Globalization and the illicit market for human trafficking: an empirical analysis of supply and demand

Gergana Danailova-Trainor
Patrick Belser

Special Action Programme to combat Forced Labour

DECLARATION/WP/53/2006
Globalization and the illicit market for human trafficking: an empirical analysis of supply and demand

Gergana Danailova-Trainor

&

Patrick Belser

International Labour Office
Geneva

December 2006

1 USA Government Accountability Office (GAO), danailovatrainorg@gao.gov. This paper expresses solely the opinion of the author and does not constitute an endorsement by the Government Accountability Office.

2 International Labour Office (ILO), belser@ilo.org
Foreword

In June 1998 the International Labour Conference adopted a Declaration on Fundamental Principles and Rights at Work and its Follow-up that obligates member States to respect, promote and realize freedom of association and the right to collective bargaining, the elimination of all forms of forced or compulsory labour, the effective abolition of child labour, and the elimination of discrimination in respect of employment and occupation. The *InFocus Programme on Promoting the Declaration* is responsible for the reporting processes and technical cooperation activities associated with the Declaration; and it carries out awareness raising, advocacy and knowledge functions – of which this Working Paper is an example. Working Papers are meant to stimulate discussion of the questions covered by the Declaration. They express the views of the author, which are not necessarily those of the ILO.

The Policy Integration Department pursues the ILO’s decent work and fair globalization agenda from an integrated perspective. Its central objective is to further greater policy coherence and the integration of social and economic policies at the international and national level. To this end, it works closely with other multilateral agencies and national actors such as Governments, trade unions, employers’ federations, NGO’s and universities. Through its policy-oriented research agenda, it explores complementarities and interdependencies between employment, working conditions, social protection, social dialogue and labour standards. Current work is organized around four thematic areas that call for greater policy coherence: Fair globalization, the global poor and informality, macroeconomic policies for decent work, and labour and sustainable development. Working papers disseminate research findings at an early stage in order to obtain comments, and are thus preliminary documents.

In 2005, the ILO’s Special Action Programme to Combat Forced Labour (SAP-FL) and the ILO’s Policy Integration Department pooled their efforts and resources to produce the ILO’s first ever global estimate of forced labour and human trafficking, with indications of its regional distribution and broad forms. To do so, the two departments first constructed a database with several thousands reported cases as well as estimates from secondary sources, and later implemented an experimental methodology which was described in a technical

---

3The text of the Declaration is available on the following web site: [http://www.ilo.org/declaration](http://www.ilo.org/declaration).
document called “ILO Minimum Estimate of Forced Labour in the World” by Patrick Belser, Michaëlle de Cock and Farhad Mehran. The main results of this pooled effort were published in the Director General’s 2005 Global Report *A Global Alliance against Forced Labour*, showing that forced labour affects at least 12.3 million people in the world, of which 2.4 million are victims of human trafficking.

The present working paper uses the database developed for the global estimate to study the determinants of one specific form of human trafficking, namely trafficking for forced sexual exploitation. It represents a first attempt at a cross-country econometric analysis of the determinants of sex trafficking. The results are supportive of the hypothesis derived from much qualitative work that there exists a statistical relationship between the number of victims trafficked out of a country and the level of female youth unemployment in that country. The results also support the hypothesis that countries which are more opened to the forces of globalization and have more prostitution are more likely to be destination places for victims of trafficking (the paper, however, has not examined the link between the legal status of prostitution and prostitution incidence, and thus has not found any correlation between legalised prostitution and trafficking). Although these arguments are not new, the paper provides some empirical support for them. The paper nevertheless recognizes that the quality of the available data is still relatively poor and hence calls for better statistics and data in order to improve the robustness of future empirical analysis. This recommendation falls in line with the ILO’s ongoing technical cooperation with countries to generate - as was emphasized in the 2005 Global Report - more and better quantitative information, providing benchmarks by reference to which progress can be measured over time.

Roger Plant
Head, Special Action Programme to Combat Forced Labour
InFocus Programme on Promoting the Declaration

Duncan Campbell, Director
Rolph van der Hoeven, Research Coordinator
Policy Integration Department
Acknowledgements

We would like to thank David Kucera, Malte Luebker and Barbara Stolz for their excellent comments and suggestions.
# Table of contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreword</td>
<td>iii</td>
</tr>
<tr>
<td>I. Introduction</td>
<td>1</td>
</tr>
<tr>
<td>II. Definitions</td>
<td>2</td>
</tr>
<tr>
<td>III. Conceptual Framework</td>
<td>3</td>
</tr>
<tr>
<td>IV. Data</td>
<td>10</td>
</tr>
<tr>
<td>V. Results</td>
<td>14</td>
</tr>
<tr>
<td>VI. Conclusion</td>
<td>23</td>
</tr>
<tr>
<td>Bibliography</td>
<td>25</td>
</tr>
<tr>
<td>List of Working Papers of the InFocus Programme on Promoting the Declaration</td>
<td>29</td>
</tr>
</tbody>
</table>
I. Introduction

In recent years, human trafficking has been identified as a form of modern slavery, as a threat to human security, and as one of the greatest human rights challenges of our time. But while there is an increasing body of literature on different aspects of human trafficking, so far there has not been any more rigorous empirical work on the forces affecting the market for trafficked victims (TV). In this paper we try to make a contribution towards filling this gap by developing largely ad hoc models of demand and supply of TV. We use data on trafficking collected from open sources by the ILO and determine the explanatory variables by a study of the literature, data availability in countries of origin and destination and by experimentation.

Our study focuses exclusively on trans-national sex trafficking. This only represents a sub-set of the overall trafficking problem – which can occur for the purpose of either sexual or labour exploitation and which can be the outcome of either a trans-national or a domestic criminal activity. In 2005, the ILO estimated for example that there were 12.3 million people in forced labour worldwide, of which about 2.4 million had been trafficked, both internally and across-borders. Among all trafficked victims, the ILO estimated that at least one third were trafficked for the purpose of labour exploitation. The U.S. Department of State, which focuses only on cross-border trafficking, estimates that each year between 600,000 and 800,000 people fall into the hands of traffickers, either for commercial sexual exploitation or for labour exploitation. These two estimates, however, are not directly comparable due to differences in the inclusion of internal trafficking, treatment of duration and differences between “stock” and “flow” figures (see Kutnick, Belser and Danailova-Trainor, 2006).

To our knowledge, the present paper represents one of the first attempts to examine the determinants of sex trafficking from an empirical perspective, using cross-country data. The quality of this data is still very imperfect and the models that are tested are simple. Our results nevertheless suggest that the demand for TV is higher in countries that are more open to globalization and that have a higher incidence of prostitution (independently from the legal status of prostitution), while the supply of TV increases when female youth unemployment is high in the countries of origin. In the current paper, we have not examined the link between legalization of prostitution and prostitution incidence, and thus have not found any correlation between legalized prostitution and trafficking.
II. Definitions

While most people have an intuitive understanding of trafficking, it is important to distinguish human trafficking from human smuggling. While smuggling refers to the illegal but voluntary transportation across borders, trafficking is defined by exploitation and forced labour. The United States Trafficking Victims Protection Act (TVPA) of 2000 defines “severe forms of trafficking” as: 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 an act has not attained 18 years of age; or: b) the recruitment, harbouring, transportation, provision, or obtaining of a person for labour or services, through the use of force, fraud, or coercion for the purpose of subjection to involuntary servitude, peonage, debt bondage, or slavery”. These definitions cover trafficking for both sexual and labour exploitation and do not require that a trafficking victim be physically transported from one location to another. (U.S. Department of State, TIP Report 2005, p.12).

Similarly, the U.N. Protocol to Prevent, Suppress, and Punish Trafficking in Persons, Especially Women and Children (the so-called Palermo Protocol) adopted in 2000 defines human trafficking as: “The recruitment, transportation, transfer, harbouring or receipt of persons, by means of 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, or the removal of organs”.

According to the U.S. Department of State, many nations misunderstand this definition, overlooking internal trafficking in their national legislation and often failing to distinguish trafficking from smuggling of migrants (TIP Report 2005, p.12). The European Commission’s Expert Group on Trafficking in Human Beings also considers that even though the U.N. Palermo Protocol complements the U.N. Convention Against Transnational Organized Crime – and hence focuses on trafficking across borders - trafficking can also happen internally within countries (EC, 2004, p.48).
The key element of the U.N. Trafficking Protocol is the forced labour or slavery like outcomes (EC, 2004, p.52). Forced or compulsory labour, in turn, is defined by the International Labour Organisation (ILO) as “all work or service, which is exacted from any person under the menace of any penalty and for which the said person has not offered himself voluntarily”\(^4\). Accordingly, forced labour or services exist when people are subjected to psychological and/or physical coercion (the menace of a penalty) in order to perform some work or service, which they would otherwise not have freely chosen (the involuntariness). Forced labour includes practices such as forced sexual exploitation, as well as debt-bondage, serfdom or other forms of servitude, which can all be viewed as different forms of “modern slavery”.

### III. Conceptual Framework

Human trafficking is a multifaceted phenomenon, which has been analyzed from a variety of perspectives. Some authors view human trafficking as a criminal activity by transnational organized groups (Bruckert and Colette, 2002). Others analyze human trafficking as a public health concern or a human rights issue within the framework of modern day slavery or modern forced labour (Ruggiero, 1997, ILO, 2005, Bales, 2005,). Human trafficking is also seen through the lenses of irregular migration.

In this paper we view human trafficking for commercial sexual exploitation as an exchange between recruiters and exploiters, despite a set of internationally recognized rules, laws and regulations designed to prevent it. This means that there exists an illicit market for trafficking victims, and that the global incidence of trafficking depends on the factors that motivate demand and supply. In the simplest scenario of human trafficking, a recruiter abducts a victim in the country of origin and sells the victim at a certain price to an unscrupulous brothel-owner in the place of destination. In this scenario, the supplier is the recruiter and the demander is the brothel-owner. The trafficked person is the victim that is being supplied and demanded. This market analogy thus implies a kind of “commodification” of victims, (not, of course, because of moral judgment, but because that is how traffickers treat their victims).

---

\(^4\) Convention No. 29, Art.2.1  
\(^5\) The Convention provides for certain exceptions, in particular with regard to military service for work of purely military character, normal civic obligations, work of prisoners convicted in a court of law and working under the control of a public authority, work in emergency cases such as wars or other calamities, and minor communal services (Art. 2.2). A subsequent ILO Convention 105, adopted in 1957, specifies that forced labour can never be used for the purpose of economic development or as a means of political education, discrimination, labour discipline or punishment for having participated in strikes.
This illicit market can be represented as in Figure 1, where the price at which victims are exchanged is represented on the vertical axis and where the quantity of victims bought and sold is represented on the horizontal axis. As always, the supply curve indicates that quantity supplied increases when the price at which victims can be sold increases, and the demand curve shows that the quantity demanded declines when the price goes up. If the market clears, the price of victims adjusts to ensure that supply equals demand, i.e. that all the victims supplied by traffickers are effectively sold to unscrupulous brothel-owners. In the present illustration, the market equilibrium arises at price \((P^*)\) and the number of trafficked victims is \((Q^*)\).

**FIGURE 1: the illicit market for trafficking victims**

It is important to note that in this framework, the demand is from brothel-owners and pimps for labor inputs (i.e., the trafficking victims) for the provision of prostitution services by a certain establishment. The demand is not directly from customers of these establishments. Customers “only” buy sexual services, not trafficked victims. Of course, the demand from brothel-owners depends on the price which customers for sexual services are willing to pay (and the marginal product of labor). But if customers do not distinguish between the service of a trafficked victim and the same service of a non-trafficked provider, then there is no separate demand for the sexual services of trafficked people. There is only one demand by customers: the demand for prostitution services.
The same argument can apply to the case of trafficking for labour exploitation. Imagine that a recruiter abducts a victim in the country of origin and sells the victim at a certain price to an unscrupulous restaurant-owner in the country of destination. Imagine also that the trafficking victim is used as a cook for producing spring rolls. The supplier in this illicit market is the recruiter and the demander is the restaurant-owner, not the final consumer of the spring-roll. Hence, here again, there is only one demand that emerges from customers: the demand for spring rolls.

In theory, this market – like all clearing markets – could be estimated empirically through a system of simultaneous equations such as the one represented by the three equations below, where (Qd) represents the demand, where (Qs) represents the supply, and where Q represents the market-clearing number of trafficked victims. We see that both the supply and the demand depend on the price of trafficking victims (P) as well as on a set of exogenous factors (X).

\[
\begin{align*}
Q_d &= \alpha_0 + \alpha_1 \cdot P + \alpha_2 \cdot X + u \\
Q_s &= \beta_0 + \beta_1 \cdot P + \beta_2 \cdot X + u \\
Q &= Q_d = Q_s
\end{align*}
\]

In practice, however, there are a number of complications, which make it almost impossible at the present stage to estimate this system of equations. Firstly, it is unclear whether the market clearing condition really holds in the global trade for trafficked victims. Although economists like to view markets as perfectly competitive, in the real world market imperfections and market failures are likely to pervade illicit markets such as the one for trafficked victims. The second - even more important - complication is that, in reality, there is often no direct and observable transaction that involves the “buying” and the “selling” of a victim. This is because recruiters and the exploiters are often all part of the same trafficking network or organization. These organizations may involve investors, transporters, corrupt public officials, informers, guides, debt collectors, money launderers and commercial sex establishments. (Aronowitz, A., 2001). The implication is that no data exist on the “price” of victims, and without such data the above system of equations cannot be estimated.

The integration between recruiters and exploiters within the same organization explains why trafficking is probably best seen as an integrated criminal activity motivated by profit-
maximization (Salt and Stein, 1997, Shelley, 2003). This means that trafficking networks operate as businesses, trying to maximize benefits and minimize costs. On the benefit side, a turnover is generated by the economic exploitation of victims throughout the trafficking chain, including debt repayment as well as revenues from the commercial sexual activities of the victims. These economic benefits arise every year as long as the business is in operation. On the cost side, there is the cost of intermediate consumption or rents (wages are usually not paid) as well as the cost linked to the probability of being detected by law enforcement authorities and of being sanctioned. If the trafficker finds that the benefits are much larger than the costs, then a decision to engage in and continue with the activity is made. Such a framework for understanding trafficking reflects EUROPOL’s (2003) assessment that trafficking thrives because it “remains a low risk - high reward enterprise for organized crime” (p.1).

The profit-maximizing framework is also consistent with Squire and Narueput’s (1997) simple model of private sector behaviour in the face of legislation. In the authors’ view, “employers” have an economic incentive to evade the law when the returns to non-compliance - in terms of increased profits – are higher than the costs, which include transaction costs and possible punitive action by the state. In the authors’ model, “firms” will switch from licit to illicit activities when:

$$\Delta \pi \equiv \pi - \pi^* > \left[ \beta \cdot A / (1 - \beta) \right]$$

(1)

where $\Delta \pi$ can be seen as the “illicit profit”, i.e. the difference between profits made with illicit activities ($\pi$) and the profits that can be made with legal activities ($\pi^*$), $\beta$ is the probability of being investigated by the authorities, and $A$ is the financial amount of the penalty in case of being detected by law enforcement authorities. In this model, firms will evade the law when the “illicit profits” are higher than the “expected costs” (calculated as the financial amount of the sanction adjusted for the probability of detection). This model indicates that the supply of TV will be higher when the profits of trafficking are high relative to other options and when the risks of being investigated and the possible penalties are low.

**Supply and Demand**

Given the impossibility to estimate the above system of simultaneous equations, the present paper will look at the forces of supply and demand separately. That is, the paper tries to
identify the exogenous variables $X$ in equations (1) and (2) by relying on the findings of the existing literature, data availability, and also by experimentation with the data. We do not look at how demand and supply interact in a single market (or in several distinct markets) to find equilibrium price and quantity exchanged. For example, we do not look at how demand and supply interact in Switzerland. We look separately at “demand” in countries of destination and at “supply” in countries of origin, in the context of the global trafficking market. In this sense, supply determines the “outflow” of victims, while demand determines the “inflow”. This approach is also consistent with the trafficking networks being seen as profit-maximizing businesses, since the determinants of supply and demand are precisely the elements that directly affect the “cost-benefit” calculation of these networks. In policy, both sides of the illicit market must be addressed to effectively combat human trafficking.

The demand-side

What determines demand? A number of studies have discussed the possible impact of various factors on the extent of trafficking for sexual exploitation (for example, Raymond, 2004, p.1159, Widgren, 1994, p.7). In the global market for trafficking victims, one major determinant is certainly the purchasing power of the population in the countries of destination. In high-income countries, customers typically pay higher prices for non-tradable services, including sexual services. These higher prices make it more profitable for brothel-owners to exploit their victims in high-income countries than in poor countries. In the present study, however, we are interested in looking beyond this generality. In particular, we want to know, what it is – within the group of destination countries – that determines the level of demand. In other words, we are not so much interested in why a country is a destination country (virtually all rich countries are destination countries) but rather in why demand varies among the different destination countries (i.e. why some destination countries seem to attract more victims than others).

Within destination countries, we conjecture that demand is driven by the openness of the country, the incidence of prostitution, and the price of the services provided by TV.

First, globalization is usually described as a major driving force that has empowered criminals and weakened agencies in charge of fighting them (Naím, 2006). We conjecture that the degree of openness of a country captures both the extent to which its economy is integrated
in the global economy and the extent of permeability of its borders. Pellerin (2005), for example, argues that there is an analytical link between the border of economic integration and the border of security. The argument is that economic and political openness are related and thus one can be used as a proxy of the other. We thus use openness to movement of goods and services (measured by the ratio of trade to GDP) not only as an indicator of economic integration but also as a proxy for the openness of borders to the movement of people.

The conjectured effect of such openness is ambiguous. On one hand, it would seem that if borders are more permeable, illegal activities are detected less frequently and thus the number of cross-border TV goes up. On the other hand, however, when there are more opportunities for regular migration illegal activities such as trafficking and smuggling declines. For instance, a reduction in trafficking has been observed among women from EU accession countries immediately after the lifting of visa requirements. This suggests that liberalizing entry conditions enables potential victims to avoid trafficking risks. However, in the case of Romania, for which the EU visa requirements were lifted in 2001, the liberalized visa regime induced initially an apparent rise in the number of victims, followed by a clear decline over time (El-Cherkeh, T., Stirbu, E., Lazaroiu, S. and D. Radu, 2004, p.4).

Second, we conjecture a positive link between illegal prostitution incidence and the number of TV demanded in destination countries (Farley, 2003, Raymond et al, 2002). The argument is that when the general level of prostitution increases, so does the number of TV demanded for commercial sexual exploitation. There are reasons to expect that the rapid expansion and diversification of a market such as the sex industry that is poorly regulated, widely stigmatized and partially criminalized will be associated with an increased incidence of abusive labor practices and fuel trafficking (Anderson, B. and J. O’Connell Davidson, 2003, p.13). This may be especially true in countries that are high destinations for sex tourism.

Finally, price of services performed by TV may or may not be the same as the price of services performed by local providers or by non-trafficked foreign providers. In some countries, TV perform different types of services or service a different segment of the market, i.e., customers with preference for women from different ethnic groups from their own, in

---

6 Of course, one could argue that TV’s are a sub-group of prostitution, and hence a greater number of TVs necessarily lead to larger prostitution. This could pose an “endogeneity problem”. In practice, however, it is unclear if prostitution estimates include trafficked victims or only “non-trafficked” persons (since trafficked victims are often invisible). Given this uncertainty we have decided not to construct a separate estimate of “non-trafficked” prostitution by subtracting the number of TV from total prostitution.
search for “exotic entertainment” or those who cannot afford the local providers. In the regressions that follow we hypothesize that the services performed by TV and those performed by other local providers are perfect substitutes. Thus, price of prostitution services is a shift parameter in the market for trafficking victims: for any given marginal product of labor, the higher the price, the higher the profit to brothel owners and the larger the quantity of trafficking victims demanded.

The supply-side

Among countries of origin, we consider that supply depends on the incidence of female youth unemployment and on the amount of corruption. In particular, we assume that a higher number of unemployed young women and a higher amount of corruption make it easier for recruiters to supply victims. This assumption is based on some of the existing literature. According to Shelley (2003), for example, the collapse of the Soviet Union combined with increased personal mobility in a global age has facilitated the growth of human trafficking in the last decade. Regional conflicts have compounded the problem and made many victims susceptible to trafficking. Female youth unemployment and corruption are typically the result of such economic and political developments.

Other exogenous factors are also likely to affect the supply of TV. These factors include the opening of borders in transition economies, economic factors such as feminization of poverty, large income differential between the country of origin and destination, high illiteracy rate, highly unequal income distribution, as well as significant disruptions in socio-economic conditions such as natural disasters, presence of conflict, and transition to a different economic system in countries of origin.

---

7 “With an emphasis on “differentness, exotica and mystery,” women of diverse ethnic groups and nationalities, as well as young children, are being incorporated into the sex industry (D’Cunha, 1998). Thai and Japanese men demand fair hill-tribe girls from Thailand, or fairer girls from the Northeast of Thailand or Burma/Myanmar; farangs prefer browner women from North Thailand; and Chinese buyers demand Chinese women from the region (UNICEF, EAPRO, 1995).”, Raymond, et al, 2002, p. 138.

IV. Data

Trafficking and prostitution

Data on prostitution and trafficking are produced from a variety of sources and are of variable and sometimes also doubtful quality. The most reliable statistics are the ones produced by national police forces, service organizations or international agencies, which are in direct contact with TV. These statistics usually relate to identified and/or assisted people. Overall estimates of these populations also exist, but they are rarely produced by official sources. Most country-level estimates are computed by academic institutions or, more often, by international or national NGOs. Methodologies that are used range from informed guesses to more sophisticated survey methods, and the results display significant dispersion.

In the present paper we use the ILO’s database constructed for the purpose of its global estimate on trafficking and forced labour (2005). All together, the ILO has collected a total of 2,092 reports from open sources and in different languages that contain quantitative information on human trafficking for the period 1995-2004. Most of these reports contain so-called incident data – i.e. data that refer to specific trafficking episodes involving a defined number of victims. To illustrate, one report about five Thai women forced to work in a brothel in Fitzroy, Australia, and freed by the Australian Federal Police in May 2003 would be an example of incident data.

In addition to such incident data, the ILO database also includes 219 reports, which contain aggregate estimates of trafficking (146) or forced prostitution (73), as well as 63 reports which contain aggregate estimates of prostitution in general. This includes, for example, a study by Steinfatt, Baker and Beesey (2002) in Cambodia. The authors have used a mapping technique to “enumerate major sex work venues in Phnom Penh”, with multiple interviews at each venue to establish the number of workers. Combined with a sample of smaller venues, the authors estimated that, as of June 2002, there were a total of 5,250 “sex workers in Phnom Penh”. In a complementary study, Steinfatt (2003) found that 20.2 percent of “urban sex workers” were trafficked either because they were “indentured” or because they were “underaged”. Based on these findings, and on the observation of rural areas, the author extrapolated that there were 18,256 sex workers in Cambodia, of which 2,000 trafficked women and children mostly in urban areas.
While the ILO global estimate was based on an extrapolation of incident data, in the present paper we exclusively use aggregate estimates. We have constructed country-level estimates by calculating the average of all available estimates. For illustrative purposes, consider the case of trafficking from Albania. A first source estimates that 100,000 Albanian girls and women were trafficked out over the last 10 years, representing an outward flow of 10,000 per year. Another report claims that every year 3,000 Albanian women and girls are forced into prostitution abroad. And a third source indicates that about 5,000 Albanian women and girls were trafficked into prostitution over the last decade, i.e. 500 per year. As we have no objective criteria to assess the quality of these different estimates, we simply compute the mean estimate of 4,500 victims trafficked out, based on the hypothesis that over- and under-estimates may cancel out (only in rare cases were some outliers excluded from the sample). The same method was also used to compute country-estimates of total prostitution. Taking the example of Greece, we found again three different aggregate estimates from three different sources. These sources estimated that there are, respectively, 10,000, 15,000, and 24,700 people in prostitution – giving a country-average of 16,567.

This method is of course not ideal, since some of the underlying aggregate data, which are used in our country-estimates may be of bad quality. It can be argued, however, that our estimates are an unbiased estimate of true trafficking and prostitution figures, since the presence of bad underlying data in country-estimates can be regarded as the outcome of a random draw. We also take comfort from the fact that our prostitution and trafficking variables have similar shapes. As can be seen in figures 1 and 2, the natural log form of both the incidence of prostitution (prostitution/population) and the incidence of trafficking (TV/population) are more or less symmetrical with a bell-shaped distribution.
The other good news is that our mean estimate for total prostitution is higher than the mean estimate for total TV in destination countries (see descriptive statistics in the next section). This is consistent with the logical observation that trafficking cannot be larger than total prostitution. Before concluding this section, it has to be emphasized once again, however, that the quality of this data is very unsatisfactory at the present stage and that there is a strong
need to improve country-estimates of both prostitution and trafficking in the future in order to improve our understanding of trafficking and the quality and robustness of future studies.

**Other Relevant Factors**

Data related to the socio-economic factors which affect supply of TV have been retrieved from the World Development Indicators as well as from the ILO’s Key Indicators of the Labour Market (KILM) and Penn World Table version 6.1. Income distribution is measured by the Gini coefficient and the literacy rate is defined as the percentage of females ages 15 and above who are literate. They are constructed as ten year averages for the period 1995-2004, if data are available, in order to be consistent with ILO’s database used for the prostitution and trafficking data. Both series come from WDI. Female youth unemployment refers to the share of the female labor force ages 15-24 without work but available for and seeking employment and comes from ILO. The values are also averages over 1995-2004 if data were available from ILO. If the time series for a particular country were not available, we filled in missing values by the average value for the sample. The income differential between the country of origin and destination is proxied by the country’s current GDP relative to the U.S. (US=100) over the 1995-2000 time period. This data was extracted from Penn World Table version 6.1.

Data on the price of the services provided by TV is based on the price of prostitution reported by public sources in the countries of destination. Another relevant factor is the degree of openness and border control. Ideally, an appropriate measure of border permeability would be the number of apprehensions or visas granted to foreign nationals, but such a cross-country data set is not available. However, as we have seen, Pellerin (2005) argues that there is an analytical link between the border of economic integration and the border of security. We thus use openness to movement of goods and services (measured by the ratio of trade to GDP) to proxy both economic openness and openness to movement of people. The export and import figures are in national currencies from the World Bank and United Nations data archives.

Finally, there are several alternative measures available in the literature which capture or should be closely related to institutional quality, including the social infrastructure index constructed by Hall and Jones (1999), the institutional quality index published in the World
Economic Outlook, IMF, 9/2005, the corruption index based on the World Bank Enterprise Survey, the corruption perception index from Transparency International and World Economic Forum Organized Crime Index by M. Porter, K. Schwab and A. Lopez-Claros (2005). In the regressions that follow we discuss the results using the corruption perceptions index from Transparency International and the corruption index from the World Bank.

V. Results

Descriptive Statistics

In the present paper we focus our attention on cross-border trafficking as a manifestation of trans-national criminal activities and as a consequence of the deep social and economic differences that characterize countries. Table 1 therefore summarizes our data on cross-border trafficking for commercial sexual exploitation. Our sample includes a total of about 390,000 victims trafficked annually out of 31 countries of origin, and a total of 340,000 victims trafficked into 37 countries of destination. The two figures are in the same ballpark, which is to be expected, since the total number of people trafficked in and out of all countries should in principle be equal\(^9\).

The regional breakdown shown in table 1 should be interpreted with care, since some regions have a very low number of observations. The breakdown’s main purpose is to show that some regions primarily contain countries of destination (like the industrial countries of our sample), while other regions mainly include countries of origin (such as the transition countries of Eastern Europe and Central Asia). There, human trafficking seems to be mainly of trans-regional nature. Other regions have both countries of origin and destination (such as Asia, Latin America and Africa) and have thus presumably both intra- and inter-regional trafficking.

\(^9\) Alan Heston, Robert Summers and Bettina Aten, Penn World Table Version 6.1, Center for International Comparisons at the University of Pennsylvania (CICUP), October 2002.

\(^{10}\) In the subsequent regressions we use data for 27 countries of destination and 31 countries of origin. The reason is that there are 27 destination countries for which we have data on both prostitution and trafficking and 31 countries of origin for which we have trafficking data.
### Table 1: Summary statistics of cross-border trafficking for sexual exploitation

<table>
<thead>
<tr>
<th>Region</th>
<th>Trafficked IN (Number of obs.)</th>
<th>Trafficked OUT (Number of obs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transition</td>
<td>12,024 (7)</td>
<td>124,417 (16)</td>
</tr>
<tr>
<td>Industrial</td>
<td>129,105 (18)</td>
<td>-</td>
</tr>
<tr>
<td>MENA</td>
<td>5,500 (1)</td>
<td>200 (1)</td>
</tr>
<tr>
<td>Asia</td>
<td>136,000 (4)</td>
<td>112,800 (7)</td>
</tr>
<tr>
<td>Latin America</td>
<td>38,813 (5)</td>
<td>58,250 (4)</td>
</tr>
<tr>
<td>Africa</td>
<td>17,050 (2)</td>
<td>92,050 (3)</td>
</tr>
<tr>
<td>Total sample</td>
<td>338,492 (37)</td>
<td>387,717 (31)</td>
</tr>
</tbody>
</table>

These patterns seem largely consistent with those found by the U.S. government and the United Nations Office on Drugs and Crime (UNODC). While a direct comparison among the agencies’ estimated flows is not possible due to differences in the regional breakdowns, the flows appear somewhat similar. For instance, the U.S. government breaks down the flow of victims among six geographical regions—Africa, East Asia and the Pacific, Europe and Eurasia, Near East, South Asia, and the Western Hemisphere. According to the U.S. government, about two thirds of the global victims are trafficked intraregionally within East Asia and the Pacific (260,000-280,000) and Europe and Eurasia (170,000-210,000). Africa has significant intraregional flows (32,000-41,000), as well as interregional flows to Europe and Eurasia (40,000-60,000) and the Near East (40,000). The Near East is primarily a destination region for victims from East Asia and the Pacific (12,500-16,000).11

In addition, UNODC also tracks global and regional patterns of cross border human trafficking. UNODC regional breakdown includes Africa, Asia, Europe, the Commonwealth of Independent States (CIS), Americas, and Oceania. According to UNODC, Africa is predominantly an origin region for Western Europe and Western Africa, which points to both inter and intra regional human trafficking. Asia is mainly an origin and a destination region for trafficking in persons. Central and South-Eastern Europe is reported predominantly as an origin region, but intraregional trafficking is also a problem. Western Europe, North America,

---

the Middle East and Oceania are primarily reported as destination regions, while Latin America and the CIS are mainly reported as origin regions.\textsuperscript{12}

Another important focus of the paper is the link between cross-border trafficking and prostitution. In Table 2 we see that in our whole sample, prostitution accounts for 0.2 percent of a country’s population on average, while the number of victims trafficked into a country represent 0.05 percent of the population. And if we restrict our sample to the 27 countries for which both variables can be observed, we find that the mean ratio of TV to total prostitution is 0.24. This means that if trafficking spells have a duration of one year, in this sub-sample of countries, TV would represent on average 24 percent of total prostitution.\textsuperscript{13}

Table 2 not only shows the country means, but also the sum of our country estimates. We see that in our sample we have a total of 7.8 million people in prostitution and 338,000 people trafficked into countries of destination. These numbers, of course, should not be seen as robust global estimates – especially since they were obtained with different number of observations (45 observations for prostitution and 37 observations for trafficking). They can however be useful benchmarks for past or future estimates. If, for example, we apply the mean prostitution estimate to the 2003 world population (UNDP, 2005), we obtain an estimate of about 12.6 million people in prostitution worldwide\textsuperscript{14}. This, of course, is only a rough approximation for illustrative purposes. It nevertheless casts some doubt on some existing prostitution figures. Richard Poulin\textsuperscript{15} estimated for example that there are about 40 million people in prostitution worldwide. In light of our data, this seems too high.

\textsuperscript{12} Trafficking in Persons Global Patterns, UNODC, April, 2006.
\textsuperscript{13} According to estimates based on IOM data by Kutnick, Belser, and Danailova-Trainor (2006), the average duration of trafficking for sexual exploitation is one year.
\textsuperscript{14} Belser and de Cock, ILO internal memo.
\textsuperscript{15} Richard Poulin, La mondialisation des industries du sexe, L’Interligne, 2004
Table 2: Summary statistics of Cross Border Trafficking and Prostitution

<table>
<thead>
<tr>
<th></th>
<th>Trafficking</th>
<th>Prostitution</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Mean incidence</td>
</tr>
<tr>
<td>Industrial</td>
<td>129,105</td>
<td>.0003</td>
</tr>
<tr>
<td>Transition</td>
<td>12,024</td>
<td>.0003</td>
</tr>
<tr>
<td>MENA</td>
<td>5,500</td>
<td>.0009</td>
</tr>
<tr>
<td>Asia</td>
<td>136,000</td>
<td>.0004</td>
</tr>
<tr>
<td>Latin America</td>
<td>38,813</td>
<td>.0010</td>
</tr>
<tr>
<td>Africa</td>
<td>17,050</td>
<td>.0002</td>
</tr>
<tr>
<td>Total Sample</td>
<td>338,492</td>
<td>.0005</td>
</tr>
</tbody>
</table>

Note: mean incidence estimates are non-weighted averages

The Model and Estimation Results

We look separately at the demand and supply sides of the market for TV. The demand for TV is estimated in a sample of 27 destination countries, while the supply of TV is estimated in a sample of 31 countries. Theoretically, at a global setting, the law of one price and market clearing would lead to some equilibrium price and number of victims exchanged. However, as we have already pointed out, due to the integrated nature of trafficking networks and in light of the numerous market imperfections resulting from the illegal nature of the activity, such market clearing would be unlikely and/or unobservable. Therefore, we do not impose any restrictions between the two sides of the market and do not estimate them in a simultaneous equations specification.

The demand-side

We specify the following regression model:

\[ \text{TRAFFICKING}_i = \alpha_1 + \alpha_2 \text{OPENNESS}_i + \alpha_3 \text{PROSTITUTION}_i + \alpha_4 \text{PRICE}_i \]  \[ 1 \]

where TRAFFICKING is the number of victims trafficked into a country of destination expressed as a fraction of total population, OPENNESS is the total trade in GDP scaled by the size of the country (its total population), PROSTITUTION is the proportion of the population
in prostitution and PRICE is the cost of prostitution for clients, and i refers to country i. Hence in this model, the demand for TV depends on the openness of a country’s borders (proxied by the openness of the economy), the prostitution incidence in the destination country and the price for prostitution services.

Since all variables are expressed in natural logarithms, the coefficient estimates can be interpreted as demand elasticities. We estimate the model using ordinary least squares. We have scaled the number of victims trafficked in by the population size and have the ratio on the left hand side to avoid multicollinearity since the correlation between prostitution incidence and population size is 0.94. We have also performed a two step regression, i.e., first, regressing prostitution incidence on population size and taking the residuals; and second, regressing the number of victims trafficked in on the population size and the residuals from the first step. The results for both specifications are similar.

The estimation results are summarized in Table 3. The coefficient estimates for openness and prostitution have the correct sign and plausible values and are statistically significant (at the 10% and 5% level respectively). The signs of the coefficients indicate that destination countries which are more open, or that have more prostitution, are also the countries with more trafficking victims.

**Table 3: Demand Model for Human Trafficked Victims**

<table>
<thead>
<tr>
<th></th>
<th>TV trafficked in/population=</th>
<th>Coefficients</th>
<th>Standard Error</th>
<th>t Stat</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>a1 + a2<em>openness/population + a3</em>prostitution/population + a4*price</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td></td>
<td>1.2348</td>
<td>3.0748</td>
<td>0.4016</td>
<td>0.6917</td>
</tr>
<tr>
<td>Openness/Population</td>
<td></td>
<td>0.2108</td>
<td>0.1124</td>
<td>1.8759</td>
<td>0.0734</td>
</tr>
<tr>
<td>Prostitution/Population</td>
<td></td>
<td>0.8697</td>
<td>0.3462</td>
<td>2.5121</td>
<td>0.0195</td>
</tr>
<tr>
<td>Price</td>
<td></td>
<td>-0.3441</td>
<td>0.3393</td>
<td>-1.0139</td>
<td>0.3212</td>
</tr>
<tr>
<td>Adjusted R Square</td>
<td></td>
<td>0.2417</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td></td>
<td>27</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
How should we interpret these results? The result of our openness variable appears to confirm the view that globalization leads to more trafficking. It confirms in particular that when countries become more open, they also become more exposed to the criminal activities of traffickers. It is impossible, however, to determine whether our results are driven by economic openness or by the openness to movement of people. In the former case, our results would support the view that economic and financial reforms, the lowering of trade barriers and the elimination of much regulation have created ample room for illicit trade, expanding the flexibility of traffickers to exercise their activities and move around their profits (Naim, 2006). In the latter case, our empirical evidence would also support the view that better border protection remains a useful tool to combat the inflow of trafficking.

Regarding our prostitution variable, we find that countries with higher prostitution incidence are also countries with more TV demanded. Beyond this, however, our finding does not help to disentangle the causes underlying prostitution incidence. In our theoretical model, illegal prostitution affects trafficking. However, since the data do not allow us to disaggregate legalized and illegal prostitution, we use data on total prostitution in a country. We did attempt to create an index capturing the degree of legalization of prostitution by using the national legislation typology on prostitution suggested by Transcrime. Interestingly, we only found a small positive correlation of 0.18 between the constructed index of legalized prostitution and prostitution incidence. This may be due to the fact that the complexity of legislation typologies and models of prostitution was not sufficiently captured in the index or, alternatively, that the legalization of prostitution does not so much affect its incidence as it does its visibility. In addition, over a third of the countries included in our sample as countries of destination were not included in the study by Transcrime. Hence, with the present data, we could not shed further light on the debate regarding the link between legalization of prostitution and prostitution incidence. Therefore, in the current paper, we have not found any correlation between legalized prostitution and trafficking.

*The supply-side*

The regression model has the following form:

\[ \text{TRAFFICKING}_i = \alpha_1 + \alpha_2 \text{FEMALE YOUTH UNEMPLOYMENT}_i + \alpha_3 \text{CGDP}_i \]  

[2]
where TRAFFICKING is the number of victims trafficked out of a country of origin expressed as a fraction of total population, FEMALE YOUTH UNEMPLOYMENT refers to the share of the female labor force ages 15-24 without work but available for and seeking employment, and CGDP is the country’s average current per capita GDP expressed relative to the United States (US=100) over the 1995-2000 time period, and i refers to country i. A higher value of CGDP corresponds to a smaller income difference between the country’s GDP per capita and that of the U.S.

The hypothesis of this model is that as more young females are unemployed, they are more susceptible to seeking employment in other countries and are an easy prey for transnational organized crime groups. Also, as a country closes the income gap relative to richer countries, the motivation for trafficking decreases and the number of TV goes down. All variables are expressed in natural logarithms so they could be interpreted as supply elasticities. We use ordinary least squares to estimate the model coefficients. The results are summarized in the Table 4 below. The coefficient estimate for female youth unemployment is of the correct sign and magnitude and is statistically significant at the 10% level. The supply of TV is close to unit elastic with respect to this variable. In other words, if female youth unemployment goes up by one percent, so does the number of TV as a fraction of the population. The coefficient estimate for the income difference between the country of origin relative to that of the U.S. has the correct sign and meaningful magnitude, but is not statistically significant.\textsuperscript{16} However, the results should be interpreted with caution since the overall adjusted R2 is quite low.

<table>
<thead>
<tr>
<th>Table 4: Supply Model of Human Trafficked Victims</th>
</tr>
</thead>
<tbody>
<tr>
<td>TV trafficked out/population=a1+a2<em>female youth unemployment+a3</em>CGDP</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Intercept</td>
</tr>
<tr>
<td>Female youth unemployment</td>
</tr>
<tr>
<td>CGDP</td>
</tr>
<tr>
<td>Adjusted R Square</td>
</tr>
<tr>
<td>Observations</td>
</tr>
</tbody>
</table>

\textsuperscript{16} The values for openness and CGDP are averages over 1995-2000 due to data availability constraints from PWT. If the time series for a particular country were not available, we filled in missing values by the average value for the sample.
We tried alternative specifications using other relevant variables such as the corruption perceptions index from Transparency International and the corruption index from the World Bank, adult female literacy rate, income distribution measured by the GINI coefficient and the female school enrollment in primary, secondary and tertiary education in countries of origin. However, none of these variables entered in a statistically significantly way in the estimation results and were of either wrong sign or implausible magnitude. Therefore, we do not report these results.

Our results on the supply-side nevertheless have important policy implications. They indicate that anti-trafficking initiatives should not only focus on demand in countries of destination but also on socio-economic conditions in the countries of origin. As long as female youth unemployment remains high in a country, it is unlikely that prevention and information campaigns will have much of an effect in reducing trafficking. Opportunities for decent work in countries of origin should be part of sustainable anti-trafficking initiatives.

**Profits**

As we have mentioned above, all these demand- and supply-side determinants affect the cost-benefit analysis of trafficking networks, and in particular their profits. In this section we report some estimates of the annual profits made by traffickers with their victims in forced commercial sexual exploitation. This is to illustrate the very high level of these profits.

Total annual illicit profits from trafficking into forced commercial sexual exploitation have been estimated to be about $27.8 billion (ILO, 2005). These profits were calculated by multiplying the estimated 1.3 million world-wide victims (including not only cross-border trafficking but also domestically trafficked and underage victims) by an estimate of annual profits per victim, broken down by region.

Estimates of profits per victim were calculated for each region as:

$$\Pi = [(q \cdot p) - (w + c)]$$  \[3\]

where the profits made by traffickers with each victim ($\Pi$) were defined as the number of clients serviced by victims over one year ($q$) multiplied by the average price paid by
customers (p), minus the possible wage payments made by traffickers to their victims (w) and the traffickers’ intermediate consumption (c), i.e. the expenditure for all necessary inputs such as rents for example. The profits per victim (Π) thus refer to the net gains realized by the trafficking network over one year during which it holds one victim in forced commercial sexual exploitation.

Estimates can be seen in table 5 below. In industrial countries, annual profits made with one victim amounts to an average of US$ 67,200, while in Asia and Africa annual profits were estimated at about US$ 10,000. The profits for industrial countries assume that victims service an average of 80 clients per month, who pay an average of US$ 100. For Asia, the calculations assumed the same number of clients, but a price of about US$ 15

<table>
<thead>
<tr>
<th>Region</th>
<th>Total Victims</th>
<th>Profits per Victim (US$)</th>
<th>Total Profits (US$’000,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial</td>
<td>200,000</td>
<td>67,200</td>
<td>13.3</td>
</tr>
<tr>
<td>Transition</td>
<td>140,000</td>
<td>23,500</td>
<td>3.2</td>
</tr>
<tr>
<td>MENA</td>
<td>23,000</td>
<td>45,000</td>
<td>9.5</td>
</tr>
<tr>
<td>Asia</td>
<td>950,000</td>
<td>10,000</td>
<td>0.5</td>
</tr>
<tr>
<td>Latin America</td>
<td>30,000</td>
<td>18,200</td>
<td>0.1</td>
</tr>
<tr>
<td>Africa</td>
<td>10,000</td>
<td>10,000</td>
<td>1.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>27.8</td>
</tr>
</tbody>
</table>

Source: Belser (2005)

Based on new data from assisted victims in IOM’s counter trafficking database, which is limited to data from 27 countries where IOM has presence, we found that 474 victims provided information about the average number of customers per day, the average charge, and the amount the TV is allowed to keep. Based on this information, we re-calculated profits per victim as:

17 While the number of victims assisted by IOM by the end of 2005 was over 7000, most relevant data for profit estimation were missing.
\[ \Pi = 53 \times [q \times (p - w)] \times d \] \hspace{1cm} [4]

where the annual profits made by traffickers with each victim (\(\Pi\)) were defined as the number of clients serviced by victims per day (\(q\)) multiplied by the average price paid by customers \(p\), minus the amount victims were allowed to keep (\(w\)). To arrive at annual profits we multiplied the daily profits by the number of days (\(d\)) the victim reported she worked times 53 weeks in the year.

Based on these answers we calculated that total annual profits from these victims were around $77 million. This would represent an average of around US$ 163,000 per victim, which is about twice as high as the estimated profits in industrial countries in table 5 by the ILO. There are two main reasons for this difference. First, the average number of customers per day based on IOM data is 6.86 and the average number of work days per week is 6.28, or 25.1 work days per month. This leads to an estimate of the average number of customers per month of 172.33 as opposed to 80 clients per month assumed in the ILO methodology. Second, no adjustment was made for traffickers’ intermediate consumption (\(c\)), i.e., the expenditure for all necessary inputs such as rents, bribes, or other costs of running the trafficking business. These results confirm that profits from the exploitation of TV are very high and could be even higher than previously estimated.

VI. Conclusion

In the present paper we have explored and empirically tested the importance of various factors, which have been conjectured by many authors to affect the demand and supply of TV across international borders. While we recognize the limitations in data quality and the ad hoc nature of the model specifications, we believe that this paper enhances the credibility of the arguments related to some of those factors. In particular, we find that prostitution incidence and openness – including the permeability of borders - in countries of destination affect the demand of TV in the destination countries. In addition, female youth unemployment also plays a significant role in fueling the supply of TV. Policies that focus on addressing these underlying factors of human trafficking could have an important impact on the market, in addition to the protection and prevention of TV. However, we have not examined the link between
legalization of prostitution and prostitution incidence, and have not found any correlation between legalized prostitution and trafficking.

Finally, we wish to highlight the importance of future data collection and estimation of trafficking flows. The development of effective policies should in principle be based on convincing empirical studies. The quality of empirical studies, however, critically depends on the quality of the available data. At the present time, the quality of the data remains unsatisfactory and, therefore, the results of any empirical investigation remain only suggestive. In our paper, we provide statistical evidence that cross-border human trafficking may result from prostitution as well as statistically weaker evidence that female youth unemployment and globalization are also influencing factors. In the future, better data should improve the robustness of these and other findings based on statistical analysis.
Bibliography


ILO Convention No. 29, 1930.

ILO Convention 105, 1957.


Steinfatt, Thomas, “Measuring the Number of Trafficked Women and Children in Cambodia: A Direct Observation Field Study”, part III of a series, working paper sponsored by USAID, October 6, 2003. Available at


Transparency International, Corruption Perception Index. Available at


Trafficking in Persons Global Patterns, UNODC, April, 2006.


List of Working Papers of the InFocus Programme on Promoting the Declaration

No. 3  Défis et opportunités pour la Déclaration au Bénin, by Bertin C. Amoussou, August 2001.
No. 5  Égalité de rémunération au Mali, by Dominique Meurs, August 2001.
No. 9  Los principios y derechos fundamentales en el trabajo: su valor, su viabilidad, su incidencia y su importancia como elementos de progreso económico y de justicia social, de María Luz Vega Ruiz y Daniel Martínez, Julio 2002.
No. 11 Annotated bibliography on forced/bonded labour in India, by Dr. L. Mishra, December 2002.
No 12 Minimum wages and pay equity in Latin America, by Damian Grimshaw and Marcela Miozzo, March 2003
No. 13 Gaps in basic workers’ rights: Measuring international adherence to and implementation of the Organization’s values with public ILO data, by W. R. Böhning, May 2003.
No. 14 Equal Opportunities Practices and Enterprises Performance: An investigation on Australian and British Data, by Prof. V. Pérotin, Dr. A. Robinson and Dr. J. Loundes, July 2003
No. 16 Gender-based occupational segregation in the 1990s, by Richard Anker, Helinä Melkas and Ailsa Korten, September 2003.
No. 17 Normalised and Disaggregated Gaps in Basic Workers’ Rights, by W.R. Böhning, November 2003


No. 19 Pay equity, minimum wage and equality at work: theoretical framework and empirical evidence, by Jill Rubery, November 2003


No. 22 A rapid assessment of bonded labour in domestic work and begging in Pakistan, by the Collective for Social Science Research in Karachi, March 2004.

No. 23 A rapid assessment of bonded labour in the carpet industry of Pakistan, by Zafar Mueen Nasir, March 2004.

No. 24 Unfree labour in Pakistan – work, debt and bondage in brick kilns in Pakistan, by the Pakistan Institute of Labour Education & Research, March 2004.


No. 27 Las desigualdades étnicas y de género en el mercado de trabajo de Guatemala, de Pablo Sauma, Marzo 2004.

No. 28 Libertad de asociación, libertad sindical y el reconocimiento efectivo del derecho de negociación colectiva en América Latina: el desarrollo práctico de un principio fundamental, de Maria Luz Vega-Ruiz, Abril 2004.


No. 35 Methodología para estimar el costo laboral por sex, de Laís Abramo, Silvia Berger, Héctor Szretter y Rosalba Todaro, Setiembre 2004.

No. 36 The social status of workers from Tajikistan in the construction industry in Russia, February 2006.


No. 38 Forced labour outcomes of migration from Moldova: rapid assessment, by Eduard Mihailov, Mariska N.J. van der Linden & Shivaun Scanlan, in cooperation with International Centre for Women’s Rights Protection and Promotion, November 2005.


No. 41 Enganche y Servidumbre por Deudas en Bolivia, de Eduardo Bedoya Garland y Alvaro Bedoya Silva-Santisteban, Marzo 2005.

No. 42 Forced Labour and Human Trafficking: estimating the profits, by Patrick Belser, March 2005


No. 45 Servidumbre por deudas y marginación en el chaco de Paraguay, de Alvaro Bedoya Silva-Santisteban y Eduardo Bedoya Garland, Julio 2005.

No. 46 La discriminación en los procesos de selección de personal de Patricia Vera Rojas, Septiembre 2005.


No. 48 Legal aspects of trafficking for forced labour purposes in Europe, by Rohit Malpani, April 2006


No. 51  Impact des normes fondamentales du travail sur la productivité des entreprises sénégalaises, par Alfred Inis Ndiaye et Abdoulaye Fall, octobre 2006.