the trafficker becomes the employer. The model presented here can be modified by identifying the vulnerable populations as the labour supply and the traffickers acting as employers as the labour demand. This application is applicable for both international and domestic trafficking where the trafficker becomes the employer. By taking on the role of business owner, the trafficker is using business-to-consumer marketing (Bales, 2005: 169).

While human trafficking is based upon labour supply and labour demand decisions, human smuggling is based on the supply and demand for illegal migration services. Kyle and Dale (2001: 32–33) describe the location of human trafficking and human smuggling as the opposite ends of a profit spectrum and identify migrant-exporting schemes (human smuggling) as assisting migrants in traveling between areas that are otherwise restricted. The Human Smuggling and Trafficking Center (January 2005: 4) identifies a smuggled person as one who willingly works with smugglers to cross an international border. The International Organization for Migration (IOM) (2008) lists employment as one of the main reasons for both international and national migration. Upon reaching the destination country, the smuggled individual has the agency to move and change jobs as desired and is therefore not considered a victim. An economic market for services would therefore be a better fit for modeling human smuggling.

REFERENCES

Anderson, B., and J. Davidson
2003 *Is Trafficking in Human Beings Demand Driven? A Multi-Country Pilot Study*. International Organization for Migration (IOM), Geneva.
Aronowitz, A.
2003 "Trafficking in human beings: an international perspective", in D. Siegal, H. van de Bunt and D. Zaitch (Eds), *Global Organized*

Crime: Trends and Developments, Kluwer Academic Publishers, Boston.

Bales, K.

2000 *Disposable People: New Slavery in the Global Economy*. University of California, Berkley.

2003 "Understanding the demand behind human trafficking", paper presented to the National Institute of Justice, July. info@freetheslaves.net.

2005 *Understanding Global Slavery*, University of California Press, Berkley.

2007 *Ending Slavery: How We Free Today's Slaves*, University of California Press, Berkley.

Becker, G.

1968 "Crime and punishment: an economic approach", *Journal of Political Economy*, 3: 169–217.

1995 "The economics of crime", *Cross Sections*, Fall: 8–15.

Becker, G., et al.

2004 "The economic theory of illegal goods: the case of drugs", *NBER Working Paper 10976*, National Bureau of Economic Research, Cambridge.

Becsi, Z.

1999 "Economics and crime in the States", *Economic Review*, 84(1): 38–56.

Belser, P.

2005 "Forced labour and human trafficking: estimating the profits", Working paper no. 42, InFocus Programme on Promoting the Declaration on Fundamental Principles and Rights at Work, International Labour Organization, Geneva.

Bertone, A.

2000 "Sexual trafficking in women: international political economy and the politics of sex", *Gender Issues*, 18(1): 4–22.

Borjas, G.

2008 *Labor Economics*, McGraw-Hill Irwin, Boston.

Bowe, J.

2007 *Nobodies: Modern American Slave Labor and the Dark Side of the New Global Economy*, Random House, New York.

Bush, G.

2004 "Remarks on efforts to globally promote women's rights", *Weekly Compilation of Presidential Documents*, 40(11): 395–399.

Campagna, D., and D. Poffenberger

1988 *The Sexual Trafficking in Children: An Investigation of the Child Sex Trade*, Auburn House, Westport.

Chuang, J.

2006 "Beyond a snapshot: preventing human trafficking in the global economy", *Indiana Journal of Global Legal Studies*, 13(1): 137–163.

Demleitner, N.
2001 "The law at a crossroads: the construction of migrant women trafficked into prostitution", in D. Kyle and R. Koslowski (Eds), *Global Human Smuggling: Comparative Perspectives*, Johns Hopkins University Press, Baltimore: 257–293.

Derks, A.
2000 "Combating trafficking in South-East Asia: a review of policy and programme responses", International Organization for Migration (IOM), Geneva.

Doezema, J.
1998 "Forced to choose: beyond the voluntary v. forced prostitution dichotomy", in K. Kempadoo and J. Doezema (Eds), *Global Sex Workers*, New York, Routledge: 34–50.

Ehrenreich, B., and A. Hoschild (Eds)
2002 *Global Women: Nannies, Maids, and Sex Workers in the New Economy*, Holt, New York.

Ejalu, W.
2006 "From home to hell: the telling story of an African woman's journey and stay in Europe", K. Beeks and D. Amir (Eds), *Trafficking and the Global Sex Industry*, Lexington Books, New York.

Estes, R., and N. Weiner
2001 "The commercial sexual exploitation of children in the U.S., Canada and Mexico, a monograph of the U.S. National Study", University of Pennsylvania, Philadelphia.

Farley, M. (Ed.)
2003 *Prostitution, Trafficking, and Traumatic Stress*, Binghamton, Haworth Press.

Feingold, D.
2005 "Human trafficking", *Foreign Policy (September/October)*: 26–32.

Finckenauer, J., and K. Chin
2007 "Asian transnational organized crime", National Institute of Justice Special Report, U.S. Department of Justice, Washington, DC, January.

Green, P.
1998 "Impact of sexual exploitation on children", in P. Kilbourne and M. McDermid (Eds), *Sexually Exploited Children: Working to Protect and Heal*, MARC Publications, Monrovia.

Haugen, G.
1999 *Good News about Injustice: A Witness of Courage in a Hurting World*, Inter-Varsity Press , Downers Grove, Illinois.

Hellman, D., and N. Apler
2006 *Economics of Crime: Theory and Practice*, Pearson, Boston.

Hughes, D.
2000 "The "Natasha" trade: the transnational shadow market of trafficking in women", *Journal of International Affairs*, 53(2): 1–18.

2002 *Trafficking for Sexual Exploitation: The Case of the Russian Federation*, International Organization for Migration (IOM), Geneva.

Human Smuggling and Trafficking Center
2005 "Fact sheet: distinctions between human smuggling and human trafficking", Department of International Development, British Government, London, January.

International Office of Migration (IOM)
2008 "About migration", IOM, Geneva. http://www.iom.int/jahia/Jahia/lang/en/pid/3.

Kelly, E.
2002 *Journeys of Jeopardy: A Review of Research on Trafficking in Women and Children in Europe*, International Organization for Migration (IOM), Geneva.

Kelly, L.
2003 "The wrong debate: reflections on why force is not the key issue with respect to trafficking in women for sexual exploitation", *Feminist Review*, 173: 139–144.

Kempadoo, K.
2004 *Sexing the Caribbean: Gender, Race and Sexual Labor*, Routledge, New York.
2007 "The war on human trafficking in the Caribbean", *Race & Class*, 49(2): 79–85.

Klueber, S.
2003 *Trafficking in Human Beings: Law Enforcement Response*, Master's thesis, Department of Criminal Justice, University of Louisville.

Kwong, P.
1997 *Forbidden Workers: Illegal Chinese Immigrants and American Labor*, The New Press, New York.

Kyle, D., and J. Dale
2001 "Smuggling the state back in: agents of human smuggling reconsidered", in D. Kyle and R. Koslowski (Eds), *Global Human Smuggling: Comparative perspectives*, The John Hopkins University Press, Baltimore.

Mizus, M., et al.
2003 "Germany, U.S. receive most sex-trafficked women", *Off Our Backs*, 33(7/8): 4.

Naim, M.
2005 *Illicit: How Smugglers, Traffickers, and Copycats are hijacking the Global Economy*, Anchor Books, New York.

Office of the Under Secretary for Global Affairs
2004 *Trafficking in Persons Report: June 2004 (Trafficking Victims Protection Act of 2000)*, US Department of State, Washington, DC.

Office on Violence against Women
2000 *Victims of Trafficking and Violence Prevention Act of 2000*, United States Department of Justice, Washington, DC.

Othman, Z.
2006 "Trafficking in women from the former Soviet Union for the purposes of sexual exploitation", in K. Beeks and D. Amir (Eds), *Trafficking and the Global Sex Industry*, Lexington Books, New York.

Raymond, J.G.
2004 "Prostitution on demand: legalizing the buyers as sexual consumers", *Violence Against Women*, 10(10): 1156–1186.

Reynolds, H.
1986 *The Economics of Prostitution*, Charles C. Thomas, Springfield.

Richard, A.
2000 *International Trafficking in Women to the United States: A Contemporary Manifestation of Slavery and Organized Crime*, DCI Exceptional Intelligence Analyst Programm, Bureau of Intelligence and Research, United States Department of State, Washington, DC.

Salt, J.
2000 "Trafficking and human smuggling: a European perspective" In R. Appleyard and J. Salt (Eds), *Perspectives on Trafficking of Migrants*, an offprint of *International Migration*, 38(3): 31–54.

Salt, J., and J. Stein
1997 "Migration as a business: the case of trafficking", *International Migration*, 35(4): 467–491.

Schauer, E., and E. Wheaton
2006 "Sex trafficking into the United States: a literature review", *Criminal Justice Review*, 31(1): 1–24.

Schloenhardt, A.
1999 *Organised Crime and the Business of Migrant Trafficking: An Economic Analysis*, Australian Institute of Criminology, AIC Occasional Seminar, Canberra.

Skeldon, R.
2000 "Trafficking: a perspective from Asia", A. Appleyard and J. Salt (Eds), *Perspectives on Trafficking of Migrants*, International Organization of Migration (IOM) and United Nations, Geneva.

United Nations
2000 *Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children, Supplementing the United Nations Convention against Transnational Organized Crime*, United Nations, New York, http://www.uncjin.org/Documents/Conventions/dcatoc/final_documents_2/convention_%20traff_eng.pdf.

United National Office of Drugs and Crime
2009 United Nations Office of Drugs and Crime Website, Vienna, http://www.unodc.org

US Department of Justice
2003 *Assessment of U.S. Activities to Combat Trafficking in Persons*, US Department of Justice, Washington, DC.

US Government Accountability Office (GAO)
2006 *Human trafficking: Better Data, Strategy, and Reporting Needed to Enhance U.S. Anti-Trafficking Efforts Abroad*, US Government Accountability Office, Washington D.C.

US Department of State
2007 *Trafficking in Persons Report, Under-Secretary for Democracy and Global Affairs*, US Department of State, Washington, DC.

Van Impe, K.
2000 "People for sale: the need for a multidisciplinary approach towards human trafficking", in R. Appleyard (ed.), *Perspectives on Trafficking of Migrants*, an offprint of *International Migration*, 38(3): 113–150.

Venkatraman, B.
2003 "Human trafficking: a guide to detecting, investigating, and punishing modern-day slavery", *The Police Chief*, 70(12): 1–8.

Zakhari, B.
2005 "Legal cases prosecuted under the Victims of Trafficking and Violence Protection Act of 2000", in S. Stoecker and L. Shelley (Eds), *Human Traffic and Transnational Crime: Eurasian and American Perspectives*, Rowman and Littlefield, Lanham.

Zhang, S., and K. Chin
2002a *Characteristics of Chinese Human Smugglers*, National Institute of Justice, Washington, DC.
2002b "Enter the dragon: inside Chinese human smuggling organizations", *Criminology*, 40(4): 737–768.