

Historic Slave Trade and Present Day Human Trafficking in Africa

-did the past influence the present?

Anne Martine Havnen Tønnessen



Master Thesis

Department of Economics

UNIVERSITY OF OSLO

November 2016

Historic Slave Trade and Present Day Human Trafficking in Africa

- Did The Past Influence the Present?

Copyright Anne Martine Havnen Tønnessen

2016

Historic Slave Trade and Present Day Human Trafficking

Anne Martine Havnen Tønnessen

<http://www.duo.uio.no>

Publisher: Reprosentralen, Universitetet i Oslo

Abstract

Human Trafficking is a worldwide problem where humans are trapped in coercion and exploitation. An estimated 21 million humans are victims to this crime, and even though there is a general agreement of its undesirability, research of its driving forces is scarce. The lack of facts and knowledge on this topic, makes current policy implementation based on feeling and beliefs rather than figures and data. In order to battle the problem, we need more research conducted and completed on the topic.

In this thesis I examine the relationship between historic slave trade and present day human trafficking in Africa. Expanding the argument set forth by Nunn (2008), that ethnic fractionalization was influenced by the slave trade, I test if ethnic fractionalization effects the level of trafficking outflows from a country today.

The data used is from Nunn (2008) and the Trafficking in Persons Report 2006 (UNODC, 2006) combined with additional data from the World Bank. I find a positive relationship between the export of slaves from a country and present day human trafficking; if a country had high numbers of slaves exported, they are prone to also have high levels of human trafficking. I continue by examining the hypothesis that ethnic fractionalization can be the driving force of this relation, and find this to be possible. The empirical analysis shows a positive and statistically significant effect of ethnic fractionalization on human trafficking, robust to re-specifications of the regression. Though data limitations make it hard to pin down exact causality, I argue that this is a plausible explanation, also because ethnic fractionalization is known to influence other aspects of the society.

Preface

This thesis concludes my time at Blindern. Though the last few years have been both challenging and demanding, they have also been rewarding and fun. A huge thank you to all my fellow students: can you believe we've spend the last half of a decade together, within these brick walls?! Thank you for being the most fabulous people ever.

Some people deserve an extra thank you for helping me at various times in the process of writing this thesis; Jon, Magnus, Herman, Stine, Øystein, Luke, Erika, Kelli and Mikkel, thank you for valuable input, discussions and grammar correcting! Suzanna - thank you for going through this with me! We did it! Maria - thank you for making me coffee in the morning and supporting me all the way. Ida and Mathea - thank you for reminding me to not accept fun offers to none-thesis-related things. Thank you to my advisor Gaute Torsvik as well as Andreas Kotsadam for helping me with inputs and structure. And finally, Craig and Jarle - I couldn't have done it without you! Any errors in the thesis are solely my responsibility.

Human trafficking is a worldwide problem, that includes almost every country in the world. It is, however, not a problem we speak, or even think, much about. For an excellent description of the state of human trafficking in Norway I recommend the book “Norsk Slaveri” by Strøm-Olsen and Reiss. It will open your eyes and give insight to a part of Norwegian society I wish we used more resources to eradicate.

Table of Content

1	Introduction.....	1
2	Background.....	3
2.1	Defining the Concept.....	3
2.2	Outlining the Problem of Human Trafficking	4
2.2.1	The width of the problem	4
2.2.2	The depth of the problem.....	6
2.3	An economic perspective on trafficking	6
2.3.1	The Demand side of the Market	7
2.3.2	The Supply side of the Market	8
2.3.3	Using the Market to Solve the Problem	9
2.4	Research on trafficking.....	10
2.5	Summary	10
3	Historic and Present Day Perspectives on Human Trafficking.....	11
3.1	The Historic Slave Trade	11
3.1.1	The Scope of the Problem.....	11
3.1.2	The Market of Slave Trade	11
3.1.3	The Long Term Effects of the Slave Trade	12
3.2	Present day Human Trafficking.....	13
3.2.1	Migration and Human Trafficking	13
3.2.2	Micro level data on Trafficking	13
3.2.3	Push factors.....	14
3.2.4	Pull factors	16
3.3	Linking History and Present – Theories and Perspectives on causalities	17
3.3.1	Possible Channels of Causality	17

3.3.2	Ethnic Fractionalization as a Causal Effect.....	19
3.4	Summary.....	20
4	Data.....	21
5	Results.....	27
5.1	Slave Trade and Human Trafficking.....	27
5.2	Ethnic Fractionalization.....	29
5.2.1	Slave Trade and Ethnic Fractionalization.....	29
5.2.2	Ethnic Fractionalization and Trafficking.....	30
5.2.3	Regression with control variables.....	32
5.3	Robustness checks.....	36
5.3.1	Regression with Other Control Variables.....	36
5.3.2	Excluding outliers.....	40
5.3.3	Additional Robustness Checks.....	45
5.4	Summary.....	46
6	Discussion.....	47
6.1	Slave Trade and Human Trafficking.....	47
6.2	Previous Research.....	47
6.3	Causal Effects.....	48
6.4	Working through other Channels.....	48
6.5	Application.....	49
6.6	Limitations.....	50
7	Conclusion.....	52
	References.....	54
	APPENDIX.....	59

List of Tables

Table 1: Descriptive statistics.....	24
Table 2: Correlation Between Trafficking and Slave Trade.....	27
Table 3: OLS regression, Slave Trade on Trafficking.....	28
Table 4: Correlation between Slave Trade and Ethnic Fractionalization	30
Table 5: Correlation between Ethnic Fractionalization and Human Trafficking	31
Table 6: OLS regression, Ethnic Fractionalization on Trafficking, no controls.....	31
Table 7: Correlation Between Trafficking, Population and GDP	32
Table 8: Correlation between Control Variables	33
Table 9: OLS Regression with Control Variables	35
Table 10: OLS regression: Robustness Check.....	38
Table 11: OLS regression, omitting outliers.....	42
Table 12: OLS regression, omitting influential observations	44

List of Figures

Figure 1: Relationship Between Historic Slave Trade and Present Day Human Trafficking.....	28
Figure 2: Relationship between Slave Trade and Ethnic Fractionalization	29
Figure 3: Relationship between Trafficking and Ethnic Fractionalization	30
Figure 4: Studentized Residual	41
Figure 5: Cook's D	43

1 Introduction

Some would say that slavery ended when the 13th amendment was passed in the USA in 1865. This, unfortunately, is not true. Humans are still sold and bought against their own will. The format, however, is more modern and not so easy to spot. It is called Modern Slavery.

The Modern Slavery is a continuation of the historic slavery that has existed for hundreds of years (Cho 2012:2). Under the name of Human Trafficking, is it in reality people forced to work for little or no pay. The victims are often vulnerable humans who end up living under coercion without a way out. The International Labor Organization (ILO) estimates that approximately 21 million people are victims to human trafficking today- more people than ever before in history. The problem is increasing, with high numbers entering into this exploitative market against their own will every year (Aronowitz 2001:164, Cho 2011:2). Even though it is the third largest illegal market, only beaten by the markets for drugs and weapons, there has been very limited research on the topic. There have been policies in place to try to stop the exploitation of humans, but since the market keeps increasing, it is obvious that it has not worked the way intended. With the lack of research, understanding the driving forces in the market and how to stop it is difficult (Cho 2011; Jakobsson & Kotsadam 2015). Trafficking of humans is a crime against humanity and should be taken seriously.

Traditionally, our concept of human trafficking is women trapped in the sex industry (Rao & Presenti 2012). However, human trafficking is so much more; it consists of both men and women, working in both legitimate and illicit markets. People are in trafficking for various reasons: labor work, child soldiers and organ “donors”. In this thesis, I will shed light on the issue by looking at the supply-side of the market, specifically; origin countries in Africa to human trafficking victims. The continent of Africa has a long history of being involved with slavery; it was the number one supplier of slaves during the slave trade years, and is still today an origin to many trafficking victims.

I look at the relationship between historic slave trade and present day human trafficking, to see if the countries largely affected by the slave trade also are the ones to supply the most humans to trafficking today. I use information from Nathan Nunn’s study of how the slave trade has affected long term economic growth (*The Long Term Effects of Africa’s Slave Trade*, 2008) and combine it with data from the United Nations Office on Drugs and Crime (UNODC) about present day human trafficking. I find that there is a correlation between historic and present day slavery. Following this, I look at possible causal relations to explain the link between the past and the present. My main hypothesis is that ethnic fractionalization is a driving force; it was affected by slave trade and now influences the

amount of human trafficking outflow from a country. Due to limited data material, pinning down an exact causal effect is not possible. However, I find support in the empirical work that ethnic fractionalization affects the trafficking outflows from a country. Higher degrees of ethnic fractionalization are related to more trafficking from a country. This finding is robust to all the tests I perform, and does not change when I re-specify the regressions.

Before looking at the data, I will explain more about both historic slave trade in Africa and the present day problem of human trafficking worldwide. The rest of the paper is structured as follows. In chapter 2 I give some background information on the issue of human trafficking. I define the concept and explain its impact in our society and how the market of human trafficking works. Chapter 3 gives an historic overview of the slave trade period and present day human trafficking. This chapter also looks at possible causal effects and gives a deeper explanation of my hypothesis that ethnic fractionalization is one of them. The method of estimation and data is presented in chapter 4. Chapter 5 includes the results and in chapter 6 I discuss what the data demonstrates. The final chapter concludes the paper.

2 Background

In order to have a well-rounded understanding of human trafficking, we need to define the problem. After providing a definition, the focus will be on how the problem impacts our society today and how we can make sense of this activity – modern slavery – from an economic perspective. I will also point out the lack of good research on the topic.

2.1 Defining the Concept

Trafficking in human beings is a complex problem, present in every country in the world, and how to define it has been debated. In 1999, the US Congressional hearing on human trafficking focused exclusively on sex trafficking (Rao & Presenti 2012:234). In general, there was lack of understanding of what the problem encompassed and over 300 different laws against slavery and trafficking across the UN nations (Bales 2007:270). An official definition of the problem was not in place before 2000, after two years of debate in the organization. The United Nations General Assembly ratified the Protocol to Prevent, Suppress and Punish Trafficking in Persons Especially Women and Children, in Palermo, Italy, and it became known as Palermo Protocol. The definition is as follows:

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.

(Palermo Protocol 2000: article 3)

The very foundation of the United Nations (UN) and of multilateral cooperation all over the world, is the Declaration of Human Rights, which draws out the most fundamental rights we have as human beings and as citizens of the world. Here the freedom of the individual is highly valued. Article 4 states that “No one shall be held in slavery or servitude; slavery and the slave trade shall be prohibited in all their forms” (UNHR 1948). Trafficking in humans takes freedom away from the victim and is a violation of this article.

The United National Office on Drugs and Crime (UNODC) is in charge of the protocol. The Protocol entered into force in December 2003, with the goal to increase and help in the work to stop trafficking. With a definition in place, it is easier for multilateral cooperation in prosecution of the

traffickers and protection of the victims. Often, more than one nation's laws are violated in a trafficking case, so a common definition that supersedes borders is of great use.

The Palermo Protocol was signed by 80 countries, and together with other legislation against trafficking - roughly 90% of countries have criminalized human trafficking. The Statute of the International Criminal Court also regards trafficking as a crime against humanity (Article 7.2). However, regardless of definitions being in place and legislation to follow up, there are still very few convictions.

The Palermo Protocols definition was an important step towards finding common ways to battle human trafficking internationally. However, Bales definition is simpler and more manageable, and therefore useful to mention: "trafficking is a process by which a person comes into a situation of slavery: the people concerned are controlled by force or by debt bondage, or are tricked into doing work they would not choose and for which they are not paid." (2007:270).

2.2 Outlining the Problem of Human Trafficking

In the grand scope of history, it may seem that human trafficking has been rather insignificant. However, the selling and buying of human beings have been an issue all throughout time, sometimes considered legal and just, other times illegal and unfair. Today there is a general consensus in the developed world that slavery is deplorable. Nevertheless, it persists in every country of the world even today, leaving it to be one of the greatest crimes in our society. The issue is not limited to developing countries, nor is it something only the developed part of the world has to deal with. There is forced labor in various industries in Bangladesh. There are sexually exploited women in Los Angeles. There are child soldiers in Uganda. People have their organs harvested in China. There are beggars on the streets of Europe's capitals whom in fact are trafficked. If you go to military bases around the world, the problem is evident; military bases are often associated with an increase in brothels. When the military leaves, the girls are trafficked to other places with higher demand (McCabe 2008:24; Aronowitz 2001:166). The problem of human trafficking is both wide and deep.

2.2.1 The width of the problem

According to Kapstain (2006), more people trafficked today than ever before in history. It is hard to find a reliable estimation of the scope of the problem. The reason is simple: most trafficking goes undetected. In the Netherlands, the Dutch National Rapporteur Against Trafficking in Human Beings estimates that only around 5% of the trafficking comes to the attention of authorities (UNODC

2006:44). The organization A21, which work against human trafficking, reports that only between 1-2 percent of those trafficked are ever rescued¹. They estimate that 27 million people around the globe is trapped in trafficking². The International Labor Organization (ILO) estimates there to be 21 million³. There is large uncertainty in the number of trafficking victims: at times the high estimates are ten times larger than the small estimates. Regardless, we are talking of millions of people. The UNODC does not even try to make an estimate, simply saying that the uncertainty of the estimates is too large. This is also what the International Organization for Migration (IOM) concluded when they tried to produce accurate estimates for trafficking in women across Europe (Aronowitz 2001:169). However, as the 2006 UNODC report puts it: “A strict focus on numbers can distract from the ultimate purpose of anti-human trafficking efforts, which must be to end, not reduce, this practice” (2006:45).

More important than the total number, is that there is a growing number of victims (Aronowitz 2001:164; Kelly & Regan 2000:1). The United States Department of State estimates that somewhere between 600 000 and 800 000 victims are trafficked across US borders each year (2005), while others estimate there to be between 700 000 and 2 millions annually worldwide (Aronowitz 2001:169). The total number of trafficking victims are claimed to have gone dramatically up over the last years, especially due to the destabilization and impoverishment of Russia and other Eastern European countries as well as more economically driven migration all around the world (Bales 2007:270). According to recent numbers, the share of women of total trafficking victims has gone down, but the group still accounts for about 50% of all reported victims (UNODC 2014:10). The increase in reported incidences of male trafficking, could be because the Palermo Protocol has broadened the definition of trafficking. Additionally, some countries are now better at detecting cases of forced labor work (UNODC 2014:29). There has also been an increase in child trafficking, where many end up in sexual exploitation or as child soldiers. In Africa, the majority of detected victims are children, about 60% (UNODC 2014:31).

One third of trafficked victims never cross international borders, and is thus not captured in the data I have available (UNODC 2014:8). Those who cross international borders often do so by the help of human smugglers. It should be noted that there is a great difference between smuggling and trafficking. Smuggling is the transporting of humans across borders, and is done with the consent of those who go. It is merely a form of illegal immigration. Trafficking means that the people are being exploited, and does not require a border crossing. The difference between smuggling and trafficking has become clearer over the last years, especially thanks to the Palermo Protocol.

¹ <http://www.a21.org/content/human-trafficking/gl0ryw> . Read: 1.10.16).

² (<http://www.a21.org/content/human-trafficking/gl0ryw> . Read: 1.10.16).

³ <http://www.ilo.org/global/topics/forced-labour/lang--en/index.htm> (Read 1.10.16)

Though human trafficking is illegal in almost all countries in the world, there are nine countries without any legislation against it, and eighteen that have legislation which only covers parts of the Palermo Protocol's definition. Unfortunately, these are highly populated countries, so an estimated 2 billion people are without binding legislation protection against human trafficking (UNODC 2014:12). Even where legislation is in place, however, there is a tremendous lack of convictions. About four in ten countries that has signed the Palermo Protocol has had less than 10 convictions between 2010-2012, and about 15% had none (UNODC 2014:13). This is probably due to the fact that trafficking in humans is difficult to detect, and because it has been challenging to get the victims to testify.

Human trafficking contributes to criminalizing the economy, and so, even without a moral imperative, the world has an economic interest in ending the practice. It is estimated that the trafficking economy is 150 billion US dollars annually. There is evidence that groups involved with human trafficking often also is involved with other types of criminal activity, like drugs and weapons (UNODC 2014; Bales 2007; Aronowitz 2001).

2.2.2 The depth of the problem

Human trafficking is not only a wide problem, it is deep. For the individuals trapped in this form of slavery, the rigors are enormous. Even if they are freed, the physical and psychological abuse they have experienced will likely be with them all their life. Because of the many forms human trafficking can take, it is hard to give a uniform description of the way the trafficking will influence someone's life. A person whose kidney has been removed will be affected different physically than someone who cuts hair at a hair salon without getting decent pay. A sexually exploited person will again have another physical experience of the trafficking. It is also common that the victims are psychologically abused; the threat harm to themselves or family back home can be just as harsh as the physical abuse.

2.3 An economic perspective on trafficking

It is evident that there are certain aspects to the demography of a country or personal characteristic which can explain why a person end us a trafficking victim. We can use an economic perspective on the issue of trafficking, because we are able to predict the origin of trafficking victims. For example, we know that there is a larger probability that a randomly chosen 12-year-old girl from Moldova is more likely to be a victim to trafficking than if we picked a girl from Norway. We can use knowledge from the field of economics to look at the phenomenon like a market with underling forces explaining the supply and demand.

As for any other market, the main motivation for the trade and exploitation of humans is profit (Wheaton et al. 2010:117). The market is driven by supply and demand, and the desire to maximize profit (Salt 2000; Salt & Stein 1997). Viewing the human trafficking industry as a standard business, we can use standard micro economic theory to explain what happens. There are suppliers (human traffickers) that sells the good (the trafficked victims) to the consumers (employers, sex-buyers etc.).

In order to maximize profit, the suppliers will buy input at a lowest possible price, and sell the output at the highest possible price. The “production”, going from input to output, includes transporting the victim to a new place. To apply economic force against human trafficking, the cost of supply and production must outweigh the gain for the traffickers, so that there is no profit. This can be done by implementing policies that will influence the expected profit, either at a supply or demand side of the market.

2.3.1 The Demand side of the Market

One of the aspects special to human trafficking is that the marginal cost of exploiting a person is very low. Once a human has been captured, and in a sense is someone’s property, you can sell the human multiple times. Additionally, the work produced by the trafficked person is often repeatable. Thus, the exploitation of a human is only limited by the time dimension, unlike a classical good that can only be sold once. Like a hotel room can be rented out over and over again, so can a human being. The fact that the marginal price of a trafficked human is so low, means that exploited persons often are cheaper than those not exploited. Thus, the exploiters are always able to compete on price. For a consumer only interested in the price of the good, a trafficked human being will be easy to choose. The developed world’s demand for cheap labor, cheap items or cheap sex keeps the market running. Countries with high willingness to pay and large populations large demanders, and favored among traffickers as the expected profit here is higher (Jakobsson & Kotsadam 2015:3).

Kapstain argues that slavery exists today because of lack of political will, not because trafficking is something that is needed for things to go around in the society (2006:103). State action or inaction can determine profit possibilities (Jakobsson & Kotsadam 2015:2). With good policies in place, there will not be a market for trafficking because the demand for trafficked persons would be so low, or even vanished. Implementing policies is an important aspect of stopping the market from the demand side, raising the cost or lowering the profit possibility, something Wheaton et al. argues is the most effective way to stop trafficking (2010).

The demand side of a market is focused around the goods’ price and usefulness. Traditionally the demanders are the final users of a good. When it comes to human trafficking, though, who the

demanders is, is hard to pin down. The final users of an exploited person often do not know that they are buying someone who does not receive pay. A sex-buyer or employer, buys sex and labor, not trafficked victims (Danailova-Trainor and Belser 2006). Therefore, it might be better to think of the demanders as the last person in the chain that knows what is going on. An example is pimps or brothels, but generally knowing who the last person in the chain is, is hard. When working with the demand side to stop policies, one of the main problems is this type of lack of information. Because governments do not know who the policies are meant to target, it is hard to find efficient policies to implement.

It is also easy to see that policies alone cannot solve the problem. Morals and standards are needed to be able to stop trafficking. Legal framework and policies influence the profit expected from trafficking, can also, as Jakobsson and Kotsadam (2013) have shown, influence the way people view the purchasing of services closely linked with trafficking. Criminalizing the buying of sex in Norway in 2009, changed the way the public viewed this action (Jakobsson and Kotsadam 2013), leading to less purchasing and thus less profit to be made in the Norwegian market. The laws speak both to a person's morals and his self-interest about not breaking law and facing a consequence. It is likely that this is also the case for other types of exploitation.

The criminalization of prostitution, can also have a down side; driving voluntarily prostitution out of the market, leaving room for only trafficking victims (Cho et al. 2013). More stigmatization means that there will be less legit workers and lower price for the services (Di Tommaso et al. 2008). This underscores the need for good understanding of all effects in a market and the necessity of a clear view of the relations between implemented policy and final outcome.

2.3.2 The Supply side of the Market

The main goal for working on the supply side of the market is to stop people from become victims of human trafficking. However, an important aspect of trafficking is that people do not choose to enter the market; exploited people do not choose to become exploited. This means that there are no direct policies a government can implement to alter someone's behavior and in that way stop the market. However, we know that there are certain areas of the world more inclined to become sources of trafficking. My thesis is about determinants of this selection. Here I will only look briefly at a broad overview of the issue, while I in section 3.2 will be taking a closer look at what affects the flow humans into trafficking.

Victims to trafficking are often lured into it. There are different degrees of this, for example can victimization into the prostitution market be divided in to four different levels: "Complete coercion

exists when victims have been abducted. Deception occurs when individuals have been promised jobs in the legitimate economy only to find themselves forced into sexual slavery. The third level involves those individuals deceived through half-truths where they are told they will be working in the 'entertainment industry' or as dancers or strippers. The fourth category involves those women who were aware, prior to departure, of their work as prostitutes, but were unaware of the extent to which they would be intimidated, indebted, controlled and exploited" (Kelly and Regan 2000:24).

In the trafficking market, the suppliers are not the victims of trafficking, but the traffickers who recruit those to be exploited. To halt the supply of trafficking victims, efforts must target the traffickers. The market goes mostly underground, and various models attempting to find policies to impact this side of the market has proven the task to be hard. Though not looking at human trafficking especially, but the closely related cases of illegal immigration and smuggling, Tamura (2007) found that policies implemented to reduce the number agents smuggling humans across borders will raise the average exploitation. According to the model, improved border control is not recommended, because it will shut down those agents who only smuggles and does not exploit, leaving the migrants to only the exploiting agents of smuggling. Policies that by themselves are meant to reduce exploitation, in fact would offset each other (Tamura 2007:34). This is also what Friebel and Guriev (2006) found in their models of illegal immigration: to enforce stricter policies like deportation can reduce overall immigration, but increase trafficking. It is thus clear that stopping trafficking from the supply side is not an easy task.

2.3.3 Using the Market to Solve the Problem

In economic terms, if you want to fight the human trafficking market, you have to reduce the expected profit to zero or less. This solution to the problem is simple, too simple for a complex world. The market of human trafficking is special, because both the demanders and the suppliers are the traffickers.

The total amount of human trafficking is a result of the interaction between supply and demand. Like Aronowitz points out "In the receiving countries there is, and always will be a demand for cheap labor and sex. In the countries of origin there is always a dream of a better life and the ability to support oneself and family members back home." (2001:172). The possibility of making easy money for the traffickers combined with a continuous supply of humans who they can lure or kidnap, makes the market unavoidable. This is not to take away the hopes of combating the market, but is to illustrate how complex the real world is.

A government wanting to reduce trafficking needs policies affecting both sides, or multiple policies working together. Akee et al (2011) showed that trafficking flows are affected by policies both in origin and destination countries. It is largely up to political will to introduce effective policies. However, what policies this is, is not so easy to determine. Efforts to stop trafficking in the real world is done so in an uncontrolled, endogenous environment. This means that even the effects of policies that have been put in place is hard to know for certain. In fact, we see an increase in the amount of trafficking, so it is natural to assume the policies implemented have not worked as intended.

2.4 Research on trafficking

There is limited research on the topic of human trafficking, especially from an economic perspective. This also goes for the affiliated sex industry (Di Tommaso et al. 2008:1). The lack of good quality data is of great hindrance to the scholars, and is most likely a reason why the interest in the issue seem to be low (Di Tommaso et al. 2008:61, Jakobsson and Kotsadam 2015:1).

The shortage of research also makes it hard, if not impossible, for a government to develop good policies to counteract it. Until now, the policies implemented are mainly based on Non-Governmental Organizations (NGOs) and advocacy firm's interests. This leads to the issue being dealt with based on feelings and not knowledge (Salt 2000). It is critical to understand the mechanisms of trafficking so that different nations can approach the problem in ways that are most effective. A destination country like Norway should most likely not implement the same policies to stop the recruitment of trafficking victims as origin countries like Moldova. Instead, Norway should focus mainly on policies that can help stall the demand for trafficked victims. Research is needed on the area to gain knowledge that will help governments pass policies that more effectively battle the problem.

2.5 Summary

It is clear that human trafficking is a wide and deep problem in the society, that is needed to be taken seriously. Because one is able to generally predict where trafficking victims come from, one can use knowledge about market mechanisms when trying to stop the problem. However, research on the field of trafficking is lacking, which makes the this a hard task. Both better data and more interest among scalars is needed, though the latter most likely depend to the former.

3 Historic and Present Day Perspectives on Human Trafficking

In this section, I will present historical material to explain why historic slave trade in Africa was possible and why Africa still is a supplier of humans to trafficking. I will also present possible causal effects explaining the relationship between historic and present day trafficking, and explain why I believe ethnic fractionalization to be one of the causalities.

3.1 The Historic Slave Trade

The history of slavery in Africa is long and complex. A complete overview is difficult to provide, and both outside my knowledge and the scope of this paper. Hence, I will give a brief summary of the story told by Nunn (2008) and Angeles (2013) about the years from 1400 to 1900 when Africa endured four simultaneous slave trades; the trans-Saharan, the Red Sea, the Indian Ocean and the trans-Atlantic. These trades took Africans from one place in Africa to another, from Africa to the Middle East and India and from Africa to the Americas.

3.1.1 The Scope of the Problem

During the first three waves of slave trade, an estimated 6 million people were exported. The last slave trade, the Trans-Atlantic, was by far the largest in number of slaves. An estimated 12 million people embarked as slaves from Africa to the Americas between the 16th century and 1866 (Angeles 2013:2, Nunn 2008:142). Keep in mind that these numbers only include the slaves that were alive upon arrival. The numbers of slaves who died in transit, and those killed during capture are likely great, but hard to estimate as they were never properly recorded (Nunn 2008:142). During the last trade, in certain parts of Africa, there was a 9.3 percent probability of ending up as a slave in the Americas during your lifetime (Whatley and Gillezeau 2011a in Angeles 2013:3). The amount of people taken from the continent left a hole in the population: in 1850 the population was only half of what it could have been (Manning 1990:171).

3.1.2 The Market of Slave Trade

To understand the forces in a market can be a challenge, and it can be an even harder task to understand the motivation for why the market came to be in the first place. In the case of African Slave Trade, we can assume that the demand for laborers started the market. The first three slave trades traded humans to work in agriculture or to exploit natural resources within Africa or in the

Muslim World. There was need for laborers in plantations, pearl diving, and work in the mines. In addition, the slaves transported to the Muslim World was viewed as a luxury good, with a likelihood of working domestically (Angeles 2013).

For the trans-Atlantic Slave Trade, the Europeans had started colonizing the Americas and there were more natural resources and agriculture to be exploited than what they could produce solely with the natives as laborers. Thus, there was a demand for labor which required little human capital and brute effort. North-American sugar and tobacco plantations were large, and the production labor intensive (Angeles 2013:11). As were the gold and silver mines in the south (Nunn 2008:160). Most of the African slaves were employed here (Angeles 2013:8, Nunn 2008:160).

Historians have sought to answer the question why Africa was the main supply for this labor force. Angeles (2013) argues that there are multiple reasons and that the population density and ethnic fractionalization are partial explanations. It could also be because Africa had less good that could be traded and transported for longer distances. The natural resourced they did have, like gold, was limited in both volume and geography, so their specialization ended up being transportation of labor – as slaves (Angeles 2013:7-8). Angeles also points to the importance of religion when it comes to the sense of fellowship among people. He argues that the lack of enslavement in the scattered states of Italy and Germany which were often in war with each other before the 1870s, was due to the area’s common Christian religion. Also in Eurasia and Muslim World, there was common religion that crossed ethnic boundaries. The same was not true for Africa (2013:18-20). In addition, Africa had a low population density, which accounted for less human interaction and in the long run less heterogeneous societies. In Angeles words: “when economic forces create a large demand for slave labour, Africa provided a fertile ground for enslavement” (2013:20).

3.1.3 The Long Term Effects of the Slave Trade

The 400-year long history of slave trade in Africa impacted the societies and subsequent development on the continent, but previous scholars have mostly been focusing on the power of colonization in the area. In his paper from 2008, Nathan Nunn does the first empirical estimation of the slave trades impact on economic development, and he finds a clear negative relationship between the amount of slaves exported from a country and the current economic performance. Later, Nunn and Wantchekon (2011) showed that at least some of this could be attributed to the effect slavery had on trust between inhabitants. If one’s ancestors were affected by the slave trade, you trust relatives, neighbors, coethnics, and local government less. With these impacts in mind, the hypothesis that slave trade could influence parts in a society, which again would impact human trafficking, is possible, and I will examine this further later in the paper.

3.2 Present day Human Trafficking

Present day human trafficking is not a phenomenon that had a clear starting point like the slave trade. Rather it is a continuous flow of people. This makes it impossible to pin down whether its' start was supply or demand driven. Instead, I will focus on explaining what the driving forces are today. The reasons why you end up in a place with risk of being trafficked can be divided between push and pull factors (Cho 2012). Before looking at these factors, I want to argue that migration and trafficking is so closely related that we can use literature on migration when we look at human trafficking, and present a set of micro data that I have used to illustrate what the findings mean in real life.

3.2.1 Migration and Human Trafficking

Previous research has argued that migration and trafficking are closely linked together and should be looked at interchangeably (Omar Mahmoud & Trebesch 2010; Rao & Presenti 2012). We have seen a rise in interest in scholarly research about human trafficking over the last years (Salt 2010), however, there are large gaps in our knowledge. It is helpful then, to examine literature about migration. In a situation where more people than possible, or feasible, want to migrate, there is more opportunity for human trafficking and other organized criminal activities (Jakobsson & Kotsadam 2015:11). In areas where there is high migration there is also often high amount of trafficking (Omar Mahmoud & Trebesch 2010). We know that many victims of human trafficking leave their country voluntarily, but then end up in exploitation (ILO 2005, Surtees 2005 and Laczko and Gramegna 2003 in Omar Mahmoud and Trebesch (2010)). The false promise of a job as a waiter in another country, and the hard reality of being trapped as a sex-worker, is well known and unfortunately too common (Aronowitz 2001:166). Often, it is the wish to migrate that puts the victim in a position where he or she can be exploited by a trafficker. Up until recently it was assumed that women traveled together with a male, and that migrating alone was uncommon, which can have given room for additional relation between human trafficking and migration (Rao & Presenti 2012).

3.2.2 Micro level data on Trafficking

IOM collects data on trafficking victims in The Counter-Trafficking Module Database. The detailed data is only accessible to those working in IOM, but through Giusta, Di Tommaso and Strøm's book on Sex Markets (2008), we have access to an overview. The data presented here is for those identified as 'victims of trafficking' for the purpose of 'sexual exploitation' (2008:61). Thus, data might not be representative of trafficking victims overall, but it will give some insight to why people end up in migration. There is also a possible bias in that only victims in countries where IOM works would be able to register.

3.2.3 Push factors

Things related to a victim's origin can be pushing forces into trafficking. It is important to remind ourselves, that while we are discussing the supply side of the trafficking equation, the victims of trafficking do not supply themselves into the market. Instead they are picked up by traffickers who exploit them or sell them for others to exploit. There are, however, demographic and ethnographic reasons as to why a person may be in a position to be recruited by a trafficker. Very few are abducted or sold into it; most are lured through deception. Many cross the borders legally with their own ID papers, and often by their own free will.

Poverty

Poverty has an influence both on migration and human trafficking (Bales 1999; Di Tommaso et al 2009). The relationship is found to be inverse u-shaped: the poorest have no money to pay the costs of migrating, while the rich have less incentives to leave (Rao and Presenti 2012). This suggests that the victims of human trafficking are neither the poorest nor the richest in the world. At the macro level, this implies that both the poorest countries and the richest will have less human trafficking originating in them. On the micro level, the IOM database reports that about 79% of the victims are from poor and middle-income families, while 20% reported being from a very poor family and only 0.2% from a well-off family (Di Tommaso et al. 2008:65-66).

Population and Networks

Population is also a factor explaining both migration and human trafficking. Here, both total population (Rao & Presenti 2012) and population density (Bales 1999) are important. The exact causation is not known, but perhaps a larger population means that there is more people to choose from. Also, lack of job opportunities can lead people to migrate in hopes of a better future, and more populated countries have a higher risk of not offering enough, well paid, jobs. In the IOM database, almost 85% of the victims reported that they were originally offered a legit job by the recruiter, like babysitting/domestic help (28%), selling/waitress/sweatshops (25%) and dancer (24%). Only about 9% reported knowing they would work selling sex. ILO (2005) states that trustworthy social networks has a positive impact; there will be less trafficking if you know the people around you. However, data and research says that many of those who end up in trafficking are recruited by acquaintances; 84% of the victims reported being trafficked via personal contacts. Of these 53% reported the recruiter as a stranger, while 29% reported it being a friend (Di Tommaso et al. 2008:67). Having a social network may be helpful, but it does not entirely protect a person from getting trafficked.

Networks work in various ways. Human trafficking is lower in areas where knowledge about its existence is high (Omar Mahmoud and Trebesch 2010). There is, however, an effect working in the

opposite direction; if there have been trafficking from the area before, social networks can lead to more trafficking. By using people from the area as recruiters, exploiters can go back to the same area to find more victims. There are many examples where those already trafficked will help their exploiters find more people, from their own social network (Cranford 2005, Martin et al. 2007, Zhang and Shin 2002 in Omar Mahmoud and Trebesch (2010)). There is a correlation between the citizenship of the victims and the traffickers, suggesting that it is normal to exploit people from the same country (UNODC 2014:8; Europol 2016). The UNODC report from 2014 states that “(...) while recruitments in origin countries are largely carried out by citizens of those countries, the exploitation schemes in destination countries are likely to involve more transnational operators.” (2014:26).

Governmental Quality

Conflict and social unrest within a country are also factors that can be a pushing force. Economics can be a factor as well, transition economies (going from state-led to market-led economies) are positively correlated with being an origin country for human trafficking and migration (Bales 1999; Rao and Presenti 2012). When there is a transition between two styles of economic foundation, there will be more economic and physical insecurity (Rao & Presenti 2012:252), which might cause people to want to migrate in the hopes of a better and more stable future.

Research on human trafficking has also listed mortality, youth unemployment and age structure in a country as affecting the degree of human trafficking (Cho 2012). Corruption in a country also influences the amount of human trafficking, and improving the corruption rate is suggested to be the most effective way to reduce human trafficking (Bales 2007:276).

Education

In the literature on migration, there is a finding that those who migrate are more educated than the general population in their home countries (UNODC 2009). This seems to also be true for female trafficking victims; microdata suggest that many women are exploited for labor work in the care sector. Many of the victims have been part of the labor force in their home countries. The IOM data on trafficked women for sexual exploitation found that only 2% had no schooling. Over 60% of the women had completed middle school, and about 6% had a university degree. Over 78% were employed in either private or public sector in their home countries (Di Tommaso et al 2008:65-66). Rao and Presenti also points out that higher education can be correlate with a higher personal standards or ‘genteelness’ or ‘cleanliness’ (2012:241). This, together with beauty perception in host country, can lead to more trafficking. Also, women who engage in paid work in their home country are more likely to want a better future and therefore be more inclined to migrate (Augustin 2005 in Rao & Presenti 2012).

Gender Inequality

Rao and Presenti (2012) examined the gender inequality in the origin countries and found that gender inequality does not necessarily create a pushing force. They draw the conclusion from this finding that “it is in societies permissive enough to allow women to travel alone and be potential economic migrants (...) that we are likely to see trafficking originate” (2012:257). In countries where women are not free to walk outside without a male family member present, it would be very hard for a woman to migrate and also to be in a position where she could be kidnapped (Rao & Presenti 2012:241). That Di Tommaso et al. (2008) found most female victims to have a job in their origin country prior to being trafficked, supports this. The finding that gender inequality itself is not a determinant of human trafficking tells us that we should be careful when working for equality in countries (Rao & Presenti 2012:258). Going from a society where women are expected to be with a male family member at all times to a society where they more freely can move around, can instead lead to more human trafficking. Being aware that this transition can lead to more human trafficking is important when working for equal rights for men and women.

Sustainable Development Goals

I will take a brief detour here, to note the following; some of the findings here are in direct conflict to the general work done in underdeveloped countries. I will use an example to underline this: the UNs Sustainable Development Goals (SDGs) signed in 2016. These are a continuation of the now outdated Millennium Development Goals. Based on the literature on human trafficking and migration, reaching some of these goals could potentially cause more supply of human trafficking victims. No poverty, quality education, gender equality and reduced inequalities (SDG 1, 4, 5 and 10), might in fact all contribute to increased human trafficking for some of the African countries. When deciding on how to implement aid work, both the risk of increasing human trafficking and the possibility of reducing it, should be taking into account (Bales 2007:269). Having SDG number 8, target 7, in mind when working on development in underdeveloped countries is important: “Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms”.

3.2.4 Pull factors

The factors that will pull a victim into human trafficking are normally pure economic: “it is first and foremost the wish for a better life abroad that puts millions of people at the risk of ending up in exploitative work conditions” (Omar Mahmoud & Trebesch 2010:2). Some victims are sold into human trafficking, like parents selling their children in hopes of the escaping poverty (Bales 2007;

Aronowitz 2001; Akee et al. 2010:5). The most common way, however, is that the victims themselves are lured or tricked into it. Some believe they will get legitimate and well paid jobs, while others know they will work in illicit markets like prostitution. They do not however, know that they will be exploited: working without or with little pay (ILO 2005, Surtees 2005 and Laczko & Gramegna 2003 in Omar Mahmoud & Trebesch 2010). Policies to reduce pull factors are border controls, or harsher immigration policies that will make the grass on the other side less green – of the fence to climb higher and wider. This, however, as pointed out earlier, might have other effects, and is not the most effective way to stop trafficking. Simply put: the driving forces on the pull-side is hard to influence in a way that will make migration less appealing and thus trafficking less probable.

3.3 Linking History and Present – Theories and Perspectives on causalities

There are multiple channels through which the slave trade period could influence and leave marks in a society so that it even today would affect the attitude towards human trafficking. My main claim is that ethnic fractionalization is one of them, but there are also others. The channels through which the influence goes are many, and I will only be able to point out some of them here.

3.3.1 Possible Channels of Causality

The massive amount of export of humans left an impact on the continent's development. In the beginning of the slave trade period, the slaves would be captured in state organized raids or warfare which caused insecurity outside the local community (Nunn & Wantchekon 2011:3220-3224), but as the slave trade expanded, so did the ways of recruiting new persons. Wars were fought solely to obtain slaves and by the end of the trans-Atlantic slave trade, it was common to turn against your own clan, your family and friends (Lovejoy 1983 in Angeles 2013:3). This created insecurity also inside of ethnic groups and communities (Nunn 2008:142; Nunn & Wantchekon 2011:3225). This probably weakened the components of basic social structure and deepened the fractionalization on the continent.

Level of Trust and Economic Growth

Nunn (2008) suggests that the slave trade influenced the long term economic growth in Africa. Following this, Nunn and Wantchekon later found that a probable reason was that slave trade lead to less trust in the society which made economic development stagger (2011). The lack of trust possibly made people less inclined to cooperate with unknown people or strangers, and more likely to stick to

their own kind. This could influence present day human trafficking through the fact that subgroups within a country was created and strengthened. If something was to happen to one group, others might not care or react. In a heterogeneous society, there might be advantages for one group in areas like trade amongst inhabitants, public infrastructure and government expenditures (Montavlo and Reynal-Querol 2005:796). The lack of interaction and feeling of responsibility towards others will also take away the safety net if something was to happen. If your kind evict you, there is no other group which will take you in. This lack of social inclusion networks can potentially lead many to have no choice but rely on a traffickers' promise of work to get a future.

Infrastructure and Institutions

Slave Trade may influence the infrastructure within the society. Angeles argues that the state bodies grew stronger during the slave trade. A complex and well-functioning tax system for the slave traders was developed during these years (2013:18-19). Nunn however, states that the slave trade stopped the evolvement of complex state systems, and that ancient states were more or less gone by the end of the slave trade (2008:143). It is reasonable to assume that there would be a focus on developing good routines and infrastructure related to slave trade, when this business was so big and defining at the time. However, this leads to less focus on other parts of the society, and would stagger the development of other types of infrastructure and institutions. When the Europeans colonized the continent in the late 1800s, African societies were not particularly developed, even though they had been in contact and trading with each other for many centuries. Most of the colonies would later implement a governance structure similar to their colonizer, learning the practices from them. This means that the slave trade period decreased the level and quality of infrastructure in all other aspects than what was related to slave trade. This has long term influence on the society, also in other aspects than purely economic (Nunn 2008). One example is not having a good education system, which will disable people and make development in the country harder.

Values and Beliefs about Human Dignity

The victims of human trafficking are often young, almost 55% of the victims in the IOM database are between the age of 20 and 30, while 37% were between 9 and 20 years of age (Di Tommaso et al. 2008:64). One of the reasons why so many young people end up in trafficking might be because there are mostly young, working-aged people migrating in the first place. However, the young age of the victims makes it necessary to ask the questions about the forces in a society that allows children and youngsters to be trapped in forced labor. There can be values in a society that makes this possible. This can make it less of a priority to battle the problem and a whole, and more of a focus to make sure it does not happen to yourself. During the slave trade, a whole society agreed to the practice of enslavement. This says something about the view of human dignity. This worldview will allow people to have a perception of some people having a higher value than others. That some people are less

worth, create opportunities for stealing their freedom and selling them to slavery. In a way, this can be seen as putting a price tag on a life. In Africa there were 400 years of people placing visible price tags on a human life when they traded humans for goods, guns and iron weapons (Abdullahi mahadi 1992; Walter Hawthorne 1999 in Nunn and Wantchekon 2011:3225; Nunn 2008:143). This will form the way one thinks about and behaves towards others, and can still be going on though the tags are not as visible. Our norms, culture and worldview can be said to have been handed down to us by those who lived here before us. Therefore, though centuries have passed, the price-tag-thinking during the slave trade can still be present in modern day Africa.

3.3.2 Ethnic Fractionalization as a Causal Effect

All of the things mentioned about are possible links between slave trade and human trafficking; mistrust, infrastructure, attitude and beliefs of human dignity. In this thesis, however, I will explore the hypothesis that ethnic fractionalization is a major determinant through which the slave trade influence human trafficking. The ethnic fractionalization in a country speaks of how high degree of heterogeneity in the population there is. Simply said, it is a measure of the probability that two randomly chosen individuals in a country belong to different groups (Esteban and Ray 2011). During the slave trade period, different ethnicities would enslave each other, but even friends and families would turn on each other. This means that the population had to put some distance between them, most likely based on ethnicities or other characteristics. Both the skepticism of others and the urge people had to capture someone before they capture you, could influence a society in a way that today could be reflected in a higher threshold to care when trafficking happen to others. I believe that it is not that citizens of countries with low trafficking outflows have higher morals or care more about fellow citizens. Rather, a cultural background which created a strong dividing line between “us” and “them” can influence this. A more fractionalized country will have minority groups of people who not a part of mainstream society. These groups of people would be more likely to face discrimination in its various forms. Thus, it is likely that the society could more easily accept them being victims to human trafficking. The countries most heavily involved with historic slave trade, are the most fractionalized today (Nunn 2008:164), and my hypothesis is that they will also be the largest suppliers of human trafficking victims today. Africa is a continent with many countries scoring high on ethnic fractionalization. Alesina et al. finds that among the 21 most ethnic fractionalized countries in the world, 20 of them are African (2003:10).

Ethnic fractionalization is proven to be an important determinant of things that affect the state development in a country, and also some of the other possible links mentioned above. It is important for social cohesion, domestic institutions, policies and quality of government in addition to economic development (Easterly & Levine 1997; La Porta et al.1999; Alesina et al. 2003; Aghion, Alesina &

Trebbi 2004; Ritzan & Easterly 2006 in Nunn 2008:165). It is also proven to reduce the provision of public goods like education and infrastructure (Alesina, Baquir & Easterly 1999; Miguel & Gugerty 2005 in Nunn 2008:165). In addition, it is proven to have an impact on investment, economic growth and the quality of government (Easterly and Levine 1997; Alesina et al. 2003; La Porta et al. 1999; Montalvo & Reynal-Querol, 2005; Cho 2012). With this in mind, it is quite possible that ethnic fractionalization also can explain some of why countries differ in the amount of human trafficking. Angeles (2013) argues that ethnic fractionalization already excised in Africa before the slave trade, and that this is one of the reasons why the African continent would be the main supplier of slaves during the trans-Atlantic slave trade. If ethnic fractionalization made slave trade possible, it would also make present day human trafficking possible.

3.4 Summary

Historic slave trade and present day human trafficking differ in nature and visibility, but could both be caused partly by ethnic fractionalization. The underlying forces in a society works together with personal characteristics, and determines whether a person end up in trafficking. If a government want to stop a trafficking market, understanding these underlying forces are important in order to know which policies to implement. Also; keeping the characteristics of persons prone to trafficking in mind is important when working on general development in countries that today are amongst the least developed. Ethnic fractionalization was assumed to be influenced by the slave trade because the number of slaves exported was so big. It is also possible that ethnic fractionalization partly can explain why a country is a supplier of human trafficking, because it influences the way people behave and care about others in the society and well as has an impact on other factors which again influence human trafficking. Following this, I argue that human trafficking is influenced by the slave trade through ethnic fractionalization.

4 Data

In this chapter I present how I did my analysis. I start by describing the data used in this thesis and explain how the data was gathered. Second, I give a descriptive statistic of the variables. Finally, I present the statistical model that was used. I have included a general overview of the variables in the appendix, including their sources.

Dependent variable

My dependent variable, Trafficking, is based on a dataset constructed by the UNODC. The variable was constructed using content analysis of information from 113 different institutions working with human trafficking, including individual source institutions, governmental institutions, NGOs, international organizations, research institutes, news agencies and national criminal justice organizations. Of these, 22% were international, 29% Western European, 18 % North American, 11 % Asian and 20% from other parts of the world. In other words, there exists a geographical bias towards developed countries. This was accounted for by the UNODC by registering every event only once, regardless of the number of victims. A total of 4950 trafficking events from 1996 to 2003 are reported in the dataset. There is an overrepresentation of sex-trafficking and most likely measurement errors. It is hard to make corrections for this, but should be kept in mind when analyzing the results. Also, the data was collected between 1996 and 2003, so the newest data is already 13 years old. To account for this, I used control variables from the same time period. After the data was collected, an expert panel looked at the results to verify their findings. They found the results to give a good description of the problem (UNODC 2006:05). Though the data behind the main variable has limitations, I believe that the variable is the best available to compare the problem of trafficking across countries.

There is a total of 161 countries in the dataset, 127 origin countries from where the victims are abducted or recruited and 137 destination countries where they are exploited. There is also transit countries in which the victims travel through. Some countries are reported only as one of the three classifications, while others have more than one role. In this thesis I use data from all African countries reported as origin countries. The variable of interest, Trafficking, takes on a discrete value between 1 and 5 depending on the amount of trafficking outflows reported from that country. If a country receive the score “very low” (1), it means that it was mentioned as an origin country by only one source. To get the score “very high” (5) it would have to be mentioned by 11 or more sources. 41 out of 54 African countries are on the list over origin countries. The countries not listed, are not necessarily free of human trafficking outflows, but they are no events registered in the dataset. To

account for the fact that we simply do not know whether or not they have human trafficking victims originating from them, I have excluded them from the analysis.

Independent Variable: Slave Trade

In the first part of my analysis, the main independent variable of interest is an estimation of the number of slaves exported from each country in Africa constructed by Nunn. Using data from historical documents and ship records from African ports, including an updated version of *Trans-Atlantic Slave Trade Database* (Etis et al. 1999), documents from government officials and observers (Austen 1979, 1988, 1992), records of sale, slave registers, slave runaway notes, court records, church records and notarial documents, he created estimates of where the slaves came from and how many there were (Nunn 2008:146). Nunn relied on the work of past African historians, linguists and ethnographers to first map the slaves into ethnicities and then map them into the country limits that we see today. One assumption that he used was that the slaves which traveled from one port was from the country the port was located in, or one of the landlocked countries that country bordered to. It could be, however, that the slave in fact was from a neighboring coastal country. Nunn (2007) showed that the procedures used correctly identified the origin between 83% and 98% of the time. Slaves from the interior of the continent are most likely underrepresented, as it was only those who survived the travel that were registered. The longer the travel, the more likely was death. After the estimates were created, it was clear that they were consistent with the view African historians have of the slave origin. The estimates are normalized by dividing the total number of slaves from each country by its size, measured by land area¹, so the variable name is $\ln(\text{export}/\text{area})$ in the analysis.

Independent Variable: Ethnic Fractionalization

Ethnic fractionalization is in general viewed as exogenous, at least over a time horizon of 30 years or less. On a longer scale though, it is reasonable to think that the ethnic composition of a country would change, both in the shares and the definition of ethnic groups (Alesina et al. 2003:7). Also, if shocks are to happen to a country, like war, genocide or ethnic cleansing, the composition can change over a course of a few years. Since I only look at the years 1996 to 2003, I treat ethnic fractionalization as an exogenous variable. The measure of ethnic fractionalization is from Montavlo and Reynal-Querol (2005). The dataset contains information on the ethnolinguistic fractionalization values for 137 different countries and is taken from the World Christian Encyclopedia (WCE). It asks the question “What is the first, or main, or primary ethnic or ethnolinguistic term by which persons identify themselves, or are identified by by people around them?” (Montavlo and Reynal-Querol 2005:298) to find a measurement is comparable across countries. They argue, like Vahanen (1999), that the best

¹ Nunn (2008) also gives alternative measurements of country size, like the average population between 1400 and 1900 or arable land. He finds that these measures give essentially identical results, so I will do as Nunn and use the same measurement as him: total exports of slaves normalized by the land area. Nunn & Wantchekon 2011:3233 also addresses the issue that we do not know the population number if each ethnicity prior to the slave trade.

measure is the one that measures the most important ethnic division in a society. Thus, the ethnic fractionalization in this measurement is the possibility of two randomly chosen individuals in a country belonging to different groups within the most important ethnic division in the society. This measurement is a little different than what Nunn used in his paper (2008), which is based on Alesina et al. 's (2003) measure. The main difference between the two sources is that Reynal-Querol tries to identify the relevant level, while Alesina et al. capture the more disaggregated level (Montavlo and Reynal-Querol 2005:300). The correlation between the two indices is very high, 0.89 (Montavlo and Reynal-Querol 2005:306). Because defining the concept of ethnicity is hard, measuring it is even harder (Alesina et al. 2003:6). This means that a measure like this, always can be debated when it comes to validity and accuracy. To control my findings, I also ran the regressions using the measure from Alesina et al. (2003), and the results are included in the appendix.

For the Reynal-Querol measure, we only have 38 observations. The countries that are not included in this measure are Equatorial Guinea, Djibouti and Burkina Faso. Ethnic Fractionalization takes on a value between 0 and 1, as it is a probability measure. A completely homogenous society would take on the extreme value 0. A completely heterogeneous society would take on the extreme value 1.

Control Variables

I included control variables to reduce the risk of omitted variable bias in the regressions. To control for the level of development of a country, I included a measure of the percentage of the population living rurally. In general, a more developed country will have more urbanization, that is people living in cities, and thus a lower score on the rural-variable. The rural measure is taken from the World Bank Development Indicators, and is the average of the years 1996 to 2003. I also included data on total country population from the World Bank. Data on GDP is from Maddison (2003 in Nunn 2008: appendix b). The relationship between GDP and human trafficking proven to be inverse u-shaped such that poor and rich countries have little trafficking, while medium income countries have more. To account for this non-linear relationship I included a squared term for GDP. Previous research has used expressions of GDP and population both with (Nunn 2008; Rao & Presenti 2012) and without (Jakobsson and Kotsadam 2011) logarithmic specifications of these variables. I have included GDP and population as the logarithm, as the absolute numbers of the coefficients of variables will be small when the dependent variable is a scale from 1 to 5.

The conditions of the state are also known to influence present day human trafficking, and I included variables for the country's stability, rule of law, corruption and the country's effectiveness, all from the World Bank's Worldwide Governance Indicators (Kaufmann and Kraay 2014). They are ranged from approximately -2.5 to 2.5, and I calculated the average from the years 1996-2003, a total of five observations (1996, 1998, 2000, 2002 and 2003). Higher values correspond to better governance.

Descriptive Statistics

The summary statistics of the variables of interest is reported in table 1. We have 41 observations for all except the variable ethnic fractionalization, where the total number of observations is 38. Because I have so few observations, there is a high chance of overfitting my model if I introduce too many control variables. Because of this, none of the regressions include all variables.

Table 1: Descriptive statistics

Variable	Observations	Mean	Std. Dev.	Min	Max
Trafficking	41	2.659	.794	1	5
ln(export/area)	41	3.910	3.657	-2.303	8.818
Ethnic Fractionalization	38	.628	.265	.050	.959
GDP per capita	41	1612.098	1518.562	379	7956.001
Population	41	1.78e+07	2.28e+07	523	1.22e+08
Stability	41	-.722	.869	-2.447	.925
Corruption	41	-.641	.514	-1.654	.763
Rule of Law	41	-.775	.622	-2.171	.557
Effectiveness	41	-.700	.578	-2.046	.699

Data limitations

In addition to the measurement errors which can be present in the data collected, there are certain limitations to the data worth mentioning.

Since the data is only cross sectional, it is hard to control for unobserved country and time effects. When it is not possible to control for variations over time it is especially hard to draw causal inferences, which is what I try to do in the second analysis when looking at ethnic fractionalization. However, all three variables of interest in general do not change much over the short period of time covered in this analysis. The total number of slaves exported from a country during the slave trade is a set number and will not change today. Present day human trafficking, when measured on a scale from 1 to 5, can also be assumed to be constant over a shorter time period, as long as no shock is introduced in the country. Finally, ethnic fractionalization is generally assumed to be stable over time, and is only changed when there are large outflows or inflows of groups (Alesina et al. 2003:2). Because of the nature of my variables, the lack of possibility to control for time and country fixed

effects is not a crucial problem to me, and the data can be used to do my analysis. It will, however, not be enough to draw robust causal inferences, but finding associational inferences will be possible. My estimations are therefore done see if the data support the hypotheses that historic slave trade is related to present day human trafficking, and that ethnic fractionalization is a determinant of human trafficking.

For the sake of further studies, I will urge the need for better data. If we were to look at the effect of policy implications on human trafficking, having a time dimension in the data would be essential, so the gathering of this type of data is necessary to be able to conduct more detailed studies. Also, the data I have here is collected on a country level, and there are most likely large variations in trafficking outflows from different regions within country borders. To better be able to predict what influences trafficking outflows, data on an ever lower level than country would be needed.

The numbers of observations are few, so there is a possibility that our coefficient estimates are not close to the true value. The Law of large numbers often used to argue that estimates are consistent, will not hold for these estimations. There might be large influence from outliers, so that the central limit theorem does not hold, or measurement errors that causes our estimates to be off. The lack of observations also causes the critical values used when testing, to be different from the standard. Using Stata 14, this will be taken into account automatically. There is not much I can do to fix this; it is simply just something to keep in mind. I will also control for outliers and influential observations, though this causes the number of observations to drop even further.

A good thing about the dataset is that it covers most of the African continent, with the exception of some smaller states. When interpreting the findings, we must be careful not to read too much into it, or apply it to trafficking outside of Africa. Also, one should be careful to draw conclusions on trafficking in general; it is not so that the forces behind trafficking is the same for both domestic and international trafficking (Jakobsson & Kotsadam 2015:22). About 1/3 of all humans trafficked never cross international borders, and I am unable to observe this in my dataset (UNODC 2014:8).

I will also address the very common problems of omitted variable bias – that variables correlated with an independent variable that also is a determinant of the dependent variable are not included - and reversed causality – that the causality runs from the dependent variable to the regressor. The latter is not a problem. Due to the time dimension, present day human trafficking cannot possible influence the amount of slave export that happened over 100 years ago. Also, that scale of human trafficking is not so high that it is believed to cause changes in the composition of ethnic fractionalization. Omitted variable bias will, however, be present in my analysis. Because I am afraid of overfitting my model,

few variables will be included at a time, and there will be things affecting human trafficking which I will not be able to account for.

Model

I examined the relationship between human trafficking and slave trade and ethnic fractionalization by using OLS estimation method to perform a cross-sectional study. In addition to the two independent variables of interest, $\ln(\text{export}/\text{area})$ and Ethnic Fractionalization, I included control variables to control for other factors that might influence human trafficking today. My baseline estimation equation was:

$$(1) \text{ Trafficking}_i = \beta_0 + \beta_1 \ln\left(\frac{\text{exports}}{\text{area}}\right)_i + \beta_2 \text{FRAC}_i + \beta_3 X_{3i} + \dots + \beta_n X_{ni} + \varepsilon_i$$

$i = 1 \text{ to } 41$

where the dependent variable Trafficking is a measure of how much trafficking that originates from a country, and takes on a discrete value between 1 and 5. $\ln(\text{export}/\text{area})$ is the natural log of the total number of slaves exported between 1400 and 1900 normalized by land area. FRAC is a measure of ethnic fractionalization, which takes on a value between 0 and 1. X_3 to X_n are control variables, and β_3 to β_n are slope coefficients for these. β_0 is the intercept. In addition, we have the error term ε_i which is normally distributed.

5 Results

In this section, I will present the two analyses; first one where I looked at the relationship between historic and present day slavery in Africa, and second one where I examined the hypothesis that ethnic fractionalization is a determinant of human trafficking. After, I did robustness checks to verify my findings from the second analysis. Here, I first included other variables believed to influence human trafficking in the regression, before I controlled for outliers and highly influential observations. Finally, I present some of the additional tests done which are included in the appendix.

5.1 Slave Trade and Human Trafficking

To check if historic slave trade and human trafficking is in fact related, we can look at the correlation between the two variables.

Table 2: Correlation Between Trafficking and Slave Trade

	Trafficking	ln(export/area)
Trafficking	1.0000	
ln(export/area)	0.4263 (0.0055)	1.0000

Significance levels in parentheses

In table 2 above, we can see that the correlation coefficient between trafficking and slave trade, $\ln(\text{export}/\text{area})$, is 0.4363. This is a positive and statistically significant correlation at the 1% level, so we can indeed argue that there is a connection between slave trade and human trafficking. The relationship is illustrated in figure 1 below.

We see a positive relationship between historic slave trade and present day human trafficking. If there was more export of slaves from a country during the slave trades, there is also higher amount of human trafficking today. Looking at the table, we can see two outliers; Morocco (MAR), which did not have a lot of slave trade but scores very high on human trafficking and Chad (TCD) which has the opposite relation. For scholars on the topic, these countries would be interesting to take a closer look at. An interesting thing to notice, is that few of the countries in Africa have a very high level of present human trafficking. Cho (2012) points to this possibly being due to the income disparity

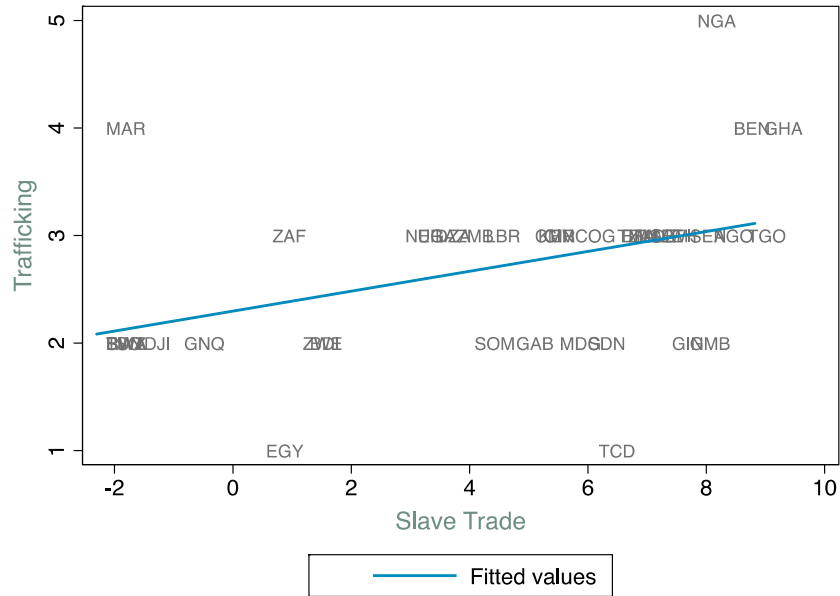


Figure 1: Relationship Between Historic Slave Trade and Present Day Human Trafficking

Relationship between log slave trade exports normalized by land area and present day human trafficking. Human trafficking is measured on a scale from 1 (very low) to 5 (very high) shows the amount of trafficking originating in a certain country.

between the neighboring countries. This could also be because many of the African countries are in fact of the poorest in the world, and that the inverse u-shaped relationship could cause there to be less overall human trafficking originating from the continent.

Table 3: OLS regression, Slave Trade on Trafficking

Dependent variable: Trafficking	
ln(export/area)	0.0926** (0.0338)
Constant	2.297*** (0.166)
Observations	41
Adjusted R-squared	0,161
F-statistics	7,487
Note: Standard Errors in parentheses	
* Significant at 10%; ** Significant at 5%; *** Significant at 1%;	

Dependent variable is trafficking, measured on a discrete scale from 1 to 5. ln(export/area) is a measure of the amount of slaves exported from a country.

Running the regression without control variables, we see that the slave trade is positively related to human trafficking, and is significant at a 5% level. Based on this finding alone, we would expect a country with a measure of slave trade 1 % higher than another country, all else equal, to have a human trafficking index that is 0.00926 higher than the other country today. This relationship cannot be guaranteed to not be not spurious, so running additional regressions including control variables will be important to see if the findings hold.

5.2 Ethnic Fractionalization

As already stated, I believe the relationship between slave trade and human trafficking to be explained partly by ethnic fractionalization. My hypothesis is that higher ethnic fractionalization makes it easier to recruit humans to trafficking, so that countries with higher levels of ethnic fractionalization is more prone to human trafficking. Here I will first present the relationship between slave trade and ethnic fractionalization before I present a closer look at the relationship between ethnic fractionalization and outflow of trafficking from a country.

5.2.1 Slave Trade and Ethnic Fractionalization

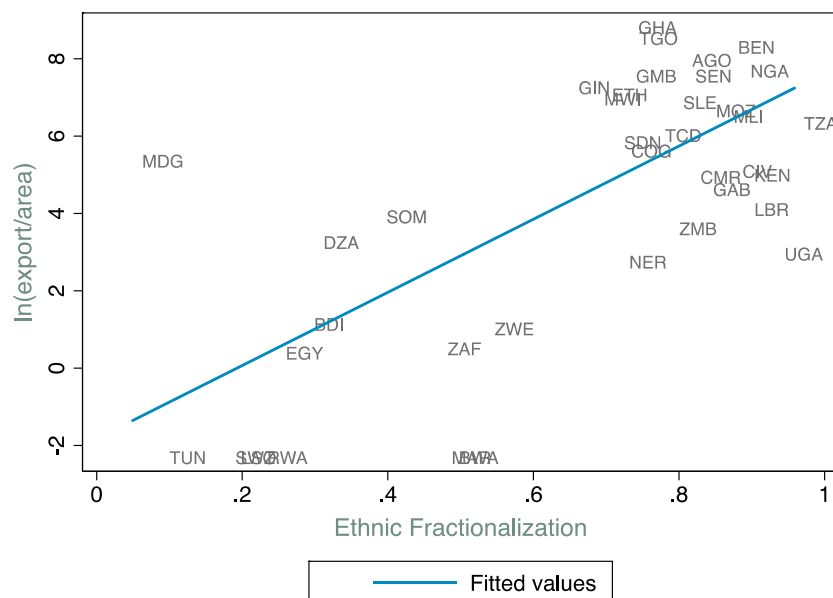


Figure 2: Relationship between Slave Trade and Ethnic Fractionalization

Relationship between log slave trade exports normalized by land area and current Ethnic Fractionalization. Ethnic fractionalization takes on a value between 0 and 1 and measures the probability that two randomly chosen individual from a country belong to the same group. The theoretical extreme cases are a complete heterogeneous society where the value would be 1, and a completely homogenous society where the value would be 0.

Looking at the relationship between ethnic fractionalization and present day human trafficking presented in figure 3, we again see a strong, positive relationship. Higher levels of current ethnic fractionalization are related to higher levels of human trafficking. This finding makes my previous set forth theory seem plausible. Table 5 presents the correlation between ethnic fractionalization and human trafficking.

Table 5: Correlation between Ethnic Fractionalization and Human Trafficking

	Ethnic Fractionalization	Trafficking
Ethnic Fractionalization	1.0000	
Trafficking	0.5072 (0.0012)	1.0000

Significance levels in parentheses

The correlation between ethnic fractionalization and human trafficking is 0.5, and the coefficient is significant at the 1% level. To examine this further I have run regressions to estimate the effects of ethnic fractionalization on human trafficking.

When not including any control variables, we see that higher levels of ethnic fractionalization is associated with higher levels of human trafficking. Going from the minimum account of ethnic fractionalization measured in Africa, 0.05, to the highest, 0.96, gives an increase of human trafficking level of 0.7. The coefficient is significant at a 5% level.

Table 6: OLS regression, Ethnic Fractionalization on Trafficking, no controls

	Dependent variable: Trafficking
	(1)
Ethnic Fractionalization	1.548** (0.438)
Constant	1.711*** (0.298)
Observations	38
Adjusted R-squared	0.237
Note: Standard Errors in parentheses	
* Significant at 10%; ** Significant at 5%; *** Significant at 1%;	

Dependent variable is trafficking, measured on a discrete scale from 1 to 5. Ethnic Fractionalization takes on a value between 0 and 1.

From this, it looks like Ethnic fractionalization indeed could be a driving force of human trafficking, and possibly be one of the main links between historic slave trade and present day human trafficking. Again, we have to be careful not to put too much weight into these findings. I have not yet controlled for any other variables and again, our limited number of observations makes finding a causal effect not possible. Instead, I will test hypothesis by checking if the data gives supports to the thought that ethnic fractionalization impacts human trafficking outflows from countries in Africa.

5.2.3 Regression with control variables

Before I present the OLS regression where control variables are included, I want to see that my data is consistent recent literature on the topics of human trafficking when it comes to the control variables.

GDP and Population

Previous research finds that both population and GDP impacts the amount of human trafficking from an area. Therefore, I want to check the correlation between GDP and population and human trafficking.

Table 7: Correlation Between Trafficking, Population and GDP

	Trafficking	Population	GDP
Trafficking	1.0000		
Population	0.4002 (0.0095)	1.0000	
GDP	-0.1937 (0.2250)	-0.0448 (0.7810)	1.0000

Significance levels in parentheses

The result show that population is positively correlated with human trafficking, which is in line with presented previous research. A larger population is associated with more human trafficking. The correlation coefficient is significant at the 1% level.

GDP is negatively associated with human trafficking. This is partly in line with previous research, but the relationship is said to be inverse u-shaped such that poor and rich countries will have little trafficking, while medium income countries will have more human trafficking. To account for this non-linearity in relationship, I include a squared term for GDP.

I also control for rurality in a country, which captures parts of the development seen in a country. More developed countries normally have more urbanization, which means that more people have moved to cities. There can be two possible effects of rurality on human trafficking. The first is that higher percentage of population living rurally leads to more human trafficking, because it indicates a less developed country. I could also be due to the fact that there are larger distances between the people, and less feeling of community across groups and towns. The other possible effect is related to the inversed, u-shaped relationship between trafficking and GDP. A too rural society will be too underdeveloped for there to be human trafficking originating from there. This is would mean that a higher percentage living rurally would decrease human trafficking. Another explanation for this is that fewer people seem to be migrating into larger cities and thus not prone to trafficking.

I will also check to see if my findings are changed when introducing measures of a country’s rule of law, corruption level, stability and effectiveness. These are all additional indicators to how successful a country is in various aspects. A country’s stability and level of corruption is also known to be impacted by the level of ethnic fractionalization in a society (Montalvo & Reynal-Querol 2005:796) as well as human trafficking (Bales 1999).

Table 8: Correlation between Control Variables

	Stability	Corruption	Rule of Law	Effectiveness
Stability	1.0000			
Corruption	0.6560 (0.0000)	1.0000		
Rule of Law	0.8276 (0.0000)	0.8396 (0.0000)	1.0000	
Effectiveness	0.6635 (0.0000)	0.8641 (0.0000)	0.8706 (0.0000)	1.0000

Significance levels in parentheses

From table 8 we can see that all the coefficients measuring governmental quality are highly correlated. The things measured here often come “hand in hand”; if a country is stable, the government can be more effective; if a country has low corruption rate it will have a higher rate of rule of law. A corrupt country is naturally not efficient and will in a long term perspective cause lower stability. The rule of law estimate is constructed using several indicators trying to give a picture of

how good the population is at abiding by the society's rules. It covers the compliment of contract enforcement and property rights as well as the quality of the police and courts. It also includes a measure of the likelihood of crime and violence and gives us an indicator of how successful the country has been in developing a fair and predictable environment when it comes to economic and social interactions (World Bank; Jakobsson & Kotsadam 2011). Due to the high correlation between the variables, I do not include them all in the same regression to avoid multicollinearity. A high degree of multicollinearity can lead to problems of identifying the real impact an independent variable has on the dependent, and also make the standard errors unreasonably high.

Regression

In table 9, the regressions with control variables are presented. Looking first at the variable rural, we see that it is negatively correlated with human trafficking. A higher percentage of the population living rurally, gives lower human trafficking. It is worth mentioning that my dataset in general has a high level of rurality. Only 8 of our 41 countries have less than 50% of their population living rurally, and the top 8 countries have more than 80% living rurally. This could mean that there are many countries in our sample that are not very urbanized, so that there is little movement between the countryside and the city. This lack of movement would naturally lead to less migration as well, which we know has a large impact on trafficking.

Looking at GDP and Population, we can see that they seem to act the same way in my dataset as others have found before me. The regressions indicate a positive, but decreasing, relation between GDP and human trafficking; I find the same inverse u-shaped as the literature suggests.

The measures of the quality of the government are all positively related to human trafficking. A higher score on these variables in fact leads to higher levels of human trafficking. We have to be careful when interpreting these coefficients, as the measure on both positive and negative; the lowest value being -2.5 and the highest 2.5. For the values below 0, this term would turn negative.

Now, turning to the variables of interest, we can first look at the estimates for slave trade, $\ln(\text{export/area})$. We see that the estimates are highly impacted by the specifications of the regression. This suggests that the effect of slave trade is working through the channels we control for. We see that when we include controls for stability, corruption and rule of law in regression 4, 5 and 6, the coefficients on slave trade turns negative, so that higher levels of slave trade, holding all the other variables constant, gives a reduction in human trafficking. These estimates are extremely uncertain,

Table 9: OLS Regression with Control Variables

Dependent Variable: Trafficking							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
ln(export/area)	0.0957** (0.0331)	0.0900* (0.0390)	0.00755 (0.0562)	-0.00692 (0.0557)	-0.00347 (0.0574)	-0.000122 (0.0556)	0.00620 (0.0576)
Rural	-0.00363 (0.00561)	-0.00176 (0.00556)	-0.00501 (0.0107)	-0.00858 (0.0115)	-0.00881 (0.0127)	-0.00796 (0.0124)	-0.00603 (0.0125)
ln(GDP)		3.532 (2.834)	5.323 (4.016)	6.055 (4.266)	6.542 (4.396)	6.117 (4.367)	5.586 (4.310)
ln(GDP) squared		-0.228 (0.187)	-0.361 (0.279)	-0.423 (0.300)	-0.459 (0.314)	-0.425 (0.309)	-0.383 (0.306)
ln(population)		0.181 (0.132)	0.213 (0.130)	0.246 (0.139)	0.220 (0.131)	0.218 (0.137)	0.210 (0.139)
Ethnic Fractionalization			1.364** (0.398)	1.327** (0.410)	1.447** (0.415)	1.348** (0.405)	1.345** (0.396)
Stability				0.146 (0.125)			
Corruption					0.269 (0.279)		
Rule of Law						0.150 (0.202)	
Effectiveness							0.0570 (0.248)
Constant	2.517*** (0.427)	-13.94 (10.95)	-20.77 (14.78)	-22.89 (15.47)	-24.14 (15.35)	-22.86 (15.56)	-21.34 (15.22)
Observations	41	41	38	38	38	38	38
Adjusted R-squared	0.145	0.232	0.311	0.311	0.306	0.300	0.289
F-statistics	4.546	4.520	5.698	4.985	5.300	5.580	4.887
Note: Standard errors in parentheses							
* Significant at 10%; ** Significant at 5%; *** Significant at 1%							

Dependent variable is trafficking, measured on a discrete scale from 1 to 5. ln(export/area) is a measure of the amount of slaves exported from a country. ln(population) is the logarithm of total population in a country and ln(GDP) is the logarithm of GDP per capita taken). Ethnic Fractionalization takes on a value between 0 and 1. Stability, Corruption, Rule of Law and Effectiveness takes on values between -2.5 to 2.5.

and although they indicate that higher levels of slave trade decrease the level of present day human trafficking, this fluctuation in results is more likely due to the non-causal relationship between the two. As already stated, we do not believe historic slave trade to be the cause of present day human trafficking, but rather that the slave trade influenced the society, which again is what is causing present day human trafficking.

Finally, we turn our interest to the estimation of the coefficient on ethnic fractionalization. For all regressions, we see that it is positively related to human trafficking and statistically significant at a 5% level. Having a higher degree of ethnic fractionalization in a country is related to higher amounts of trafficking from the country. This is in line with my hypothesis. Introducing control variables for the stability, corruption, rule of law or effectiveness of the state, does not alter the sign of the coefficient, and for all the regressions the estimated value of the coefficient is similar. This gives support to my theory that ethnic fractionalization is a determinant for the amount of human trafficking from a country. The coefficients are statistically significant at a 5% level for all regression specifications.

5.3 Robustness checks

We have found that the level of human trafficking outflow is influenced by the degree of ethnic fractionalization in the country. To test the robustness of this finding, I ran additional regressions to see if they would alter the results. First, I ran regressions where I included other variables assumed to influence human trafficking outflow. Next, I omitted the outliers and highly influential observations in the data to see if this would influence my findings. Lastly I briefly present a few more additional tests that were done, the results of which are included in the appendix. For all the regressions, slave trade is included as a control variable. This, however, is no longer the variable of interest and what I check is the robustness of the result that ethnic fractionalization is positively related to human trafficking.

5.3.1 Regression with Other Control Variables

In my first approach, I ran regressions with variables for other factors, which I believe might affect the amount of human trafficking from a country. These were included one by one into the regression. The results are presented in table 10. Because I am worried about overfitting my model, I also ran this regression without the controls for GDP and population. This table is included in appendix 3. The

findings were similar to the ones presented in table 10, with the exception being that regression 6 gives coefficient of ethnic fractionalization, a statistical significance level of 10%.

In regression 1, I did not include any other control variables than GDP and population. We see that ethnic fractionalization is still positively correlated with human trafficking, but only significant at the 10% level.

In regression 2 I included variables measuring the endowments of natural resources in the country; the production of gold, oil and diamonds. It is the natural log of the annual average per capita production between 1970 and 2000. Angeles (2013) argued that the lack of other types of goods to export could be one of the reasons why Africa was selected into slave trading. If this is true, the relationship should still hold today. Though humans are not traded as goods the way they were during the slave trade, having natural resources would impact the availability of humans to traffic. A country with lots of natural resources will need labor itself to produce these goods, and thus have a larger supply of job opportunities. This means that less people will have to migrate in order to find a job (Cho 2012:12). However, to be clear, this does not mean that the laborers working with the extraction of natural resources never are victims to trafficking. No border crossing is needed to be a victim to trafficking, but my data only account for those who have crossed international borders. Thus, they would not be visible here. From the regression, we see that both having higher amounts of gold and oil is negatively associated with human trafficking. The reasoning does not seem to hold for diamonds. None of the terms are statistically significant so we cannot reject that their true relationship to human trafficking is zero. When we do not control for GDP and population, the coefficient on ethnic fractionalization is no longer statistically significant.

In regression 3 I included a term that measures the natural log of coastline normalized by land area. This is to account for geographical effects and that being able to use sea routes for human trafficking could affect the level of it (Rao & Presenti 2012:248). Having a coastline is positively related to human trafficking, but is not statistically significant at any significance level.

In regression 4 a variable that is closely related to ethnic fractionalization, ethnic polarization, is included. The difference between fractionalization and polarization is important; according to Esteban and Ray (1994) a society is polarized if you can group the population into clusters of people with similar attributes, but that each cluster's attributes are very different from each other. In economic conflict theories, ethnic polarization is linked to social unrest, rebellion, revolt and civil war (Esteban

Table 10: OLS regression: Robustness Check

	Dependent variable: Trafficking					
	(1)	(2)	(3)	(4)	(5)	(6)
	No controls	Natural Resources	Coastline	Ethnic Polarization	School enrollment	Mortality
ln(export/area)	0.0181 (0.0479)	0.0159 (0.0573)	0.00378 (0.0588)	0.0180 (0.0487)	0.0205 (0.0502)	0.0274 (0.0480)
ln(GDP)	4.846 (3.463)	5.842 (3.921)	5.072 (3.547)	4.850 (3.556)	4.991 (3.649)	4.432 (3.445)
ln(GDP) squared	-0.320 (0.241)	-0.391 (0.276)	-0.338 (0.248)	-0.320 (0.247)	-0.331 (0.253)	-0.276 (0.241)
ln(population)	0.203* (0.0971)	0.240* (0.115)	0.193 (0.101)	0.203* (0.0986)	0.201 (0.100)	0.234* (0.0991)
Ethnic Fractionalization	1.390* (0.577)	1.366* (0.664)	1.458* (0.605)	1.389* (0.595)	1.339* (0.612)	1.157 (0.600)
Gold production		-0.00918 (0.0268)				
Oil production		-0.00487 (0.0388)				
Diamond production		0.0471 (0.0683)				
Coastline			0.0223 (0.0518)			
Ethnic Polarization				0.00468 (0.608)		
School Enrollment					0.0935 (1.138)	
Mortality						0.00774 (0.00606)
Constant	-19.69 (12.25)	-23.53 (13.88)	-20.14 (12.45)	-19.70 (12.62)	-20.16 (12.75)	-20.01 (12.13)
Observations	38	38	38	38	37	38
Adjusted R-squared	0.329	0.273	0.312	0.308	0.295	0.343
F-statistics	4.636	2.737	3.796	3.743	3.508	4.213

Note: Standard Errors in parentheses
 * Significant at 10%; ** Significant at 5%; *** Significant at 1%;

Dependent variable is trafficking, measured on a discrete scale from 1 to 5. $\ln(\text{export}/\text{area})$ is a measure of the amount of slaves exported from a country. $\ln(\text{population})$ is the logarithm of total population in a country and $\ln(\text{GDP})$ is the logarithm of GDP per capita taken). Ethnic Fractionalization takes on a value between 0 and 1. Gold, oil and diamond production in the logarithm of average annual production between 1970 and 2000. Coastline is the natural log of coastline divided by land area. Ethnic Polarization is from Montalvo and Reynal-Querol (2005) and take on a value between 0 and 1. School enrollment is gender parity index of primary school enrollment in a country. Mortality is the number of infant deaths to every 1000 live birth.

& Ray 1994). By including this in the regression, I check the relative strength of the indexes and that my findings for ethnic fractionalization is not in reality caused by polarization. Looking at the regression result, it does not seem like polarization is driving the results. The coefficient of ethnic fractionalization is statistically significant at a 10% level, while the coefficient on polarization does not have significant impact on human trafficking.

Regression 5 included a variable for the gender parity index of primary school enrollment in a country. It is a ratio of girls to boys, so a value less than one suggests that girls are more disadvantaged than boys. It was included as a proxy for differences in the value of girls from boys, or discrimination. We can see that if boys and girls had the same enrollment rate, there would be more human trafficking. This is in line with what research has said about victims of trafficking often having education and that in societies where inequality is high, there is in fact less trafficking. It should be noted that this measure is not necessarily the best measure of gender inequality, but captures some of the difference in the valuation of the gender.

In regression 6, I included a variable for mortality among infants in a country; the number of death to every 1000 live births. Generally, a more developed country will have less mortality. Caldwell (1986) says that lower mortality is, amongst other, associated with higher public spending on health and good health facilities available to all, higher female autonomy and access to vaccinations. These are all indicators of a government taking more or less good care of its citizens and thus also more caring about what happens to its people. There is also a possibility that in countries with low mortality, the government is more aware of its inhabitants, so that people will have somewhere to turn if wrongdoings were done toward them. Mortality is also found by Cho (2012) to be related to human trafficking. This is the only regression in which the coefficient of ethnic fractionalization is not statistically significant. In the regression without additional control, it is still statistically significant. Also, the effect ethnic fractionalization has on human trafficking, is still positive and almost the same as when controlling for the other variables.

In all the regressions in table 10, the coefficient on ethnic fractionalization kept more or less the same value. For a given level of ethnic fractionalization, the impact on human trafficking will be almost the same regardless of the controls. However, when I ran these regressions, it is clear that the significance level of the coefficients went down; they are only significant at the 10% level. This implies that some of the effect of ethnic fractionalization on human trafficking seem to go through these variables. Statistically speaking, the level of significance means that the results are still robust. This makes me more confident that my hypothesis is right and that ethnic fractionalization influences the degree of human trafficking for a country. When not controlling for GDP and population, we find similar result.

5.3.2 Excluding outliers

As already stated, having few variables, makes the estimations very exposed to unusual and influential data, like outliers. Some outliers are not influential; to be so there has to be both discrepancy and leverage. Here, I test the robustness of my findings by excluding outliers using studentized residuals and exclude influential observations using Cook's D to make sure the results are not driven by these unusual observations.

Studentized Residual

Most datasets have some types of outliers in their input; an observation that is substantially different from the others, with large residuals. That is, the observation's value on the dependent variable is unusual given the values of the independent variables. To test if any of the outliers in my dataset are the drivers of the result, I observed the studentized residuals⁴. The studentized residual is plotted in figure 4.

We are most concerned about the variables whose outliers are exceeding the absolute value of 2. Here, we see that this is Egypt, Chad, Morocco and Nigeria. By removing these observations, we can see if these observations are driving the results and making them bias. If they are, removing them will change the results compared to what we found before.

⁴ I use the regression from table 9, regression 3 when calculating this.

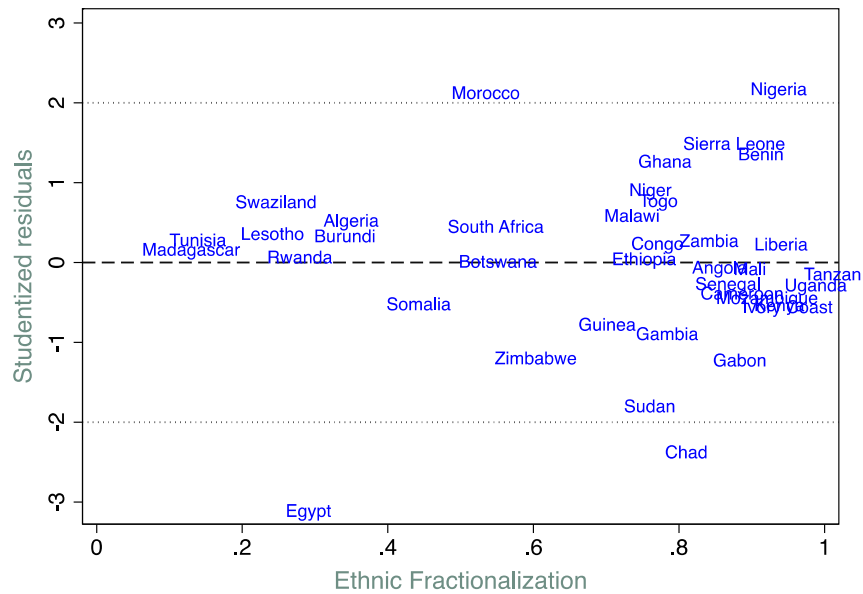


Figure 4: Studentized Residual

Studentized Residuals are plotted in the graph.

When we compare this table to table 9, we see that there is not much difference in the estimates on ethnic fractionalization. There is a small decrease in the value of the coefficient, but it is still positive and statistically significant at the 5% level. Thus, omitting the outliers does not seem to alter the result, and we can conclude that the effects are not driven by the outliers. In appendix 4, I have included the calculation excluding the control variables rural, GDP and population to make certain we do not overfit our model. There are no differences in the results, so the findings are robust.

Table 11: OLS regression, omitting outliers

	Dependent variable: Trafficking				
	(1)	(2)	(3)	(4)	(5)
ln(export/area)	0.0628 (0.0398)	0.0489 (0.0369)	0.0561 (0.0400)	0.0508 (0.0368)	0.0596 (0.0380)
Rural	0.00654 (0.00702)	0.00341 (0.00677)	0.00472 (0.00797)	0.00309 (0.00794)	0.00482 (0.00754)
ln(GDP)	-0.0599 (2.483)	0.615 (2.775)	0.459 (2.821)	0.786 (2.916)	0.316 (2.743)
ln(GDP) Squared	0.0247 (0.173)	-0.0306 (0.195)	-0.0169 (0.203)	-0.0431 (0.208)	-0.00772 (0.197)
ln(population)	0.145 (0.0798)	0.173* (0.0795)	0.148 (0.0821)	0.156 (0.0827)	0.137 (0.0916)
Ethnic Fractionalization	0.970** (0.293)	0.949** (0.338)	1.007** (0.295)	0.959** (0.323)	0.946** (0.330)
Stability		0.0944 (0.107)			
Corruption			0.0957 (0.217)		
Rule of Law				0.127 (0.160)	
Effectiveness					0.0885 (0.208)
Constant	-1.763 (9.226)	-3.860 (10.07)	-3.195 (9.913)	-4.120 (10.23)	-2.457 (9.587)
Observations	34	34	34	34	34
Adjusted R-squared	0.427	0.424	0.409	0.420	0.410
F-statistics	12.80	11.02	10.86	10.53	10.51
Note: Standard Errors in parentheses					
* Significant at 10%; ** Significant at 5%; *** Significant at 1%;					

Dependent variable is trafficking, measured on a discrete scale from 1 to 5. ln(export/area) is a measure of the amount of slaves exported from a country. ln(population) is the logarithm of total population in a country and ln(GDP) is the logarithm of GDP per capita taken). Ethnic Fractionalization takes on a value between 0 and 1. Stability, Corruption, Rule of Law and Effectiveness takes on values between -2.5 to 2.5.

Cook's D

To see which variables in the regression that are highly influential, I observed the Cook's Distance (Cook's D). A variable is influential if it is both an outlier and has leverage, that is effecting the estimate of the regression coefficients more than usual. By removing the variables that has an unusual high Cook's D, the variables are said to be influential if the results alter when I reran the regressions.

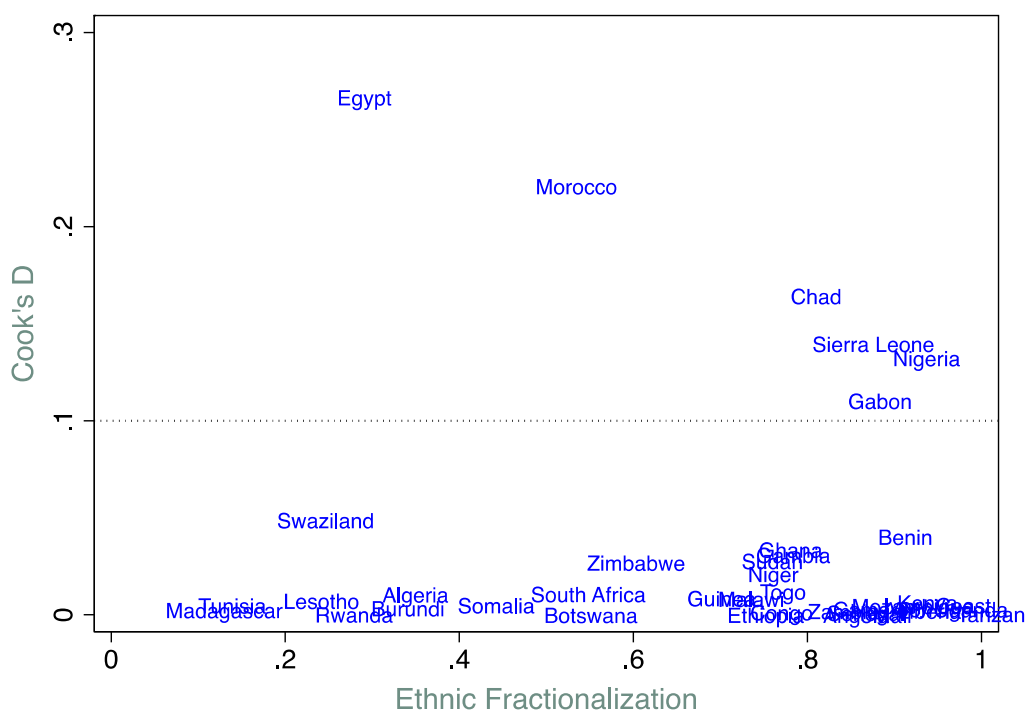


Figure 5: Cook's D

Cook's D is plotted in the graph.

Which threshold level to use when excluding observations, is of debate, and various methods have been used. To make a best judgement, I examined the points that are substantially larger than the rest. Looking at figure 5, we can see that all points above 0.1 are substantially larger than all the others, and I therefore chose to exclude these countries: Egypt, Morocco, Chad, Sierra Leone, Nigeria and Gabon. Because I have so few observations, removing so many of them is not optional, and ideally one should not do it. However, because all of them deviate so much from the rest, I have chosen to leave all of them out. In appendix 5, I have included the regression where I only omitted the two observations deviating the most; Morocco and Egypt.

Table 12: OLS regression, omitting influential observations

	Dependent variable: Trafficking				
	(1)	(2)	(3)	(4)	(5)
ln(export/area)	0.0677 (0.0392)	0.0512 (0.0418)	0.0706 (0.0433)	0.0552 (0.0420)	0.0662 (0.0407)
Rural	0.00574 (0.00895)	0.00259 (0.00936)	0.00643 (0.00994)	0.00257 (0.00973)	0.00506 (0.00973)
ln(GDP)	0.182 (3.005)	1.398 (3.190)	-0.0652 (3.369)	1.298 (3.291)	0.387 (3.229)
ln(GDP) Squared	0.0164 (0.211)	-0.0766 (0.226)	0.0360 (0.242)	-0.0697 (0.235)	-0.000584 (0.231)
ln(population)	0.113 (0.0818)	0.152 (0.0889)	0.110 (0.0846)	0.128 (0.0842)	0.110 (0.0842)
Ethnic Fractionalization	1.098** (0.389)	1.061* (0.389)	1.087* (0.401)	1.076* (0.392)	1.084* (0.402)
Stability		0.109 (0.0987)			
Corruption			-0.0396 (0.225)		
Rule of Law				0.127 (0.149)	
Effectiveness					0.0381 (0.189)
Constant	-2.567 (10.88)	-6.733 (11.48)	-1.843 (11.83)	-6.002 (11.65)	-3.042 (11.34)
Observations	32	32	32	32	32
Adjusted R-squared	0.489	0.494	0.469	0.484	0.469
F-statistics	5.952	5.318	4.908	5.151	4.912
Note: Standard Errors in parentheses					
* Significant at 10%; ** Significant at 5%; *** Significant at 1%;					

Dependent variable is trafficking, measured on a discrete scale from 1 to 5. ln(export/area) is a measure of the amount of slaves exported from a country. ln(population) is the logarithm of total population in a country and ln(GDP) is the logarithm of GDP per capita taken). Ethnic Fractionalization takes on a value between 0 and 1. Stability, Corruption, Rule of Law and Effectiveness takes on values between -2.5 to 2.5.

Looking at the regression in table 12, we see that ethnic fractionalization still is positive and the estimated value of the coefficient is close to the same as previously found. However, for the regressions including controls for governmental stability, the term is only statistically significant at the 10% level. This means that some of the effects of ethnic fractionalization is driven by these outliers. Looking at the table in appendix 5, where we only have excluded Morocco and Egypt, these estimators are still significant at the 5% level, and in fact, regression 3 is statistically significant at a 1% level. Though the significance level did change, I still consider my results robust.

Like before, I have run the regression excluding the control variables, and this regression is to be found in appendix 6. Again, we see a change in the significance level of the coefficients, but the results overall are the same; a positive relationship between ethnic fractionalization that is significant at least at a 10% level.

5.3.3 Additional Robustness Checks

All of the regressions have shown that ethnic fractionalization indeed can explain some of the variation in human trafficking. The coefficient is positively related to human trafficking, and the value of the coefficient are very similar across all regression specifications. To further test if this holds, I also used ordered logistic regression⁵ and did the same regression as reported in table 6 to see if the results still are consistent when using a different statistical method. In fact, the coefficient on ethnic fractionalization takes on the same positive value and is significant at the 1% level for all regression specifications. The OLS regressions give all in all the same results as the ordered logit regression, and therefore I conclude my OLS specification to be correct.

I also tried to use a different measure of ethnic fractionalization, from Alesina et al. (2003). Again the coefficients on ethnic fractionalization are positive⁶, however, they are not statistically significant. This is interesting, and is in line with what Cho (2012) found when testing statistically significant push and pull factors of human trafficking. He also used the measure from Alesina et al., so most likely the difference in significance level stem from difference in the measurement of ethnic fractionalization.

The last thing I did, was follow Nunn (2008) in his estimation, using dummy variables for the colonizer for the country as the control variable and not include rural. Again, I got the same result for

⁵ The regression is found in appendix 7.

⁶ The regression is found in appendix 8.

the estimation of the coefficient on ethnic fractionalization⁷; a positive and statistically significant coefficient at a 10% level.

5.4 Summary

I find ethnic fractionalization to be positively related to human trafficking, and the value of the coefficient is close to the same in all the specifications. The results are generally do not change when I perform robustness checks, though the significance level changes some. This makes me conclude that ethnic fractionalization indeed is a determinant of, and positively related to, human trafficking.

⁷ I am, however, worried that this regression is miss-specified. The explanation and regression is found in appendix 9.

6 Discussion

The empirical analysis indicates that ethnic fractionalization is influencing the level of human trafficking outflows. In this section I will discuss the results, and argue why they are plausible.

6.1 Slave Trade and Human Trafficking

Below I will argue that ethnic fractionalization can influence human trafficking through several different channels. If we believe these to be plausible hypotheses, and given the findings in my empirical analysis, we can conclude that historic slave trade and present day human trafficking is related, not through a casual relation in itself, but through other factors. Slave trade have long-term impact on various aspects of the African culture, which again has made human trafficking possible.

The empirical analysis in chapter 5 gave an indication that there are strong relations between the historic and present day outflow of human trafficking from African countries. An important thing to note is that there are trafficking victims originate from all other parts of the world as well; so coming from a country that has a history of extensive slave trade is not the only thing decisive for present day trafficking.

6.2 Previous Research

To the best of my knowledge, there has not yet been done a lot a research on the topic of ethnic fractionalizations' impact on human trafficking. The exception is a beginning research done by Akee et al. (2010). In their work, they test the link between fragmentation, conflict and human trafficking. This is done using different a measure of ethnic fractionalization, and includes other countries. Also worth mentioning is Cho (2012), who runs multiple regressions testing various things argued to influence trafficking flows. Amongst the variables tested is ethnic fractionalization. Cho does not find ethnic fractionalization to be a statistically significant determinant of human trafficking when checking the robustness across three different datasets. Again, the analysis cover other countries than in my analysis, and again the measure of ethnic fractionalization is different. Because I used a more disaggregated measure of ethnic fractionalization (the one of Motavlo and Reynal-Querol), I am unable to directly compare my findings to this previous research.

The results of my empirical analysis seem to be robust, but as there is not sufficient research on the topic, and I know my dataset has limitations, I cannot conclude with certainty. Regardless, I will argue that it is plausibly that ethnic fractionalization is a determinant of human trafficking, working both through both direct and indirect channels.

6.3 Causal Effects

As previously stated, finding the causal effect of a variable in such a limited dataset, is not possible. I have found associational inferences, but cannot say anything about causality. I have too few variables to run good robustness checks, and due to risk of overfitting the model there are many variables which I do not include in the regression.

Even though I am not able to prove the causality, I will argue that there is a causal relation between ethnic fractionalization and human trafficking, which means that ethnic fractionalization directly influences the level of human trafficking.

The argument is that a highly ethnic fractionalized society will have groups of humans that does not relate to each other, and who do not feel responsibility toward each other. This means that they are more prone to exploiting those not a part of their own group. In addition, when someone from another group is treated badly or trafficked, they are less likely to care about it, or to take action to make it stop. Simply said: in a fractionalized society it can be more acceptable to exploit and to be exploited.

6.4 Working through other Channels

In addition to any direct causality, ethnic fractionalization can have an indirect effect on human trafficking. Earlier studies⁸ have shown that ethnic fractionalization influences various factors in the society, which again can have an impact on the number of trafficking victims originating from the country. These are the indirect ways ethnic fractionalization influences human trafficking.

A highly ethnic fractionalized society has a higher risk of civil war and social unrest, factors that push people into migration and human trafficking, in the search for a better future. The African countries are in general highly fractionalized, and the continent has been prone to internal wars for years. The need for soldiers is another aspect war, and kidnapping of children to satisfy this need is known to happen. War and conflict causes people to flee, or migrate to new places. The boundaries the colonizers drew up in Africa also split and divided ethnic groups, clans and families, which can be a cause of both wars and the movement of people.

Ethnic fractionalization is known to be influencing the quality of the government, economic growth and investments. These are long-term influences, which means that they also influence the prospects

⁸ The references to these studies are given earlier in the paper.

of people in the distant future. It is associated with reduced provision of public goods like education and infrastructure, as well as domestic institutions. The lack of good prospect for the future, can cause people to migrate and thus end up in situations exposed to trafficking. This can also make families sell or give away their children in good hopes of them receiving a better future.

Also found in previous research is the impact ethnic fractionalization has on social cohesion, the degree of equality in the society and the common rights of the people. In a heterogeneous society, you often have a majority ethnicity, or a coalition of ethnicities forming a majority, running the country. If you are not part of the ruling ethnic groups, there is a possibility that you will have less access to public services, governmental jobs and etcetera. Policies can be unjust, or be different depending on the ethnicity. Those running the government can favor their own kin, and choose to implement rights and rules in accordance to personal preference. Again, this can lead people to migrate as they possibly will be treated better other places. Also, the lack of job opportunities can lead people to accept offers from traffickers.

Migrating and trafficking are known to be connected, thus things that make people migrate also make people exposed to trafficking. It is easy to see that more knowledge about the migration factors can shed light on the issues of trafficking. In addition, worth noticing is the effect possibilities of migration legally will have on trafficking; if people did not have to rely on smugglers to be able to migrate, this channel would be less open for traffickers. This, however, is outside the real scope of the thesis, but worth mentioning when we see how heavily trafficking is related to migration.

6.5 Application

The new insight on what influences human trafficking, is something to keep in mind if one wants to work on limiting the outflow of human trafficking. Ethnic fractionalization being a determinant of human trafficking, is not in itself a solution to the problem of human trafficking, but simply shed light to the complexity of the problem.

Though no other continent has experienced slave trade the way Africa has, ethnic fractionalization is still present in all countries of the world. It is not something easy to get rid of, without considering using unethical measures. A country's ethnic fractionalization is inherited from the previous generations. In reality we only see it changing when there is a large inflow of new ethnical groups - creating higher ethnic fractionalization - or an outflow of an entire group - leading to lower ethnic fractionalization (Alesina et al. 2003:2). During the slave trade the number of humans exported was so high that Nunn (2008) believe it to have influenced the ethnic fractionalization in countries, and in

this paper, I have assumed that this is true. Trafficking today is more limited in scale, and most likely does not influence the composition of ethnic fractionalization.

With this in mind, if a government wants to stop human trafficking originating from its country, it is probably more effective to use measures influencing the other channels affecting human trafficking. However, knowing that ethnic fractionalization influences various parts of a society, can help governments know where to look for loopholes leading people into a place exposed to trafficking. Keeping the different channels of impact in mind is important, especially seeing as we know that many of the push factors are related to a higher development level of a country.

To reach a goal of restricting the amount of human trafficking from a country, one needs to understand the way implemented policies work, and how they influence other parts of the society. The purpose of this thesis is not to say that all hope is gone for countries with high levels of ethnic fractionalization. It is simply to point out that the level of ethnic fractionalization in a country has a say in the level of human trafficking, and most likely it will influence the effect of implemented policies.

In a highly fractionalized society it is likely that the population is concerned and aware of the dividing power in the everyday setting. Though we neither can, nor want to, change people's ethnicities, we can influence the way people behave and think about others, so that the issues caused by fractionalization diminishes. For this to work, we need to search for good ways to create bridges between groups and subcultures in the societies concerned. As ethnic fractionalization is also known to influence several other aspects of society, working on cooperation and a sense of community across ethnic groups can have a positive spillover effect on more than human trafficking.

6.6 Limitations

Though my results are robust to most regression specifications, there are some important limitations that is important to keep in mind.

My finding is based on a limited data material, with only 38 observations when we include the term for ethnic fractionalization. Thus, we should be careful not to read too much in to the data, and especially be very careful in trying to apply the findings to the rest of the world.

There is most likely omitted variable bias in the specifications of the models, and due to the limited data material we also the risk an overestimation of the model. It should be noted, again, that the data

from UNODC has its own limitations, as presented in the data chapter. This thesis has only looked at ethnic fractionalization's role in origin countries, not trafficking as a phenomenon in itself.

There is no time dimension in the available data. Though ethnic fractionalization will be more or less constant over a period of time, the degree of human trafficking can vary, and the data is not able to account for this. It should also be noted that in general it is difficult to know the exact quality of the data on African countries, as there are many states where collection of data can be challenging.

7 Conclusion

Human trafficking is people trapped in coercion, and is present in all countries of the world. There is a general consensus that this is not a fair and good treatment of humans, however it is persisting to be a part of today's society. In order for governments and other agents to come up with good policies to stop the crime from happen, a better understanding of the causes and relations is needed.

On a general basis, we are able to predict where human trafficking victims originate from, and this gives a clear indication that personal and demographical characteristics are important determinates of who ends up as victims to trafficking. By increasing our knowledge about these characteristics, there is a higher chance for the international community to limit, and ultimately to eradicate, the problem. In this thesis, I tried to shed light on one of the issues in this regard; that ethnic fractionalized societies are more prone to trafficking.

Following Nunn's (2008) argument that the slave trade in Africa increased ethnic fractionalization, I extended the analysis to examine if human trafficking is related to ethnic fractionalization. To do this, I used data from Nunn (2008), UNODC (2006) and the World Bank. First, I looked for a relation between slave trade and present day human trafficking, to see if the former impacted the latter. My data showed that this was the case. Next, I replicated Nunn's (2008) finding that slave trade had an influence on ethnic fractionalization, and then tested to see if ethnic fractionalization could explain human trafficking outflows of African countries today. My results show that this is the case; ethnic fractionalization is a positive and statistically significant predictor of human trafficking. The significance level on the coefficient is consistent in almost all of my calculations. The results are consistent when doing robustness checks, as well as when using ordered logit modelling instead of OLS. This makes me conclude that ethnic fractionalization is an important determinant of the level of trafficking outflows from a country.

Though no other continent has experienced slave trade in the same way as Africa, ethnic fractionalization is still present in all countries of the world. My findings do not imply that all highly fractionalized countries necessarily have to have high levels of human trafficking originating from them. Instead, it is a connection which should be kept in mind when working on the issue of human trafficking.

For governments and multilateral organizations to be able to eradicate the problem of human trafficking, knowing and understanding the forces that drives the market is essential. I will therefore

end this thesis with a call for more work to be done on the field of gathering good and reliable data, as well as research following it. To sum up: there is a lot we not yet know, so let's get to work!

References

- Akee, R. K. & et al. (2010). Ethnic Fragmentation, Conflict, Displaced Persons and Human Trafficking: An Empirical Analysis. *IZA Discussion Paper* No. 5142
- Akee, R. K., A. Bedi, A. K. Basu, N. H. Chau (2011). Transnational Trafficking, Law Enforcement and Victim Protection: A Middleman Trafficker's Perspective. *IZA Discussion Paper* No. 6226
- Alesina, A., A. Devleeschauwer, W. Easterly, S. Kurlat & R. Wacziarg (2003). Fractionalization. *Journal of Economic Growth* Vol. 8, No.2 pp. 155–194.
- Angeles, L. (2013). On the Causes of the African Slave Trade. *Kyklos* Vol. 66 No. 1 , pp. 1-26
- Aronowitz, A. A. (2001). Smuggling and Trafficking in Human Beings: The Phenomenon, the Markets that Drive it and the Organizations that Promote it. *European Journal on Criminal Policy and Research* Vol. 9, pp 163-195
- Bales, K. (1999). Disposable People: New Slavery in the Global Economy. *University of California Press*
- Bales, K. (2007). What Predicts Human Trafficking? *International Journal of Comparative and Applied Criminal Justice* Vol. 31 No. 2, pp 269-279
- Caldwell, J. C (1986). Routes to Low Mortality in Poor Countries. *Population and Development Review*, Vol. 12, No. 2, pp. 171-220
- Cho, S. Y., A. Dreher & E. Naumayer (2011). The Spread of Anti-trafficking Policies – Evidence from a New Index. *CEGE Discussion Paper* No 119
- Cho, S. Y (2012). Modeling for Determinants of Human Trafficking. *Economics of Security Working Paper Series* No. 70

Cho, S. Y., A. Dreher & E. Naumayer (2013). Does Legalized Prostitution Increase Human Trafficking? *World Development* Vol. 41 pp. 67-82

Danailova-Trainor, G. & P. Belser (2006). Trafficking in Persons and Development: Towards Greater Policy Coherence. *International Migration* Vol.48, pp. 38-83

Di Tommaso, M. L., M. D. Giusta, S. Strøm (2008). Sex Markets. A Denied Industry. *Routledge*, London and New York

Di Tommaso, M. L., I. Shima, S. Strøm and F. Bettio (2009). As Bad as It Gets: Well-being Deprivation of Sexually Exploited Trafficked Women. *European Journal of Political Economy* Vol. 25 No. 2, pp. 143-162.

Easterly, W., & R. Levine (1997). Africa's Growth Tragedy: Policies and Ethnic Divisions. *Quarterly Journal of Economics* No.112, pp. 1203–1250.

Esteban, J-A. & D. Ray (1994). On the Measurement of Polarization. *Econometrica* Vol. 62 No. 4, pp 819-851

Esteban, J-A. & D. Ray (2011). Linking Conflict to Inequality and Polarization. *American Economic Review* No. 101, pp 1345-1274

Friebel, G. & S. Guriev (2006). Smuggling Humans: A Theory of Debt-Financed Migration. *Journal of the European Economic Association* (Vol 4), pp 1085-1111

Jakobsson N. & A. Kotsadam (2011). Gender Equity and Prostitution: An Investigation of Attitudes in Norway and Sweden. *Feminist Economics* Vol. 17 No.1, pp. 31-58

Jakobsson N. & A. Kotsadam (2013). The Law and Economics of International Sex Slavery: Prostitution Laws and Trafficking for Sexual Exploitation. *European Journal of Law and Economics*. Vol. 35, No. 1, pp 87-107

Jakobsson N. & A. Kotsadam (2015). The Economics of Trafficking for Sexual Exploitation. *Memorandum, Department of Economics*. University of Oslo No. 07

- Kapstein, E (2006). The New Global Slave Trade. *Foreign Affairs* Vol 85. No. 6, pp 103-115
- Kelly, L. & L. Regan (2000). Stopping Traffic: Exploring the Extent of, and Responses to, Trafficking in Women for Sexual Exploitation in the UK. *Home Office, Policing and Reducing Crime Unit, Research, Development and Statistics Directorate*. London
- La Porta, R., F. Lopez-de-Silanes, A. Shleifer & R. Vishny (1997). Legal Determinants of External Finance. *Journal of Finance* No. 3, pp 1131-1150
- Mahmoud, T. O. & C. Trebesch (2010). The Economics of Human Trafficking and Labour Migration: Micro-evidence from Eastern Europe. *Journal of Comparative Economics* No. 38, pp 173-188
- Manning, P. (1990). Slavery and African Life: Occidental, Oriental, and African Slave Trades. Cambridge: *Cambridge University Press*.
- McCabe, K. (2008). The Trafficking of Persons: National and International Responses. *Peter Lang Inc., International Academic Publishers*. 1st New edition
- Montalvo, J. G. & M. Reynal-Querol (2005). Ethnic Polarization, Potential Conflict and Civil War. *American Economic Review* Vol 95. No.3, pp. 796-816
- Nunn, N. (2008). The Long Term Effects of Africa's Slave Trades. *Quarterly Journal of Economics* No.123, pp 139-176
- Nunn, N. & L. Wantchekon (2011). The Slave Trade and the Origins of Mistrust in Africa. *American Economic Review* No. 101, pp 3221-3252.
- Nunn N. (2009) The Importance of History for Economic Development. *Annual Review of Economics* No. 1, pp. 65-92
- Nunn N. (2007). Historical Legacies: A Model Linking Africa's Past to its Current Underdevelopment. *Journal of Development Economics* Vol. 83 No.1, pp. 157-175.

Rao, S. & C. Presenti (2012) Understanding Human Trafficking Origin: A Cross-Country Empirical Analysis. *Feminist Economics* Vol. 18 No. 2, pp 231-263

Salt, J. (2000). Trafficking and Human Smuggling: A European Perspective. *International Migration*. Vol 35, No. 3, pp 31-56

Salt, J. & J. Stein (1997). Migration as a Business: The Case of Trafficking. *International Migration*. Vol. 35, No. 4, pp 467-489.

Tamura, Y. (2007). Migrant Smuggling. *Warwick Economic Research Papers*. No.791.

Vanhanen, T. (1999). Domestic Ethnic Conflict and Ethnic Nepotism: A Comparative Analysis. *Journal of Peace Research* Vol. 36 No.1, pp. 55–73.

Wheaton, E. M., E. J. Schauer & T. V. Galli (2010). Economics of Human Trafficking. *International Migration* Vol. 48. No. 4, pp 114-141

United Nations (UN). 2000. Convention against Transnational Organized Crime and its Protocol to Prevent, Suppress and Punish Trafficking in Persons, especially Women and Children, New York.

United Nations Office on Drugs and Crime (UNODC). 2004, United Nations Convention Against Transnational Organized Crime and the Protocol Thereto. New York.

United Nations Office on Drugs and Crime (UNODC). 2006, Global Report on Trafficking in Persons, Vienna.

United Nations Office on Drugs and Crime (UNODC). 2009, Global Report on Trafficking in Persons. Vienna.

United Nations Office on Drugs and Crime (UNODC). 2014, Global Report on Trafficking in Persons. Vienna.

United States Department of State (2005), Trafficking in Persons Report.

Data Sources

UN Sustainable Development Goals: <http://www.un.org/sustainabledevelopment/sustainable-development-goals/> (Read 1.10.2016)

Universal Declaration of Human Rights (1948) Paris: <http://www.un.org/en/universal-declaration-human-rights/> Read (1.10.2016)

Rome Statute of the International Criminal Court (1998) Rome: https://www.icc-cpi.int/nr/rdonlyres/ea9aeff7-5752-4f84-be94-0a655eb30e16/0/rome_statute_english.pdf (Read 1.10.2016)

ILO: <http://www.ilo.org/global/topics/forced-labour/lang--en/index.htm> (read 1.10.2016)

World Bank: World Governance Indicators: <http://data.worldbank.org/data-catalog/worldwide-governance-indicators> (read 1.10.2016)

World Bank: Development Indicators: <http://data.worldbank.org/data-catalog/world-development-indicators> (read 1.10.2016)

A21: <http://www.a21.org/index.php?site=true> (read 1.10.2016)

APPENDIX

APPENDIX 1: Incidence of reporting of origin countries

A direct copy from the UNODC Trafficking in persons report (2006):

VERY HIGH (5)	HIGH (4)	MEDIUM (3)	LOW (2)	VERY LOW (1)
11-13 number of sources reported	6-10 number of sources reported	4-5 number of sources reported	2-3 number of sources reported	1 number of sources reported
Albania	Armenia	Afghanistan	Argentina	Brunei Darussalam
Bulgaria	Bangladesh	Algeria	Bhutan	Chad
Belarus	Benin	Angola	Botswana	Chile
China	Brazil	Azerbaijan	Burundi	Costa Rica
Lithuania	Cambodia	Bosnia and Herzegovina	Canada	Egypt
Nigeria	Colombia	Burkina Faso	Cape Verde	Fiji
Republic of Moldova	Czech Republic	Cameroon	Congo Democratic Republic of	Jamaica
Romania	Dominican Republic	Congo	Djibouti	Macao, China SAR
Russian Federation	Estonia	Republic of Cote d'Ivoire	Equatorial Guinea	Netherlands
Thailand	Georgia	Croatia	Eritrea	Paraguay
Ukraine	Ghana	Cuba	Gabon	Syrian Arab Republic
	Guatemala	Democratic People's Republic of Korea	Gambia	Uruguay
	Hungary	Ecuador	Guinea	Yemen
	India	El Salvador	Iran (Islamic Republic of)	
	Kazakhstan	Ethiopia	Iraq	
	Lao People's Democratic Republic	Haiti	Jordan	
	Latvia	Honduras	Lebanon	
	Mexico	Hong Kong, China SAR	Lesotho	
	Morocco	Indonesia	Madagascar	
	Myanmar	Kenya	Maldives	
	Nepal	Kosovo (Serbia and Montenegro)	Nicaragua	
	Pakistan	Kyrgyzstan	Panama	
	Phillipines	Liberia	Rwanda	
	Poland	Malawi	Republic of Korea	
	Slovakia	Malaysia	Somalia	
	Uzbekistan	Mali	Sudan	

Viet Nam

Mozambique

Swaziland

Niger

Tunisia

Peru

United States of
America

Senegal

Zimbabwe

Serbia and
Montenegro

Sierra Leone

Singapore

Slovenia

South Africa

Sri Lanka

Macedonia

Taiwan Province of
China

Tajikistan

Togo

Turkey

Turkmenistan

Uganda

Tanzania

Venezuela

Zambia

APPENDIX 2: Description of the Variables

	Description	Source
Dependent variable		
Trafficking	Amount of trafficking out of a country. Takes on discrete values between 1 and 5.	UNODC 2006
Main Independent variables		
ln(export/area)	Natural log of slave trade exports normalized by land area of the country	Nunn 2008
Ethnic Fractionalization	The probability that two randomly chosen individuals in a country belong to different groups. A completely heterogeneous society would have the value 1, while a completely homogenous society would have the value 0.	Montavlo & Reynal-Querol 2005
Control Variables		
ln(GDP)	Natural log of per capita GDP in 2000 US \$	Maddison 2003 (Nunn 2008)
ln(population)	Natural log of total population in a country	World Bank
Rural	Percentage of population living rurally	World Bank
Stability	The perceptions of the likelihood of political instability and/or politically-motivated violence, including terrorism. Estimate gives the country's score on the aggregate indicator, in units of a standard normal distribution, i.e. ranging from approximately -2.5 to 2.5.	World Bank, WGI
Corruption	Captures perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests. Estimate gives the country's score on the aggregate indicator, in units of a standard normal distribution, i.e. ranging from approximately -2.5 to 2.5.	World Bank, WGI

Rule of Law	Captures perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence. Estimate gives the country's score on the aggregate indicator, in units of a standard normal distribution, i.e. ranging from approximately -2.5 to 2.5.	World Bank, WGI
Effectiveness	Captures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies. Estimate gives the country's score on the aggregate indicator, in units of a standard normal distribution, i.e. ranging from approximately -2.5 to 2.5.	World Bank, WGI
Gold Production	Natural log of average annual gold production between 1970 and 2000	Nunn 2008
Oil Production	Natural log of average annual oil production between 1970 and 2000	Nunn 2008
Diamond Production	Natural log of average annual diamond production between 1970 and 2000	Nunn 2008
Coastline	Natural log of a country's coastling, normalized by deviding it on land area	Nunn 2008
Ethnic Polarization	A measure on how far the distribution of ethnic groups are from the bipolar (1/2, 0, ... 0, 1/2) distribution.	Montavlo & Reynal-Querol 2005
School Enrollment	Enrollment to schol, gender parity index	World Bank
Mortality	Infants mortality rate, per 1000 live births	World Bank
Ethnic Fractionalization (Alesina)	The probability that two randomly chosen individuals in a country belong to different groups, on a more aggregated level than the one of Montavlo and Reynal-Querol.	Alesina et al. 2003

Appendix 3: OLS Regression, Robustness check, without GDP and population

	Dependent variable: Trafficking					
	(1)	(2)	(3)	(4)	(5)	(6)
	No controls	Natural Resources	Coastline	Ethnic Polarization	School enrollment	Mortality
ln(export/area)	0.0146 (0.0463)	0.0104 (0.0505)	-0.0102 (0.0509)	0.0148 (0.0469)	0.0264 (0.0500)	0.0164 (0.0475)
Ethnic Fractionalization	1.410* (0.623)	1.406 (0.705)	1.580* (0.638)	1.433* (0.641)	1.388* (0.655)	1.445* (0.650)
Gold production		0.00855 (0.0263)				
Oil production		0.0305 (0.0304)				
Diamonds production		-0.0261 (0.0576)				
Coastline			0.0545 (0.0478)			
Ethnic Polarization				-0.144 (0.649)		
School Enrollment					0.657 (1.137)	
Mortality						-0.00114 (0.00486)
Constant	1.738*** (0.314)	1.872** (0.531)	1.782*** (0.315)	1.800*** (0.423)	1.148 (1.133)	1.804*** (0.425)
Observations	38	38	38	38	37	38
Adjusted R-squared	0.217	0.173	0.224	0.195	0.190	0.195
F-statistics	6.130	2.553	4.556	3.992	3.807	3.994
Note: Standard Errors in parentheses						
* Significant at 10%; ** Significant at 5%; *** Significant at 1%;						

Dependent variable is trafficking, measured on a discrete scale from 1 to 5. ln(export/area) is a measure of the amount of slaves exported from a country. Ethnic Fractionalization takes on a value between 0 and 1. Gold, oil and diamond production in the logarithm of average annual production between 1970 and 2000. Coastline is the natural log of coastline divided by land area. Ethnic Polarization is from Montalvo and Reynal-Querol (2005) and take on a value between 0 and 1. School enrollment is gender parity index of primary school enrollment in a country. Mortality is the number of infant deaths to every 1000 live birth.

APPENDIX 4: OLS Regression, omitting outliers, without GDP and population

	Dependent variable: Trafficking				
	(1)	(2)	(3)	(4)	(5)
ln(export/area)	0.0465 (0.0311)	0.0477 (0.0325)	0.0510 (0.0332)	0.0505 (0.0329)	0.0600 (0.0346)
Ethnic Fractionalization	0.960** (0.313)	0.951** (0.336)	1.035** (0.341)	0.958** (0.333)	0.911* (0.337)
Stability		0.0659 (0.0997)			
Corruption			0.173 (0.158)		
Rule of Law				0.147 (0.135)	
Effectiveness					0.209 (0.122)
Constant	1.872*** (0.145)	1.921*** (0.150)	1.915*** (0.155)	1.971*** (0.173)	1.989*** (0.165)
Number of observations	34	34	34	34	34
Adjusted R-square	0.391	0.382	0.392	0.398	0.417
F-statistics	23.01	19.16	14.98	15.58	15.84
Note: Standard Errors in parentheses					
* Significant at 10%; ** Significant at 5%; *** Significant at 1%;					

Dependent variable is trafficking, measured on a discrete scale from 1 to 5. ln(export/area) is a measure of the amount of slaves exported from a country. Ethnic Fractionalization takes on a value between 0 and 1. Stability, Corruption, Rule of Law and Effectiveness takes on values between -2.5 to 2.5.

Appendix 5: OLS Regression, omitting influential observations, only Morocco and Egypt

	Dependent variable: Trafficking				
	(1)	(2)	(3)	(4)	(5)
ln(export/area)	0.0484 (0.0330)	0.0406 (0.0333)	0.0471 (0.0330)	0.0454 (0.0327)	0.0476 (0.0343)
ln(GPD)	4.173 (3.812)	4.522 (4.022)	4.370 (3.964)	4.585 (4.038)	4.004 (3.860)
ln(GDP) squared	-0.268 (0.257)	-0.298 (0.273)	-0.284 (0.269)	-0.300 (0.274)	-0.254 (0.262)
ln(population)	0.252* (0.0950)	0.279* (0.102)	0.252* (0.0976)	0.256* (0.0998)	0.258* (0.106)
Ethnic Fractionalization	0.955** (0.283)	0.943** (0.338)	0.982*** (0.266)	0.957** (0.305)	0.966** (0.295)
Stability		0.124 (0.115)			
Corruption			0.0589 (0.194)		
Rule of Law				0.116 (0.152)	
Effectiveness					-0.0571 (0.208)
Constant	-18.14 (14.53)	-19.43 (15.30)	-18.73 (14.91)	-19.40 (15.22)	-17.79 (14.59)
Number of observations	36	36	36	36	36
Adjusted R-square	0.441	0.443	0.423	0.431	0.424
F-statistics	9.170	7.361	8.680	8.021	7.798
Note: Standard Errors in parentheses * Significant at 10%; ** Significant at 5%; *** Significant at 1%;					

Dependent variable is trafficking, measured on a discrete scale from 1 to 5. ln(export/area) is a measure of the amount of slaves exported from a country. Ethnic Fractionalization takes on a value between 0 and 1. Stability, Corruption, Rule of Law and Effectiveness takes on values between -2.5 to 2.5.

APPENDIX 6: OLS Regression, omitting influential observations, without GDP and population

	Dependent variable: Trafficking				
	(1)	(2)	(3)	(4)	(5)
ln(export/area)	0.0400 (0.0307)	0.0408 (0.0305)	0.0446 (0.0309)	0.0440 (0.0302)	0.0542 (0.0307)
Ethnic Fractionalization	1.097* (0.404)	1.097* (0.400)	1.178** (0.408)	1.105** (0.395)	1.045* (0.391)
Stability		0.104 (0.0851)			
Corruption			0.183 (0.162)		
Rule of Law				0.186 (0.122)	
Effectiveness					0.234 (0.132)
Constant	1.839*** (0.204)	1.914*** (0.211)	1.885*** (0.207)	1.962*** (0.215)	1.971*** (0.210)
Observations	32	32	32	32	32
Adjusted R-squared	0.438	0.448	0.444	0.463	0.477
F-statistics	13.10	9.388	9.245	9.903	10.44
Note: Standard Errors in parentheses					
* Significant at 10%; ** Significant at 5%; *** Significant at 1%;					

Dependent variable is trafficking, measured on a discrete scale from 1 to 5. ln(export/area) is a measure of the amount of slaves exported from a country. Ethnic Fractionalization takes on a value between 0 and 1. Stability, Corruption, Rule of Law and Effectiveness takes on values between -2.5 to 2.5.

APPENDIX 7: Ordered Logistic Regression

	Dependent variable: Trafficking				
	(1)	(2)	(3)	(4)	(5)
ln(export/area)	0.0459 (0.205)	-0.0216 (0.203)	-0.00759 (0.206)	-0.000252 (0.197)	0.0394 (0.205)
Rural	-0.0115 (0.0360)	-0.0275 (0.0394)	-0.0275 (0.0419)	-0.0263 (0.0426)	-0.0153 (0.0395)
ln(GDP)	15.21 (14.32)	19.62 (17.31)	20.53 (15.22)	19.74 (16.71)	16.23 (14.71)
ln(GDP) Squared	-1.017 (0.985)	-1.368 (1.205)	-1.438 (1.072)	-1.373 (1.171)	-1.102 (1.026)
ln(population)	0.778 (0.498)	0.958 (0.580)	0.823 (0.520)	0.841 (0.545)	0.763 (0.522)
Ethnic Fractionalization	4.562*** (1.226)	4.569*** (1.267)	5.040*** (1.198)	4.605*** (1.209)	4.514*** (1.250)
Stability		0.569 (0.449)			
Corruption			0.980 (0.791)		
Rule of Law				0.668 (0.689)	
Effectiveness					0.217 (0.694)
Cut 1					
Constant	66.79 (54.19)	81.36 (64.96)	82.27 (55.33)	80.18 (61.39)	69.04 (54.44)
Cut 2					
Constant	70.36 (53.85)	85.02 (64.78)	85.91 (54.98)	83.81 (61.23)	72.61 (54.08)

Cut 3					
Constant	74.05 (53.95)	88.88 (65.02)	89.72 (55.12)	87.63 (61.43)	76.32 (54.16)
Cut 4					
Constant	75.80 (54.11)	90.65 (65.23)	91.43 (55.32)	89.37 (61.66)	78.05 (54.36)
Observations	38	38	38	38	38
Note: Standard Errors in parentheses					
* Significant at 10%; ** Significant at 5%; *** Significant at 1%;					

Dependent variable is trafficking, measured on a discrete scale from 1 to 5. $\ln(\text{export}/\text{area})$ is a measure of the amount of slaves exported from a country. Ethnic Fractionalization takes on a value between 0 and 1. Stability, Corruption, Rule of Law and Effectiveness takes on values between -2.5 to 2.5.

APPENDIX 8: Regression using measures of ethnic fractionalization from Alesina et al. (2003)

There are various measures constructed to account for ethnic fractionalization, and to check that I do not get different results depending of which one I use, I have done the calculations presented in table 6 with a different ethnic fractionalizations measure.

	Dependent variable: Trafficking				
	(1)	(2)	(3)	(4)	(5)
ln(export/area)	0.0574 (0.0425)	0.0495 (0.0433)	0.0573 (0.0430)	0.0564 (0.0427)	0.0573 (0.0434)
Rural	0.00326 (0.00635)	0.00284 (0.00676)	0.00324 (0.00639)	0.00347 (0.00641)	0.00324 (0.00647)
ln(GDP)	3.591 (2.941)	3.476 (2.998)	3.601 (3.057)	3.522 (3.023)	3.602 (3.072)
ln(GDP) Squared	-0.222 (0.192)	-0.219 (0.197)	-0.223 (0.199)	-0.219 (0.198)	-0.223 (0.199)
ln(population)	0.180 (0.123)	0.199 (0.130)	0.180 (0.128)	0.176 (0.127)	0.181 (0.141)
Ethnic Fractionalization, Alesina et al.	0.950 (0.636)	0.996 (0.669)	0.947 (0.655)	0.989 (0.642)	0.948 (0.650)
Stability		0.120 (0.131)			
Corruption			-0.00725 (0.217)		
Rule of Law				0.0732 (0.181)	
Effectiveness					-0.00848 (0.224)
Constant	-15.44 (11.35)	-14.98 (11.55)	-15.49 (11.97)	-15.05 (11.70)	-15.51 (12.28)

Observations	41	41	41	41	41
Adjusted R-squared	0.249	0.243	0.226	0.230	0.226
F-statistics	4.446	3.849	4.258	4.258	4.115
Note: Standard Errors in parentheses					
* Significant at 10%; ** Significant at 5%; *** Significant at 1%;					

Dependent variable is trafficking, measured on a discrete scale from 1 to 5. $\ln(\text{export}/\text{area})$ is a measure of the amount of slaves exported from a country. Ethnic Fractionalization takes on a value between 0 and 1. Stability, Corruption, Rule of Law and Effectiveness takes on values between -2.5 to 2.5.

APPENDIX 9: Regression using colonizer fixed effects as control variable

In this regression, I include what Nunn (2008) calls colonizer fixed effects. The colonizer fixed effects are included to make sure any effect coming from simply being a colony for a specific country has something to say. This is taken from Nunn (2008) and is dummy variables indicating whether the country was colonized by Britain (17 countries), France (17 countries), Portugal (2 countries), Belgium (2 countries), Spain (1 country) or not colonized (2 countries, baseline measure).

Nunn (2008) includes these variables in his study of how the slave trade influence long term economic growth, so to follow his model I have run this regression to see what the results are. The reason why I have not included this regression in the main part of the paper is because I am uncertain of its consistency and believe it to be a miss-specified model. I am uncertain if being a former colony is defining of whether or not human trafficking originates for a country, and also if the colonization is dependent on earlier slave trade. As Nunn (2008) points out, the Europeans did not colonize Africa until after the slave trade period was over. Almost all of Africa in reality was colonized, so the amount of historic slave trade does not seem to influence the colonizers decision much. Thus, though Nunn (2008) does control for colonizer fixed effects, my belief is that this will have more of an impact on economic development by influencing the state development and institutional qualities than it will on human trafficking. If this is true, the regression is miss-specified and including the colonizer fixed effects will make the coefficient bias and inconsistent. However, the finding that the coefficient on ethnic fractionalization is very similar to the others, is interesting. The results are presented below.

	Dependent variable: Trafficking					
	(1)	(2)	(3)	(4)	(5)	(6)
ln(export/area)	0.0164 (0.0722)	0.0164 (0.0722)	0.00521 (0.0679)	0.00606 (0.0723)	0.00849 (0.0703)	0.0153 (0.0733)
Ethnic Fractionalization	1.429** (0.488)	1.429** (0.488)	1.390* (0.502)	1.516** (0.494)	1.411** (0.494)	1.399** (0.488)
Rural	-0.00293 (0.0128)	-0.00293 (0.0128)	-0.00879 (0.0148)	-0.00746 (0.0154)	-0.00708 (0.0158)	-0.00453 (0.0145)
ln(GDP)	5.263 (4.345)	5.263 (4.345)	5.991 (4.554)	6.482 (4.757)	6.101 (4.755)	5.610 (4.749)
ln(GDP) squared	-0.351 (0.301)	-0.351 (0.301)	-0.415 (0.320)	-0.450 (0.340)	-0.420 (0.336)	-0.380 (0.337)
ln(population)	0.214 (0.138)	0.214 (0.138)	0.257 (0.153)	0.221 (0.140)	0.220 (0.147)	0.209 (0.150)
Stability			0.188 (0.157)			
Corruption				0.286 (0.316)		
Rule of Law					0.181 (0.254)	
Effectiveness						0.0829 (0.291)
Colonizer fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Constant	-20.98 (16.04)	-20.98 (16.04)	-22.87 (16.52)	-24.21 (16.60)	-22.98 (16.85)	-21.65 (16.70)
Observations	38	38	38	38	38	38
Adjusted R-squared	0.219	0.219	0.225	0.210	0.205	0.191
Note: Standard Errors in parentheses						
* Significant at 10%; ** Significant at 5%; *** Significant at 1%;						

Dependent variable is trafficking, measured on a discrete scale from 1 to 5. ln(export/area) is a measure of the amount of slaves exported from a country. Ethnic Fractionalization takes on a value between 0 and 1. Stability, Corruption, Rule of Law and Effectiveness takes on values between -2.5 to 2.5.