Source: (Hanchett, 2015)

Do larger immigrant populations increase homicide rates?

A global study, 1995-2014

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Content

Abstracts

Relating high immigration to violent crime has been a sensitive topic in the media for quite some time, often concerning highly populistic politics. Still substantial research that validates or disproves this assumed relationship is missing, and that is the motivation behind this thesis. More specifically I examine the statistical relation between immigration stock and the reported homicide rates in countries worldwide. The results show a small positive association for a world sample, but other variables seem to be more important. The effect of immigration on homicides seem to be conditioned on the access to political power among the lower socioeconomic groups in society. Looking explicitly at the OECD countries the effect goes away. I use data from 1994-2014 for over 150 countries globally and 33 countries in the OECD. Country- and time fixed effects are included in OLS regressions both with Newey-West robust standard errors and spatial correlation (Driscroll-Kraay) in STATA for both samples. The results taken together do not support the simple view that a larger share of immigrants increase violent crime.

Å relatere immigrasjon til voldelig kriminalitet er et svært sensitivt og debattert tema både i massemedia og blant populistiske politikere. Slik har det også vært over lengre tid. Det mangler likevel data som bekrefter eller avkrefter de mange mytene rundt temaet, men dette ønsker jeg å gjøre så langt det er mulig i denne masteroppgaven. Jeg studerer den statistiske sammenhengen mellom innvandrerbefolkningen og den rapporterte mordraten i et land. Utvalgene mine er både et globalt og et som kun tar for seg OECD land. Jeg finner en svak positiv effekt på verdensbasis, men andre variabler kan synes å ha større betydning. Jeg finner for øvrig at effekten av innvandring på mordrate er betinget hvor stor politisk innflytelse lavere sosioøkonomiske samfunnsgrupper har. Effekten forsvinner ved å kun se på OECD. Datamaterialet strekker seg fra 1994-2014 for over 150 land globalt, og 33 medlemsstater av OECD. Land- og tids «fixed effects» er brukt i OLS-regresjoner med både Newey-West robuste standardfeil og romlig korrelasjonsestimat (Driscroll-Kraay). All analyse gjennomføres i statistikkprogrammet STATA. Det er ikke funnet støtte for at en større innvandrerbefolkning fører til mer voldelig kriminalitet.

Introduction

Politics of fear

This thesis examines the relationship between immigration and homicide. The politics of fear" based around questions arising from immigration drive much of todays' politics. This term is used by amongst others Ruth Wodak (2015) to explain how populist politicians and media often connect these two; immigration and violent crime. Exploring the statistical trend for these measures, it seems like an odd connection to make indeed. Never has so many people been on the move internationally. The world is becoming more densely populated but because of new technology and internationalizing economies, the world is becoming a smaller place. Meanwhile, global homicide rates have gone down during the latest decades. This is especially prominent for western countries, the same areas that has become destination for many international migrants (see figure 1 and 2).
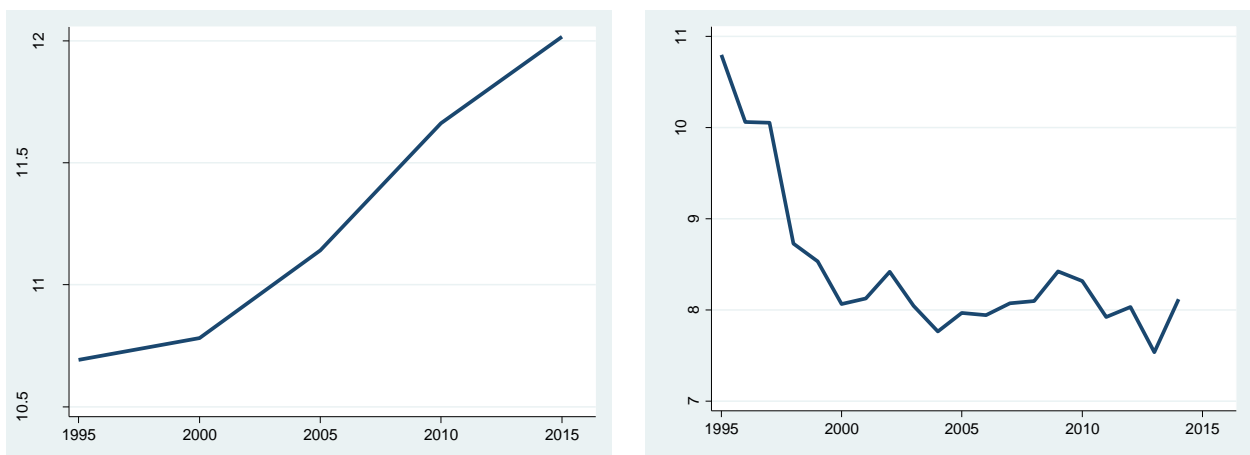

Figure 1 and 2: Using data from the World Bank (The World Bank, 2016) I display the trending development of the size of the migrant stock as a share of the population (left) and the homicide rate by intentional killings per 100 000 people (right).

The bivariate picture drawn above could be misleading. This study thus, conducts a multivariate analysis to examine if the share of the immigrant population can explain the crime rate of a country.

Migrants bring foreign cultures, speak new languages and settle in areas that tend to be poorer because that is where housing is cheapest. All these barriers between foreigners and

locals are used strategically by populist politicians to their own advantage. Making it easy to fear and resent the unknown by connecting immigrants to issues like violent crime and poverty, is the essence of scapegoating. Trying to find the true effect of immigration on homicide, I use the World Bank Indicators which provides the best data on time- and spatial coverage at once. Homicide is chosen as a proxy for measuring fear, social disruption and crime in society because deaths are countable, highly comparable between countries, has good reporting and is easily interpreted compared to more subjective questionnaires like the World Value Survey.

After the second world war, the issue of migration gradually became more important. Developed countries needed workers to strengthen their economies after the war. This established what was to become a high migration flow from poor to richer countries. As economic development slowed down in the 70's, much immigration was restricted down to an absolute minimum of refugees and family reunions. Still the diaspora of migrants was establishing (the stock of migrants not fully integrated), and in the 90's host countries started to develop more prominent integration policies. Around 2001 terrorism became a topic of interest among both the public and media, causing a backlash against immigration because of the fear of extremist immigrants. Hearing more and more about terrorism, people become concerned with questions of integration and the issue of crime.

"*When Mexico sends its people, they're not sending their best — they're not sending you. They're not sending you. They're sending people that have lots of problems and they're bringing those problems with us. They're bringing drugs. They're bringing crime. They're rapists. And some, I assume, are good people*".

Donald Trump, presidential announcement speech (Washington Post Staff, 2015).

I am quoting Mr. Donald Trump, the 2016 elected president of the US. This is just one of many broad statements made by both Mr. Trump and other populist politicians around the world. He repeatedly referred to "the Internet" when asked about the source of his statement. This sort of speech is not unique to American politics, and has triggered enough curiosity to examine if a larger immigrant stock should be associated with higher homicide rates. Populist leaders all over the world seem to say similar things. Many see this as scapegoating of the week. Immigrants are the easiest target when someone is to be blamed for problems in society, a classical "us vs. them" rhetoric. As a democratic politician, you do not want to blame the citizens at large, after all – they have the power to vote, so you blame the powerless

instead. My question is therefore; what is the real relationship between immigration and violent crime?

In 2010, about 216 million people, that is 3.15 % of the world population, lived outside of their birth countries (Zapponi, 2010). In 2015 the number had increased to 244 million, or 3.3 % (UNPF, 2008). Many more are on the move within their state borders. Refugees are now more numerous than ever since WW2. The UN Refugee Agency (UNPF, 2008) reports 59,5 million refugees to be among the 244 million migrants of 2014. The top ten host countries with the largest numbers of immigrants *pr. count* was from the top down; the USA (migrant stock at 13,8 % of total population), Russia (8,8 %), Germany (13,1 %), Saudi Arabia (28,3 %), Canada (21,3 %), the UK (11,2 %), Spain (14,8 %), France (10,3 %), Australia (25,7) and India (0,5 %) (Zapponi, 2010).

One explanation for the increased international migration flow is that the global economy is becoming more inter-dependent. At the same time, developed countries are seeing a decline in their fertility rates and working-age populations. The need for foreign workers is increasing as nations are trying to keep up with global economic development. Integration policy is also important when trying to avoid social clashes and conflict as people with different backgrounds, references and experiences meet. This has for a long time been a study for sociologists. Recently political scientists also have joined, indicating much explanation may be found on an institutional level. The classical way of working with migration is thought to mostly apply to sociology theory because of much empirical policy (Givens, 2007). Throughout the 90's, the most prominent question asked if democracy and its institutions together with international cooperation weakened the importance of national citizenship (Ibid. p. 71). The Swedish immigration policy with a utopian rhetoric emphasizing that one is first and foremost a citizen of the world and should open ones' heart to welcome as many immigrants as possible, because there is no "we" and "them", only "us". Now in the 21st century, the focus on citizenship has again increased.

In addition to the migration flow, the homicide rate is just as important. It is a proxy for social capital, and might tell a lot about frustration and trust in society. The UN reported intentional homicides to be at around 437,000 globally in 2012 (UNODC, 2013). The largest share of homicides pr. region was in America (36 %), then Africa (31 %), Asia (28 %), Europe with only 5 % and the least in Oceania at an astonishingly low 0.3 %. The absolute highest rates are to be found in Central America and Southern Africa. More and more

migrants are heading to Western- and Southern Europe from East. This is an example of a migration passage, but does not mean the homicide patterns in host countries are changing along with the migration flow. The UNODC (Ibid.) has discovered the most prominent pattern in the homicide rates across Europe to be because of alcohol consumption, not migrant stock. Such bad habits seem to be geographically locked as people move around, just as homicide rates do not follow migration paths. Changing *immigration* policy might not be the most efficient way for politicians to lower violent crime. There might be more prominent national factors like alcohol consumption, gun control and economic policies to address first, and this may also be indirectly addressed by focusing more on *integration* policy.

Status Quo

I want to actualize the immigration debate in relation to violence in society, measured through the simplest and most prominent violent crime there is – homicide. The question of how immigration might increase violent crime is much debated. A Norwegian report (Skarðhamar, Thorsen, & Henriksen, 2011) is highly critical to this effect. Together with Martin Andresen (2013) they state that *"… immigration in - and of itself, do not increase homicide"* (Ibid. p. 632). Many relevant studies (Andresen, 2013; Drugs & Crime, 2013; LaFree & Tseloni, 2006; M. T. Lee, Martinez, & Rosenfeld, 2001; Neapolitan, 1994, 1999) have been done, both qualitative and quantitative on the matter, all trying to reveal patterns between violent crime and immigration. Lee, Marinez and Rosenfeld (2001) found

"… that recent immigration generally does not increase community levels of homicide (and therefor) has implications for policies that target immigration as a social problem. (The) results offer little support for claims that immigration fosters homicide…" (Ibid. p. 574).

Many studies have looked at immigration flow and how specific groups of migrants influence communities on local and national levels. For instance, Robert Putnam (2007) looks at homicides pr. "county" (the lowest geographical level at which crime rates in America are consistently reported) in the US, but not many have looked at the bigger picture; does having a large stock of immigrants increases the homicide rate for every country globally? My choice of strategy is to look at the specific connection between migrant stock and homicide rates. I want to test if the effect is negative globally since migration is a world-wide phenomenon. Is there any truth to what Mr. Trump is saying or is he just as biased as any populist politician? If he is on to something, then high focus on immigration and integration policy is not a bad

strategy, but if there are no support for his claims he and many more are wasting time looking to decrease homicide rates by the wrong means.

There are shortcomings about earlier studies on immigration and homicide. Studies has been done for two or three states at a time, like the article "An eco-systemic view of homicide" (deSouza Minayo & Constantino, 2012) that compares two different towns in Brazil and two in Argentina. Also, Robert Putnam (2007) evaluates homicide rates within the US, and Martin Andersen (2013) looks closer at the possible causes of homicide in the Canadian provinces. None of them explores the explicit relation between migration stock and homicide on a global basis. According to Nivette (2011 p. 223);

"...samples are small and biased. On average, only about 20 % of the global population of countries are covered, of which the overwhelming majority are primarily developed and industrialized. (...) Indicators are theoretically vague, with considerable empirical overlap and no agreement on operationalization. (...) "Time" is nearly non-existent in cross-national research, as designs predominantly favour cross-sectional over longitudinal." (Ibid.)

Media are also exploring the same themes, e.g. by publishing an article in the Norwegian national newspaper "V.G." in 2016 (Quist, Brenna, & Marte, 2016). Head of the Norwegian national police department Kripos; Ketil Haukaas was interviewed about the decreasing share of ethnic Norwegians among criminals having committed partner homicide. He saw this as Norway succeeding in making "Norwegian norms" less accepting of violence. It is always crucial how the crime data is interpreted. After all, about 90 % of the convicts in Norway between 2001 and 2004 had Norwegian citizenship (Skarðhamar et al., 2011 p. 24). Focusing on norms being the root of conflict and violence is a typical example of conflict theory. When basic values are not universally accepted within a country, this may cause tension between ethnic groups. Negative associations, stigma and hate can also rise from having to compete for limited resources without understanding the needs of each other.

Homicide is defined by the World Bank as; *"... an intentional killing of a human being by another"* (2016). By limiting my definition of homicide to the traditional western perception - excluding killing by armed forces – I am in danger of underestimating killings most typical in developing and conflict affected countries, like genocide, death penalty, terrorism and civil war. Some countries exclude killings done in a state of recklessness while others see being mentally unaccountable as still intentional. Some reporting inconsistency

must therefore be anticipated. The World Bank provides the most general definition I could find, capturing the type of criminal violence I want to measure. High crime and violence is a good indicator of social cohesion and community development. My main independent variable; migration stock is also collected from the World Bank (Ibid.). The definition say *"... all the people born in another country than the one they currently live in, including refugees"* are counted. The stock is not the same as the diaspora. Stock counts immigrants from arriving, throughout life, regardless of integration. By diaspora I mean immigrants of common background, identifying more with their home country than their new host state. As they integrate and come to feel like locals, they leave the diaspora.

Structure of the thesis

The thesis begins by presenting the current debate on migration and violent crime. The main theories in the field are then explored in two parts, first "negative theory" predicting more homicide will follow from immigration, seeing immigration as a challenge. Then I present "positive theory" suggesting immigration may reduce homicide, being a resource. The methods part is a justification of my choice of data, analyses, techniques, and how I intend to conduct the analysis. I also present the included variables. In the analysis, I show my results with several tables that I interpret. I give a more detailed explanation of important findings in the discussion section, before some concluding remarks at the end. More tables and figures are presented in the appendix.

Theory

This section is a presentation of important theories making up the debate on migration and homicide. There are two main camps; some find immigration to be problematic for host societies, others see it as positive. In the very first part I look at the debate from a holistic perspective. *The global debate* presents immigration as a world-wide phenomenon, looks at where it is most prominent and presents theoretical takes on the overall development. Why is immigration so much debated in the media and political landscape? I present theory on multiculturalism and how it is perceived as a threat to social cohesion. Patterns of migration are mentioned together with the importance of integration policies. Finally, I consider how immigration is connected to violent crime.

First of the two camps are *negative theory* – immigration is a struggle. Here, much focus is on inequality being caused by immigration through demographic heterogeneity. This is actualized through modernization theory. Eric Neumayer (2004) Emile Durkheim (1933), Gerry Lafree (2006), Kriss Drass (2002) and Norbert Elias (1978) are central to this part. Roughly they think immigration segregate society. Norms, social cohesion and trust is changing when new jobs are created, work forces change and new needs are introduced. Institutional anomie theory is explained by Neumayer (2003) and Mauricio Rivera (2016). Violence increase with high immigration because state institutions are not adapted to the changing demography. Anomie here means frustration among the marginalized who no longer feel protected by the state. Social cohesion theory is a bit broader. Putnam (2007) and Neumayer (2003) argue together with Staffan Kumlin and Bo Rothstein (2005) that immigrants as a group tend to have other references and forms of capital than locals in host countries. Integration policy must therefore build bridges between the local and foreign over time. Immigrants must transition from being strangers into being part of a diaspora and in the end becoming full citizens. During such transitions, violence is expected to be higher. In addition to these theories there are more to say about the issue of trust, a continuous condition for social cohesion and peace. If people do not share a feeling of community with their neighbours, interaction is scarce and prejudice flourishes. A lack of trust makes violence appear like an easier solution than solving problems through communication. In relation to trust, social disorganization theory focuses on inequality. People being fairly treated by the state breeds trust. Civil war is linked to a larger share of migrants being refugees. This may

increase violence in host societies because of the trauma and past marginalization refugees have experienced.

The last part consists of *positive theory.* Main scientists are Matthew T. Lee, Ramiro Martinez, and Richard Rosenfeld (2001) who together found high diverse societies to create personal freedom to choose exactly the life one wants. Multiculturalism does not necessarily end with violent confrontation. Different to negative theory, this camp views migrants themselves – not institutions – crucial for good societies. Motivation behind migration is key, because migrants arriving in host countries wanting to start new lives are often more motivated than locals to honor the law. The fear of deportation is important, together with appreciation for the opportunity for a better life. Locals are used to better living standards and may not respect authorities as much. The topic of <u>ethnicity</u> explores how this is often related to crime statistics in the media and by politicians. Often this relation goes away controlling for age and gender or other risk factor groups among the imprisoned. Ethnic diversity does not seem to affect crime rates as most violent crime happens *within* ethnic communities. Diversity may foster curiosity, learning and openness. Positive effects like higher economic productivity with a fresh working force is thought to increase trust. If differences are apparent, tolerance will increase when people learn to know each other. The topic <u>employment</u> critique the statement: "immigrants are taking our jobs". Entrepreneurship is high among immigrants and new jobs are created. Often the minimum salary in the host country exceeds by manifold what one could make in the country of origin. <u>Democracy</u> is the final paragraph. As societies evolve into stronger democratic states (especially when transitioning from autocracies) they go through a stage of turmoil and institutional reorganization. Violence may be low in autocracies, reaching new highs during transition but ending up at even lower levels than starting with when democratic rule is established.

I now show which sub-theories I relate to positive- and negative theory, and name the various scholars cited on the matter:

Negative theories	Philosophers		Positive theory	Philosophers	
Inequality	Bailey, 1984 Bennett, 1990 Chon, 2012 Denny, 2012 Fajnzlber, 2002 Wilkinson, 2004	Fox, 2012 Karstedt, 2006 Merton, 1938 Messner, 1982 Neumayer, 2003	*Ethnicity*	Chon, 2012 Feldmeyer, 2009	Gartner, 1993 Hagan, 1999
Modernization	Durkheim, 1933 Elias, 1939 LaFree, 2002	Shelley, 1981 Neumayer, 2003	*The trust solution*	Alesina, 2005 Fearon, 2003 Laitin, 2013 Messner, 2004	Fearon, 1996 Karstedt, 2008 Lijphart, 1977
Institutional anomy	Fajnzylber, 2002 Rivera, 2016	Neumayer, 2003 Savolainen, 2000	*Employment*	Joppke, 2007 Koopmans, 2003	Reid, 2005
Social cohesion	Ferrera, 2000 Fukuyama, 2001 Joppke, 2007 Kumlin, 2005	Neumayer, 2003 Putnam, 2007 Lederman, 2002	*Democracy*	Chu, 2013 Miller, 2016 Weber, 1949 De Mesquita, 2011 Mann, 1970 & 2005 Karstedt, 2006 & 2008	Hobbes, 1950 LaFree, 2006
Social dis-organization	Alesina, 2000 Easterly, 1997 Elgar, 2011 Horowitz, 1985 Kelly, 2000 Shaw, 1942	Putnam, 2007 Rabushka, 1972 Reid, 2005 Rosenfeld, 2001 Rothstein, 2005			
Civil War	Carreras, 2012 Rivera, 2016	Ouimet, 2012			

The global debate

Immigration drives much of the political agenda in of most developed countries today, both in Western Europe and North America. National leaders in countries – may they be rich welfare states, highly industrialized OECD members, war torn areas like Syria and Congo, or small depopulated islands in Asia – migration is relevant to them all in one way or another. The world is becoming smaller in the sense that globalization and technology covers every corner of the earth. Mobile phones are now affordable to more and more people, making it easier to be aware of ones' own situation compared to others. Deprived people in poorer countries see how the rich industrialize and modernize, so they too start dreaming of a better life. Information technology gives access to data describing where international migration flows are moving, which locations are attractive and how to get there (Vertovec, 2004 p. 222). It seems important to include the entire world when looking at migration, because the reasons behind are complex and varies a lot. It makes sense including all countries when data is good enough. Luke Martell (2010) points out that most refugees are not going from poor- to industrialized countries, so just choosing to look at richer host countries is going to be a biased- selection. *"… most refugees today flee across the nearest border to neighbouring poor- or developing countries…"* (Ibid. 2010 p. 108) Martell writes. The number of refugees settling in OECD-countries declined during the entire period of 2006-2010, and a smaller increase over the last years is understood as an indirect result of communicative technologies becoming cheaper and easier accessed.

Anyone with assets to migrate will probably take the chance if creating a decent life at home is impossible. Huge sacrifices are being made for the chance of success. There are huge costs of migrating and changing location in the short run. Boats with migrants sink while crossing oceans, people are killed by smugglers or die of exhaustion. It is a great loss cutting contact with the home country, culture and family. In the long run, one can achieve economic gains, enough to send revenue back to the family. The absolute poor do not have the assets to migrate. The moderately poor living in the middle of the social economic ladder do not have much to lose, but a whole lot more to gain from migrating. With a cheap Nokia, they can get in contact with diasporas in host countries and thereby information on how to get there. Knowing someone in a diaspora lowers the costs of arriving there. Some lucky ones even get to stay with friends or relatives while looking for work (Collier, 2013 p. 163).

Opportunity is in other words essential. David Miller (2016 p. 45) addresses equality of opportunity in this way:

"... a person's opportunity to obtain education, employment, and other valued positions should depend only on their talent, motivation, and choice, and not on factors such as their family background or their gender that have no intrinsic relevance to the position being sought. (...) that a person's being raised in one society rather than another should also make no difference to their opportunities." (Ibid.)

Miller is not convinced that open borders will create such equal opportunities. There is much to do before national citizenship does not matter for opportunity in work. Free flow of people might not be the way to go about immigration, because integration is not an automatic process. As of today, nothing seems more important than making integration policy adaptive to immigration flow because there must be social cohesion amongst people for peace and safety to be achieved.

Why would it be problematic for a country that people are culturally and ethnically diverse? Miller say;

"... cultural divisions among members of a political community may reduce both interpersonal trust and trust in political institutions. This reduction by no means entails the end of democracy, but it may change the way in which democratic institutions function. (...) Where trust is lacking, deliberation is likely to be replaced by self- interested bargaining on the part of each group, where the outcome reflects the balance of power between them." (Miller, 2016 p. 64).

Without trust, an almost Hobbesian state of nature will arise according to the citation by Miller. If immigration promotes ethnic and religious differences, trust between people will decrease. It is not the differences in *personal* culture that matters, but if *public culture* embraces variety. This is simply illustrated, again by Miller (2016 p. 67) in a single quote;
"... one can have a state made up of meat eaters and vegetarians in roughly equal numbers, but not one similarly composed of democrats and theocrats."

Miller (2016 p. 66) does not think problems with immigration will escalate out of proportion just because more people migrate. Nor that immigration will make the population size increase uncontrollably. People migrating from poor to rich countries are likely to have fewer kids by the next generation, adjusting to new norms and needs. But, for a larger diaspora it is still more likely that cultural enclaves appear, because integration requires more from state institutions (Ibid. p 68).

Multicultural policy may have both unifying and segregating effects on society. Segregation is often the result of too little nation-building policy and too much focus on differences when conveying politics (Miller, 2016 p. 142-3). If nation-building is prominent, solidarity and trust can flourish as the citizens are reminded of their common, larger, and all-inclusive identities. Heterogeneity heightens the threshold for making even informal social interactions, and generalized trust decrease (Hero, 2003; Hooghe, Reeskens, Stolle, & Trappers, 2009 p. 200). Jerome Neapolitan (1997) understands ethnically diverse societies through opportunity theory, where the essence is that more immigration forces people to accept more dense living conditions. This still increases chances of violent interactions because people will interact more often in the public sphere and more opportunities for conflict occur. A larger population is harder to control for the government, and bad institutions may result in more violence and homicide (Neumayer, 2003 p. 621).

Collier (2013) writes in his book "*Exodus: Immigration and multiculturalism in the 21st century*" that social integration is different if policy promotes multiculturalism compared to if it applies assimilation. Integration will take more time with multicultural policies, as migrants learn the indigenous language at a slower pace and cooperation is less effective when adapting is more optional. For example, Collier (2013 p. 107) sites Koopmans (2010) who suggests that generous welfare states are likely to experience a relatively slow integration because being in a lower socioeconomic class will be comfortable for new migrants compared to their previous living standards. This segregation escalates over time, especially when there are issues of domestic unemployment and governments still find it difficult to cut in labour migration. Locals and populist politicians may be quick to claim immigrants are taking domestic jobs, but the truth is more often that recruiting natives back into jobs formerly held by immigrants turns out to be hard. Something happens to how the way native workforce perceives these jobs. Posts where immigrants are over represented are labelled "immigrant"/ low-status jobs that locals do not want to be associated with, making it necessary to recruit even more immigrants.

The mechanisms for gluing society together are according to Rothstein and Uslaner (2005), social cohesion and social capital. But, in the end they both are dependent on societal trust (Hooghe et al., 2009 p. 200). Social cohesion, -capital and -trust are all relevant to integrating immigrants because *"... trust is easiest to develop when we are familiar with the people around us, and particularly when they seem similar to ourselves"* (Abrams, Hogg, & Marques, 2004; Hooghe et al., 2009 p. 201). Putnam (2007) also discover this while studying

an American sample. A larger proportion of immigrants in society creates less trust between immigrants and indigenous people and intra these two groups. He calls this effect "hunkering down", as *"... indigenous people living in high immigrant societies are retreating to themselves, trusting less and taking less part in social activity, having fewer friends and watching more TV"* (Collier, 2013 p. 75). These findings were not accounted for over time, which is an important weakness of his study. Highly trusting societies are better able to cooperate and face lower costs from transactions, being less dependent upon processes of formal enforcement (Collier, 2013 p. 32). Such bureaucracy can be a lot of work, both in welfare states where there is always a form to fill out, and in badly organized poorer countries where these forms do not even exist.

The Danish Torben Andersen (2012) looked at the Scandinavian welfare model and concluded that high migration makes the system less viable conditioned that immigrants are dependent on welfare for income and have lower skill levels than the local population. Collier (2013. p. 148) found that migrants expecting to earn below average incomes, seek out host countries with higher redistributive taxations like Europe and especially Scandinavia. Migrants expecting to earn above average go to countries where greater inequality is accepted, like the USA. Still, it is not easy to determine the most important reason behind for migrant flow, one can only assume jobs and safety must be essential. Looking at the map made by National Geographic (see "figure 3" on the next page), the most frequently used migration routes are tried documented. This is a task made even more difficult by illegal immigration. One can conclude that most routs go from the south-east to the north-west, but the motivation behind can only be understood by looking closer at receiving countries like the OECD for example.
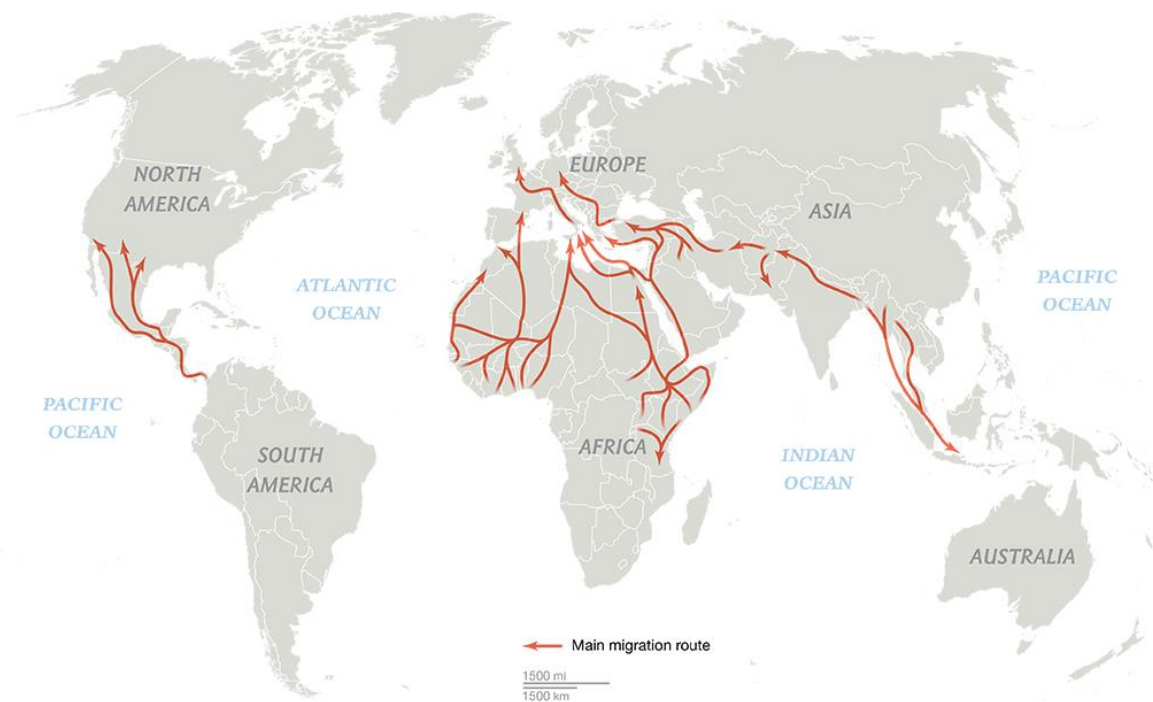
Figure 3: Source: (Chwastyk & Williams, 2015)

"Dual labour-market theory" may be better at interpreting figure 3. It connects immigration to modern industrial economies, saying immigrants are an important resource when new structural requirements rise upon the labour force. The paths in figure 3 may be led by globalizing labour markets. More work-related immigration can be the result of globalized economies expanding beyond nation-state borders. The present flow of migrants might have been formed a long time ago, but the reasons behind movement today seem to be tightly related to job markets.

Immigration is a highly relevant topic, but even though there are increasingly many people on the move, we still cannot define what good integration is. Immigrants are a vulnerable group in society. They arrive as strangers, different from the local population, and easy targets for media and populist politicians. When in need of a scape goat it is always easier blaming an outsider. This can be traced back to preschool behaviour when bullies target the odd one out. Politics of fear are even more powerful when social institutions are failing, making people feel unsafe. Somewhere down that line, violent crime might rise. Populist politicians searching for power often link immigration to high homicide rates and accentuate single convictions to create and blame this enemy for social disorganization. Bad social policy and government can easily be disguised by focusing on xenophobia.

Homicide is also a global phenomenon. By including all countries globally, the goal is to reveal some general impact of immigration on homicide. Eric Neumayer (2003 p. 623) sees murder rates as closely connected to the probability of getting arrested and convicted afterwards. Having good policing is therefore important to lower homicide rates. Often populist politicians label immigrants as dangerous criminals by displaying conviction rates, but these are very easy to misinterpret and alter. All countries agree that homicide is not legal, but the way they prosecute the cases are differing. In the US (Drugs & Crime, 2013 p. 94) the homicide rate is high, and police identify suspects for a good half of all homicide victims. Less than 50 % of these are convicted, so that under 25 % of all homicides lead to conviction. In Asia homicide rates are on average lower (Ibid.), with multiple suspects for every homicide, and 50 % leads to conviction. In Europe, the number of suspects equals homicides, with about 80 % leading to a conviction. These differences make statistics gathered by the World Bank harder to compare, but it is still the best comparable data.

Who gets locked up for murder? This seems to be an important question for both populist politicians and journalists. Data is easily available and everyone can make simple graphs based on the numbers from national statistical bureaus. A common argument for restricting immigration is that immigrants are more criminal and therefore must be kept out of society to control crime rates (e.g. homicide). Often this is not totally wrong, immigrants are overrepresented like Hispanics in American prisons. But, it is not the entire truth (Hagan & Palloni, 1999). The Hispanic diaspora in the USA consists mainly of young males, also thought to be a high-risk group for violent behaviour. Controlling for this, there are no longer a statistically significant overrepresentation of immigrants in prison. In Hagan and Pallonis' (1999) article, they were actually less represented than the local population.

The problem and solution of migration is debated on a global basis, especially prominent among developed, richer countries. It makes intuitive sense that "Western" countries are the main recipients of migrants, the West consisting of industrialized countries in Europe and North America. Roughly, people are moving from poor dysfunctional states to the richer prosperous ones. They look for opportunities and ways to create a good life. There are two main ways of looking at immigration; as a problem (the following negative theory) or as a value (positive theory) to receiving societies.
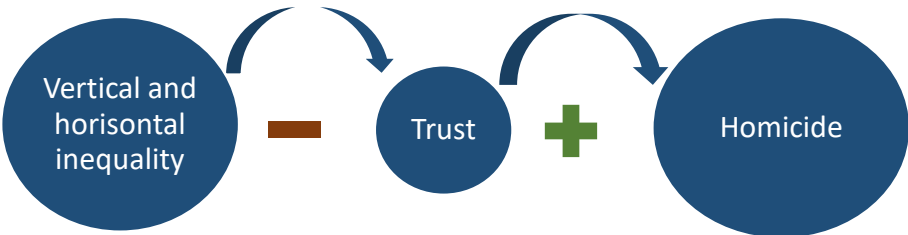
Negative theory

In all parts of negative theory, inequality seems to be the common denominator. I therefore start off by explaining the importance of the main two inequality dimensions; horizontal and vertical. Vertical inequality is operationalized by income inequality, while horizontal is measured along indexes of ethnic and cultural heterogeneity. Neumayer (2003, 2004, 2005) argues that inequality is key to understanding violent crime. If inequality is provoked by immigration, it might be an indirect cause for homicide. Neumayer is in support of Avison and Loring (1986 p. 733) who say horizontal inequality is more important explaining violent crime than vertical inequality. They find the effect between these two dimensions and homicide rates to be positive, and ethnically dependent differences has the strongest impact. Horizontal inequality also seems to increase the positive effect of vertical inequality on homicide, as shown in the illustration below:
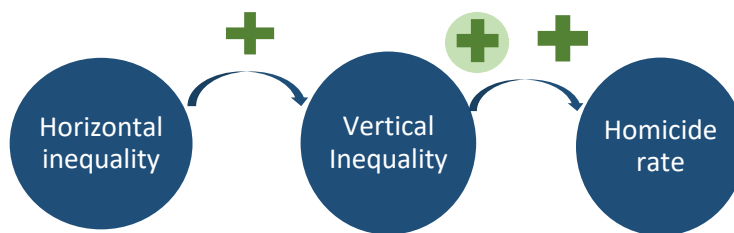
Much research supports that horizontal inequality lowers trust and social cohesion (Bennett & Lynch, 1990) on a national level, while most research on vertical inequality show positive correlation with homicide rates globally (Neumayer, 2003). GINI is the most used proxy for vertical inequality, e.g. used by Don Soo Chon (2012) and Messner et al. (1982), stating "… *income inequality is amongst the most robust predictors of homicide rates in cross-national research*" (Chon, 2012 p. 471). I believe GINI is highly relevant to violent crime, but not all by itself. Marginalization of the lower socioeconomic groups may play a part, and after reading what Neumayer (2003, 2004) found on the matter, it seems like most positive effects of GINI on violent crime only hold without controlling for country fixed effects. Considering the trends within every single entity in the analysis, GINI lose its effect. I suspect other dimensions to be more relevant than income. William Bailey (1984 p. 545) found the degree of absolute poverty to increase homicide rates significantly, and income inequality to only have an effect on crime, but not murder. This is contradicting much

research on the field, but is none the less an important finding. Bailey (Ibid.) writes that richer states have more to be spent on welfare and the disadvantaged, so he thinks GDP pc. will have a negative effect on homicide rates. In comparison with Fox and Hoelscher (2012 p. 432); and Karstedt (2006 p. 60), they also found absolute poverty to increase crime rates, and inequality to matter for predicting homicide rates.

Inequality is often structured based on social status, power and access to resources (Wilkinson, 2004 p. 9). In the case of e.g. Dubai, inequality is very visible, but the state protect itself and the elite with strong autocratic rule and security. In more dysfunctional states like Congo where institutions are less holistic, violence seems to increase *within* the poor society, not affecting the wealthy that much. Resources are used to keep the elite safe and separate from the rest of the people. The marginalized poor are then the prime competitors for a fixed amount of scarce resources, forced to fight each other over such goods. As resources become even more scarce, opportunities for achieving power and wealth involves gang involvement, crime, and violence (Denny & Walter, 2012). While the police protect rich from poor, violence between poor people flourish. This can be linked to "strain theory" (Merton, 1938) predicting larger gaps between rich and poor will make differences more visible to the marginalized and create frustration. The "strain" represents a want to be as successful and wealthy as other people in society. It is thought (Ibid.) that when income inequality is distributed along lines of socioeconomic inequality it has a toxic effect on trust, breaking down social cohesion and enabling violent crime like illustrated below:

Modernization theory

Neumayer (2003) discusses both the positive and negative aspects of inequality and crime. He acknowledges people migrating may easily end up alienated. Modernization theory posits that violent crime rates increase with more immigration because social and economic transformations during modernization processes brings countries into chaos and social breakdown (Neumayer, 2003 p. 620-21) making host societies unfit for integration. Today, most changes take place in urban areas where social mobility is high. With changing status relations, stereotypes, social organization and -control, people need to adapt over a short time span. This is the same process that was seen during societal adaptations to the industrial revolution in the Western hemisphere – e.g. in Great Britain – for most of the nineteenth century (Shelley, 1981). Peoples' needs and wants change. Some suddenly feel alienated from their own society. When new jobs are created and markets change, unemployment increases and safety nets take time to establish. This is where the American professor Louise Shelley (1981) say "anomie" occur, the same phenomenon as Neumayer (2003) calls "crumble of social integration and capital". Modernization theory predicts that when economy change at a rapid phase, homicide rates may increase as traditional norms, social organization and control changes. Only after a country has successfully evolved, established new effective institutions, violent crime is expected to decline. This may also apply to transitioning states from autocratic to democratic institutions. Autocratic regimes may be good at keeping order but there would be much more satisfaction amongst the citizens in stable democracies in the end.

Emile Durkheim (Durkheim, 1933) thought transitioning from traditional to modern society brings more extreme violence because modern values and norms come into contact with- and disrupt older, established systems of role allocation. This leaves people feeling insecure about their new roles. Norms for how to behave blur out. Durkheim (1964) analysed differences in homicide rates from a sociological perspective just like Neumayer (2003 p. 620). People get scared when they lose social capital; this may be loss of value to their education, less competitiveness in the job market, or income no longer covering living costs. This makes people scared. Durkheim (Ibid.) thinks low income rates may cause a positive effect on homicides, and with immigration there will be more people earning low wages. This is best avoided if society changes and industrialize *over time* so that people get a fair chance of adapting to new markets.

Most research has tested modernization theory by looking at the effect of income and immigration on crime with cross-sectional designs, but measuring at only one point in time. Most do not find significant results. By contrast, in a longitudinal study of homicide rates in thirty-four nations from 1956 to 1998, LaFree and Drass (2002) found considerable support for modernization theory. 70 % of industrializing countries in this study had experienced homicide "booms" (rates increasing rapidly and with a positive and sustained change in direction) during a modernization period that both included industrialization and democratization. Fewer than 21 % of highly modernized countries showed the same high homicide rates. Murder rates should increase as autocratic countries experiment with democracy and loosen its grip on the population. Homicides may diminish once a fully democratic regime is in place and people find other ways of expressing their frustrations than violence. Violent crime is in LaFree and Drass' analysis (Ibid.) shown to be curvilinear to the democratization process.

Norbert Elias (1939) predicts long-term decline in violent crime for countries through another modernization process. Stronger states increasingly claim monopoly on the legitimate use of violence. In this way, violence within the scope of family- and friends is increasingly regarded as a public matter and a subject to formal penal law. Citizens of industrialized nations get to take part in greater social configurations and institutions, making it easier to express unease without the use of violent means. Still, Elias (Ibid.) only found weak results, and war contradicted empirically when homicide rates almost exploded following WW2 (LaFree & Tseloni, 2006 p. 29). This is not doing his theory justice and deserves some attention. Few studies have examined connections between levels of democratization and violent crime rates for a large sample of countries (Ibid.), so I will try to do just that in my analysis.

Institutional anomie theory

Concluding from what Savolainen (2000 p. 1036) found in his research, the effect of GINI on homicide rate is dependent on the welfare system. Strong welfare states keep people out of absolute poverty and desperation. Homicide rates therefore stay the same even if GINI increases, such as the Scandinavian welfare states for instance. There is an economic elite also in these countries, but poorer people dependent on welfare still do not resort to violence. There seem to be a basic need to be fairly treated by the state, and this is the essence of institutional anomie theory. "Anomie" means the marginalized are feeling helpless because

institutions cannot provide economic safety. At the global level, many countries struggle with huge parts of the population living in absolute poverty, leading to frustration. For OECD countries, it is not expected to be statistically significant effects from income inequality because there is so little absolute poverty.

Another attribution to this theory comes from Mauricio Rivera (2016). He underlines that proof of income inequality generating homicide is lacking. If it is true that people get violently frustrated because of vertical inequality, it would make sense that mostly richer people were killed, as they are the people to envy. The reality is that rich socioeconomic groups are exposed to more property-, but not violent crime. Also, Neumayer comments:

"*The reason for the link between inequality and violent crime being spurious is that income inequality is likely to be strongly correlated with country-specific fixed effects, such as cultural differences*" (Neumayer, 2003).

So, when controlling for country fixed effects considering the within-country variation, the statistical significance of inequality on homicide washes out, as briefly mentioned. Making an artificially small sample size might be a solution. A homogeneous selection will decrease the chances of cultural variations hiding an inequality effect. I will accomplish this by looking at the OECD explicitly, taking spatial dependency into account – a estimation technique neither Rivera or Neumayer used.

One of the most cited research thesis on inequality and homicide is written by Fajnzylber, Lederman, and Loayza (1998, 2002). They claim to find a strong, significant and positive effect of inequality on homicide, the opposite of Neumayer and Rivera. Their thesis uses UN data, covering only 37 countries included, not likely to be a random selection. States known to have high homicide rates such as many Central American, are not included. The reporting of data is done by individual states, so bad values might be undistributed. Rivera (2016) has commented that evidence of positive effects are weak, and Neumayer (2003 p. 623) critiques the paper of Fajnzlber et.al. for being misleading because the detected effect would apply more to economic crime than homicides. He writes:

"*No matter whether income inequality is measured – by the GINI coefficient or by the ratio of the top to the bottom income quintiles – it is insignificant in fixed-effects and dynamic estimation and significant only in random-effects estimation*" (Neumayer, 2004 p. 110). Inequality is not explaining homicide rate on a large scale.

Social cohesion theory

Some pessimists thinking immigration leads to more homicide, say this is because large diasporas lead to less social cohesion. Two of the most important people here are the American born social scientist Robert D. Putnam and the German born professor who himself migrated to England, Eric Neumayer. In their view, it is not quite clear why some countries manage immigration better than other, but in the ones who do well the diaspora have often reached an equilibrium where it is no longer increasing. To achieve this, integration policy is key. There are innumerable ways for host countries to control the flow of migrants, helping the diaspora blending in with the population. In Canada and Australia for instance, predominantly highly skilled, resourceful, and language-competent immigrants are chosen to stay; and integration become a smoother process. Many migrants coming to Europe arrive mostly based on "rights" like family reunification. If the unskilled migrants do not learn the local tongue shortly after arrival, work and school will be too hard and may end up dependent on welfare, slowing integration (Joppke, 2007 p. 18-19).

Staffan Kumlin and Bo Rothstein (2005) say welfare institutions can be both positive and negative for social capital. Social capital reflects how capable people are within a society to co-operate (Fukuyama, 2001). Economically, social capital reduces transaction costs. In a political context, it promotes connections needed to succeed with governmental collaborations that is important in many modern democracies like the Scandinavian. Daniel Lederman, Norman Loayza and Ana Maria Menendez found (2002 p. 529) trust to be essential for social capital, and among community members trust has a significant negative effect on homicide rates. If more immigrants as a share of the total population decreases trust, I believe higher immigrant stock increases homicide rates indirectly. Lederman et.al. conclude (Ibid. p. 530) that both income inequality and economic downturns will increase violent crime because of less trust.

Kumlin and Rothstein (2005) think welfare reduces social cohesion if citizens feel unjustly treated by selective, needs-tested welfare institutions. People will have less trust in the state. Welfare institutions may also strengthen social cohesion when people feel treated fairly and equally. Kumlin and Rothstein (Ibid.) conclude that Swedish and other Scandinavian countries have high levels of interpersonal trust because their welfare systems are highly inclusive. It is therefore worrying if selective welfare solutions are being used more and more because of globalizing economies. Selective welfare instead of an inclusive

structure will put more pressure on bureaucrats to make people feel fairly treated. Human errors may ruin trust and social cohesion (Kumlin, 2002) if locals for feel immigrants gain more on welfare than themselves.

Social disorganization theory

Social capital means all factors contributing to cooperation, social relationships and realizing collective goals (Rosenfeld, Baumer, & Messner, 2001 p. 284). The most fundamental building block is as always; trust. Without social capital, violent crime is expected to increase (Ibid.). In political science, the question is often asked; if migrants are systematically getting lower paid jobs and thereby increasing economic diversity and probability of civil conflict (Horowitz, 1985)? Such effects may also be amplified by inefficient welfare institutions (Alesina, Baqir, & Easterly, 2000), by economic underdevelopment (Easterly & Levine, 1997), social distrust (Putnam, 2007) and/or democratic instability (Rabushka & Shepsle, 1972).

A lack of trust might increase homicide rates if people get suspicious of immigrants before they are integrated. The operationalization of public institutions is important to understand trust as Rothstein and Stolle write:*"… impartial, just and inclusive institutions (are) responsible for the implementation of public policies (and creates) trust*" (2003 p. 29-30). If private and public goods are distributed through rightful open processes that people can follow if interested, citizens will not be suspicious of each other getting better treatment, nor feel discriminated against. "*Citizens do make strong connections between the impartiality of institutions and generalized trust (…)*" (Ibid.). Lesley Williams Reid et.al. (2005) think immigration increases homicides by altering demography, and in so shifting pressure points on social institutions. Locals and immigrants have different needs in relation to e.g. religion and spare-time activities. Often it is necessary to prioritize one over the other. Immigration pushes local politicians to choose more visibly which groups to prioritize. If people feel systematically left out, they might get angry at the public institutions and in extreme cases this can lead onto a path towards violence and homicide.

Shaw and McKay (1942) has defined themselves as "social disorganization researchers", but they clearly qualify as social cohesion researchers too. They predict more violent crime when social control weakens. Such control may decrease when poverty and racial heterogeneity (horizontal inequality) coincide (Kelly, 2000 p. 530). Poverty is not necessarily a problem by itself, but as soon as horizontal inequality takes part, poverty

become more visible and create frustration leading to violent crime. Another study (Elgar & Aitken, 2011 p. 244) accentuates vertical inequality to be the better predictor of homicide rates, conditioned on trust. When trust is high, vertical inequality has less positive effect on homicide rates. Elgar and Aitken (2011) think this vertical inequality is a much better predictor of violence than looking at poverty like Shaw and McKay (1942) did. Visible hierarchal class differences in income seem to weaken social cohesion and lowers social capital (Ibid.).

It is easy to think of states like e.g. the United Arabic Emirates and wonder why such extreme regimes do not prove theory about inequality increasing homicide rates wrong. Once again, that is why trust is so essential. Dubai is built on a strong and visible social class hierarchy. It is an all the way constructed, artificial state, so to speak. Homicide rates are about zero in Dubai, public executions by the state not included. There is no room for criminality. Deviations from the law is tracked carefully by police, but at the same time everyone knows their place. Life is highly predictable and people trust that their neighbour is just as loyal to the system as themselves. With such an iron hand governing every aspect of life, the states do not function in any traditional societal way. People immigrate because it is a life of predictability and safety. The state certainly does not provide freedom, social mobility or expression, but people are not living in absolute poverty either. The Emirates would qualify as a case study by itself, showing that relative deprivation does not need to increase violence if the state rules efficiently and autocratic. Even though the state is not ruling fairly, it is securing the lowest level workers a better life relative to the conditions they lived with in their home country. If people feel safe, know the rules of the game and are not feeling threatened by neighbours, peace can be accomplished. It is highly unlikely that The Emirates would be just as successful in keeping order had the rule of law been based on more democratic values.

Rippling effects of civil war

Miguel Carreras (2012 p. 849) thinks refugees especially, has a positive effect on homicide rates. Countries bordering states with civil war, are likely to experience increased homicide rates because many refugees will migrate to neighbouring countries (Ibid.) during conflict. Carreras writes that refugees impact host economies negatively in short term because they need heavy support and bring with them very limited resources. If the refugee flow is high, this will after some time become an economic burden on host societies. Indirectly homicide rates may increase if segregation is high and integration difficult. Carreras (Ibid.)

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makes a point by saying: "*States hosting large numbers of refugees should design policies to avoid mistrust between local- and the refugee populations. Each group has to be made aware of the hardships of the other and a better understanding should be encouraged from the top.*" It is lack of understanding, knowledge, communication and trust that is tearing host societies apart when effective integration policies are absent.

There are not just economic challenges to hosting refugees. Marc Ouimet (2012 p. 243) thinks bordering countries surrounded by civil war will experience more violence because of increased imports of small arms and weapons. Guns from war that become available to the population at large will also easier get in the hands of criminals. After a time of chaos, Rivera (2016 p. 87) believes unique opportunities arises to reforming the state and create good institutions. Despite good intentions, civil war may still have brought on conditions of conflict, making violent crime stay high even after the end of the war. Suddenly, the people who were fighting are left with uncertainty and no job opportunities. Weapons stay easily accessible without effective policing institutions. Even though I cannot control sufficiently for refugees in my sample due to lack of data, this theory is helpful understanding the impact of civil war being included in the robustness check.

Negative theory camp covers a lot. The essence of it all is that change leads to chaos, institutional reform and the potential for violent crime. I here sum the main statements in a few points;

a) Inequality seem to matter on two different dimensions; vertical (income) and horizontal (social). The more visible this is and the more marginalized the poor are, the higher risk of violent crime.

b) Modernization theory: Ethnic difference and multiculturalism creates segregation, less trust and in the end; more violence.

c) Institutional anomie theory: Inequality and more poor people make people view the state as illegitimate. This create alienation and lack of trust in the justice system; more violence occurs when taking justice into own hands.

d) Social cohesion theory: When local populations do not feel prioritized and more money is spent on immigrants and integration, there will be less institutional trust, and violence may rise.

e) <u>Social disorganization theory:</u> Trust will be low because immigrants and locals lack a common ground for cooperation. Immigration change demography and job market demands. New people fall into the lower socioeconomic groups and politicians find it easy blame migration, creating tension.

f) From <u>civil war</u> comes refugee-migrants. Homicide is expected to increase when these people with trauma and little assets try to adapt to a new host country.

Based on these points my first hypothesis is;

H1: The size of the immigration stock is positively related to the homicide rate of a country, meaning more immigrants increases violent crime in society.

Positive theory

"The counterclaim", as Matthew T. Lee, Ramiro Martinez, and Richard Rosenfeld (2001) calls it, does not view more immigration as a cause of increased homicide rates. Lee et.al. (Ibid.) see immigration as a "stabilizing force" in urban areas. The stabilizing factors are; freedom to choose social and cultural milieu from a larger pot, better job opportunities as more small businesses are established and new arenas to socialise at. Immigrants are thought to make urban life more viable and hinder population decline which is a pressing problem in more and more developed countries. Immigration could revive old neighbourhoods and save declining industry.

Before immigrants are granted citizenship, one might expect more violent crime because these migrants do not yet feel ownership to the host country. Lee et.al. (Ibid.) say this is not true. Immigrants will probably stay away from violence in fear of deportation. They found indications that good behaviour motivated by fear has a negative effect on homicide rates both for legal and illegal immigrants. Besides, Pidi Zhang and Jimmy Sanders (1999) found immigrants with low-paying jobs to be reporting greater work incentives than the local population within the same branch, possibly because of different references in life. Coming from a society of high poverty and unemployment, will make jobs much more valuable. Immigrants work longer hours than natives in Zhang and Sanders study (Ibid.). Even when migrants and locals had equal ethnic backgrounds, immigrants showed a better work ethic (e.g., Mexican immigrants work longer hours than American-born Latinos) (Ibid. 1999). They concluded immigrants may perceive less injustice in low salaries and having a greater sense of optimism about their prospects of social mobility in the long run.

Ethnicity

An article by Feldmeyer and Steffensmeier (2009) leaves an impression that much of populist political debate today is based on how many immigrants are imprisoned. Scare statistics show how disproportionately many Blacks and Hispanics are over-represented in prison for violent crimes in the US, but the story does not show which contributing factors are making up this data. One way of stereotyping might be through headlines like *"... Government reports growing numbers of Hispanic immigrants in US prisons*" (Hagan & Palloni, 1999 p. 617). This is a misleading headline considering *"... Hispanic immigrants are dis-proportionately young males who regardless of citizenship are at greater risk of criminal*

involvement" (Ibid.). There are no research showing an ethnicity effect on violent behaviour if risk factors are accounted for. Imprisonment has little to do with the ethnicity of the inmates, their status as immigrants or their cultural belonging. Poverty and long term unemployment is much better predictors sling with age and gender. Young males between 15 and 30 years of age make up the highest risk group for committing homicide and other violent offences in society. Rosemary Gartner (1993) finds this to be true for the US, but it might be a country-specific effect. In comparison to the US, many Eastern European countries report middle aged males to be the highest risk group (Chon, 2012 p. 744). Still, in the states, Hispanics and the population at large are equally prone to committing murder if we are to believe Feldmeyer and Steffensmeier (Ibid.). Controlling for unemployment and being poor, the African American people are no more criminal than the rest of the American population either. So why is always ethnicity mentioned by the media when crimes are committed? It would seem like having a scapegoat to blame for bad things happening in society is an easy way out for many politicians. If immigration was not a problem in society, politicians would have to take more responsibility for *institutions* not protecting the young and poor as well as they should.

Social, ethnic and cultural variety within the population is what I mean by heterogeneity. It is possible that more heterogenous populations are more likely to experience higher income inequality compared to more homogenous ones, at least this is what social disorganization theory claim. Don Soo Chon (2012) tried to test this, but found that*"…the interaction term between horizontal- (both ethnic and linguistic) and vertical inequality is weak*" (Ibid. p. 741). Both inequality measures influence homicide rates, but not interactively. Actually, Chon (2012 p. 744) found that *"… most criminal homicides occur within the same ethnic group.*" This indicates less inter-group interaction and more residential segregation based on socioeconomic class, cause crime to occur within groups. More inequality does not necessarily increase homicide rates nationally, but alters the areas where crime happens to be more segregated. In Sweden, immigrants themselves decide where to settle. This may be a cause for ethnic segregation, following the logic that people of the same background (diaspora) find safety in each other and therefor choose to live close. The same thing happened as Norwegian farmers emigrated to the US throughout the 19th century. Today, many Norwegian-Americans still live in the same areas as their forefathers. They eat "lutefisk" and celebrate the Norwegian national holiday on the 17th of may each year. This clearly shows how integration can dramatically slow down or at least take the form of

multiculturalism over assimilation if immigrants do not interact with local population daily and keep socializing only within familiar culture.

Trust

"*The production of generalized trust in modern societies is based on high social mobility, individualism and social equality*" (Karstedt, 2008 p. 211). Karstedt does not mention ethnic homogeneity at all. A study done in the U.S. revealed "*a direct and negative impact of generalized trust on homicide rates*" (Ibid.). So, more trust, less homicides (Messner, Rosenfeld, & Baumer, 2004 p. 898).

As people with different backgrounds live within the same society, cultural diversity increases. Instead of differences destroying trust and lowering economic performance, Laitin and Jeon (2013) use social psychology, organizational behaviour, and computer science to conclude that *"... diverse populations are collectively more able to solve complex problems with creative solutions*" (Laitin & Jeon, 2013). Some would think that differences fractionalize and creates conflict, but diversity might just as well be a functional asset, produce large gains in economic productivity and improve performance in intellective tasks like problem solving, innovation and decision making (Ibid. p. 1). Some research shows greater economic productivity even when social cohesion is reported to decrease (Alesina & Ferrara, 2005).

Having established trust as one of the most basic mediators of homicide rates, the context between trust and horizontal inequality is not clear. Even though heterogenic societies seem more exposed to risk factors for high homicide rates, Lijphart (1977) shows that within certain institutional frameworks, heterogeneity does not need to be a threat to good institutions. Encouraging news from Fearon and Laitin (1996) tell that cooperation between ethnic groups actually outnumber interethnic violent occurrences 2000 to 1 in places like Africa and the post-Soviet world right after independence. That is very counter-intuitive considering the unease and tension that has been in these areas. It looks like high ethnic variation within populations contributes to cooperation in a positive way, conditioned on generalized trust and effective institutions. Fearon and Laitin (2003) also debunks the assumption that ethnic diversity increases the risk of civil war. In their cross-country study this effect went away controlling for GDP pc, so economy and good institutions seem more important than ethnicity when explaining conflict.

Employment

If the job market is very limited immigrants who are not fully integrated and lacking broader education, may turn to an eventual illegal market for jobs, with lower salaries then acceptable. Some would say this breaking of the law lowers the threshold of committing more crime, and shortens the path to violent crime (Reid et al., 2005 p. 760). This might be a larger issue in states with bad policing and less efficient welfare along with other institutions. E.g. does the Scandinavian inclusive welfare model offer better alternative solutions to unemployment than crime, such as education, benefits and applicant programs. Reid et.al. (Ibid.) only see homicide as a problem somewhere down the line where criminal milieus can evolve. Organized property crime is often the first step into a criminal career, only escalating into violent crime where gangs develop. Even then, violence is mostly kept within these groups. It is not yet clear why immigration should create crime. Most migrants *"... do not only "take" jobs, they also "make" jobs that the native-born obtain.*" (Reid et al., 2005 p. 776). In this way, local population benefit from immigration because more new businesses are founded.

Ruud Koopmans (2003 p. 2) finds that in the Netherlands and Germany ethnic minorities commit crimes more often than is to be expected on the basis of their percentage of the overall population. In Germany, 27 % of the imprisoned population in 1997 was of non-German descent, whereas 53 % of inmates in the Netherlands in 1998 were foreign-born. However, this observation is not easy to explain. Offences of immigration law can only be committed by foreigners. The overrepresentation of high risk groups in minority communities also contribute to the explanation. Immigration and crime has been a highly prioritized issue in the EU for the last ten years. The third of the unions' basic principles states that *"... employment is a key part of the integration process*" (Council of the European Union, 2004 p.20). The rate of unemployment and welfare dependency among immigrants is known to be high both for first and second generation due to failing integration. This is not how unemployment is distributed in the population of the United States and Canada, but seem to be more of a European problem. In recent years, getting diasporas self-sufficient has been priority for countries like the Netherlands and France. They have dedicated themselves to a policy of making immigrants independent of the state (Joppke, 2007 p. 4).

Democracy

Michael Mann (1970) thinks democracies have built-in mechanisms making them particularly vulnerable to violence and violent crime in multi-ethnic environments. Maybe the supposedly positive effect of immigration on homicide is due to democratic rule? Autocracies (Karstedt, 2006 p. 63-4) are assumed more successful in keeping tensions under control, and therefore show lower levels of violent crime. It seems like (Karstedt, 2008 p. 206) some characteristics of the democratic state during transition from autocracy to democracy makes society more violent. In this process people experience liberties they are not used to, inequality become more visible and spread throughout society at the same time social control decreases in comparison to autocratic rule. Institutions like law, welfare and fiscal systems are changing. Social inequality is no longer controlled by the state. A single elite do not get to have the largest slice of the cake for themselves, but maybe your neighbours suddenly move up the socio-economic ladder. A more open market economy may facilitate people to take more chances, but also opening for more inequality. A society in transition lacks safety. Autocratic regimes may keep capital away from the people, like suggested in the "*Dictators Handbook*" by De Mesquita and Smith (2011). They underline the importance of controlling for inequality when including GDP pc. in any analysis. It is crucial to control for disproportionately distributed wealth, because people may still be deprived even though the country gets richer. It is not democratic institutions that make people violent, it is the transitioning process and adaptation to these new institutions. Susanne Karstedt (2008 p. 207) also sees *"… diversity of beliefs and patterns of behaviour*" as hard for new institutions to comprehend with less authoritarian control. If institutions lose legitimacy, the foundation of trust starts to erode.

Mann (2005 p. 4) thinks autocracies should handle multi-ethnic societies by using "divide and rule" principles. This he explains by comparing the autocratic state to a tiler, having to make different people fit together side by side with fugue separating groups. Democracies remove the fugue between the tiles, letting them blend into each other making more of an abstract painting. Policy focuses on differences being visible and accepted. Mann (Ibid.) thinks this makes them vulnerable to violence – especially ethnic violence – because oppositions interact a lot more frequently and freely. This is also studied more explicitly by Chu and Tusalem (2013 p. 268), saying government legitimacy is essential to keep order, peace, social cohesion and stability. They find a positive correlation between homicide rates

and political instability (Ibid. 267) which coincides with states transitioning from autocracy to democracy having more violent crime.

Conflict theory may be useful in explaining how Europe is challenged in the process of lowering homicide rates. As economy is globalizing, economic inequality is increasing in the West. The gap grows wider between rich and the poor on a global basis, including the OECD. Globally, the larger group of poor, economically dependent countries fall behind. LaFree and Tseloni (2006) use conflict theory to understand the dilemma of the rich getting richer. They find a u-shaped pattern where democratization increases violent crime rates but strong democratic societies get lower homicide rates in the end. Looking for an alternative explanation for this, I will test if migrants choose host courtiers based on violent crime rates. This will be addressed in the robustness check by a Granger causality test (Granger, 1988) that explores the direction of the correlation between immigration and homicide rates. If no systematic relation is to be found for low homicide rates and high migrant stock, the next most likely theory seems to be the democratic transition hypothesis.

H2: The effect of immigration on homicide is positive for given levels of income inequality.

The issue at large is phrased in a clever way by Mr. David Miller as he writes; *"... the public debate on immigration generates much heat, but little light."* (Miller, 2016 p. 2). This states that immigration seems to be a popular topic to scratch at the surface for both politicians and media. Still very little academic research is addressing the question spot on; does more immigration lead to more homicide? There may be problems linked to trust, fear, xenophobia and taboos, but I am not convinced by Mr. Trump that we should fear violence increasing in society just because of more immigration.

Here are the main points of positive theory:

a) <u>Ethnicity</u> is central as no matter ethnicity, immigrants does over all seem to work more than the local population. Legal immigrants pay taxes and contributes to the economy and illegal immigrants cannot live of benefits because they have no rights. High ethnic heterogeneity is not proven to increase economic inequality. Homicides also happens more within one ethnic community than between them.

b) <u>Trust</u> comes with economic stability. With immigrants and more ethnic diversity the economic efficiency might increase and therefore create higher trust.

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c) <u>Employment</u> is not a zero-sum game. Immigrants tend to have lower payed jobs than locals, but are also more satisfied. If unemployment is not a huge problem to start with, immigration is only adding to the work force bringing more tax money to the state.

d) Conflict theory say a process of <u>democratization</u> bring less trust and more violence for a period, but the turn out will be higher institutional predictability, safety and lower homicide rates than before.

Based on this summary, my second hypothesis states as follows;

H0: There is no positive effect from immigration stock on homicide rates, and therefore no reason to associate immigrants with high risk for committing murder.

Methods

This study uses time series, cross section (TSCS) data for roughly 157 countries for the 1995-2014 period. Since the dependent variable is a continuous measure, I use standard OLS regression. TSCS data typically suffer from autocorrelation and heteroscedasticity, which requires correction. Newey-West standard errors (STATA) account for these (Neumayer, 2005). Considering eventual spatial correlation within the country sample, I also use an xtscc regression in STATA. By estimating pooled OLS with fixed effects, which is based on the Driscoll and Kraay (1998) standard errors, taking into account the problem of cross country dependence. Policies on crime and the movement of immigrants can be spatially dependent.

There are about 195 countries in the world today, depending on who is to be counted as legitimate. The dataset includes 157 countries. This many units increase the chances of finding representative cases along the entire spectrum of the immigration and homicide interaction. Both autocracies, democracies, rich, poor, welfare and developing countries are all in the dataset. I might have problems ensuring good quality of data since the data reporting may vary a lot. It is difficult to control for geographical dependencies like areas of e.g. drug criminality and terror warfare, but it can be done to some extent by spatial estimation. Every country agrees to some extent what a homicide is, and it is more often a matter of counting bodies than interpreting subjective opinions. Looking at immigration and crime using all available countries may therefor give useful information despite reporting errors. Lee et al. back this decision by saying; *"... the effects of macro-level factors (e.g., social and economic policies) on violent death rates in a population are shown to be more significant than those of micro-level influences (e.g., individual characteristics) ..."* (B. X. Lee, Marotta, Blay-Tofey, Wang, & de Bourmont, 2014). Migration is a global phenomenon. It is on the agenda of world leaders, politicians and citizens in large majority of countries and it is an issue that forces states to interact and cooperate on a more global level. It would be limiting therefore only to look at a selection of cases.

I use a longitudinal design with the largest number of years possible. I expect the data points to be dependent on their value one year earlier, in other words a one year delay in the effect. Therefore, the data is lagged by one to prevent spurious correlations between variables

trending over time. I run a Wooldridge-test (Wooldridge, 2010) looking for first order autocorrelation and the results are significant; meaning there are first order correlation in the data. Also, a Wald-test for no autocorrelation was then run and rejected with an F of 23.23. Probability F of 0.000, establishing autocorrelation. This is why I estimate Newey-West standard errors, accounting for serial correlation (Wooldridge, 2010) and heteroscedasticity (Newey & West, 1987).

Having 20 years of data is an acceptable number when using country fixed effects. Thus, I use both time- and country fixed effects in both the world- and OECD sample. By adding country fixed effects, I capture unmeasured heterogeneity within the units over time. Immigration and homicide is phenomenon expected to be very dependent on the country it concerns. Cross country autocorrelation or "spatial" dependence (also known as a neighbourhood effects) will be controlled for with xtscc spatial autocorrelation using fixed-effects with Driscoll-Kraay standard errors (Hoechle, 2007 p. 9). This considers larger unit variation (Oneal & Russett, 2005 p. 304), meaning measurements from different locations may be dependent on each other. Migration- and homicide rates are likely to be dependent on the countries surrounding each state. Borderline states and co-operations (both economical, trade union, aid-program, globalized production) like NATO are likely to affect policy for all parts.

In the first test, it is important that the main variable get a chance to speak for itself. Therefore, only three control variables are included in addition to migration stock in the first two columns. As I progress, more variables are included based on solid theory and spuriousness will also be tested in the end by a robustness check to be found in the appendix. The analysis uses time- and country-fixed effects for all estimates and the same variables are included for both samples. To safeguard against country specific variations not specified by the model even with spatial correlation estimates, the number of countries are cut. Choosing the OECD seem defendable since immigration has increased especially to richer western countries. The problem with the world sample is a too large N (157 countries) relative to T (20 years), called a "Nickell-bias" (Nickell, 1981). The number of years are too few to extract statistically significant results with fixed effects given the large amount of countries. N should ideally not be greater than T for STATA to sort out trends from white noise. In the OECD sample the number of countries are less (33), still slightly too many. Latvia is taken out of the OEDC-sample, because it joined the cooperation as late as 2016, and leaves is no data

available. All other countries that joined after 1995 are counted in after the year of membership.

The reason for using the World Banks' Development Indicators (WDI) as main source of data, is that there is no other database with such a range of coverage of both time and countries. It uses standard ways for assessing data quality legitimized by internationally accepted guidelines, including the United Nations Fundamental Principles of Official Statistics. The WDI has gathered data from a total of 217 countries and territories, covering all countries of the world. Their datasets are not complete for every country, but they consist of information from different sub-sources during an impressive period of time from the 1960s' until 2015. Updates are also frequent (seasonal) and cover many different topics. But the WDI does not collect political data. It is necessary to look other places for variables like "poliarchy", "law and order", "control of corruption" and "civil war". Besides this, Jerome L. Neapolitan (1997) assigns WHO as the most reliable data source. Still I do not follow his advice using only WHO because their data do not encounter Asian and African countries nearly as well as South-America for instance. This seem likely to create unnecessary spatial bias in my analysis. Interpol also gathers data on homicide, but for some countries they include attempted murders. This I am not interested in looking at, because not all nations include attempts (Neapolitan, 1999 p. 260). Another problem that cannot be controlled for, but must be considered while interpreting the results is nations underreporting homicide rates. Intuitively this becomes a problem in the more autocratic states and in countries with badly organized or weak institutions. Such inconsistencies will be controlled for in the robustness check by including a measure for regime type taken from the V-Dem project (Board of Principal Investigators, 2016) to measure the degree of democracy.

Main variables

The homicide rate can be a hard indicator of the level of social cohesion and trust. Homicide and crime determine social capital and other processes in society that creates stability. Where there is no trust, people do not organize and chaos may easily break out as citizens feel they stand alone against power, authority and their unknown neighbours. Homicide is a strong measure of violent crime because it is highly likely to be reported both to- and by the police. It is a serious matter with tough punishments by law. The World Bank writes on its' information sites; "

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"Intentional homicides (per 100,000 people) are estimates of unlawful homicides purposely inflicted because of domestic disputes, interpersonal violence, violent conflicts over land resources, inter-gang violence over turf or control, and predatory violence and killing by armed groups. Intentional homicide does not include all intentional killing; the difference is usually in the organization of the killing. Individuals or small groups usually commit homicide, whereas killing in armed conflict is usually committed by fairly cohesive groups of up to several hundred members and is thus usually excluded." (The World Bank, 2016)

The World Bank, uses data from the UN Office on Drugs and Crime's International Homicide Statistics database. The data covers only murders registered with a cause of death entered. This includes first- and second degree murder, manslaughter and infanticide (Nations, 2003 p. 81). Data are gathered from national criminal justice sources together with public health data from both WHO and the Pan American Health Organization. Countries with higher homicide rates like South-Africa and Central America have experienced an increased rate during the past years, and the reason is believed (The World Bank, 2016) to be organized crime like drug and gun traffic.

There is more than one reason for looking at violent crime in the form of the international homicide rate. Not only is the number relatively easy to gather and report for government and statistical international bureaus, it is also a measure often used by news media and politicians. According to the UN; *"Homicide is the most readily measurable, clearly defined and most comparable indicator for measuring violent deaths around the world"* (UNODC, 2013 p. 25). Homicide is easy to quantify by the number of dead bodies; it is stigmatized as a felony on a global basis and approximately equally defined all over the world. Fajnzylber, Lederman and Loayza argues the same;

"... the type of crime that suffers the least from underreporting and idiosyncratic classification is homicide. It is also well documented that the incidence of homicide is highly correlated with the incidence of other violent crimes. These reasons make the rate of homicides a good proxy for crime, especially violent crime." (2002 p. 8)

In this thesis, I want to understand how homicide rate is effected by the national immigrant stock. Measuring "migration", I am using both stock and flow. The migrant stock data are collected in 5 year periods. Therefore, I interpolate the missing years. I divide the stock of migrants by the total population to get a percentage, and I do the same with migrant flows. Since both variables are highly skewed, I use the natural logarithm to reduce the effect of extreme values. The results using the interpolated data and the original remain very similar,

as demonstrated in figure 4 in the appendix. The reason for this step is to avoid biased results since the mean value is unrepresentative for the selection. The logged values take extreme measurements into consideration, creating better prediction on the mean value. Data are collected from 1995 until 2014 on a yearly basis with values stretching from zero to about 140 homicides pr. 100k people. WDI acknowledge homicide data collected by the World Health Organization (2001) as the most valid and reliable (LaFree & Tseloni, 2006 p. 32). LaFree and Tseloni (2006 p. 41) did too study international homicide, finding that 87 % of the variation in rates was due to country fixed effects rather than over-time differences.

I use immigration stock as the main independent variable explaining homicide rates. The stock appears more useful than the flow, since I am looking at trends over time, and the path to committing a homicide is thought to happen over some time too. Migration data is gathered form the World Bank, which actually did not release such a major dataset as this one until late 2012 (Collier, 2013 p. 38). Officially It is labelled "international migrant stock (% of population)" and includes all people born in another country than the one they currently live in, including refugees. WDI get the data from the United Nations Population Division, defining migrants as *"...economic migrants, that choose to move in order to improve the future prospects of themselves and their families"*, and refugees as "*having to move if they are to save their lives or preserve their freedom*" (The World Bank, 2016). Data collection is done every five years from 1995 up until 2014 and varies between 0 % and 90 % of the total population.

Migrant stock is based on how many in the foreign-born population that have residence in a country they were not born in (The World Bank, 2016). Not every state keeps such records, so when this is not available, data on foreigners; citizens of a country other than the country in which they reside, are used instead (Ibid.). This is done for about 18 % of the countries. There were nine countries with no information in 2008; amongst these were China, the Democratic Peoples' Republic of Korea, Eritrea and Somalia. Since the WDI report immigrant stock data in quintiles, I interpolate the values in between the 5-year periods.

Control variables

Quantitative analysis is a tool to look for empirical patterns. It is still useless without generalizing findings based on theory. Christopher H. Achen underlines the importance of *"... none of the independent variables causing each other in any substantial way.*" (Achen, 2005 p. 329). That is important, because spurious effects within a regression will be caught in the

error term and make the confidence intervals deviate from their real scope. A basic model should strive not to exceed three independent variables to be able to make "*graphical analysis and partial regression plots to find the perfect line, non-linear fitting*" (Ibid.). This is done in table one column one and two. Oneal and Russett (2005 p. 295) adds that "*...the great danger with limiting analyses to no more than three independent variables is that the result may end up as numerous islands of theory without knowing their common ground, relation or relative importance.*" Apart from the three main variables, I add two more relevant variables in later models. My basic model builds on positive and negative theory together, kept as simple as possible. There is no point in controlling for factors just because they may impact the dependent variable, I want to discover the effect on the dependent- *through* the main independent variable (Oneal & Russett, 2005 p. 295). My goal is not to control for everything that explains homicide, then the effect of immigration would fade away. I am only looking to explain if- and how immigration effects the homicide rate.

My first major control variable is democracy. I think democracy may contribute to a too negative effect of the immigration stock in developed countries like the OECD, but a too positive effect on the global sample. The transition from autocracy to democracy is associated with high homicide rates because of the comprehensive social and institutional changes it brings. As democracy stabilizes (Neumayer, 2003 p.619) homicide rates are expected to fall again. Autocracies have strict control over their citizens so homicides may not be such a problem, or they might be underreporting. The democracy variable is a scale catching both countries transitioning, autocracies and democracies. Downloaded from V-DEM (Board of Principal Investigators, 2016) the measure is continuous, made up of 100 points. One drawback is that strong states in either extreme ends of the scale might not be caught as well as the intermediate states. Degree of democracy is measured on seven main levels of state rule; "*... electoral, liberal, participatory, majoritarian, consensual, deliberative, and egalitarian*" (Board of Principal Investigators, 2016). "*... Regular elections, judicial independence, direct democracy, and gender equality*" (Ibid.) are also evaluated. Data are available from 1995-2014 through yearly collections.

Measuring quality of governance along the lines of democracy-autocracy is risky according to Paul Collier. "*Incumbent rulers are often able to manipulate elections so that they meet the appearance of legitimacy without threatening their power*" (2013 p. 183), he writes. This may be causing autocracies to show low homicide rates, and it may also be as Lee et al. writes, that

"...the great rise in interpersonal violence following the spread of democracy throughout the world is an after-effect of the crumbling autocracies, of which Russia is an example. And according to the respective culture, it manifested largely in the form of escalating homicide rates. Were the repressive autocracies, then, less violent? Few would argue that they were, which points to the sudden "spike" being merely a transfer from one type of violence to another." (B. X. Lee et al., 2014 p. 735). Maybe democracies are not more violent than autocracies even though homicide rates increase, it might just be violence changing into homicides from a different form. In any case, since democracies are more tolerant and welcoming of foreigners, and because immigrants may seek out democracies, I control for regime type.

To control for wealth, Gross Domestic Product per capita is a much-used proxy. Data are provided by the WDI and measured in constant US 2011 dollars for best comparability between countries. There is information for 20 years merged from the World Bank and OECDs' National Accounts. Numbers are made by dividing the product of all capital value created on national bases, by the midyear population. To correct skewness in the variable, GDP pc is log transformed. Wealth is mentioned in negative theory as a protection against negative effects from inequality. When a country gets richer, some scholars like Jeffrey Sachs (Sachs & McArthur, 2005) argue there is more resources to spend on the poor and e.g. should more aid money be given to end extreme poverty. Others, like William Easterly (2006), thinks corruption and inequality must be taken into account to get the full picture. Countries with lower GDP pc. are expected to report higher homicide rates because the state will have less resources to put into public goods like law and order. If this is the case, trust in institutions may fall apart and fear because of insecurity may cause chaos and increased homicide rates. If immigrants contribute to a larger working force, more local businesses and tax income, GDP may be contributing to negative effects of the immigration stock on homicide. If, as negative theory say, immigrants cost society by acquiring benefits, integration and help, and contribute to more inequality by systematically joining the lowest socio economic group, then GDP per capita might interfere with the effect of migration on homicide if not included. Thus, controlling for income captures a broad array of factors associated with immigration. Income per capita captures the level of development, which could explain homicide in a variety of ways, and it is associated with higher stocks of immigrants. Higher income per capita reflects good institutions, strong state forces, and higher opportunity costs for people engaging in violent behaviour. Also, level of education and more positive aspects of strong societies can be captured through this proxy.

The third control variable is population size, logarithmic transformed. In theory, sparsely populated regions are expected to have fewer homicides because of fewer interactions between people, and less opportunities for conflict. This is referred to by Neapolitan (1997) during the global theory part, as opportunity theory. I do not have good enough data to be able to say if a large share of men between 16 and 26 years of age (a high-risk group writes Neapolitan (Ibid.)) in the migration stock is causing immigration to have an assumed positive effect on homicide rates. What I will look at is how state power may find it easier to keep order the less people there are to rule. I suspect population size to cause some positive effect on homicide rates through the migration stock because as more foreigners settle, the larger the population. The variable count all people living within a country regardless of legal citizenship or not. It is measured mid-year, merged from both the United Nations Population Division and National Statistical Offices together with Eurostat's Demographic Statistics and the Secretariat of the Pacific Community (The World Bank, 2016).

To these basic controls, I also subsequently test civil war and years of being at peace. Civil war in the host country is not exactly a pressing problem in the Western Hemisphere and the OECD especially, but many other nations might experience it triggering high homicide rates. Countries with civil war ongoing are thought to have high homicide rates even though large scale organized murders are not counted in the World Bank data. Rivera (2016) says as a part of negative theory, that during civil war there are so many conditions of conflict present that homicides on the one to one scale will also increase in society. I will test this by including civil war as a variable. The positive effect on homicide might be very strong, also showing through the immigrant stock because of traumatized refugees emigrating. I also assume a neighbourhood effect of civil war countries because of weapon sales. Melvin and Carol Ember (1994 p. 630) sees a connection between so called "aggressive training" during war and the homicide rate. This occurs in countries at civil war as parents bring up their children to defend themselves violently in a state of chaos. Luckily we can control for a neighbour effect to some degree with spatial correlation estimates. Still it may not be influencing the migrant stock as much as it effects the immigration flow. Hence, I include flow in a robustness check. Civil war estimates are gathered from The UCDP Group (2014). A score of one equals 25 deaths or more registered as a direct cause of civil war and 0 if not. Apart from ongoing war, I also control for the legacy of peace by including a count of peaceful years since the last civil war at the 25-death threshold. I expect the positive effect of

war on homicide rate to fade off as the years go by and chaos ends. Having tested a global sample, I also test a sample of Organization for Economic Cooperation and Development (OECD) sample of countries.

The issue of immigration and crime can be due to reverse causality. Immigrants may choose to settle in higher numbers in countries with low crime. If this is the case, then the migrant stock will correlate negatively with crime. To eliminate the issue of causality I use the Granger Causality test (Granger, 1988) to examine the data. Running the test on both the world and OECD sample, I ask if homicide increase migration stock or migration stock increase homicide? Looking at the direction of causality in the data, an F-test shows the strongest predictor those two. In none of the samples are there any systematic patterns. Migrants does not seem especially concerned with violent crime rates when choosing their destination. Other criteria must be more important. This goes against what was hypothesized in negative theory by Avison and Loring (Avison & Loring, 1986); that more ethnic variation will create a more positive effect of vertical inequality on homicide.

Interactive effects

As the theory discussed above suggests, income inequality is shown to be a big factor explaining homicide. Apparently, frustration is high if inequality is visible and the lowest socioeconomic group is marginalized. To this date, there are no good quantitative measures of the horizontal inequality mentioned in the theory section, it may only be visible through country fixed estimation as coefficients change controlling for within country variation. Vertical inequality is much easier to operationalize. The most common measure is GINI, looking at the economic income distribution within every single country. Neumayer sees the possibility of *"... country-specific fixed effects simultaneously affect(ing) both inequality and crime, such that inequality spuriously picks up these effects, if they are not controlled for."* (2005 p. 110) So maybe the inequality measure is not a linear effect, but dependent on several country specific variations. It then become highly relevant to check if the effect of immigration on homicide might differ with various levels of inequality. If this is found, it can explain why immigration to highly developed countries like in the OECD where inequality is low, has a different effect on homicide rates than in poorer countries elsewhere.

I use the GINI index to capture the effect of inequality. Since immigration might be associated with rising inequality, I control for this factor as well as examine the conditional effect between inequality and the immigrant stock on homicide. It might very well be that

immigration stock is problematic at increasing levels of inequality. Since GINI is measured annually it is interpolated. This variable is also from the World Bank Indicators and explains how income is distributed among the population on a scale of "perfectly equal distribution" (0) and "perfect inequality" (100). If more inequality increases social cohesion, envy and frustration, it might indirectly increase homicide rates as well. Unaccounted for, vertical inequality might cause a too positive effect on homicide through the migration stock. New immigrants are thought to be overrepresented in the lower socioeconomic class in richer host societies. A positive association between economic inequality and homicide rates is probably the most consistent finding in the cross-national homicide literature (LaFree & Tseloni, 2006 p. 40).

Analysis and results

I begin by estimating a margins plot (see "figure 17" pg. 59) with the estimated distribution of countries based on their homicide rate and migrant stock. No country has the combination "high homicide rate" and "high migration stock". Even though we cannot say immigrants cause lower homicide rates, at least it is not possible that they cause higher rates. Looking at some outliers, Syria and the nearby region has since 2005 reported the largest emigration numbers. Many of the international migrants in the analysis are expected to come from these areas because of civil war. Of course, immigration might have other effects on other *types* of criminal behaviour than just the homicide rate, that I cannot say anything about. I am investigating the specific relation onto homicide, because this is a much-used proxy for violent crime and fear in society used both in research, by populist politicians and the media.

Table 1 The global sample: Basic model with Newey-West and Driscoll-Kraay standard errors.				
	1	2	3	4
Dependent var = Homicide rate	NW	DK	NW	DK
% migration stock in total population (log)	0.07	0.07**	0.06	0.06*
	(0.05)	(0.03)	(0.05)	(0.03)
Income per capita (log)	-0.19**	-0.18**	-0.17*	-0.16**
	(0.09)	(0.08)	(0.09)	(0.08)
Population size (log)	1.61***	1.62***	1.64***	1.66***
	(0.15)	(0.08)	(0.15)	(0.07)
Democracy (V-Dem)	-0.17	-0.15	-0.14	-0.12
	(0.19)	(0.15)	(0.19)	(0.16)
Time by years		-0.03***		-0.03***
		(0.00)		(0.00)
Civil War ongoing			0.16***	0.16***
			(0.04)	(0.03)
Years of peace since last war			0.001***	0.001***
			(0.00)	(0.00)
Constant	24.08***	39.18***	25.01***	45.51***
	(2.9)	(4.84)	(2.89)	(5.24)
Observations	1,913	1,913	1,898	1,898
Number of groups	157	157	155	155
Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1 All estimates use time- and country-fixed effects.				

Table 1 examine the relationship between migrant stock and homicide rate for 1995-2014 using a global sample. In column 1 with Newey-West (NW) estimates only, there is no effect from migration stock on homicide. Such an effect first appears in column 2, where spatial correlation is accounted, the effect of the migrant stock becomes positive and statistically significant. This change indicates that accounting for spatial dependence could be important. Countries with a larger share of immigrants show an association with higher homicide rates. **This supports H1 saying larger share of immigrants in the population of a country increases the homicide rate**. The migrant stock refers to the share of the total population that is foreign-born with residence in a host country.

Looking at high income per capita, this seem to decrease homicide rates in both columns. The size of the population also turns out significant in column 1 and 2, but positive. I find no significant differences between democracies and autocracies in relation to homicide rates on a world basis. In column 3 the variables "civil war" and "years of peace after civil war" are included. These coefficients stay about the same as in column 1 and 2. It seems defendable to include them, because they are highly significant and positive. Logically, civil war causes higher homicide rates. It is more of an unexpected finding that higher numbers of peace years positively correlate with homicide when "civil war ongoing" is accounted. This may in fact be an effect of strong autocracies in poor countries that never have civil war. So, all in all the results of the control variables are reasonable. None of them is showing very counter intuitive results apart from the count of peace years, which strengthens the general findings. Table 1 establishes that there might be a connection between a large share of immigrants as a percentage of the population and a higher homicide rate. Substantively[1], a standard deviation increase in the share of migrants in a society increases the homicide rate by 8,5 % of a standard deviation of the homicide rate. This effect is clearly very small. Given the prominence of immigration in the populistic discourse in the North, I now turn to findings isolating the OECD countries.

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[1] I computed the substantive effects (real world impact) by multiplying the coefficient with a standard deviation of the x-variable, and then judging the product against a standard deviation of the y-variable.

Table 2
OECD sample: Basic model with Newey-West and Driscroll-Kraay standard errors.

Dependent var = Homicide rate	1 NW	2 DK
% migration stock in total population (log)	-0.08	-0.06
	(0.1)	(0.11)
Income per capita (log)	-0.76*	-0.47
	(0.4)	(0.32)
Population size (log)	3.09***	2.97***
	(0.77)	(0.53)
Democracy (V-Dem)	-0.86	-1.01**
	(0.78)	(0.48)
Civil War ongoing	-0.02	-0.05
	(0.1)	(0.07)
Years of peace since last war	0.001	0.001
	(0)	(0)
Time by years		-0.04***
		(0.01)
Constant	-42.37***	31.33***
	(12.74)	(9.45)
Observations	510	510
Number of groups	33	33
Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1 All estimates use time- and country-fixed effects.		

In table 2, I test the effect of the share of the immigrant population on homicide for a sample of only OECD countries. Testing OECD countries only, reduces the effect of country heterogeneity in the previous analysis (table 1) because the 33 countries in this sample generally are homogenous on many counts. As seen here, the significant effect of immigrant population share is no longer valid. Instead, the effect has turned negative but not statistically significant. **I now have support for H0, saying there is no effect from a larger immigrant stock on homicide rate in a country.**

In column 1, income has a negative and significant effect, but controlling for spatial correlation in column 2 the effect goes away. Population size has the exact same positive effect as in the world sample. What is more interesting is how democracy now becomes significant in column 2. With the DK estimates, stronger democracies have less homicides, probably partly due to the sample of only OECD countries. This finding supports De

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Mesquita and Smith (2011); Karstedt (2008) as they write that it is the transitioning process from autocracy to democracy that creates violence because of the new institutions that has to be integrated to society. Maybe in the global sample, more states are going through such turbulent processes today, while for the OECD countries under one, the democratization process has come such a long way that homicide rates have settled. Also from positive theory; LaFree and Tseloni (2006) find similar results. In conflict theory, such a democratic effect is explained by an inverted u-pattern where in full democracies, homicide rates are expected to be at an all-time low. Further in table 2, a larger immigrant population share has no effect on the homicide rate. This is an important finding I will evaluate more later, in the discussion chapter.

In none of the columns are "civil war" or "years of peace" significant within the OECD. This makes sense, as there are very few member states with a score of one on these variables. Countries in the OECD that have civil war are Chile, Mexico, Turkey, Israel, Spain, and the USA. Since armed conflict is not being covered by the World Bank Indicators homicide rates, I choose to keep the civil war variable in the table to make the data broader. In South Africa homicide rates are as high as 44 killings per 100 000 people. Even though it is not at civil war, the fact that it has been once – may be causing problems today.

At this stage I try to identify countries that contribute to the effect of migration on homicide. By dropping them one at a time, the effect does not change and the change in direction is therefore not driven by any single country. The negative effect gets marginally stronger when dropping Australia, but not enough to make a difference. I then collapse the homicide rate for the OECD to look at trending through mean values. As figure 5 in the appendix shows, there was an upwards peak in 2010. To some extent this may be spiked by the terror attack in Norway July 22nd 2011, but many countries also join the OECD around this time. The rate going downwards again may show that these new member- countries changed how they counted and reported homicide rates after joining. All in all, there is a downwards trend over time. As immigration is increasing into the OECD this is an important finding.

To get a better view of the relation between homicide and migrant stock within the OECD, I create a scatter plot as shown in "figure 6" below. Countries like Mexico stand out once again; with high homicide rates but very little immigration. Reasons may be cultural and country specific, not to be explored this time around. Excluding Mexico would have given a

very different result to the regression, underlining how fragile estimates are using such a small sample. Luxembourg and Ireland are dragging the regression too, but in the opposite direction; high migrant stock and low homicide. USA has relatively high migrant stock and homicide rate together with some earlier members of the Soviet Union (Estonia), going against the main trend together with Japan. Japan has low immigration and low crime.
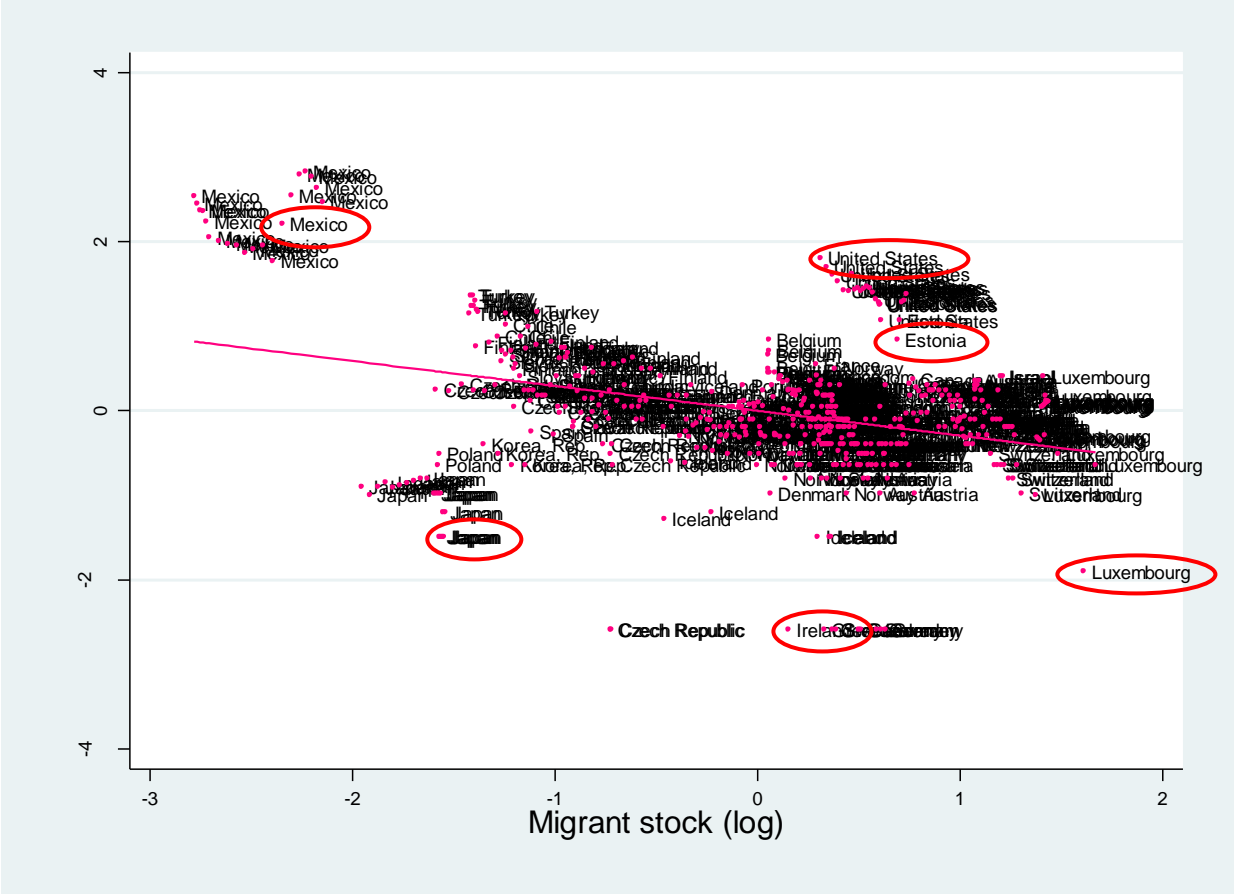

Figure 6: Scatter plot displaying how OECD countries place in relation to both migrant stock (x) and homicide rates (y), data from the World Bank (2016).

I now want to test if the relationship between high immigration and homicide might be altered by the third conditional variable; inequality. If migrants settle in host countries as part of the lower socioeconomic groups, this can create a more visible inequality. I do not state this as a problem unless the host country suffers from bad institutions. If the state is unable to secure the poor against marginalization, higher inequality may cause unease and more violent crime. I therefore think immigration does not need to cause more homicides by itself and neither do inequality. It is when both factors are present at the same time – in countries where

social security and welfare is not sufficient – that immigration and inequality may boost each other's effect on violent crime.

Table 3 below, show the conditional effects of migrant stock and income-employment- and socio-economic inequality on the homicide rate. The effect of migrant stock on violent crime is estimated by conditioning the stock-effect on level of inequality. Time- and country fixed effects are estimated with Newey-West standard errors, taking into consideration how inequality and homicide rates are fluctuating *within* the country units. I do not include spatial correlation estimates because they show the same results. In the case of high immigration and high income- or socioeconomic inequality, there will be more homicides. This is significant for both inequality measures, more for the world sample with more units, and socioeconomic inequality is statistically much more different from zero than the income inequality measure. So, the less access lower socioeconomic groups in society get to political power, the stronger the positive effect from immigration on homicide rates. **This supports H2, stating the effect of migrant stock on homicide rate is conditioned the level of inequality, and in my data, the effect is conditioned upwards**.

I suppose that if a state cannot control inequality issues to begin with, hosting migrants will not automatically solve these problems. In the case of zero immigration and high income inequality, I find homicide rates to go down, and the same goes for zero immigration and high socioeconomic inequality. The negative effect might be explained by policing being better in more unequal societies. The migration effect alone is different. High immigration to countries with no income inequality is expected to lower homicide rates. I suppose this effect can be driven by e.g. small island-societies with some immigration and little income inequality, or totalitarian regimes with bad reporting of both inequality and crime. High immigration where there is no socioeconomic inequality on the other hand - increases homicide rates. This is a very interesting finding. The pure effect of the migrant stock is now twofold, dependent on which type of inequality I control for. This indicate that inequality may be a more important indicator of violent crime in society than the migrant stock. This supports the work of Skarðhamar et al. (2011 p. 632) who predicted that *"… immigration in - and of itself, do not increase homicide*". My findings are important because I do address Neumayers' criticism on previous studies since I account for country fixed effects.

Table 3: Conditional effects of migrant stock and income- employment- and socio-economic inequality on homicide rate.				
	1	2	3	4
Dependent var = Homicide rate, log transformed with interpolation	World	OECD	World	OECD
Income per capita (log)	-0.34**	1.32**	-0.16*	-0.76*
	(0.13)	(0.64)	(0.08)	(0.40)
Population size (log)	1.46***	1.23	1.62***	2.75***
	(0.27)	(1.32)	(0.15)	(0.80)
Democracy (V-Dem)	-0.31	2.14**	-0.17	-0.88
	(0.20)	(0.84)	(0.19)	(0.75)
Civil War ongoing	0.12**	0.01	0.15***	0.02
	(0.05)	(0.10)	(0.04)	(0.10)
Years of peace since last war	0.001	0.001	0.001***	0.001
	(0.00)	(0.00)	(0.00)	(0.00)
% migration stock in total population (log)	-0.30**	-1.29*	0.31***	0.51
	(0.14)	(0.66)	(0.09)	(0.32)
Socio-economic inequality			-0.23***	-0.50**
			(0.07)	(0.24)
Log of % migration stock x Socio-economic inequality			0.11***	0.18*
			(0.03)	(0.10)
GINI	-0.01**	-0.06*		
	(0.01)	(0.04)		
Log of % migration stock x GINI	0.01**	0.02		
	(0.00)	(0.02)		
Constant	-16.07***	-0.63	-24.87***	-38.39***
	(4.75)	(26.52)	(2.86)	(12.97)
Observations	1,276	287	1,898	510
Standard errors in parentheses				
*** p<0.01, ** p<0.05, * p<0.1				
All estimates use time- and country-fixed effects.				

Running the table without country fixed effects gives the same results as Neumayer (2004) found; inequality show a positive and highly significant effect on violent crime until you control for within country variation. With fixed effects, this changes. It seems like inequality on its own does not breed violent crime. Something happens as inequality is high and the migrant stock increases. I want to test further if the effect of immigration on homicide rates is conditioned on the level of inequality. The margins plots in the appendix (see figure 7 and 8 and 9) show the migrant stock-effect on homicide fluctuating together with income- and socioeconomic inequality. See figure 10-13 for more details on the marginal effects estimations. Figure 7 show how income inequality increases the positive effect of immigration for low and high levels on a global basis. This is still a very small impact. In figure 8 the additional effect from income inequality is even weaker, but in the OECD income inequality increases the effect of homicide on homicide for low levels of inequality. That is not so surprising as inequality over all is less for the OECD than in the global sample. Figure 9 show the most interesting finding in this section; that on a global scale – socioeconomic inequality increases the positive effect of immigration on homicide *for all levels of inequality*. I therefor see socioeconomic inequality (access to political power to all socioeconomic groups) as a better control variable than GINI when explaining homicide. GINI is also not as well reported as socioeconomic inequality. It therefore has less data points.

There must be numerous ways for social, economic and political inequality to destroy social cohesion in society, creating problems that might lead to more homicides. Problems of bad institutions may be intensified by immigration, but if social inequality is under control, and country specific heterogeneity is less prominent like in the OECD, the effect of immigration on violent crime goes away. I display the score of every OECD country on the two inequality dimensions in figure 14 below. The most striking is how the scores are widely distributed around the regression line, with no clear effect of high values on one dimension causing high or low values on the other. Countries like the Ukraine have low income inequality in comparison to other sorts of inequalities. If Russians are systematically discriminated against, being poorer than the rest of the population, that would qualify as socioeconomic inequality. Azerbaijan has low income inequality, but high socioeconomic differentiation. Not so odd since the state is a former Soviet republic. In Bolivia, socioeconomic inequality is not that high, but income inequality is very prominent. This might be a difference in earnings between different sub-groups in the Bolivian population, because despite there being income inequality, access to political power is evenly distributed.

Also in Malawi GINI is high, with moderate socioeconomic differences. This may be explained by good social institutions. Without more in depth data on each country this is only speculations of course. There are many dimensions to the term inequality, and it cannot always be measured well enough through income only. Looking at Honduras and Haiti, both dimensions are high, but I cannot detect any overall systematic pattern between the two. Scandinavian countries place low on both dimensions. So, Scandinavia have low social and economic inequality in addition to a solid democracy, which effects homicides in a negative direction within the OECD. No wonder homicides are low in an area where all risk-factors are less high too. Scandinavian welfare stares are expected to be dragging the OECD analysis a bit, because it only consists of 33 countries.

Figure 14: Scatter plot displaying how countries place on the two dimensions; income- and social inequality. Data from the World Bank (2016).
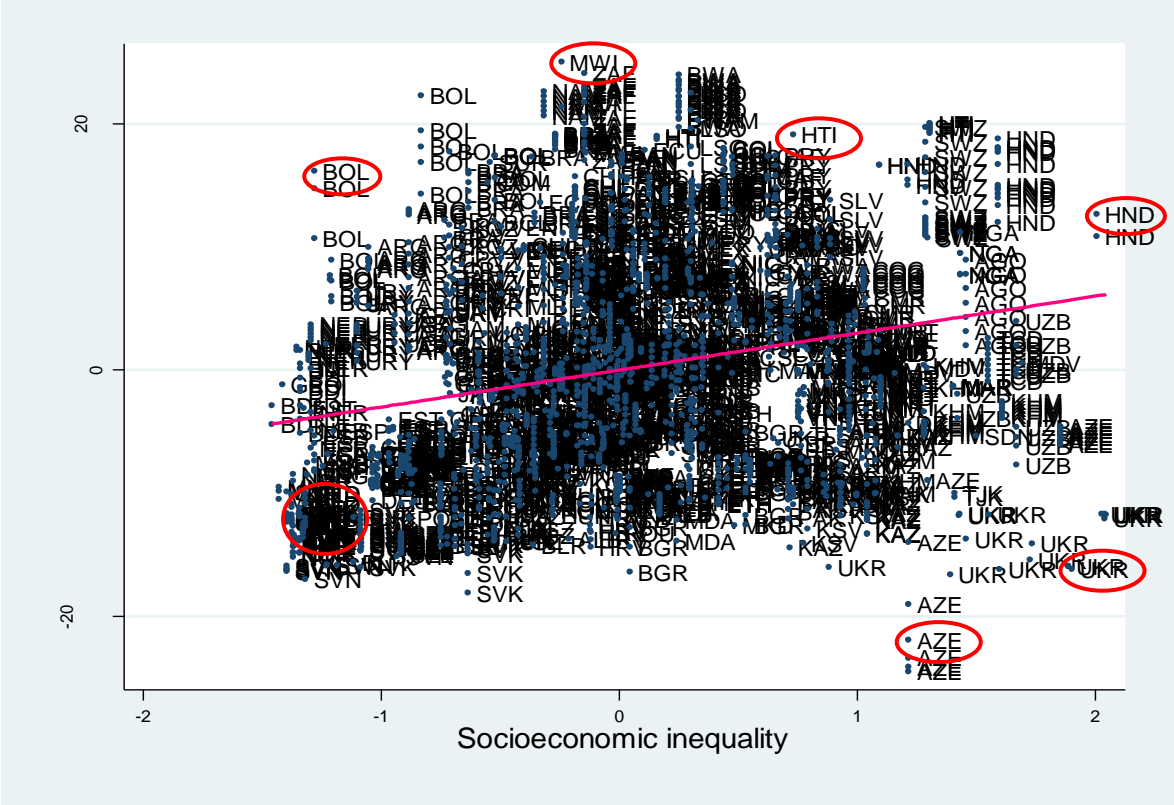
Robustness check

I now run a robustness check on the basic model for both samples, using theory to choose additional variables and maybe get a better understanding of the conditional effects from inequality on homicide and immigration. To see if my results are driven by a selection effect where migrants go to countries with less violent crime, I execute the Granger causality test. The result shows no systematic selection effect in my data. High migration does not explain high crime better than high crime explains large migrant stocks or vice versa. This might be because of too few data points, but I find no support for systematic selection. I now run the robustness table as shown in figure 15 (appendix); adding the variables "migration flow", "socio-economic inequality" and "unemployment rate" to the basic model.

Controlling for migrant flow:

The difference between stock and flow is that the flow may catch new immigrants and refugees much better than migrant stock. In the new model, column 1 show that adding flow drains a lot of the stock effect, but the stock is positive and slightly significant (10 % level). The flow variable on the other hand is highly significant (1 % level) and positive for the world sample. Using the same calculating methods as for the substantive migrant flow effect in table 1, I now find the real-world impact of migration flow. This shows that a standard deviation increase in the migrant flow to a society increases the homicide rate by 4 % of a standard deviation of the homicide rate. Even less than for the migrant stock. No effect is detected for the OECD-only. Many refugees may be moving from war-torn countries to the nearest state. The effect not being statistically significant for the OECD, is likely because far less refugees go there. Another aspect of controlling for migrant flow is that not all states have efficient control over who crosses their borders. A large flow may be caused by the state intuitions being weak. Inefficient boarder control or the rumour of such among migrants may give the impression that it is easy to immigrate to these countries. As more migrants without proper reason for a residence permit get in, it will also be harder to prevent crime for such countries with bad policing and inefficient policy operationalization.

Controlling for unemployment:

If immigration contributes to more people in the lower socioeconomic groups of society, this also means more unemployed people in states struggling with such. I therefore add this as a variable to the model. The unemployment rate is measured as share of labour

force without work, seeking employment while in suitable working condition (The World Bank, 2016). The variable is based on both nationally reported- and imputed data. It indirectly measures inequality and alienation from society – expected outcomes of long term unemployment. Maybe high unemployment makes society vulnerable to negative effects of immigration as more people are fighting in the job market. Immigrants may also be easy targets when blaming someone for lacking job opportunities. One shortcoming with this measure is that citizens holding several part time jobs can get just as frustrated as the unemployed because income is not sufficient to make ends meet, and they get no welfare. Neither do I expect new immigrants to be working immediately after arriving. I end up thinking unemployment is not suited to explain variations in homicide rates. In column 3 and 4, all the effect of migrant stock is gone, and unemployment is statistically insignificant to my table. This may be because it includes all sorts of unemployment, not only long-term. Data estimation vary a lot from country to country, sometimes including only active registered job seekers.

Controlling for socio-economic inequality:

Even though income inequality is considered *a* good indicator of homicide rates by some (Chon, 2012), it is not automatically a sufficient cover of the effects on violent crime alone. I get the impression that GINI may have some shortcomings reading the work of Neumayer (2005) ten years ago. My results support his finding that economic inequality is only statistically significant and positive when country fixed effects are not controlled for. When using country fixed effects; *"… income inequality is no longer a statistically significant determinant of violent crime"* (Neumayer, 2005 p. 110). The GINI has a bivariate correlation with socioeconomic inequality at only 0.2. I therefore expect different results. I include from the V-Dem dataset the variable "access to political power distributed by socioeconomic position", measuring the effect of income and wealth inequality on political power. The data is coded on a scale from 0 to 4 on inequality. A score of 4 means the wealthy have monopoly over political power (Andersson, Mechkova, & Lindberg, 2015). In column 5 and 6 migrant stock is still insignificant, but for the world sample, socioeconomic inequality has a highly significant negative effect, that is again lost looking at the OECD only. So globally there is an effect saying better access to political power to all socioeconomic groups in society – lowers violent crime. The reason for this not being detected for the OECD countries might be that the threshold of political power is much lower in richer states, at least on paper.

pg. 56

Discussion

This thesis has focused on the highly populistic political discourse that seems to suggest that high levels of migration will increase crime in receiving countries. I begin this discussion by summarizing my main results.

The world sample

First, I find an extremely small positive effect of higher migrant stock as a percentage of the population on homicide rates. This effect substantively is negligible. For a sample of OECD countries only, the effect goes away. This suggests that it is possibly poor countries receiving migrants that might face problems due to weak governments rather than rich countries.

Wealth also reduce homicide rates in the global sample. Monetary power will be more important to poorer countries, as the threshold for bettering living conditions and welfare is relatively low. Good integration of immigrants is also an expensive investment that do not create income in the state short term. Larger populations also have a positive effect on homicides. It may be that more people challenge state institutions and authority more. Civil war seems to be a suitable control variable for the world sample, and so does the count of peace years after the last civil war. Both show a positive and significant effect globally. This supports Rivera (2016, p. 92) as he says civil war and turmoil at one time may contribute to high homicide rates also later. Civil war is often an outcome of bad institutions, rulers and society. Rivera (2016) adds that civil war does much more than just increase homicides – it creates and breeds uncontrolled gun flow, institutional breakdown, unemployment and violent behavioural patterns likely to haunt countries even after the war has ended.

From the robustness check I found out that larger migrant flows on a global basis increases homicide rates. I assume refugee flows from war torn countries are larger globally than in the OECD, where no such effect was found. Also, less access to political power for lower socioeconomic groups in society is likely to increase violent crime on its own, and it is also detected a positive conditioning effect of such inequality on the world sample, where more inequality conditions the effect of immigration positively. However, the substantive effects of these findings are small.

The OECD sample

Interestingly, the effect of immigrant stock is negative and statistically not different from zero in the OECD sample. Reducing the number of countries minimizes the cross-country heterogeneity and keeps much cultural, economic and political differences between countries low. At the same time – fewer units can cause results to be more easily driven by single countries. But, as I drop one country at a time, changes are marginal. Looking at this selection explicitly therefore might be a better way of singling out the true effect of the migrant stock on homicides. In other ways, the OECD sample is much alike the global sample. More GDP per capita has a negative effect on homicides and larger populations increase homicide rates also here.

Positive theory clearly states that full democracies are going to experience less homicides. This I find support for in the OECD sample. In the world sample, there is no such effect. A larger Nickell bias for the world might be hiding the true effect, because of the large N (country entities) together with a small T (number of years) problem. One part of negative theory; social disorganization-theory (Alesina et al., 2000; Putnam, 2007; Rosenfeld et al., 2001) states that institutional breakdown will increase the risk of civil war because of transitions from autocracy to democracy or the other way around. I try to validate this to a highly limited extent by looking at the case of Chile ("figure 16" in appendix). The outbreak of civil war and democratic institutions becoming autocratic clearly coincide. Also, Mexico struggles with drug crime, corruption, illegal weapons and high homicide rates after having experienced civil war. Civil war has no effect in the OECD. Most likely because of very limited civil war within this sample. Chile and Mexico is among the few states that has had civil war, and they probably still struggle with some after effects like poverty, inequality and crime.

I cannot find proof or support for positive theory in my data, but I am not discarding it completely, considering there was at least no positive effect from immigration on homicide rates in the OECD. With stronger institutions, industrialized richer countries may have a better chance of integrating immigrants in both the job market and society. Immigrants do not only occupy already existing jobs, they more often than natives create new businesses too (Reid et al., 2005). I think immigration is a clearer benefit for OECD countries, compared to states outside this collaboration struggling more economically and politically with bad institutions and more inequality. OECD members are experiencing economic progress and

population decrease. This shows a need for a bigger work force and larger families, so immigration may be the solution.
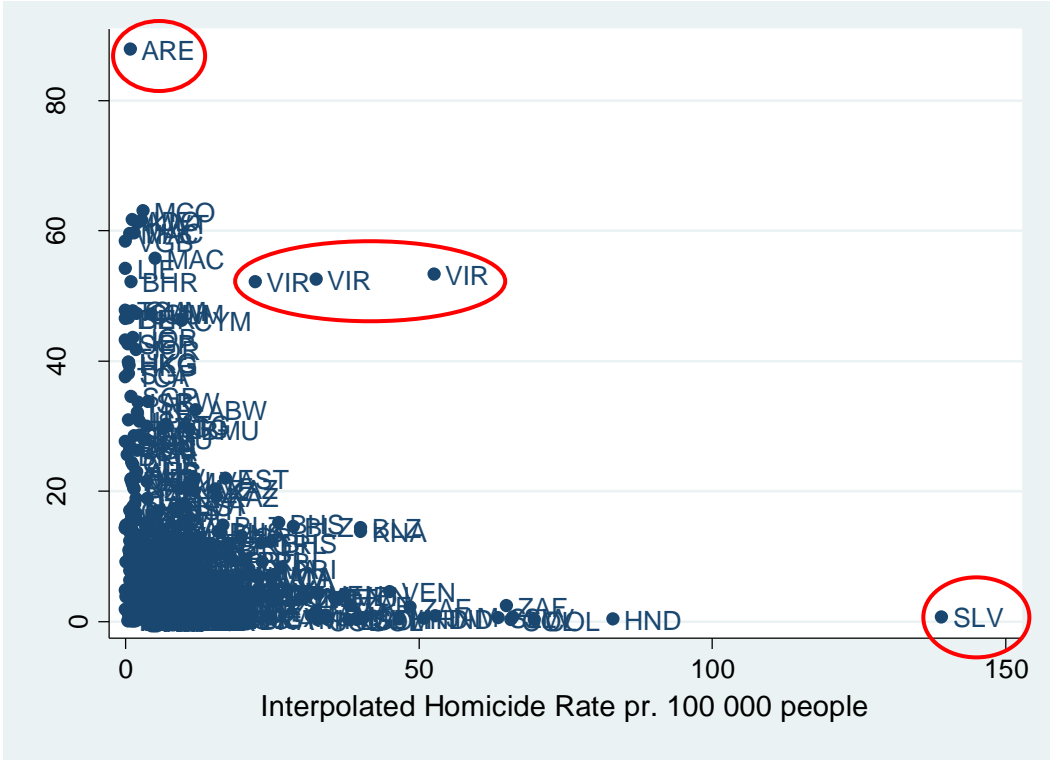

Figure 17: Scatter plot of homicide rates in relation to migration stock with the world sample.

As a final remark looking at both samples, I include this scatter plot seen in figure 17 above. This is the distribution along the two dimensions: homicide rate and immigrant stock for the global sample. It is no surprise that the United Arab Emirates score extremely high on immigration and low on homicides as mentioned on pg. 26. El Salvador who operates on the other extreme end of the scale sort of evens out the regression line with a high homicide rate and very little immigration. The outlier that might hide the more general effect of immigration on violent crime is the Virgin Islands (US.). The moderately high migrant stock and homicide rate might be explained by looking deeper into the history colonisation of these islands. I find no clear sign of higher migrant stocks systematically contributing to higher homicide rates. The plot shows a lot more "grey" effects than the black and white picture painted by many populist media and politicians.

Conditional effects from inequality

The conditional effects for GINI in the world sample show that when migrant stock is high and inequality also is high, there is a significant positive effect on violent crime. I suspect that where high inequality is already a problem, because of bad institutions. They will

not be able to handle an increase in population by new immigrants very well, neither would they have capacity to run good integration programs. The same effect holds for the OECD too, but is much less significant (see figure 10 and 11 in appendix). The income inequality effect stops already at low levels within the OECD. Weak states in poor countries may struggle with a positive migrant stock effect on homicide because of the inequality, but for OECD countries this does not play a part.

Conditional effect of access to political power based on socioeconomic group also has a positive and statistically significant effect. Where access to political power is more unequal between socioeconomic groups, immigration has a more positive effect on homicide rates. I suppose homicide rates will be high in countries that do not have good institutions for integration policies. Even though the rich will be able to use their wealth to protect themselves, homicide rates might increase for the lower socioeconomic classes. Chon (2012 p. 744) supports positive theory stating that *"… most criminal homicides occur within the same ethnic group."* The poor may take their frustration out on their own community if segregated from the rich. These effects however, do not hold in the OECD sample.

Conclusion

This study addresses the question of populistic rhetoric around immigration and crime. I have tried to understand this problem by looking at the best available data that will help make some judgement about the veracity of the "politics of fear" that seems to be driving the agenda of populistic parties and media. Using a global sample with data on the share of migration stock relative to the total population, and homicide rates from the World Bank, this study has found that there is very little support for the populistic claim. Particularly within the OECD countries, there seems to be no association between the rise of the immigrant population and violent crime. The results support the negative theory camp in the sense that there is a small positive effect globally, but that is not the whole story. This effect only occurs for countries where access to political power is unequally distributed among socioeconomic groups. Many researchers (Avison & Loring, 1986; Bennett & Lynch, 1990; Neumayer, 2003) say horizontal inequality lowers trust and social cohesion nationally, and this might be one explanation for the inequality effect found in this thesis. The results taken together do not find any effect supporting positive theory.

The global debate about politics of fear clearly draws a connection between immigration and violence. After having searched for a pattern indicating this may be true, I must conclude I was not able to obtain such. If a pattern of immigrants causing homicide rates to increase does not exist, then why is it still a hot topic in the media and for the speeches of populist politicians during election seasons? The political debate also seems to be most heated in richer Western countries, which makes little sense since the OECD is where the effect turns out most insignificant. Nobody mentions the overall trend of homicide rates going down while immigration is as widespread as ever before. Maybe the world just needs some time to adapt, and populist politics will begin to turn over a new leaf. At least one can hope that with the less populistic party winning the French election in 2017, there will be more focus on the benefits of immigration instead of focusing on the "politics of fear" from expected challenges.

One question that have come to mind during the process of this analysis is if choosing homicide rates as a proxy for violent crime is too much of a simplification. Rape, assault, violent theft and so on are measurements not covered by this thesis that may increase when the size of the migrant population grows. Such comparisons should be made in future studies.

It would also be interesting to compare the effect of refugees and non-refugees on homicide. It may be that more trauma following refugee-migrants leads to more violence. Another possibility is that refugees are the most motivated people to do well and do good in their new host countries and therefor contribute to a better society with less homicides.

Perhaps, the "politics of fear" has more to do with cultural factors such as traditional xenophobia, islamophobia, racist attitudes or other factors connected to economic globalization, than to real fears driven by realities such as violent crime. This is supported by Inglehart and Norris (2016) as they develop a "cultural backlash theory" saying less educated older white men that once had a privileged position in society, now are starting to feel marginalized in their own countries. This is especially true for Western democracies where immigration is changing traditional norms and values. This may be useful, trying to understand why, in countries like the Scandinavian – where economy is good, immigration is at a moderate level and homicide rates are decreasing – the establishment of new populist political parties are still advancing.

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Writing this thesis has been a great learning process considering source criticism, structure and ways to go about academic writing. I have also become more aware of the importance of being critical to statistics because there are so many ways of interpreting, preparing and selecting variables. Writing by myself has been a great way of learning by doing, and I am happy to say this last semester at NTNU Dragvoll has been one of the best.

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APPENDIX

Figure 4: Skewness of the migration stock before and after logistic transformation
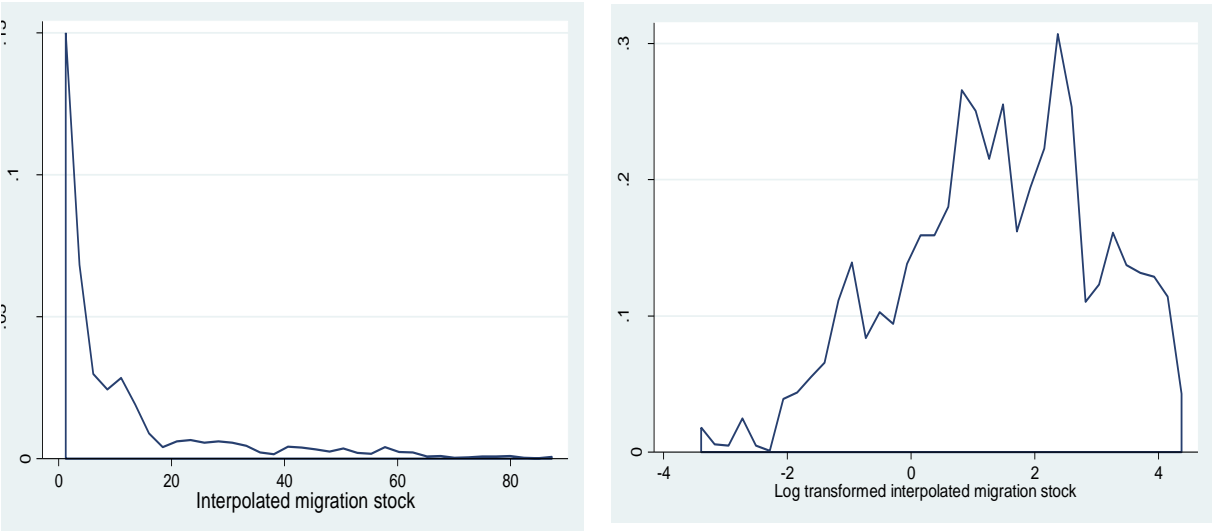
Figure 5: OECD homicides per 100,000 population, 1995-2014

Figure 7: Conditional effects of immigration stock on homicide rates dependent on level of income inequality for the world sample.

Conditional Marginal Effects of immigration stock with 95% CIs

Figure 8: Conditional effects of immigration stock on homicide rates dependent on level of income inequality for the OECD sample.

Conditional Marginal Effects of immigration stock with 95% CIs
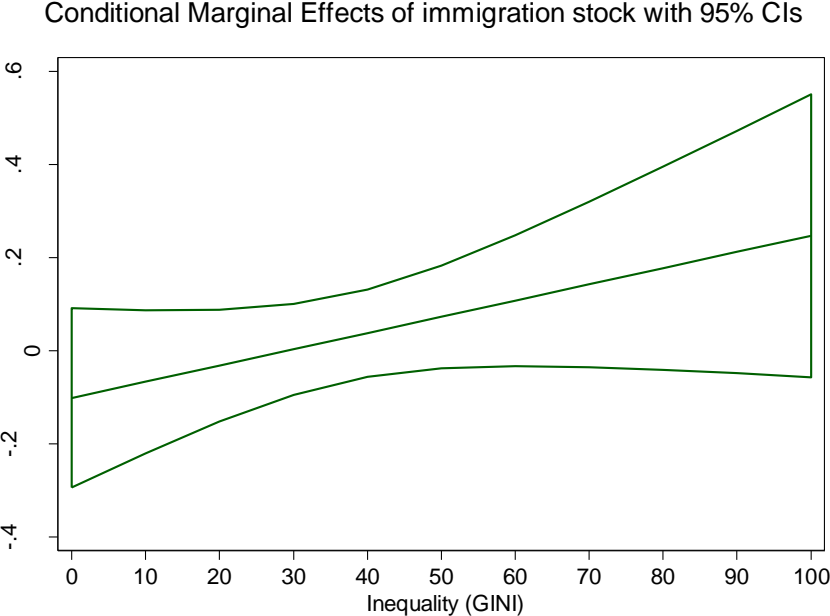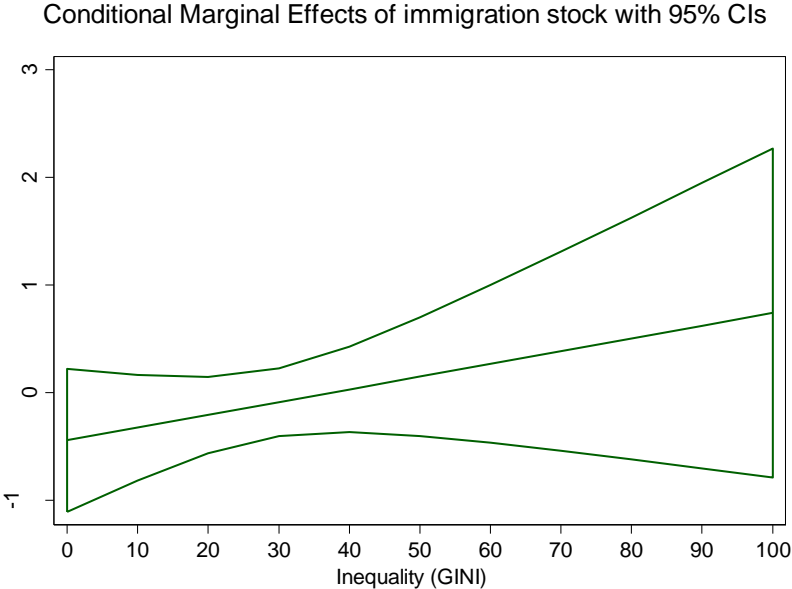
Figure 9: Conditional effects of immigration stock on homicide rate dependent on level of socioeconomic inequality for the world sample.

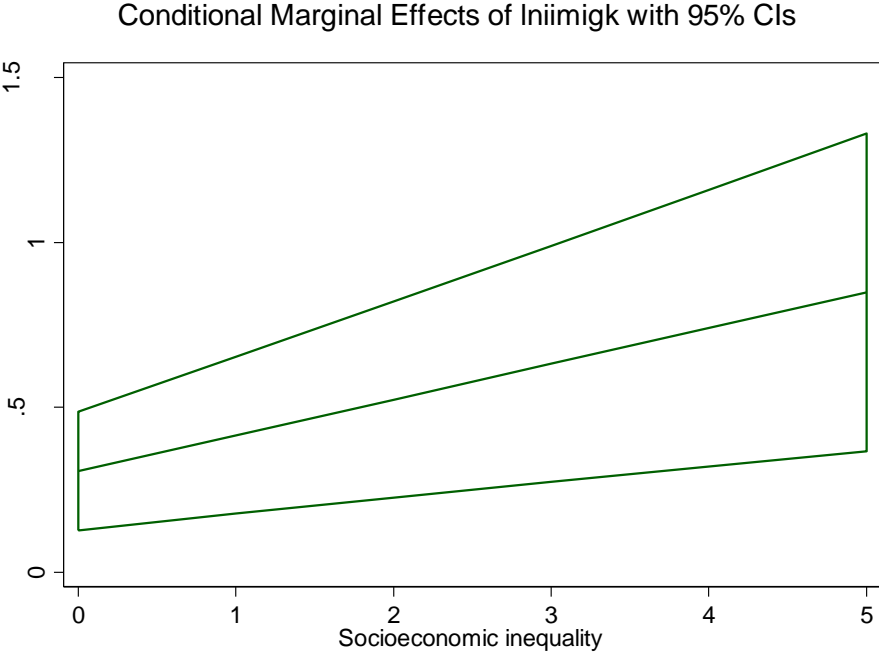Conditional Marginal Effects of lniimigk with 95% CIs

Figure 10:

		WORLD			
		Delta-method: The effects of the immigrant share of the population on the homicide rate conditional on income inequality.			
	Std. Err.	z	P>|z|	[95% Conf.	Interval]
1	0.1433277	-2.10	0.035	-0.5822920	-0.0204579
2	0.1170144	-1.98	0.048	-0.4609350	-0.0022470
3	0.0930115	-1.74	0.082	-0.3441063	0.0204922
4	0.0736148	-1.25	0.211	-0.2363055	0.0522593
5	0.0632168	-0.35	0.725	-0.1461418	0.1016635
6	0.0662028	0.72	0.473	-0.0822103	0.1772999
7	0.0811078	1.45	0.148	-0.0416396	0.2762971
8	0.1028755	1.82	0.069	-0.0145195	0.3887449
9	0.1280526	2.01	0.045	0.0059181	0.5078752
10	0.1549865	2.11	0.035	0.0229127	0.6304485
11	0.1829026	2.17	0.030	0.0379821	0.7549471

Figure 11:

		OECD			
		Delta-method: The effects of the immigrant share of the population on the homicide rate conditional on income inequality.			
	Std. Err.	z	P>|z|	[95% Conf.	Interval]
1	0.6591671	-1.96	0.050	-2.585920	-0.0020327
2	0.5316763	-2.03	0.043	-2.119005	-0.0348724
3	0.4270651	-2.01	0.044	-1.696933	-0.0228688
4	0.3655353	-1.76	0.079	-1.359299	0.0735727
5	0.3692885	-1.15	0.249	-1.149618	0.2979666
6	0.4366446	-0.48	0.633	-1.064595	0.6470198
7	0.5444901	0.02	0.988	-1.058931	1.0754310
8	0.6736519	0.33	0.738	-1.095046	1.5456210
9	0.8140460	0.54	0.587	-1.153176	2.0378260
10	0.9607609	0.69	0.493	-1.223694	2.5424200
11	1.1112960	0.79	0.430	-1.301699	3.0545010

Figure 12:

	WORLD				
	Delta-method: The effects of the immigrant share of the population on the homicide rate conditional on socioeconomic inequality.				
	Std. Err.	z	P>|z|	[95% Conf.	Interval]
1	0.0921360	3.33	0.001	0.1264111	0.4875776
2	0.1210758	3.43	0.001	0.1780273	0.6526358
3	0.1514298	3.46	0.001	0.2268717	0.8204656
4	0.1824936	3.46	0.001	0.2743249	0.9896867
5	0.2139583	3.46	0.001	0.3209924	1.1596940
6	0.2456700	3.45	0.001	0.3671759	1.3301840

Figure 13:

	OECD				
	Delta-method: The effects of the immigrant share of the population on the homicide rate conditional on socioeconomic inequality.				
	Std. Err.	z	P>|z|	[95% Conf.	Interval]
1	0.3211382	1.59	0.111	-0.1179653	1.140874
2	0.4126705	1.68	0.093	-0.1166065	1.501032
3	0.5056650	1.73	0.084	-0.1181135	1.864057
4	0.5994415	1.76	0.079	-0.1211533	2.228614
5	0.6936830	1.78	0.075	-0.1251044	2.594083
6	0.7882226	1.80	0.073	-0.1296400	2.960136

Figure 15:

Robustness check: Both the global and OECD sample adding new inequality measures and immigration flow using spatial correlation.						
	1	2	3	4	5	6
Dependent var = Homicide rate, log transformed with interpolation	World	OECD	World	OECD	World	OECD
Income per capita (log)	-0.17*	-0.52	-0.07	-0.55	-0.17**	-0.48
	(0.08)	(0.38)	(0.07)	(0.36)	(0.08)	(0.31)
Population size (log)	1.65***	3.40***	2.03***	2.99***	1.59***	2.90***
	(0.07)	(0.55)	(0.14)	(0.54)	(0.09)	(0.56)
Democracy (V-Dem)	-0.16	-1.02**	-0.11	-0.99**	-0.19	-1.01**
	(0.18)	(0.44)	(0.16)	(0.44)	(0.15)	(0.41)
% migration stock in total population (log)	0.07*	-0.07	-0.03	-0.07	0.06	-0.05
	(0.03)	(0.11)	(0.04)	(0.11)	(0.03)	(0.12)
Immigration flow by population	1.05***	1.32				
	(0.2)	(1.72)				
Time by year	-0.03***	-0.04***	-0.03***	-0.04***	-0.03***	-0.04***
	(0)	(0.01)	(0)	(0.01)	(0)	(0.01)
% unemployment in total labor force			0.001	0.001		
			(0)	(0.01)		
Socio-economic inequality					-0.12***	-0.12
					(0.04)	(0.09)
Constant	38.72***	31.22***	38.06***	30.43***	38.05***	32.04***
	(5.6)	(10.79)	(4.25)	(9)	(4.81)	(9.62)
Observations	1,799	474	1,461	509	1,913	510
Number of groups	157	32	127	33	157	33
Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1 All estimates use fixed-effects with Driscoll-Kraay standard errors.						

Figure 16: How civil war and the disappearance of democratic institutions coincide