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HUMAN TRAFFICKING IN EUROPE

A quantitative study on the effect of convicted traffickers on trafficking victim inflow

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1. Abstract

There are several indicators that supposedly influence the trafficking victim inflow in a country: the type of prostitution law, as researched by Jakobsson et al. (2013) and Cho et al. (2013), and additionally, according to previous literature, the degree of law enforcement also plays a role. In this thesis a quantitative study will be conducted, with the aim to investigate whether the number of convictions has an effect on the number of trafficked victims within a country in Europe. The data will mainly be retrieved from the UNODC Country Profiles Reports and the model used is based on the models by Jakobsson et al, (2013) and Cho et al, (2013). Four different models are introduced, the first one being a replica of the models of Jakobsson et al. (2013) and Cho et al. (2013), the second model is the main model with several different additional variables, the third model includes the outlier France as a dummy variable and the fourth model introduces the interaction term $\text{SwedishModel} * \text{Convictions}$. The results of all the models are the same and show a contrast to the theory; a positive relation is found between convictions and trafficked victims, meaning that convictions lead to more trafficking inflow in a country.

Keywords: Human Trafficking, Law Enforcement, Prostitution Law, Trafficker convictions, Sexual Exploitation

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2. Introduction

Human trafficking is often called a modern form of slavery. In 2015, approximately 35.8 million human beings are being enslaved worldwide (Modern Slavery Index, 2015). In Europe, the greatest share of these people are trafficked for the purpose of becoming sexually exploited (UNODC, 2008). This thesis will focus on this form of trafficking; trafficking for sexual exploitation purposes.

In much of the previous research on human trafficking, there is a major link made between prostitution and human trafficking. Authors such as Jakobsson, et al., (2013) and Cho, et al., (2013) looked into the effect of prostitution law on the prevalence of trafficked victims in Europe and on a global level, respectively (Jakobsson et al., 2013; Cho et al., 2013). What they discovered is that countries with legalized prostitution have a higher inflow rate of trafficked victims, whereas countries with criminalized prostitution or which only criminalize the buyers, such as countries using the Swedish model, had a lower inflow rate. According to previous research the underlying problem appears to be the nature of prostitution, which is still overshadowed by corruption, violence and stigmatization of prostitutes (Huisman et al. 2014, p. 225). If prostitution is legalized and there is a system in place that regulates prostitution as any other market, logically, this would mean that trafficking victim inflow would decrease. This is, however, not the case: trafficking inflow is high and most of the legal activities are still hidden and take place behind ‘closed doors’ (Huisman et al., 2014, p.225). Even though criminalizing prostitution seems to have an effect in lowering the rate of human trafficking victims, it is still prevalent in all countries in Europe and no perfect solution regarding prostitution law and its effect on trafficking has yet been found.

This ongoing problem leads to the next step in research. Instead of looking only at prostitution law and its effect on human trafficking, it is also relevant to look at law implementation and its effect on trafficking inflow. Aside from different prostitution laws, every country in Europe has adopted laws that intend to combat human trafficking (Jakobsson et al. 2013, p. 94). However, trafficking victim inflow numbers are still present in all European countries and in some countries are quite high (EuroStat, 2013). Law implementation or the lack thereof is most likely the cause for this, and therefore worth looking into more closely. Thus far, there are several case studies conducted on individual countries, such as Huisman’s case study of law enforcement in the Netherlands (Huisman et al., 2014). However, no quantitative research

has been conducted on law enforcement implementation and its possible effect on human trafficking inflow.

Another under researched area of human trafficking related to prostitution law and law enforcement is the research on the perspective of the trafficker. Most often, the existing literature evolves around trafficking victims and possible solutions to decrease the number of victims, however, there is much less information on the motives of and ways that traffickers work. According to Jakobsson and Kotsadam (2013) the trafficking of human beings is primarily a part of organized crime and aims to maximize profits for the traffickers (p.88). A link, therefore, can be made with prostitution law and law enforcement: if maximizing profits is the main goal of traffickers, they would want to have the most optimal conditions to let their victims work in, which would be considered ‘benefits’ (prostitution law) and at the same time having the lowest risk of getting caught which would be the ‘cost’ (law enforcement).

In order to conduct this type of research, the definition of ‘law enforcement’ needs to be specific and measurable. For the past five years Europol and the United Nations Office on Drugs and Crime (UNODC) have gathered data about convicted traffickers in different countries worldwide. Numbers of convicted traffickers will be a sufficient proxy for law enforcement in this thesis, as it shows clearly how different actors, such as intelligence agencies, NGO’s, policemen and prosecutors, within the process of law enforcement, work together to come to a conviction. Using convictions as a proxy will also provide information about traffickers and their behaviour, since it is expected that the number of convictions in a country will influence the decision of the trafficker to place his or her victims there or not.

This thesis is a quantitative study, based on the models by Jakobsson et al, (2013) and Cho et al, (2013), and was conducted using the UNODC Country Profiles Reports. The aim of this study is to investigate whether the amount of convictions has an effect on the number of trafficked victims into a country in Europe. Contrary to the theory, a positive relation is found between convictions and trafficked victims, meaning that convictions lead to more trafficking inflow in a country. Several models are produced but none of them change the direction of the coefficient. Only the introduced interaction term Swed*Conv produces a negative significant result, however, this does not change the direction of the overall model. In general, the results of this thesis have to be interpreted with great caution due to the number of observations and the type of data used. More on the context, theory, method, data, analysis and the conclusion follows in the upcoming chapters.

3.1 Contribution to the literature

With this thesis, a contribution will be made to the human trafficking literature in general, and to the human trafficking literature linked to law enforcement and organized crime in particular. It will be the first time that a quantitative study is conducted which focuses on the ‘cost’ versus ‘benefits’ equation that a trafficker is faced with when making the decision where to traffic his or her victims. Roughly following the models of Jakobsson et al., (2013) and Cho et al., (2013), it will also make a contribution to determine if the type of prostitution law remains significant when a new independent variable, such as number of convictions, is added.

3.2 Research Question

In order to examine the possible relation between law enforcement and trafficking rates, the following research question has been created:

Does stricter law enforcement have an effect on trafficking victim inflow in a country in the region of Europe?

With the following hypothesis:

The number of convictions of traffickers have a negative effect on the number of trafficking victims in a country.

4. Contextual Background

To begin, this chapter will provide some useful background information about the concept of human trafficking before moving on to the theoretical framework. Although most of the text is not directly discussed later on in the thesis, the topics in this chapter are important to know when discussing human trafficking specifically in Europe. In the first section of this chapter, the definition of human trafficking as it will be used in this thesis, will be presented and the most important treaties and directives will be discussed. The next section will consist of the division of countries in origin, transit and destination countries. It is important to realize that countries have different roles in the process of human trafficking and they can therefore be categorized in three different sections. Finally, the last part will be about the paradox of illegal migrants trying to get into Europe and the Schengen area and how this brings along different challenges for traffickers.

3.3 Human Trafficking Definition and Laws

Soon after WWII, in 1949, the United Nations adopted the convention for the suppression of the traffic in persons (United Nations, 1949). In this convention, member states were called upon to abolish trafficking and prostitution. However, trafficking was not clearly defined and not all member states ratified this convention because of the requirement to abolish prostitution as a whole (Outshoorn, 2005, p. 142). Consequently, up until 2000, there was no clear universal definition of human trafficking, and this is the reason that scholars before that period have slightly different definitions and focus on different facets of human trafficking. It was also difficult for prosecutors to know exactly what to do with certain cases of human trafficking, as it was not clearly stated what was and what was not considered trafficking. Particularly difficult was the fact that very often victims and traffickers came from different countries than the one in which they were arrested. These problems turned around when the United Nations General Assembly adopted the following convention: United Nations Convention against Transnational Organized Crime 55/25 on the 15th of November 2000. This convention was the first international tool to specifically combat organized crime outside borders of individual countries (UNODC CTOC, 2008). The convention was supplemented by three protocols, also called the Palermo Protocols, of which one was specifically aimed at human trafficking: the Protocol to Prevent, Suppress and Punish Trafficking in Persons,

Especially Women and Children. It was in this specific protocol that a clear and encompassing definition of trafficking was finally provided:

“Trafficking in persons” shall mean the recruitment, transportation, transfer, harbouring or receipt of persons, by means of the threat or use of force or other forms of coercion, of abduction, of fraud, of deception, of the abuse of power or of a position of vulnerability or of the giving or receiving of payments or benefits to achieve the consent of a person having control over another person, for the purpose of exploitation. Exploitation shall include, at a minimum, the exploitation of the prostitution of others or other forms of sexual exploitation, forced labour or services, slavery or practices similar to slavery, servitude or the removal of organs” (UNODC CTOC, 2008).

In total, 117 member states signed the convention in 2000 and were considered signatories. However, not every member state that signed the convention ratified it, while there were also countries which were not signatories in the beginning but did become party to the protocol later. As of 2008, 124 member states in total became a party to the convention (UNODC Country List, 2008). Being a party to a protocol or convention means that the country is bound to follow the measures and tools suggested in the protocol or convention and can be held accountable if they act otherwise (Dopplick, 2010). In the region of Europe, all countries but Montenegro are signatories to the treaty, and all countries (including Montenegro but excluding the Czech Republic, Greece, Iceland, Ireland and Luxembourg) are party to the protocol, meaning that most countries within Europe are obliged to act according to the protocol. The focus of this protocol is aimed at international cooperation, protection of trafficking victims and the prevention of trafficking and prosecution of traffickers (UNODC CTOC, p.2). Specific measures are not mandated and thus how the protocol is implemented is the responsibility of the individual member states.

The European Union has also created its own laws, directives and strategies. Article 5 of the Charter of Fundamental Rights of the European Union has proclaimed that trafficking of human beings is illegal (EU Charter of Fundamental Rights, 2000, p.9). As a follow-up and a more practical and workable approach, a directive in 2011 was signed: Directive 2011/36/EU On Preventing and Combating Trafficking in Human Beings and Protecting its Victims (European Commission, 2011). This directive is written from a human rights and gender perspective and its focus is threefold: prevention, law enforcement and victim protection (European Commission, 2015). The directive has several new approaches, such as its aim for

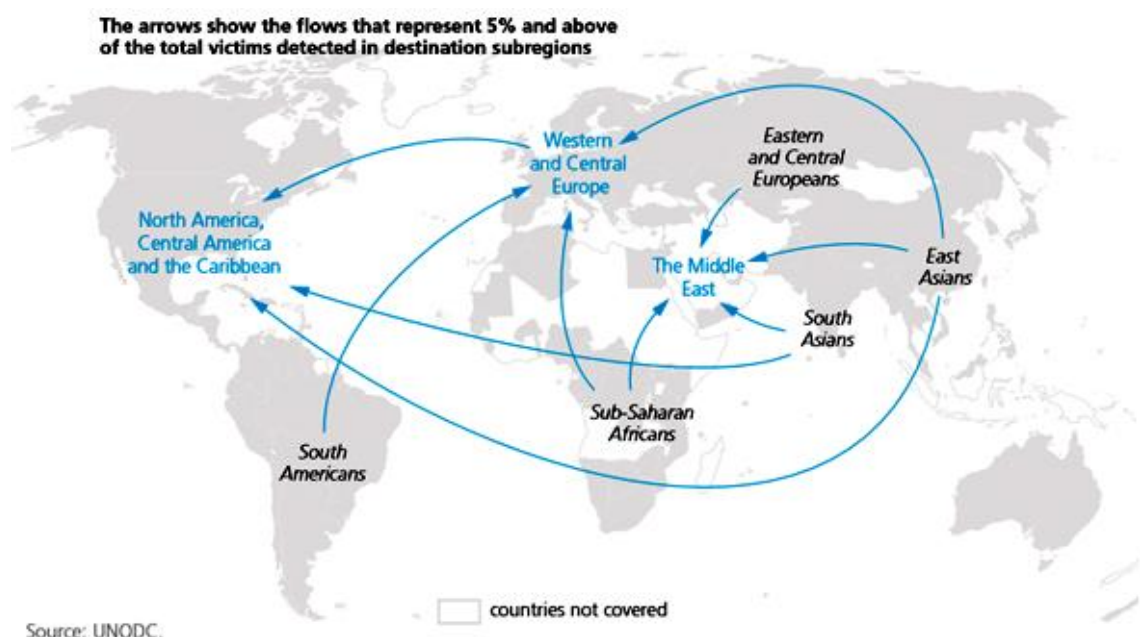
countries to take a pro-active stance towards the investigation of human trafficking, instead of waiting for the crime to happen. It also encourages more cooperation with other states and civil society organizations (NGO's) in order to better protect victims and prevent the movement of victims from one country to another. Furthermore, the directive is very specific on punishment for traffickers: when caught and found guilty they should be imprisoned for a minimum imprisonment of five years (European Commission, 2011, p. 6). More measures and suggestions can be found in the directive, for which the link can be found in the bibliography (European Commission, 2011). In order to make sure this directive will be implemented, all countries were required to appoint a national reporter charged with giving an annual update on the trafficking situation in that respective country.

A year after the introduction of this directive, a 5-year strategy plan was introduced in 2012: The EU Strategy towards the Eradication of Trafficking in Human Beings 2012–2016 (European Commission, 2012). The aim of this plan was to find concrete measures to implement the directive from 2011 while also sharing best practice experiences from different countries, civil society organizations and experts (European Commission, 2012, p. 5). Although the 2016 deadline has not yet been reached, Eurostat has provided several mid-term reports that show that 25 member states have already fully implemented the directive from 2011 (European Commission, 2014, p.4).

Aside from this international and European legislation, most individual countries worldwide also have legislation on a national level to combat human trafficking. In total, 146 countries worldwide have introduced national legislation criminalizing every aspect of human trafficking, eighteen countries have partially criminalized human trafficking and nine countries do not have any legislation relating to human trafficking at all (UNIS, 2014). Although these numbers are not yet optimal, the majority of the world is taking part in the battle against trafficking.

3.4 Index of Countries: Origin, Destination, Transit Countries

As can be seen in the map below, human trafficking is a worldwide phenomenon which includes almost all countries on the planet, either as a country of origin, transit, destination or a combination of these.



Source: UNIS, 2014.

Generally, a country of origin is the country where the victims of trafficking originate while a transit country is the country which the victims pass through going from the originating country to their final destination. Logically, a destination country is the country where the victims are eventually trafficked to and where they are primarily being exploited. The UNODC has prepared several tables categorizing all the countries of the world (UNODC Country Index Part II, 2006). For the purpose of this paper only the countries of Europe are combined in the tables.

Very High	High	Middle	Low	Very Low
Albania	Czech Republic	Bosnia		Netherlands
Bulgaria	Estonia	Croatia		
Lithuania	Hungary	Serbia		
Moldova	Latvia	Montenegro		
Romania	Poland	Slovenia		
	Slovakia	Macedonia		
		Turkey		

Table 1. Origin countries Europe. Source: UNODC Country Index Appendix 2006

Noticeable in this table is that only Eastern European countries are considered origin countries, while the only western European country in the list is the Netherlands, considered a very minor origin country.

Very High	High	Middle	Low	Very Low
Albania	Belgium	Croatia	Austria	Estonia
Bulgaria	Bosnia	Cyprus	Latvia	Finland
Hungary	Czech Republic	Netherlands	Lithuania	Ireland
Italy	France	United Kingdom	Moldova	Norway
Poland	Germany		Slovenia	Sweden
	Greece		Spain	
	Montenegro		Switzerland	
	Romania			
	Macedonia			
	Serbia			
	Slovakia			
	Turkey			

Table 2. Transit countries Europe. Source: UNODC Country Index Appendix 2006

Noticeable in this next table is that almost all European countries are to some extent transit countries. The countries in the section categorized as ‘very low’ are mostly countries on the outskirts of Europe, with no connection to destination countries; thus it makes sense that they are in this category. The countries in the ‘very high’, ‘high’, and ‘middle’ section are all countries that are next to, close to, or are also destination countries. Therefore, it also makes sense that there are more transit countries than origin or destination countries.

Very High	High	Middle	Low	Very Low
Belgium	Austria	Albania	Ireland	Moldova
Germany	Bosnia	Bulgaria	Luxembourg	Slovakia
Greece	Cyprus	Croatia	Romania	
Italy	Czech Republic	Estonia	Slovenia	
Netherlands	Denmark	Finland		
Turkey	France	Hungary		
	Serbia	Iceland		

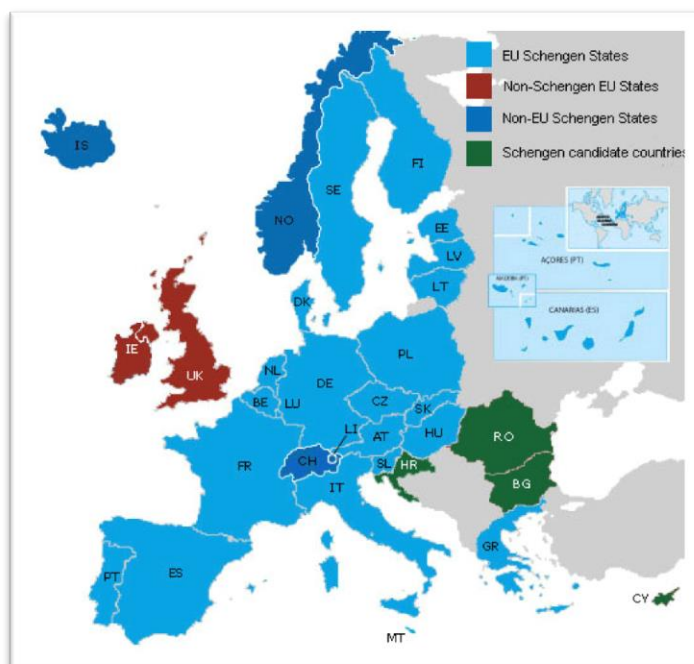
	Montenegro	Latvia		
	Poland	Lithuania		
	Spain	Norway		
	Switzerland	Portugal		
	United Kingdom	Sweden		
		Macedonia		

Table 3. Destination countries Europe. Source: UNODC Country Index Appendix, 2006

Table 3 does not show the complete opposite of the ‘origin country’ table, but it is mostly Western European countries that are ‘very high’ and partly ‘high’ destination countries. This could possibly be explained by the economic status of the countries; richer countries have the money and are willing to spend it on sex with prostitutes, whereas in poorer countries people do not have the money to spend on prostitution. These prostitutes could also be trafficked victims. Nevertheless, in the categories ‘high’ and ‘middle’ there are also a high number of origin countries listed. The reason for this could be that prostitution laws are different (legal or partly legal) in several countries in Eastern Europe and perhaps also because law enforcement is less visible in these countries due to higher corruption levels (Quality of Government Institute Standard Data Set, Worldbank, 2006).

3.5 Schengen Region and Human Trafficking

When it comes to the transportation of the victims from one country to another, the European region is a special case with the Schengen Agreement and its effect on European migration laws. In 1985, the Schengen Agreement was signed by five European countries, with the idea that border control within these countries would be abolished. Over the years, more countries joined, and in 1997 the Agreement was added to the European Union law (Schengen Country List, 2014). In 2015, 26 European and non-European countries are members of the Schengen agreement (See map 2 below).



Map 2. Map of Shengen territory 2014. Source: Shengen Country List 2014.

According to Väyrynen (2003), the set-up of such an agreement works both in favour of and against trafficking (p. 4). As the borders within the Schengen region are not controlled, the outer borders are subject to a much stricter controlling mechanism which makes it harder for traffickers to get their victims in from outside this area. On the other hand, the Schengen area is very appealing for traffickers, as once they get the victims within the borders they are free to move them within the area without too much difficulty.

There are, however, a few reasons why the first part of Väyrynen's argument above could be questioned. The first problem is suggested by the author himself, as he states that stricter border controls may actually drive people that want to move to the Schengen (or any other) area into the hands of traffickers, as illegal trafficking organizations are most often the only ones that have the networks to get people across the border. Specifically, people from the Balkan region, where countries have a background of conflict, are very eager to leave for a country with more opportunities (Shelley, 2003, p. 126). It is only after these people have crossed the border that they often turn into victims, as the traffickers' intention was never just to smuggle them in but also exploit them (Salt, 2008, p.32). There is also another reason why the first part of Väyrynen's argument could be questioned; if one looks at the outer border countries of the Schengen area, particularly in the southeast, one can see that they border only these countries that are known to be origin countries of trafficking victims. States such as Romania, Bulgaria and Albania are said to be the largest origin countries with their supply to

Western Europe (UNODC Country Index Appendix, 2006). As a result, the border control cannot be as strict as represented, since traffickers do find ways to get into the Schengen area.

Aside from reasons like corruption and weak law enforcement, another reason for high trafficking victim inflow in Europe may be the European laws on migration. Where the Schengen agreement is limited to 22 European countries, the European Union as a whole consists of 28 countries. According to Article 1 of the 2004 Directive 2004/38/EC ‘On the right of citizens of the Union and their family members to move and reside freely within the territory of the Member States amending Regulation (EEC)’, citizens of the European Union have the right to freely move and reside within the EU member states (European Parliament and Council Directive 2004/38/EC, 2004). Although there are limitations to Article 1, it has become much easier for European citizens to travel and relocate to another EU country since the implementation of this directive. For traffickers, it is also obviously easier to bring in victims from non-Schengen, European countries. Although passports may be required to enter the European Union, when this requirement is met, victims are easily transported to other countries within Europe.

On a side note, while one can say that as migration within the EU is legal, by means of this directive, it can be argued that migrants within the EU are less dependent on trafficking organizations for passing borders. However, it is clear they still do, since trafficking numbers are still high within Europe.

5. Theoretical Framework

The theoretical framework for this thesis consists of three aspects of human trafficking: organized crime, law enforcement and prostitution law. These three topics belong to the two approaches most often mentioned in human trafficking literature: human trafficking as a criminal activity and human trafficking as an economic activity (Salt, 2008, p. 35). They are very much interrelated and cannot be discussed as completely separate issues. In this chapter, however, an attempt is made to discuss the topics separately as much as possible.

5.1 Human Trafficking and Organized Crime

Human trafficking organizations are considered to be part of the organized crime network by both scholars and the governments of many countries. The act of trafficking is also considered one of the worst types of organized crime, because it involves not only the smuggling of people (which could be initiated by the victim itself in search for a better life abroad), but also includes the exploitation of the victims and the violation of human rights when the victims have reached their final destinations (Salt, 2000; Väyrynen 2003). Before specifically talking about human trafficking as a part of organized crime, one broader definition of organized crime is presented by Väyrynen :

“Organized crime refers to subnational and transnational corporate agencies that operate systematically outside the purview of law with the intention to turn in profits for its members, especially the leaders. Organized crime is obviously illegal in nature, although it may have diverse connections both with the state agencies and legal markets.” (Väyrynen 2003, p.2)

About the transnational criminal he says the following:

“the transnational criminal today tends to be active in several countries, going where the opportunities are high and the risks are low” (p.2)

Traffickers seem to fit this image perfectly. According to several scholars and previous research, the main purpose of traffickers is to make a profit, not only from the smuggling, but specifically from the exploitation of their victims (Salt, 2000, p.35; Schloenhardt, 2001, p.228 UNODC, 2006; UNODC, 2009; Jakobsson et al., 2013, Cho et al, 2013). The United Nations

calculated that trafficking organizations worldwide have earned more than 31 million USD in total with these activities (UNODC Factsheet, 2012). Thus, if making profit is the main purpose of the trafficking organizations and if the activities that they use to make this profit are illegal all over the world, one can only expect that these organizations look for an environment that would give them the lowest risk of getting caught and that also provides them with the maximum opportunities to make money.

In his article, Väyrynen also talks specifically about the conditions needed for trafficking (2013, p.2). First of all, he mentions that weaker states are better targets for traffickers than stronger states. This seems logical, as he mentions that as weaker states usually have fewer resources to enforce the anti-trafficking law, both financially and in manpower, this makes it easy for traffickers to proceed with their activities without legal consequences. Furthermore, weak states are also known to be more prone to corruption (Rothstein, 2011; Väyrynen, 2013). This means that even if legal authorities, such as border control personnel, know about the practices of traffickers, their silence is easily bought. According to Shelley (2003) “top-level law enforcement personnel” are often directly involved in trafficking organizations, thus corruption is a major condition for criminal organizations to thrive (p.126).

Väyrynen also discusses the issue of illegal migration. He states that many countries have opened their borders for immigrants for periods of time in the past because they needed labour migrants for certain types of jobs. Now, since many types of jobs are outsourced to the periphery regions worldwide, countries have closed their borders to these types of immigrants. That this closure creates a paradox for migrants and traffickers was already explained in the contextual background: on the one hand migrants want to get into richer countries, and thus search for the easiest way to do so, which is how they end up (sometimes voluntarily) in the hands of traffickers. On the other hand, border controls are stricter which should make it harder for traffickers to get in; however, this is not always the case, for example in weak states, where corruption and weak law enforcement still makes it possible for traffickers to cross the border.

Schloenhardt (1999) writes along the same lines as Väyrynen and in his article gives three reasons why trafficking has become such a profitable business: first, the need for migration is very high, mostly from the sending countries (due to wars, bad living and working conditions etc.); secondly, the borders of higher income countries (EU) being closed for outside migration forces migrants to look for illegal ways, driving them indeed into the hands of

traffickers; finally, the low risk of getting caught compared to other criminal activities makes trafficking a lucrative business for traffickers.

Based on the above, lax law enforcement seems to be one of the major problems and reasons why organized crime can continue to exist. The next part focuses on this topic.

5.2 Human Trafficking and Law Enforcement

The conclusion of almost all organized crime and human trafficking literature attests that in order to stop human trafficking, strict law enforcement is a vital condition. However, the problem with law enforcement is that it is very dependent on other conditions in the country; first of all, countries need to have the appropriate and fitting laws to combat trafficking, both on a local, regional and national level. Next, the country needs to have the financial means to hire the appropriate number of task forces, again on different levels, from border control personnel to police forces and prosecutors. Furthermore, there needs to be cooperation between these different actors involved in law enforcement, and these different actors should ideally have the will to enforce the law, and not be prone to corruption. Lastly, there should be enforcement on different levels and in all three types of countries; origin, transit and destination (Salt, 2000; Schloenhardt, 1999; Shelley, 2003; Rahmani, 2006; Surtees, 2008; Williams, et al, 2002.; Bettio et al, 2010; Mahmoud et al, 2010; Huisman et al, 2014).

Scholars have written articles about several of these different aspects of law enforcement and related issues. Their findings will be discussed below.

In her article, Shelley (2003) discovered that trafficking organizations have regional and cultural differences depending on where they originate. Thus, laws and the enforcement of laws should be adapted to this difference. She talks about six different trafficking models in her paper, which all apply to different regions in the world (Model 1: Russia, Model 2: China, Model 3: Mexico, Model 4: Balkans, Model 5: Africa and Model 6: host countries, e.g. Netherlands). In her analysis, she shows that organizations work differently based on historical events related to that region (e.g. slave trade Africa, importance of family ties China, smuggling goods across the Mexican-US border, civil conflict, violence and instability Balkan region) (Shelley, 2003, p. 123-128). As a conclusion to this article, it can be stated that strong law enforcement is not only necessary in trafficking recipient countries, but importantly, also in the countries of origin, and then adapted to the type of traffickers, their methods, and their networks.

In line with the article by Shelley, Rahmani (2006) writes about trafficking routes in mainly eastern and southern Europe. Importantly, he observes that, “traffickers have adapted their strategies and routing systems according to measures taken by governments and organisations” (p. 77). He further states that, “it is clear that alternative paths are being taken by traffickers to move their victims, and that there is a need to heighten levels of security at these new routing points” (p.100). In his article, Rahmani looks at data collected by the IOM (the Counter Trafficking Module) and compares it to the findings of Tal Raviv and Alberto Andreani from 2004, in order to see if trafficking routes have changed. From his conclusions it becomes clear that human trafficking routes originally follow other types of trafficking routes (e.g. other goods/drugs), but that these routes can change very rapidly depending on measures taken by authorities, sometimes even within months (p.100).

There are several scholars who write more generally about law enforcement against organized crime and human trafficking, and how this optimally would function. Williams and Godson (2002) agree with Shelley (2003) by saying that law enforcement measures should be adapted to conditions that facilitate organized crime in a specific country, and that these conditions are dependent on the culture of that country and on the role which organized crime plays there (p. 351). They further state that up until now, law enforcement has been mostly reactive, and that this is due to the lack of information (p. 352). In contrast, Simmons and Lloyd (2010) find that the opposite is currently happening. In their findings, countries appear to be sensitive to framing. Thus, when neighbouring countries have framed human trafficking in a certain way and have adopted policies to combat this, the neighbouring countries will imitate these policies (p. 37-38).

Surees (2008) and Mahmoud et al, (2010) draw the same conclusions as Williams and Godson, that information sharing is essential (Surees 2008, p.63; Mahmoud et al. 2010, p. 186). This information consists not only of information on victims, but particularly of data on organized crime organizations and traffickers in particular, as this will help creating appropriate and successful policies and anti-trafficking measures. Levi and Macquire (2004) agree with Williams and Godson (2002) that there should be a focus on both pro-active and re-active measures. They stress, however, that much more research is needed to see the effects of these kind of measures (Levi and Macquire 2004, p. 451-453).

Friesendorf (2007) discussed in his articles what he calls “the anti-trafficking security governance system”. This system focusses on several aspects in the process of trafficking: legal measures, protection of victims, prosecution of traffickers, prevention in the countries of

origin and also prevention in the destination countries. What seems to be lacking, according to him, is the cooperation between the different actors on the different levels of the process. This is particularly what makes the prevention in both origin and destination countries difficult and inefficient (p. 398). In origin countries, the counter trafficking measures should focus on the eradication of poverty and discrimination so the population does not feel the need to migrate in the first place (p. 398). For destination countries, he suggests revising the laws towards migration and employment opportunities, providing illegal migrants avenues to legality and removing the need to seek help from organized crime organizations (p.398). Friesendorf also agrees with Shelley (2003), Williams and Godson (2002) and Surees (2008) that law enforcement organizations should be more flexible and adjust more quickly, as this is how the organized crime network successfully responds to changes (p. 398).

Huisman et al, (2014), who performed a case study on law enforcement in the Netherlands, came up with several conclusions as to why law enforcement did not function as expected there, and these conclusions are in line with what was theoretically researched by the earlier mentioned scholars. On a first note, the Netherlands is mostly a destination country and their strategy of combatting trafficking was to legalize and regulate prostitution in order to separate the cases of trafficking and illegal prostitution in that way. According to their study, the most important thing lacking in the enforcement process is the cooperation between different actors. The ideal was that criminal justice agencies would work together with administrative bodies and provide each other with the necessary information for the other actor to perform their job (p. 221). For different reasons, such as the agencies not recognizing human trafficking as a problem, the lack of authorization and responsibility from personnel, or simply the different aims both the agencies have, this cooperation did not function as it was intended (Huisman et al, 2014, p. 221-222).

As is evidenced in this literature, organized crime and law enforcement are two interrelated and important topics for both the human trafficking literature and for this thesis specifically. However, there is also a body of literature written on additional conditions that would increase or decrease human trafficking in a country. One of those specific topics is prostitution law, which will be discussed in the next sub chapter.

5.3 Human Trafficking and Prostitution Law

Aside from the presence of organized crime, several scholars argue that the availability of commercial sex in countries is one of the reasons for high trafficking inflows (Jakobsson, 2013, p.88). Since the introduction of the first United Nations convention on human trafficking in 1949, human trafficking and prostitution have already been linked or even considered the same thing (United Nations General Assembly, 1949). As a result of this link, much research has been conducted on prostitution from different perspectives. Cameron (2003) examined factors that would affect the decisions of men on whether or not to engage in commercial sex with a prostitute. He found that health risks, the stigma of visiting prostitutes, and being part of a religious group, all decrease the likelihood of buying sex from a prostitute (p. 286). Edlund and Korn, (2002) analysed prostitution in the “marriage market model”, where women who are compelled to give up their marriage prospects by becoming a prostitute will have to be compensated for that loss, and this explains why prostitution is so well paid (p. 211). Della Giusta et al, (2009) looks at yet another prostitution model (supply vs. demand), but add the role of stigma and reputation to the equation. What they find is that women make up the majority of the supply side of prostitution activities whereas men make up most of the demand side. Additionally, the more women would earn in other type of jobs, the fewer hours they would spend as a prostitute, which would result in the price going up (p.515).

When one specifically examines the moral aspect of prostitution, the feminist debate of the last decades cannot be overlooked. In the feminist debate surrounding prostitution, there are those who assert that prostitution is sexual dominance by men and contributes to oppression; on the other hand, there are those that say that prostitution is a type of work and nothing more (Outshoorn, 2004; Limoncelli, 2009; Agustín, 2006; Batsyukova. 2007). Naturally, such a division in opinion also has an effect on how the scholars view prostitution law; the first group believes that human trafficking is caused by prostitution and that abolition or even prohibition of prostitution is the solution to this problem, while the second group sees prostitution as work, and prefers to see prostitution legalized so it is an official part of the market and the workers would be protected by law (Outshoorn, 2005, p. 153). In her 2004 book, Outshoorn made a well-known distinction between different types of prostitution law, separating them into abolitionism, prohibitionism and regulation camps. In the abolitionist approach, all third parties would be punished (pimps, buyers etc), whereas in the prohibitionist approach, all parties are criminalized, including the prostitute. In a regulated system, prostitution is legalized and regulated. In Jakobsson et al.’s article (2013), a fourth

category is described: the neo-abolitionist approach, in which prostitution is illegal but only the buyer would be punished (p. 89).

There has been active debate among scholars and policy makers as to which system would work best in combatting human trafficking. The Netherlands is convinced that regulating prostitution would work best so that women who want to work as prostitutes have the opportunity to do so in a regulated market, making it safer for them; at the same time in this system there will be stricter enforcement in criminalizing traffickers and identifying the trafficked victims (Huisman et al, 2014). On the other hand, Sweden and Norway believe the opposite, that prostitution is equal to violation against women and that by criminalizing prostitution, the overall demand would decrease (a theory shared by Miron and Zwiebel, 1995). However, in order to save the trafficked victim from double punishment (residing illegally as well as participating in criminal activity) only the buyer is criminalized in these countries (Jakobsson et al, 2011). Although the following authors did not look at the correlation between prostitution law and trafficking inflow, Danailova-Trainor and Belsen (2006), conducted a quantitative research, using a demand-supply economic model, and found that higher rates of prostitution in a country does lead to more trafficking inflow (p. 23). Additionally, they found openness to globalization and youth employment also appeared to have an impact on trafficking inflow (p.23).

However, to isolate which of the prostitution law systems decreases rates of human trafficking, one has to examine the research focused specifically on this topic.

Jakobsson and Kotsadam (2013) have conducted a quantitative research study where they looked at the effect prostitution law had on the trafficking inflow in a country. They examined the region of Europe and used several data sets for their dependent variable (trafficking inflow) to make sure the data was more complete and reliable than previous studies. Their hypothesis was that criminalization of prostitution would lead to a decrease of human trafficking in a country, and their results correspond with their hypothesis. They concluded that in countries where prostitution is criminalized and only the buyers get punished (Swedish model) trafficking inflow is lowest, while in countries where prostitution is legal and regulated (Dutch model) inflow is highest (Jakobsson et al. 2013, p.97).

Cho, Dreyer, and Neumayer (2013) conducted similar research but included a much larger sample (worldwide, 161 countries). They wanted to examine two opposing effects of legalizing prostitution: if legalizing prostitution will lead to an expansion of the prostitution

market, and if in the resulting substitution effect, the demand for trafficked prostitutes will decrease, as buyers would also have the option to have sex with a legal prostitute. In their regression, they controlled for nearly identical variables as the Jakobsson study (rule of law, population, migrant share, GDP) and the results were also similar to Jakobsson (2013). The first effect they expected was proven, as the market of prostitutes did expand when prostitution became legal, however, there was no decrease in trafficked victim inflow; the opposite was found to be true in countries with a legalized system (e.g. the Netherlands and Germany) which still experienced a higher incidence of trafficked victims (p. 74-75).

5.4 Model, Research Question and Hypothesis

The model that will be used for this thesis is a combination of the two models used by Jakobsson & Kotsadam (2013) and by Cho, Dreher & Neumayer, (2013). The reason to use a combination of exactly these models is because, like ‘prostitution law’, ‘law enforcement’ can be considered a relevant condition for human trafficking to increase or decrease. Therefore, the models both the authors used to quantitatively measure the effect of their independent variable ‘prostitution law’ on trafficking inflows, will also work to measure the independent variable ‘law enforcement’ (which is operationalized in this thesis as conviction rates) and its effect on trafficking inflow.

According to Jakobsson et al. (2013), the authors chose to look at Europe because they expected that law enforcement would be generally the same in all these countries (p.94). However, since some countries, especially in Eastern Europe, do not have the same resources to commit to law enforcement as the western European countries, this does not seem likely. However, as stated by Levi and Macguire in their 2004 article, “research is needed to judge whether measures have actually helped reducing the crime” (p.451). This is the undertaking of the next chapters. Based on the literature review, the following research question and hypothesis has been created.

Does stricter law enforcement have an effect on trafficking victim inflow in a country in the region of Europe?

H1. The number of convictions of traffickers have a negative effect on the number of trafficking victims in a country.

6 Method and Data

6.1 Method: OLS Regression

The phenomenon that will be researched in this thesis is the effect that the number of convicted traffickers have on the inflow of trafficked victims in a country. The method for this study will consist of an OLS multivariate regression. A time-series cross-sectional (TSCS) study would have been preferred, since this would be a new addition to the existing literature on human trafficking and it would be interesting to see how this phenomenon might have changed over the course of several years. Unfortunately, however, the majority of the data was not available in time-series format; if it was available, the source discouraged time-series research, as that they could not guarantee the same input from countries for different years.

6.2 Data sets

Before focusing on the specific choice of dataset used in this project, some general remarks must be made about data collection. The main reason why there is so little statistical data on human trafficking is because it is difficult to obtain good and reliable data in general. Salt (2008) mentioned that all the data that is retrieved from countries by international organizations such as the UN and Eurostat is being compiled by different types of organizations in each country (p.37). These different organizations all have different tools of measurement and collect data at different times. Additionally, they may use different terminology to discuss the same concepts. Although this difference has improved over the years with Eurostat and the UN setting standards for comparable data, it is still questionable how reliable and how similar cross-country data may be.

On a different but related note, there is heavy politicization of this type of data. Human trafficking is an extremely sensitive topic for many countries as the outcomes of data reports may have an impact on the countries' position within the EU, for example, they might be perceived as weak if their trafficking victim numbers are too high. It is, therefore, possible that countries are not completely forthcoming about the trafficking numbers that they submit to international organizations. More specific information follows now in the dataset discussion.

6.2.1 Dependent and Independent variable data sets

For the dependent and independent variable used in this project, there are two serious options which will be examined, as well as a third option present as a back-up; all the options will be discussed and compared.

To begin, the Eurostat Trafficking in Human Beings Working Paper (2013) will be used. In this dataset, several different types of information can be found. First of all, information on victims of human trafficking is presented. In the document, a distinction is made between presumed and identified victims, and there are different tables for different years (2008, 2009, 2010). Moreover, there are also separate tables with information on the age, gender and country of origin of the victims (per country) and if they have received assistance. However, it is the following that makes this data set in particular very interesting for this thesis: in yet another table the victims are also categorized per type of exploitation per country (p.44). The problem with most other available data is that there is no separation in type of exploitation, which makes it difficult to analyse when one writes about one type in particular. The sources for this information are a combination of police reports, NGO's and other agencies (Eurostat, 2013, p.35). Aside from victim information, there are also police reports on suspected traffickers and information on prosecuted traffickers (p.64-80). Similar to the victim information for both suspected and convicted traffickers, the report also provides the age, gender and country of origin, as well as the form of exploitation of which they are suspected or convicted. Overall, this can be considered a complete and elaborate dataset with specific information needed for this thesis.

The second data set used is the UNODC Country Profiles Europe and Asia 2007-2010 (UNODC Country profiles, 2010). Although less detailed than the Eurostat set, this report also presents information on victims, suspected traffickers and convicted traffickers. In the victim section, age and gender is part of the analysis, and depending on the country, a distinction is also made on the type of trafficking of which they were a victim. For suspected and convicted traffickers this is presented the same. Most often present are the age and gender of the traffickers, while, information on the country of origin or the type of trafficking they are suspected or convicted for is presented as well. Unfortunately, this is not the case for all countries.

The third dataset is the 3P Anti-Trafficking Policy Index provided by Cho (2013). In this index, three aspects of human trafficking are measured for 187 countries: Prosecution, Protection and Prevention, of which the first aspect would be relevant for this thesis. The data in this set does not consist of actual numbers, but instead this variable has been converted to a 5-point scale ordinal variable, where 5 means ‘high degree of prosecution’ and 1 means ‘low degree of prosecution’. There are no further details on the profile of the victims or traffickers and it is therefore not as ideal a dataset, but may be considered in addition to the first two.

The first two datasets are original in that they both present actual (real) trafficking numbers. Of course, one can question as to how reliable these actual numbers are as human trafficking is an activity that remains mostly hidden and, according to the UNODC, only the “tip of the iceberg” is visible, meaning that there will be many more victims and traffickers that are not known (Cho et al, 2013, p.69; UNODC, 2009). What also should be taken into consideration with actual numbers is that some countries might have better legal systems and means in general to detect victims and trace traffickers, so the resulting numbers might also currently be higher than presented for that reason (Jakobsson et al, 2013, p. 91).

These reports represent the first time that these organizations have included information on conviction rates. This information can be considered to be sensitive since it gives an indication of the degree of law enforcement of that country. However, comparing both data sets, the Eurostat data set appears to be more elaborate and complete than the one from UNODC and would have been preferred as the primary set. Unfortunately, after the first preliminary analysis of the Eurostat dataset, the number of cases was not found to be enough to be significantly relevant, with only 23 complete sets of dependent and independent variables being present, compared to 32 complete sets of the UNODC dataset.

6.2.2 Control variable data sets

The seven control variables come from four different datasets. The first dataset is the Quality of Government Standard Time Series dataset presented by the Quality of Government Institute in Gothenburg (QOG, 2015), the second dataset is the World Bank’s World Development Indicators (World Bank, 2015). The third dataset is Atlas of Economic Complexity established by Hausmann et al (2008) and the fourth and last dataset is the Country Prostitution Law Europe Index produced by the Guardian (2013).

6.3 Case selection

The number of countries used are all part of Europe, or tied to Europe, and are selected in conformation with the article written by Jakobsson and Kotsadam (2013): Albania, Austria, Belgium, Belarus, Bosnia, Bulgaria, Cyprus, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Macedonia, Moldova, Malta, Montenegro, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, the United Kingdom and Ukraine.

Countries like Andorra, Vatican City and Monaco are not included because they are either too small or there is no information available for them.

Although there is data available for the dependent and independent variables for the years 2008, 2009 and 2010, the choice was made to only use the data from the year 2008. There are two reasons for this, the first being that after 2008 there was a worldwide economic crisis which might influence the results and change it in such a way that it would not be possible to draw unbiased and legitimate conclusions. The second reason is that according to the literature, traffickers are very quick in changing their routes if they encounter problems with the original route (Rahmadi, 2006). A high number of convictions in any one country may become too 'costly' for the trafficker to continue operating in this specific country, after which a new route is quickly found, even within the year. Therefore, it should be possible to see results even when the conviction numbers and the victim numbers are from the same year. As a robustness check it would have been good to include another year for victim inflow to create more solid and reliable results, however, due to time constraints this will not be performed in this thesis.

6.4 Model

The main model of the analysis will consist of a dependent variable, an independent variable and seven control variables. This model is based on a combination of the variables used by Jakobsson and Kotsadam (2013): GDP Per Capita PPP, Rule of Law, Population, Immigrant Share, Heroin Trafficking Numbers; and also by Cho et al. (2013): GDP Per Capita PPP, Rule of Law, Population, Immigrant Share, Catholic Share. Both authors researched the effect of Prostitution Law on Trafficking Inflow and found the same significant results. Therefore,

as a last control variable Prostitution Law is added as an important control variable in this thesis.

6.5 Variable operationalization

The *dependent* variable in this paper is the number of trafficked victims, as presented in the UNODC Country Profiles from the years 2007 until 2010. In this thesis, this variable is called ‘*Victim_numbers_UN*’ and it consists of real numbers which makes it an interval variable. Compared to previous quantitative literature, the variable is not in itself is unique, but the type of variable is. In other reports and papers, trafficking rates are almost always converted into an ordinal variable (Jakobsson & Kotsadam, 2013; Cho et al., 2013). The phenomenon that is attempted to be captured with this variable is trafficking victims inflow in a country. In order to assume trafficking inflow in a country, the data is checked for the country of origin for the victims. For more than 2/3 of the country cases, the victims in that country come from abroad and thus inflow is assumed. Making this data sufficient and reliable to answer the research question (UNODC Country profiles, 2010).

For data on victims of human trafficking there are several sources to be found, such as the International Organization for Migration (IOM), the US department of State, the United Nations Office on Drugs and Crime (UNODC), the European Union (Eurostat) and individual countries might also have their own reports on victims, such as the Dutch Report: *Mensenhandel in en uit Beeld* from the Dutch Reporter on trafficking for the European Council. The reason that the UNODC dataset was eventually selected for this project is because it also provided numbers on the independent variable. This means that the information for both the dependent and independent variable would come from the same source, and would therefore be closely aligned. One can argue that using different sources for the dependent and independent variable would create more reliability because the sources are different, however, in the case of human trafficking this is unlikely as different sources may differentiate in terminology or in method of data collection, which in turn has an effect on the results in the data set. As can be seen from the histogram in the appendix, this variable is clearly right skewed and therefore log transformed in order to attain normality.

The *independent* variable consists of the number of traffickers convictions taken from the UNODC Country Profiles from the years 2007 until 2010. In this thesis, this variable is called ‘*Conviction_numbers_UN*’ and it consists of real numbers which also make it an interval

variable. Prosecution numbers, and more specifically conviction numbers, have only recently (since 2013) been made public by the UNODC and Eurostat. The oldest data available on conviction rates is from 2007 (UNODC Country Profiles, 2010).

As law enforcement was the phenomenon of interest, a reliable proxy was needed for the operationalization. There are many aspects of law enforcement one can examine, such as arrests, border controls, police surveillance and patrol data, and more. However, number of convictions seem to be the ultimate achievement of law enforcement, as a conviction indicates all the previously mentioned steps have been met and the trafficker is punished. As can be seen in the histogram in the appendix, the variable is roughly normally distributed.

Control variable 1 consists of Hausmann et al.'s (2008) Economic Complexity Index, and this variable is used as a substitute for GDP. According to the authors, this measure of economic growth is more encompassing and complete than just GDP, since it "tries to capture the total amount of productive knowledge that is embedded in a society as a whole and is related to the diversity of knowledge that a society holds" (Hausmann et al., 2008, p.34). They further say that, "the gap between a country's complexity and its level of per capita income is an important determinant of future growth: countries tend to converge to the level of income that can be supported by the knowhow that is embedded in their economy" (Hausmann et al., 2008, p.23). In this thesis, the variable is called '*EconComp*' and the reason to add it to the regression is that previous research indicates that a higher economic growth, and more money to spend by the population of a country, will lead to a higher chance that they can and might spend it on buying sex (Cho et al. 2013, p. 71.; Jakobsson et al. 2013, p. 93). Looking at the histogram in the appendix, a normal distribution is assumed.

Control variable 2 consists of the Rule of Law estimates (*wbgi_rle*), as presented in the Quality of Government standard dataset provided by the Quality of Government Institute in Gothenburg. This variable is extracted from the World Bank World Development Indicators. In this paper, the variable is presented as *Rule_Law* and it is an ordinal variable with units ranging from -2.5 up to 2.5, with the positive values corresponding to better rule of law outcomes (Kaufmann et al, 2009). The variable is operationalized as follows: "Rule of Law includes several indicators which measures the extent to which agents have confidence in and abide by the rules of society. These include perceptions of the incidence of crime, the effectiveness and predictability of the judiciary, and the enforceability of contracts. Together, these indicators measure the success of a society in developing an environment in which fair and predictable rules form the basis for economic and social interactions and the extent to

which property rights are protected.” (QoG standard dataset, 2015, p. 533). This variable was selected because it is expected that high rule of law correlates with lower trafficking rates because the risk of prosecution is higher (Cho et al. 2013, p. 71). As can be seen in the histogram in the appendix, the variable is roughly normally distributed.

Control variable 3 consists of the total population of a country taken from the World Development Indicators provided by the World Bank. In this thesis, the variable is called *Population_WB* and it consists of actual numbers which makes it an interval variable. It is operationalized as follows: “Total population is based on the de facto definition of population, which counts all residents regardless of legal status or citizenship--except for refugees not permanently settled in the country of asylum, who are generally considered part of the population of their country of origin. The values shown are midyear estimate.” (World Bank, 2015). This variable was selected because according to previous literature, more populous states should encounter more trafficking victims and traffickers (Cho et al, 2013; Jakobsson and Kotsadam, 2013, p. 95). As can be seen from the histogram in the appendix, the variable is right skewed and is therefore log transformed to attain normal distribution.

Control variable 4 is the international immigrant share of a population in a country taken from the World Development Indicators provided by the World Bank. In this thesis, it is called “*Immigration_Total_WB*” and it also consists of actual numbers which makes it an interval variable. It is operationalized as follows: “International migrant stock is the number of people born in a country other than that in which they live, including refugees.” (World Bank, 2015). According to the United Nations, an important link exists between migration flows and trafficking. This seems logical, as in areas where high rates of migration is happening, trafficking might happen undetected and more easily than in areas where no migration movement is seen. From the histogram in the appendix it can be seen that the variable is right skewed and therefore is log transformed.

Control variable 5 consists of the different types of prostitution law in a country, based on the Prostitution Law Index provided by the Guardian in 2013. In this thesis, the variable is called *Type_Law_Guardian* and it is a nominal variable. According to this measurement, there are four possibilities, and thus four types of law are operationalized as follows:

1. Decriminalized and regulated
2. Not a criminal act but public solicitation, pimping, and brothel keeping are illegal
3. Illegal to buy sex although prostitutes are not prosecuted; buyers can be fined

4. Completely illegal

According to both Jakobsson et al. (2013) and Cho et al. (2013), countries with law type number 1 (Dutch model) will have the highest trafficking inflow rate, whereas countries enforcing law type 3 (Swedish model) will encounter the lowest trafficking victim inflow. In order to see if number of convictions reduce this effect, this variable will be added to the model. This measurement is from 2013, and although the year that will be researched in this thesis is 2008, all countries were individually checked for any changes in prostitution law. Looking at the histogram in the appendix a normal distribution is assumed.

Control variable 6 consists of the amount of trafficked heroin in kilograms in a country. This variable is a combination of the UNODC Annual Reports Questionnaire supplemented with Interpol and UNDOC Field Offices reports as provided by Jakobsson and Kotsadam (2013). In this thesis, the variable is called *Heroin_trafficking_Jakobsson* and it consists of actual kilogram values, also making this an interval variable. This variable had information on heroin trafficking from the year 2008. The reason this variable was included is because it is proven that traffickers often use the same smuggling routes for drugs as they do for humans. Additionally, there is more reliable data on drug smuggling routes than on human trafficking routes (Schloenhardt, 2001; Jakobsson, 2013). From the histogram in the appendix it can be seen that the variable is clearly right skewed, and therefore it is log transformed.

Control variable 7 consists of the share of Catholics in a country (*lp_catho80*), as presented in the Quality of Government standard dataset provided by the Quality of Government Institute in Gothenburg, and is based on the report by La Porta et al. (1999). It measures the percentage of Catholics in the population of the country. In this thesis, the variable is called *Catholic_Share_QOG* and since it concerns percentages instead of actual numbers, it is a ratio variable. This variable was selected because in her 2013 article, Cho et al., proved that in regions where there are more Catholic people, the trafficking victim rates are lower (Cho et al, 2013). By adding this variable, the effect that more Catholics in a country might have on the trafficking victim rates is controlled for. Looking at the histogram in the appendix a normal distribution can be noticed.

7 Analysis

The analysis will consist of an Ordinary Least Squared (OLS) multivariate regression. However, before the actual regression can be done, several preparatory assumptions have to be tested first and they should not be rejected.

7.1 Preliminary Analysis

First, the different variables need to be checked for normality. In the appendix (part 2) all the histograms for the different variables can be found. Several of the variables need to be log transformed, namely, IV Trafficked Victims, C3 Population Total, C4 Immigrants Total and C6 Heroin Inflow. The new, log transformed variable histograms can also be found in the same part of the appendix.

Secondly, the linearity of the variables needs to be checked. Scatterplots for the dependent variables and all the independent and control variables are plotted and can be found in the appendix (part 3). Linearity is present in all the plots, although correlations are not always that strong.

Next, the data will be checked for multicollinearity. The table below shows a correlation matrix with all my variables. Correlations with a value of above .80 are worrisome and should be looked into further. None of the variables exceed this number thus from this table no multicollinearity is assumed.

	TrafV	Conv	Ecoco	RoL	Pop.l	Immi	TypeL	Heroi	Cath.s
TrafV	1								
Conv	,485**	1							
Econc	,052	,113	1						
RoL	-,235	,004	,360*	1					
Pop.l	,606**	,390*	,353*	-,103	1				
Immi	,509**	,316	,468**	,187	,730**	1			
TypL	,079	,076	-,143	-,676**	-,148	-,307	1		
Heroi	,220	,167	-,193	-,060	,478**	,318	-,333*	1	
Cath.s	-,315	,045	,251	,272	-,005	,116	-,237	-,138	1

Table 1. Correlation Matrix with all dependent, independent and control variables.

However, another test for multicollinearity has to be done before one can be sure of the results. Therefore a table with the VIF and Tolerance is also presented below.

Model	Tolerance	VIF
Convictions	,675	1,482
EconomicComplexity	,499	2,002
Rule of Law	,419	2,386
(log)Population	,103	9,745
(log)Immigrant Total	,197	5,075
Type of Law	,464	2,156
(log) Heroin	,253	3,947
Catholic Share	,920	1,087

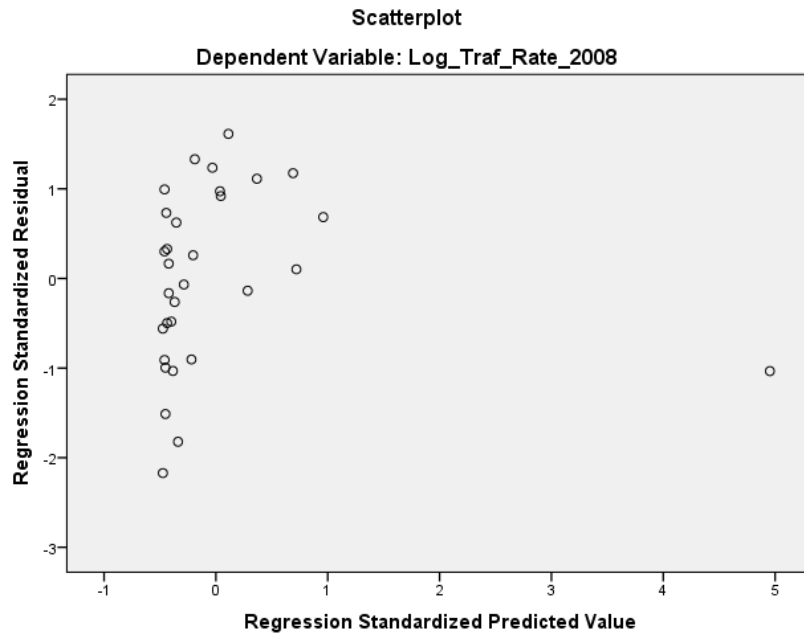
a. Dependent variable: (log) trafficked Victims

Table 2. Collinearity Statistics

According to Fields the VIF values cannot exceed 5,000 and the Tolerance values cannot go below ,200 (p.325). When analyzing the table above, one can see that the VIF and Tolerance values exceed the limit for the variables Population and Immigrant Total. It was therefore decided to not put them together in the same model in the multivariate regression. The values for Rule of Law and (log)Heroin are high as well but do not exceed the limit yet and therefore will be kept in the model.

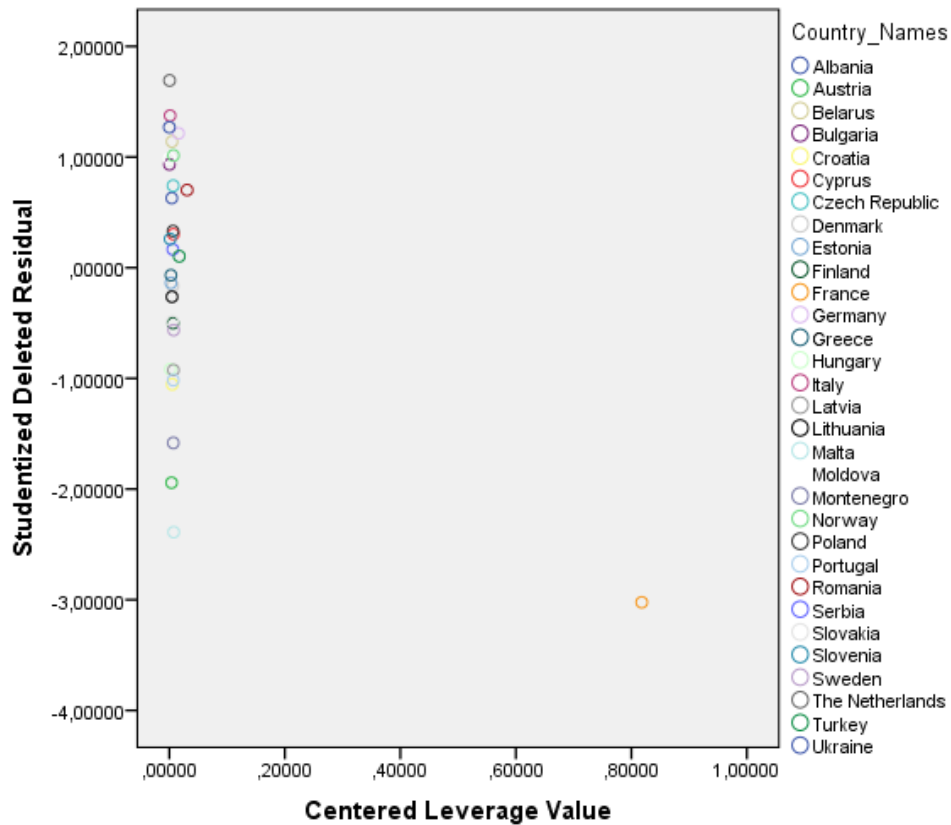
The next assumption is homoscedasticity. In order to check if there is no relation between the dependent and independent variable a scatterplot is created where the Standard Residuals are plotted against the standardized Predicted Values. The result can be seen in the table below. No clear pattern is visible, thus homoscedasticity is assumed.

Figure 1. Scatter plot of Standardized Residuals against the Standardized Predicted Values.



The last assumption that needs to be checked is if there are no outliers in the data. The reason that there cannot be outliers is that they could possibly skew the data in a certain direction or another. The scatter plot below shows the Studentized Deleted Residuals on the Y-axis and the Centered Leverage Values on the X-axis. If a country has an extreme value, either high or low, on the Y-axis and has high(er) X-axis values this means it could be an outlier and therefore skew the data (Field, p.217, 788-89). Analyzing the scatter plot below it can be seen that France is the only real outlier in the data set. However, instead of deleting it, a regression will be run with France as a dummy variable to see if it actually has a significant influence or if it is just a peculiar case.

Figure 2. Scatter plot of Studentized Deleted Residuals against Centered Leverage Values



7.2 Regression models

After having checked the different assumptions now the actual regressions will follow below. The first regression table will be a replication of the models by Jakobsson et al. (2013) and Cho et al, (2013). The only variable that is differently operationalized is the Type of Prostitution Law, and this was done since the Guardian operationalization is more elaborate with the extra category ‘ Swedish model’.

Regression table 1. Similar model to Jakobsson (2013) and Cho(2013)

DV:log_vict	Mod1	Mod2	Mod3	Mod4	Mod5	Mod6	Mod7	Mod8	Mod9
IV: conv	,485** (,002)	,493** (,002)	,492** (,002)	,289 (,002)	,287 (,002)	,297 (,002)	,347* (,002)	,279 (,002)	
C1.(log)GDP PPP		-,158 (,502)	,331 (,982)	,067 (,934)	,068 (,950)	,650 (1,405)	,260 (,858)	,070 (,969)	,019 (,946)
C2.RoL			-,562 (,665)	-,298 (,623)	-,315 (,641)	-,776* (,781)	-,460 (,588)	-,292 (,707)	-,250 (,640)

C3.(log)Pop					,453*	,363	,605	,272	,381	,501
					(,227)	(,393)	(,473)	(,360)	(,425)	(,385)
C4. (log) Immi						,107	-,117	,091	,100	,110
						(,344)	(,360)	(,306)	(,354)	(,342)
C5. (log) Heroin							-,151			
							(,158)			
C.6 CathSha								-,390**		
								(,007)		
C.7 ToL									,036	
									(,345)	
Constant	3,554***	8,468	-5,882	-7,629	-7,431	-	-10,288	-7,926	-8,424	
	(,326)	(5,059)	(9,482)	(8,565)	(8,724)	29,878*	(7,819)	(9,331)	(8,727)	
						(13,663)				
Adj R²	,209	,208	,264	,403	,382	,438	,510	,357	,333	
N	31	31	31	31	31	30	29	31	33	

*p<0.05** p<0.01***p<0.001. Standard Errors in parantheses.

Model 1 is a bivariate regression on the effect that the number of convictions in 2008 has on the trafficking victim inflow in 2008. In model 2 until model 5 the control variables that both groups of authors use are added one by one: GDP, Rule of Law, Population and Immigration total. In model 6 the extra variable from Jakobsson et al, (2013) is added (log Heroin inflow) and in model 7 the extra variable from Cho et al, (2013) is added (Catholic share). In model 8 the variable Type of Prostitution Law is added to the regression. Model 9 includes all the main control variables from both Jakobsson and Cho but is run without the independent variable.

Looking at the regression table, there are several things that can be noticed. Firstly, in model 1 the coefficient is positive and significant on a .01%-level. This is the opposite of what was predicted in the literature and might point to reversed causality, which would translate into 1 unit increase in convicted traffickers would lead to an increase of trafficked victims of ,485 (SD=.002). This means the hypothesis would be rejected. If we look at the adjusted R², this is ,209 thus, only 20% of the trafficked victim inflow in a country can be explained by model 1, which is meaningful, however, it does not have a very high explanatory power.

In models 2 and 3, with the addition of GDP and Rule of Law, the independent variable continues to be significant and the adjusted R² does not change much. In models 4, 5 and 6 and in models 8 and 9 the independent variable is no longer significant, although separate variables are significant in itself. This means that most of the control variables do not have an effect on the dependent variable. Particularly worth noticing is the absence of significance of type of prostitution law, since both Jakobsson et al, (2013) and Cho et al, (2013) found a significant result for this variable. In model 7 the independent variable is significant on a .05%-level, which means the following: the larger the share of Catholics in a country, the lower the number of trafficked victims in that country, with 1 unit increase of Catholic share leads to a decrease of trafficked victims of -,390 (SD=,007). The Adjusted R² is ,501 which means 50% of the variance in trafficking victims can be explained by model 7. This seems to be a stronger predictor than only conviction rates.

Although it is interesting to see the results of a similar model to Jakobsson et al, (2013) and Cho et al, (2013), due to high multicollinearity values it is hard to interpret the results properly. See the table below for the VIF and Tolerance values. As can be seen GDP, RoL and Population exceed the maximum values allowed for a correlation. It was therefore decided to do another model with slightly different and added variables.

Table 3. Collinearity Statistics 2

Model	Tolerance	VIF
Convictions	,706	1,416
(log)GDP.PPP	,145	6,915
Rule of Law	,133	7,541
(log)Population	,125	7,986
(log)Immigrants total	,221	4,522
(log)Heroin	,283	3,528
Catholic Share	,945	1,058
Type of PLaw	,492	2,032

a. Dependent Variable: (log)trafficked Victims

Regression Table 2: Main model (Jakobsson/Cho but with alterations)

DV	Mod1	Mod2	Mod3	Mod4	Mod5	Mod6	Mod7	Mod8
IV	,485** (,002)	,488** (,002)	,482** (,002)	,301 (,002)	,326 (,002)	,221 (,002)	,295 (,002)	,323 (,002)
Econ Comp		-,013 (,589)	,115 (,579)	-,059 (,593)	-,107 (,626)	-,171 (,532)	-,074 (,653)	-,029 (,580)
RoL			-,387* (,345)	-,249 (,341)	-,336* (,322)		-,239 (,364)	-,207 (,352)
Pop				,433* (,255)		,570** (,239)	,481 (,407)	,426* (,242)
Immi					,437* (,230)			
ToL						,233 (,263)		
Heroin							-,051 (,184)	
CathSh								-,325* (,007)
Const	3,554*** (,326)	3,724*** (,699)	3,915*** (,654)	-4,815 (3,882)	-2,136 (2,729)	-8,640* (3,752)	-5,642 (5,669)	-4,263 (3,688)
Adj R²	,209	,176	,292	,397	,396	,402	,370	,493
N	31	28	28	28	28	28	28	27

*p<0.05** p<0.01***p<0.001. Standard Errors in parantheses.

Model 1 is a bivariate regression on the effect that the number of convictions in 2008 has on the trafficking victim inflow in 2008, which is the same as in the previous table. Model 2,3 and 4 one by one add the variables Economic Complexity, Rule of Law and (log)Population Total. In model 5 (log)Population is removed and replaced by (log)Immigrant Total, as their correlation values are too high to be in one model together. Model 6 brings back (log)Population and removes again (log)Immigrant Total but it also removes Rule of Law and instead introduces Type of Prostitution Law, since these two variables also correlate to highly in order to be in the same model. Model 7 and 8 have the same three main control variables: Economic Complexity, Rule of Law and (log)Population. However, in model 7 the variable(log)Heroin is added and in the last model the variable Catholic Share is added, all separately from each other.

The first noticeable thing about this regression table is again the significant positive effect that independent variable has on the dependent variable. Since it is the same dependent and independent variable as in the previous table, the results are also the same.

Similar to the previous model, Economic Complexity (substitute for GDP) and Rule of Law have an effect on the independent variable and keeps it significant with Adjusted R²'s of ,176 and ,292 respectively. Thus the explanatory power is not that high, 17% and a better 29% of the variability. It must be noticed however, that EconComp's coefficient changes direction

when Rule of Law is added, from negative to positive and back to negative in later models. If this variable would have been significant this would be an interesting finding and would need more research. The slope of Rule of Law is negative as expected from the literature: the higher the Rule of Law, the lesser Trafficked Victims in that country.

By adding more control variables the independent variable turns insignificant. In model 4 the variable (log)Population is slightly significant with an Adjusted R² of ,397 which means 39% of the trafficked victims can be explained by an increase in the total Population of country. If significant, this result would follow the literature: A country with a bigger population will encounter more trafficked victims. Unfortunately, the independent variable remains insignificant, thus the data do not support the hypothesis. In model 5 (log)Immigrant Total is slightly significant on a .05%-level and *Rule of Law* also becomes significant on a .05%-level. Yet again, the independent variable remains insignificant. The slope however is positive which is in line with the literature: A country with a higher amount of immigrants will encounter higher trafficking victim inflow. In model 6, by adding the variable type of law, (log)Population turns significant on a ,01%-level. However, it is not significant itself and it also does not make the independent variable significant. Again, this is an unexpected result, since Jakobsson and Cho both found a significant effect. What can be suspected is that amount of convictions make type of law less important. In model 7 it can be seen that the coefficient of inflow of Heroin is negative, meaning that if the inflow of heroin goes up, the number of trafficked victims goes down. However, the variable is also not significant and does not turn the independent significant either, so it has no explanatory power. Model 8 looks slightly different, for although the independent variable is again not significant, (log)Population did become significant to a .05%-level and so is the variable Catholic Share itself up to a .05%-level. The slope is also still negative, meaning that an increase in Catholics leads to a decrease in trafficked victims in a country. The Adjust R² is ,493 which means that model 9 would explain almost 50% of the variance of number of trafficked victims if the independent variable was significant as well.

Since the results were not entirely as expected, based on the literature and previous research two more analyses were done. Table 3 consists of the main control variables (EconComp, RoL and (log)Population with the addition of the dummy variable France. This was created in order to see if the outlier has an explanatory effect on the previous model. This was not the case as the independent variable and all other controls including the Dummy itself remained

insignificant. For the table see appendix part 4. The last table will be shown below and looks at the interaction effect of number of convictions (IV) x Swedish Model. The assumption is that the type of law should have an effect, in particular, the Swedish model, where only buyers are convicted and not the prostitutes (trafficked or not). By turning them into an interaction term one could control for this effect.

Regression table 3: Including interaction term and main control variables

DV	Model 1	Model 2	Model 3	Model 4
IV	1,565*** (,005)	1,535*** (,005)	1,348** (,005)	,992* (,006)
SwedMod	,160 (1,089)	,137 (1,138)	,242 (1,117)	,222 (1,082)
Conv*Swed	-1,251** (,006)	-1,206* (,006)	-1,056* (,006)	-,802 (,006)
EconComp		,022 (,554)	,102 (,540)	-,026 (,587)
RoL			-,339 (,348)	-,263 (,349)
(log)Pop				,315 (,265)
Constant	2,933*** (,357)	3,025*** (,688)	3,349*** (,670)	-2,828 (3,929)
Adj R²	,377	,320	,395	,435
N	31	28	28	28

*p<0.05** p<0.01***p<0.001. Standard Errors in parantheses.

Model 1 includes the independent variable, the Swedish Model dummy variable and the interaction term Convictions*SwedishModel. Two effects can be noticed, firstly that the independent variable is significant at a .001%-level, meaning that in countries where the Swedish model is not in place, conviction rates leads to a higher amount of inflow of trafficked victims. This effect was seen before in the other tables as well, which might be an indicator for reversed causality. However, the interaction term is also significant at the .01%-level and it has a negative slope, meaning that in countries with the Swedish model the relationship between the independent and dependent variables becomes negative, thus the more convictions, the lower the amount of trafficked victims. The Adjusted R² is ,377 which means that this model (model 1) explains almost 40% of the variance of the dependent variable, making it quite a strong predictor.

In model 2 the control variable EconComp is added. What can be seen is that although not significant, it has only a slight effect on the interaction effect and no effect on the relation between the independent and dependent variable. This means that even when controlling for

economic growth in a country, when it handles a Swedish Model the relation between convictions and the inflow of trafficked victims remains negative and slightly significant up to a .05%-level.

In model 3 the control variable Rule of Law is added. The table shows that this variable is also not significant. It also lowers the significance of both the independent variable on a .01%-level and the interaction term on a .05%-level.

In the last model, the variable (log)Population is added. This variable is also not significant but, just like EconComp and Rule of Law, does follow the literature in the way the slope is directed. In this case; the bigger the population of a country, the higher the inflow of trafficked victims in that country. What can be seen is that by adding this variable the significance of the interaction term is gone and the independent variable is only slightly significant on a .05%-level.

8 Conclusion and Discussion

In the first part of this chapter, some concluding remarks will be given as well as an answer to the main research question and hypothesis, which will be stated once more:

Does stricter law enforcement have an effect on trafficking victim inflow in a country in the region of Europe?

With the following hypothesis:

The number of convictions of traffickers have a negative effect on the number of trafficking victims in a country.

When looking at the results of the different models, the hypothesis is rejected all the four models. Although the effect of convictions is significant, even after the addition of the control variables *EconComp* and *Rule of Law*, in table 1 and 2, the direction of the relationship is positive where a negative one was expected. This is a very interesting result, even though it is not the result that was predicted. The discovered fact that convictions do have a significant relation to the number of trafficked victims in a country is a contribution in itself. However, the direction of the relation is surprising, as in the literature a clear negative direction could be noticed; therefore an increase in convictions should lead to the decrease in trafficking victims in a country.

Even after adjusting the model with different variables and controlling for outliers, this did not change the direction of the coefficient. Also, the addition of the variable *type of prostitution law* did not have a significant effect or change the direction of the coefficient. This is surprising, since this variable was significant in Jakobsson and Cho's studies. A reason for this might be the slightly different operationalization compared to their projects.

In the last table, which is table 4, the interaction term *Convictions*SwedishModel* is introduced. Even though this variable has a negative slope and is significant, it does not change the direction of the relation between the independent on the dependent variable. Therefore, also model 4 rejects the hypothesis.

What needs to be taken into account when interpreting the results in the different tables, is that the number of cases differentiates, depending on the availability of the data for the specific variable. Unfortunately, the number of cases could not be corrected, otherwise too

many observations would get lost and the results would no longer be statistically relevant. What also has to be noted is that the number of observations in general is quite low. In several cases there were only 26 observations for a model, which makes it harder to obtain significant and interpretable results.

Nonetheless, it can be concluded that the causal direction can go both ways, therefore the answer to the main research question is still yes: more law enforcement, in the form of convictions of traffickers, does have an effect on trafficked victims inflow in a country. On the one hand, and according to the literature, convictions should lead to a decrease in trafficked victim inflow because the traffickers would find the ‘cost’ of potentially getting caught higher than the ‘benefits’ of earning money. What can be seen in the results of this study is that convictions can indeed lead to a decrease in trafficked victims, given the condition that the country has adopted the ‘Swedish prostitution law’ model. However, in a country where there are more convictions, the trafficked victim numbers can increase as well; if there are many convictions, this means that in that same country there are also the victims that the trafficker has brought into the country. One could even argue that a high number of convicted traffickers and victims indicates that the country is taking the problem of human trafficking seriously, and therefore it is more likely that it identifies more traffickers and victims.

Although the results show a significant positive relation between the dependent and independent variable, the results and the relationship should be interpreted with great caution. The low amount of cases and the quality of the data make it hard to draw real conclusions. Future research should provide a more encompassing and complete picture of the effect of law enforcement on human trafficking victims.

8.1 Recommendations for future research

Taking into account the challenges with the data, and the results of this study, several recommendations for future research can be made.

First of all, a general recommendation would be that the available data on human trafficking needs improvement. Although measures have been taken to create comparable cross-sectional data, it can still be questioned how comparable the data really is, and especially when comparing different years. Since organizations such as the UNODC and Eurostat are dependent on country governments and NGO’s for their information, the numbers,

particularly for trafficked victims, might be different from the actual number of victims. Again, this is due to decisions of governments to share or not share the complete picture, but also dependent on how well the entire process of identifying trafficking works in a country. Thus, some countries might have higher numbers of both traffickers and victims, but this may be an indication that their system of identification works better than in some other countries.

Secondly, and more relevant for this thesis in particular, a larger N sample would possibly give different outcomes. Since the sample was very small, there is a higher chance of omitted variable bias, which could be controlled for if the sample would be larger. One possibility is to conduct a larger study on a worldwide level or to make a comparison between different regions in the world.

And finally, a time-series cross-sectional study would be a major addition to the existing literature; if one could identify the relationship between convictions and trafficking victim inflow over a larger period of time, one could see if, as predicted in this thesis, the relation possibly turns negative. As data on convictions of traffickers is only recently available (2008) and until now has not been suitable for such an analysis, this would also make a great contribution.

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10. Appendix

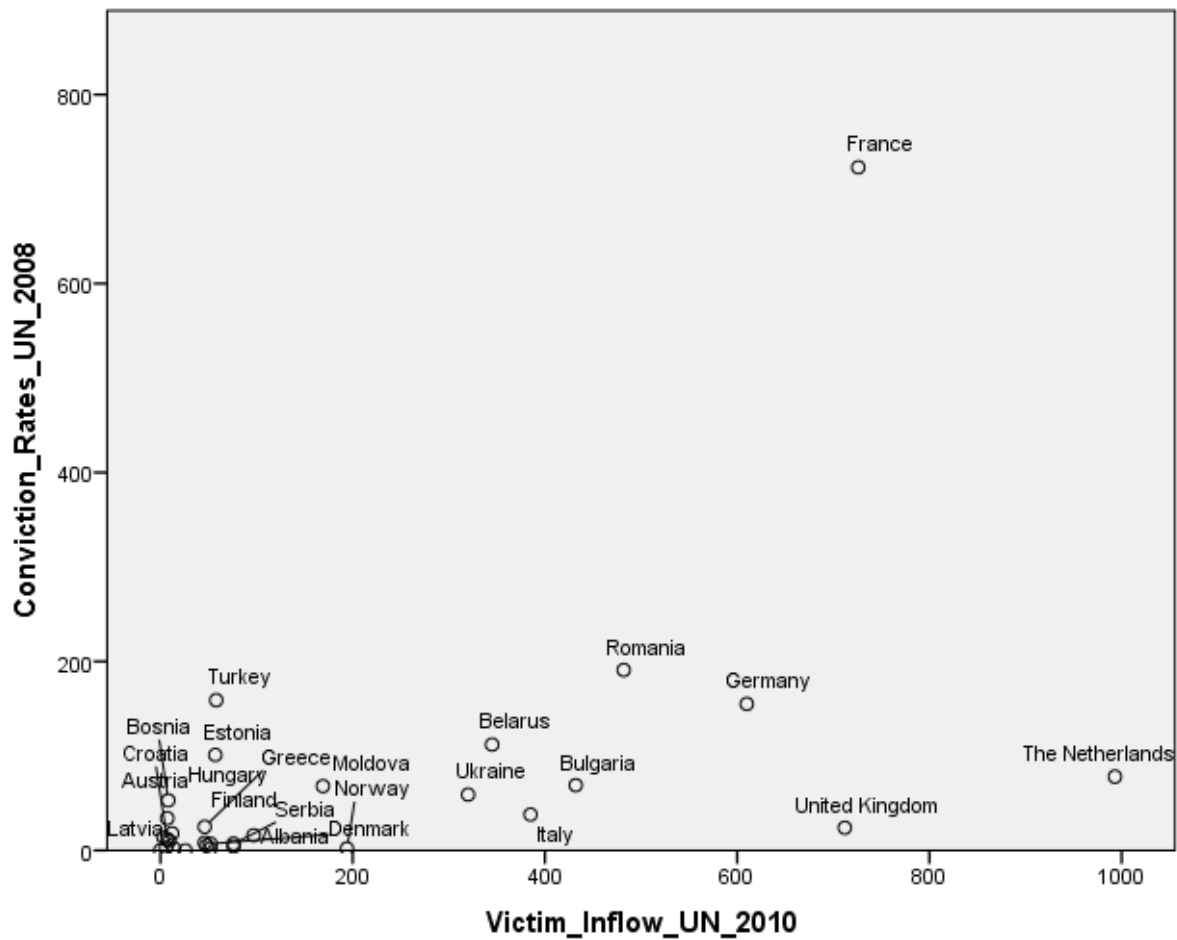
1.

Table 1. Variables and Summary Statistics

Notation	Variable	Source	N	Mean	SD	Min	Max
DV Traf_victim s	Trafficking Victim numbers	UNODC Country Profiles	33	4,0227	1,79089	,00	6,72
IV Convictions	Number of Conviction s	UNODC Country Profiles	35	58,60	125,940	0	723
C1 EconComp	Economic Complexit y	Economic Complexity Index	33	1,04548	,551586	-,018	1,985
C2 Rule_Law	Rule of Law	The Guardian	40	,8371960124	,9068425792	- 1,005517 141	1,9573257 79
C3 Pop_Total	Total population	World Development Indicators	40	15,6681	1,60019	10,80	18,22
C4 Immigrant	Total number of immigrants	World Development Indicators	40	12,9782	1,75632	7,93	16,19
C5 Type_PLaw	Type of Prostitutio n Law	The Guardian 2013 Index	40	2,48	1,062	1	4
C6 Origin_C	Origin Country	Dummy from Type of Country,UN ODC	40	,40	,496	0	1
C6 Heroin	KG of Heroin	Jakobsson et al, 2013	38	3,8509	2,93124	-6,91	8,73

C7	Share of Catholics	Quality of Government Standard dataset	38	39,29	38,861	0	97
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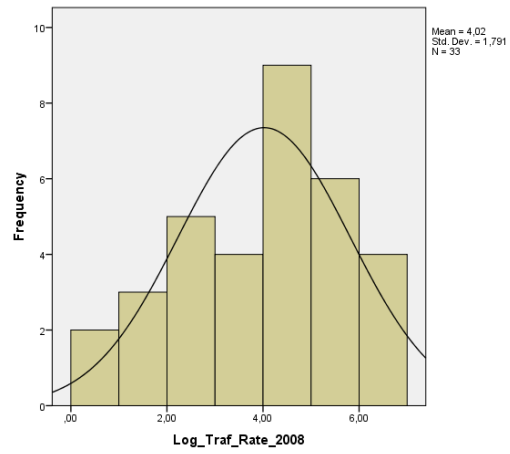
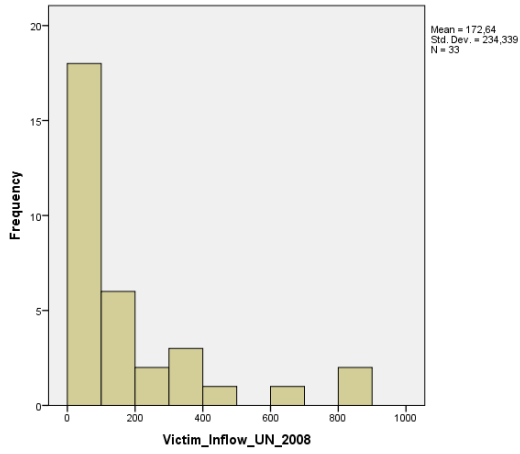
Scatterplot 1. Dependent variable trafficking victim 2008 and independent variable convictions 2008. The variables are not log transformed.



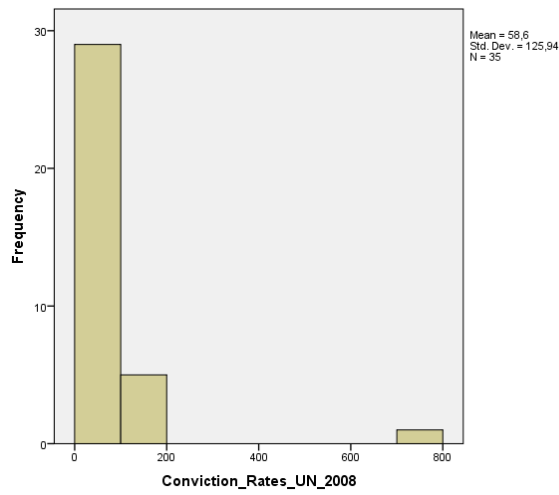
2.

Histograms of the different variables

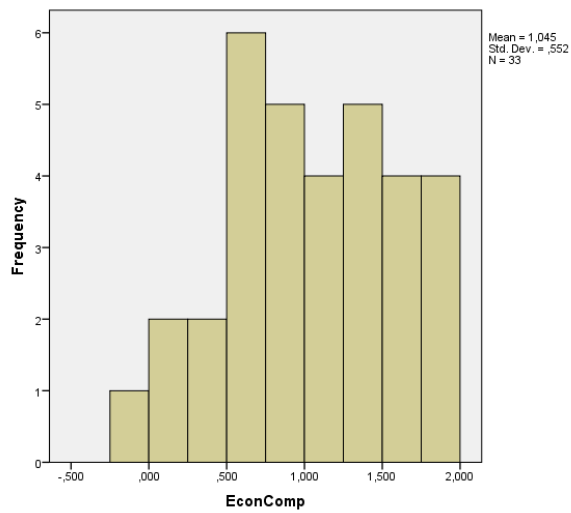
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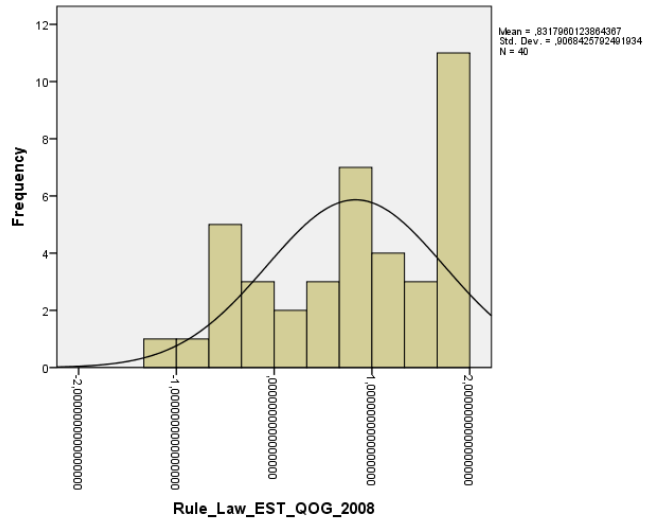
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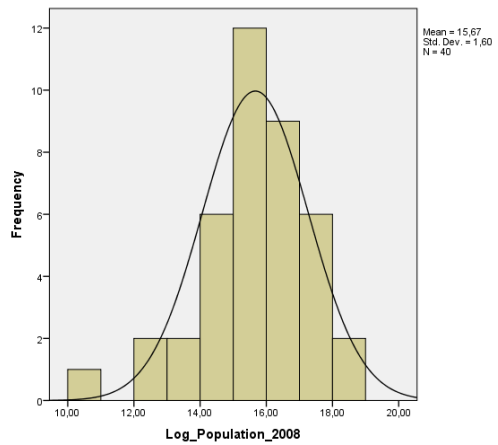
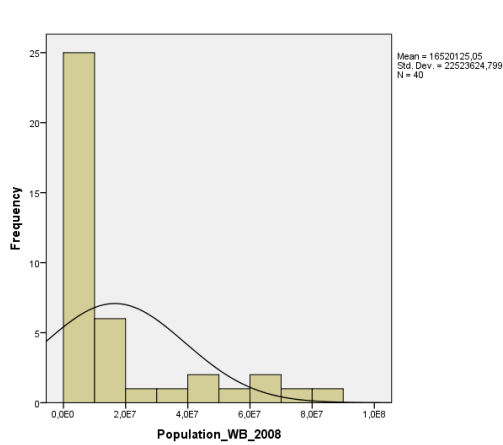
3. Histogram Control 1. Economic Complexity



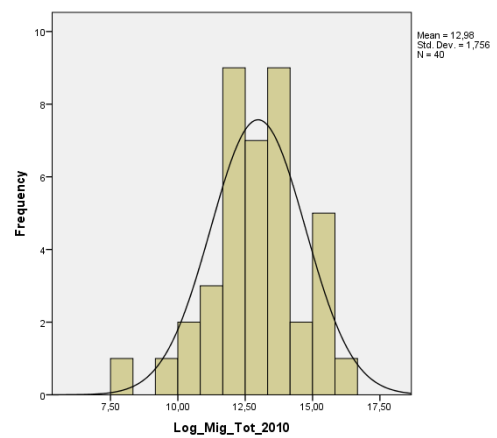
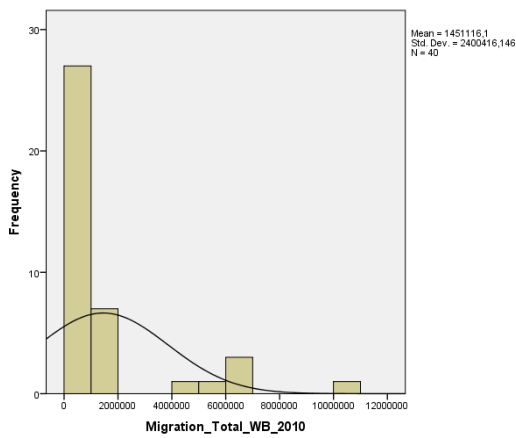
4. Histogram Control 2. Rule of Law Estimates



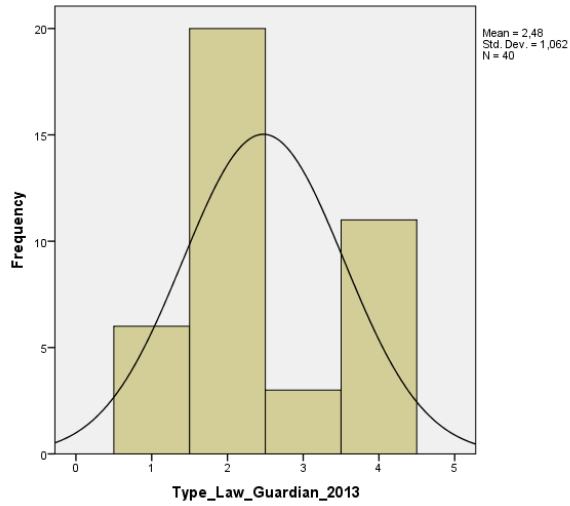
5. Histogram Control 3. Population Total. 1= Original 2= Log transformed



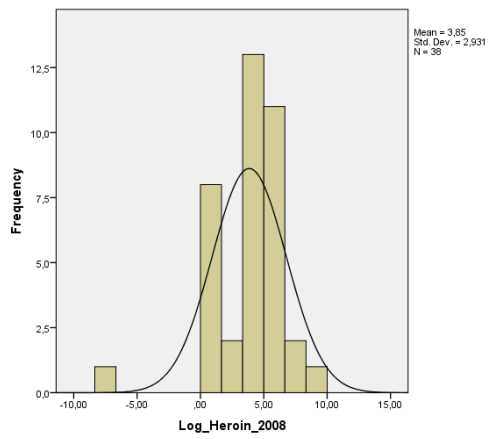
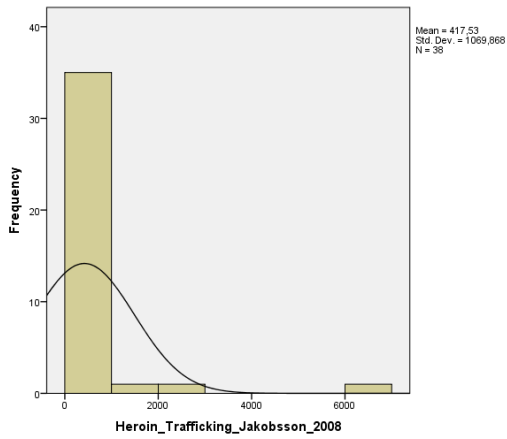
6. Control 4. Immigration Total. 1= Original 2= Log transformed



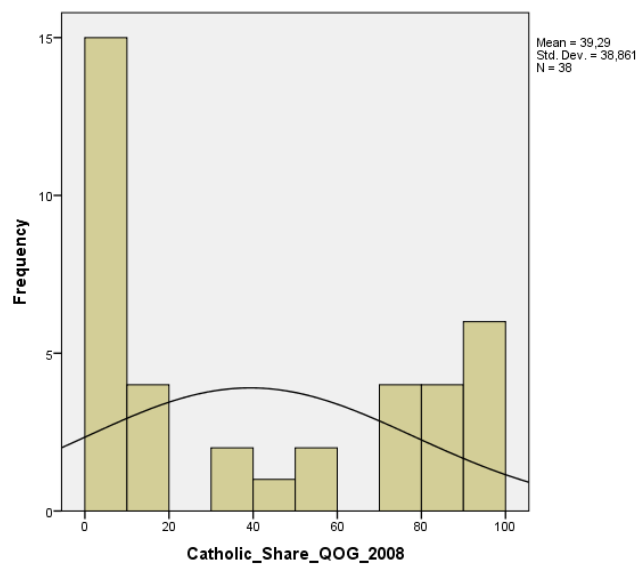
7. Histogram Control 5. Type of Prostitution Law



8. Control 6. Heroin Inflow in Kilo's. 1 = Original 2= Log transformed



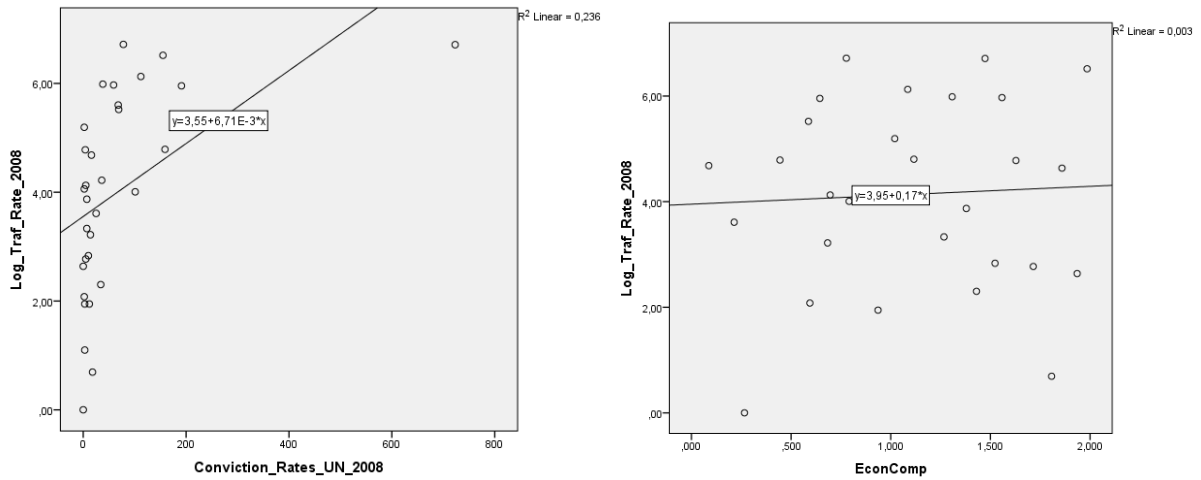
9. Control 7. Histogram Control 5. Catholic Share



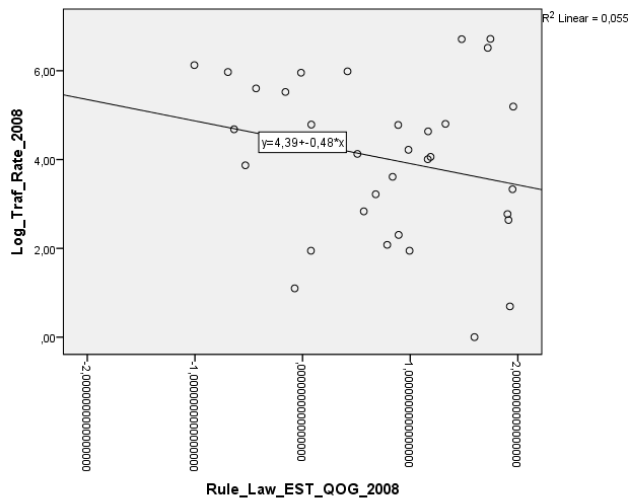
3.

Linearity check scatterplots

Scatterplot 2. (Log)Trafficking victims vs. convicted traffickers

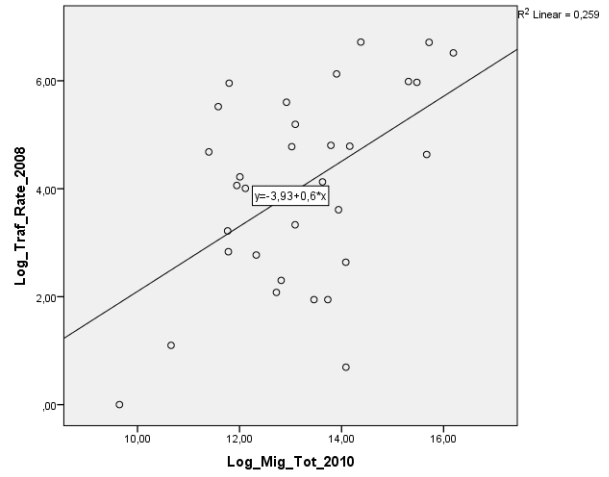
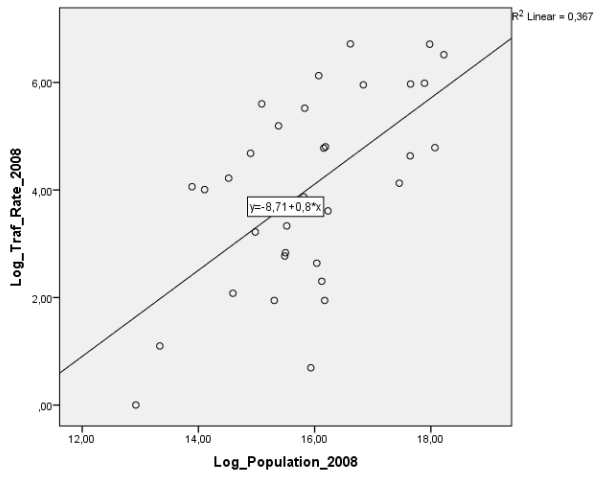


Scatterplot 3. (log)Trafficked victims vs. Economic Complexity



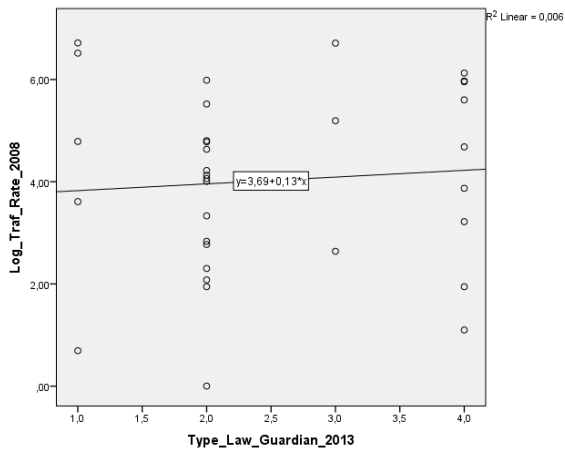
Scatterplot 4. (log)Trafficked victims vs. Rule of Law

Scatterplot 5. (log)Trafficked victims vs. (log)Population

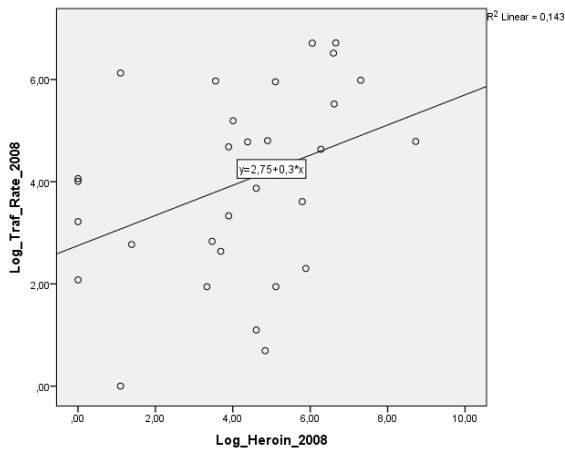


Scatterplot 6. (log)Trafficked victims vs. (log)Immigration total

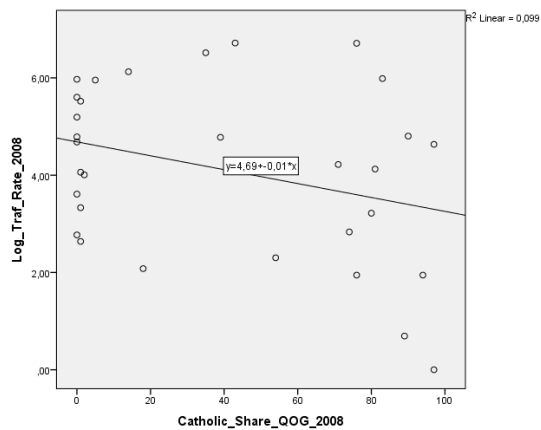
Scatterplot 7. (log)Trafficked victims vs. Type of Prostitution Law



Scatterplot 7. (log)Trafficked victims vs.(log) Heroin inflow



Scatterplot 8. (log) Trafficked Victims vs. Catholic Share



4. Regressions

Regression table. Including Dummy outlier France

DV	ModelFrance
IV	,988 (,006)
EconComp	,072 (,567)
RoL	-,267 (,337)
Pop	,223 (,000)
France	-,681 (4,257)
Constant	3,354*** (,676)
Adj R ²	,387
N	28

*p<0.05** p<0.01***p<0.001. Standard Errors in parantheses.