



DEMOGRAPHIC IMPACT OF VIOLENCE

Authors:

MARINA ANDRIJEVIC, HUMBOLDT UNIVERSITY IN BERLIN

JAKUB GÁBOR, COMENIUS UNIVERSITY IN BRATISLAVA

CONSTANZA GINESTRA, JOHANNES KEPLER UNIVERSITY LINZ

Agency: UNITED NATIONS OFFICE ON DRUGS AND CRIME

Mentor: ANGELA ME

Counsel: ROMAN HOFFMANN

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Abstract

This paper explores the demographic impact of intentional homicide and calculates the difference this expression of violence makes as a cause of death in terms of life expectancy in selected countries. It comprises of two parts. The first one provides a comprehensive review of the counts and rates of homicide across the world. The second one investigates the effect of this form of violence on life expectancy in selected countries where the situation with regard to this phenomenon is the worst for men and for women. The study approaches the trends and patterns of intentional homicide in the world, and sets the stage for a further research in this area to make the policy-making at the national, regional or global level more effective at preventing and reducing violence, and protecting people against the unlawful taking of life.

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1 Introduction

Global dispersion of violent deaths is extremely unequal: almost 50% of all homicides happen in countries where less than 10% of the global population lives. While homicide rates have been steadily low or declining in most of the European and East Asian countries, the rate in the Americas has been approximately 5 to 8 times higher and even increasing throughout the past decade. (UNODC, 2013)

Homicide as a cause of death can be regarded as a factor affecting the demographic structure of the population, primarily through increased mortality rates. At the same time, beyond being the cause of death of hundreds of thousands of people every year, this form of violence has a severely adverse impact on peace, security and the atmosphere in society as such, as the repercussions of violence go far beyond the loss of human life. Prevalence of violence creates a climate of fear and uncertainty in society which exacerbates the negative influence on the quality of life, as well as people's mental and physical well-being. Due to its rather abstract nature, well-being is extremely complex to quantify. Being a preventable cause of death, homicides take a toll on an important dimension of well-being - life expectancy - and this adverse impact can be quantified and captured using reliable statistical methods.

Globally, there is an increasing need to understand the trends and patterns related to various forms of homicide at the global, regional and national level in order to design policies that will efficiently act in preventing and reducing violence. This need has been recognized in the Target 16.1 of the 2030 Agenda for Sustainable Development, through which Member States of the United Nations (UN) committed to "significantly reduce all forms of violence and related death rates everywhere" and to "strengthen relevant national institutions, including through international cooperation, for building capacity at all levels, in particular in developing countries, to prevent violence and combat terrorism and crime" (UN General Assembly, 2015).

This study will deal with the demographic impact of violence, focusing on life expectancy as an important indicator of health, quality of life, societal progress, and general well-being. The outcomes of the study aim to increase the capacity of national and international authorities to understand the consequences of this form of violence, and to be more effective in preventing and protecting people against the unlawful taking of life, as the right to life is a supreme normative imperative, enshrined in both national and international law.

This is particularly important, because the actions that policy-makers take, or do not take, have a significant impact on the counts and rates of homicide. As the most recent Small Arms Survey report (2017) points out, if current trends continue without major policy changes, the yearly number of deaths caused by homicide are forecasted to increase by almost 10% between 2017 and 2030. Nevertheless, if states were to find their ways to progress in following the Target 16.1 of the 2030 Agenda for Sustainable Development, they may save more than 800.000 lives until 2030 (Small Arms Survey, 2017).

To set the stage for complex in-depth analyses of specific cases, this paper will introduce a cross-country analysis of homicide rates and counts to identify where the situation with regard to homicide as a cause of death is the worst for men, and where for women. Based on its results, it will investigate the effect of homicide prevalence on age-specific life expectancy in selected countries from different regions of the world. Using traditional cause-decomposition techniques, it will compute life expectancy at any given age taking into account all causes of death, and compare it to the life expectancy if homicides were to be eliminated as causes of death.

2 Theoretical Framework

While substantial research has been done on the causes of political violence (e.g. civil wars), investigations of roots of social violence (i.e. interpersonal violent acts that are not necessarily politically motivated, such as homicides) are not as common (Fox and Hoelscher, 2010). The roots of violent behaviours are often intertwined interactions of different complex factors. The ecological framework used by the World Health Organisation (WHO) (WHO, 2002) classifies those factors into four levels:

1. *Individual*: personal history and biological effects on personality, aggressive behaviour, substance abuse.
2. *Personal relationships*: the nature of interactions with immediate surroundings such as family, friends and intimate partners may influence the risk of engaging in violent behaviour.
3. *Community*: specifics of the wider context where social interactions happen (e.g. school, workplace).
4. *Society*: socio-economic situation and cultural norms can to a great extent determine whether violence is encouraged or inhibited.

Although certain socio-demographic characteristics share commonalities across gender, other factors, such as the perpetrator motivation and the situational contexts, differ extensively between men and women. In this way, homicides are better understood considering the gendered context in which occurs (Eriksson & Mazerolle, 2013).

While it is important to keep in mind the theories and explanations for the causes of violence, our study, however, will focus on the consequences, or the impacts of violent acts, particularly homicides. Theories on the consequences are scarce for a very obvious reason - violence only can have adverse consequences, and other social variables will always respond negatively to the

influence of violence. It is nevertheless important to stress the scope and intensity of such repercussions. Violence causes serious physical and psychological consequences (both for the victim, its surrounding, and the society as a whole) which can be classified into two major groups:

1. *Individual*: such as injuries, physical and mental trauma, fear and uncertainty; effect on the ability to be a productive member of the society,
2. *Collective*: such as trust in the society, incentives for education, social functioning, slowed economic and social development.

Besides its direct impact on the victim, the consequences of social violence go far beyond only the threat to human security. Fox and Hoelscher (2010) list several dimensions of socio-economic development that can be affected by violence and the atmosphere of insecurity and uncertainty. Some of them come across as straightforward, such as high costs of medical care, expenditure on law enforcement activities, lost productivity either due to death or disability caused by the violent act. Others, such as higher insurance premiums or diversion of public resources that could otherwise be used for social schemes such as the pension systems, might not be so obvious at first but are nevertheless still consequences of widespread violence.

The consequences that we will study emerge from the interaction between demographics and violence. The nexus of the two is mostly concentrated on the demographic factors that contribute to violence to emerge. A prominent example of how a demographic group can have an effect on violence is a large population of youths. Political scientist Henrik Urdal found longitudinal empirical support across different countries for the effects of the “youth bulge” - i.e. youthful age structures - on the society’s susceptibility to political violence (Urdal, 2006). Although our research is focused on social violence rather than political, the potential effects of youth bulges are nevertheless important.

A contribution of our paper will be to analyse the relationship between demography and violence from a different angle - investigate the effects of violence on different age groups of population. From the previous work it is already known that: 1) Most perpetrators and most victims of violence/homicide are men, 2) Youth are more at risk, and 3) Women are mostly the victims of homicides by partners. Therefore, it is unnecessary to hypothesize about the sheer profile of a “typical perpetrator” or a “typical victim”, because that would result in a gender-biased outcome. Instead, this study is interested in identifying the subgroups by age groups and gender and showing the reduction in life expectancy resulting from homicide prevalence among them.

3 Research Design and Strategy

3.1 Research Questions and Strategy

In line with the standards laid down in the most recent Global Study on Homicide (2013), this paper has approached homicide narrowly as an intentional act of a direct perpetrator

occurring in non-conflict settings, with three major typologies: 1) homicide related to other criminal activities, 2) interpersonal homicide, and 3) socio-political homicide. This has excluded any other types of violent deaths (as illustrated in Figure 1) from our research.

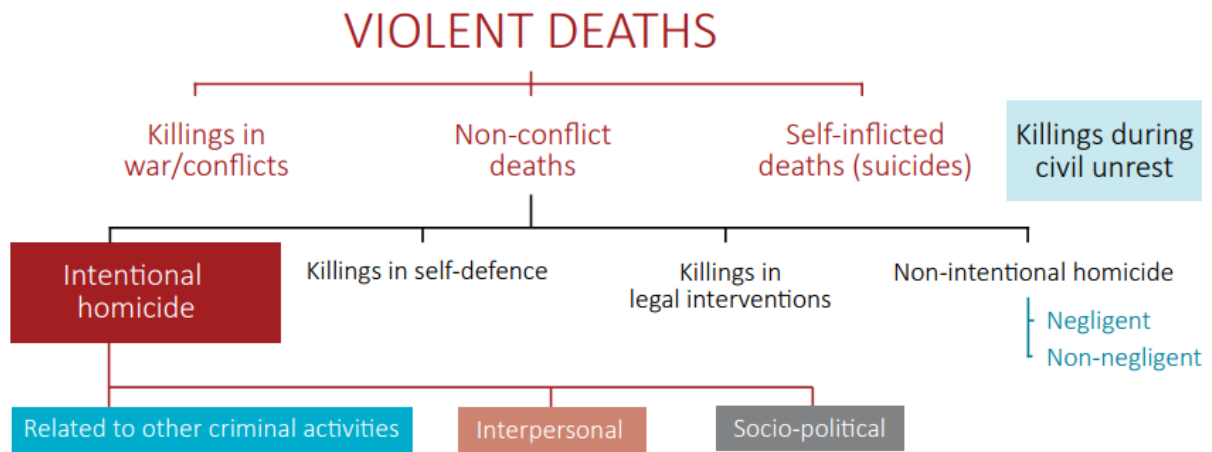


Figure 1: Classification of violent deaths. (UNODC, 2013)

A definition of the intentional homicide at the international level by the UNODC currently contains three elements: 1) The killing of a person by another person (objective element); 2) The intent of the perpetrator to kill or seriously injure the victim (subjective element); 3) The intentional killing is against the law, which means that the law considers the perpetrator liable for the unlawful death (legal element) (UNODC, 2013:102). While definitions of individual countries often correspond with the one provided by the UNODC, notable discrepancies exist in the way specific categories of homicide are treated or classified.

In order to handle these issues, in 2013 the UN Statistical Commission and the UN Commission on Crime Prevention and Criminal Justice agreed on a plan to improve the availability and quality of crime statistics, identifying three main ways to improve the availability and quality of data on crime: 1) Development of new methodological standards for treating statistical data on crime; 2) Improvement of national capacity for the production of statistical data on crime; 3) Improvement of international data collection and analyses. (UNODC, 2013; p. 105). Even though the situation is gradually improving, there is still a number of countries, or territories/autonomous entities that do not comply with standards laid down in this roadmap, which will make our research rely on the estimates, too.

Due to its demographic focus, our research has been conducted mostly with different quantitative methods. Using primarily the UNODC Homicide Statistics dataset, we have carried out a cross-country analysis of age-specific and sex-specific homicide rates to identify where the situation is least favourable for young men, and where for young women. We corroborated our results with the data used in the latest Small Arms Survey. After detecting the most problematic cases, we have conducted an in-depth analysis and compared the incidences of homicide to other

causes of death. Using traditional cause-decomposition techniques (Preston et al., 2000), we have calculated the impact of homicides on life expectancy in areas that are most severely affected. Our study has sought to answer the following research question:

What difference does homicide as a cause of death make in terms of life expectancy in selected countries?

Our research has been conducted in two steps:

a) *Cross-country analysis*

The cross-country analysis has been the starting point of our quantitative research, in order to set the stage for further analyses of specific cases and identify countries where the situation with regard to homicide is the worst for men and for women. By worst we mean countries with highest rates and the ones with the highest counts.

A single dataset with the data for all UN member states and every year has been composed to facilitate easier processing of data in the first phase, as well as for further steps. The variables of our interest have been age- and sex-specific total counts of deaths, and counts of deaths resulting from homicide.

b) *Multi-decrement life tables and cause-decomposition technique*

In the second phase, we have calculated multi-decrement life tables (i.e. to determine life expectancy by multiple causes of death), based on an appended dataset. Life tables are required to calculate life expectancy. We downloaded the yearly life tables for the countries of our interest from the WHO. We extracted the core life table measures: number of people surviving to age x (l_x), probability of dying between ages x and $x+n$ (nq_x), average years lived in the interval between x and $x+n$ (na_x), age-specific life expectancy with all causes of death combined (e_x). This data was complemented with age-specific death counts which facilitated calculation of the proportion of deaths caused by homicides. Using the methodology of Preston et al. (2000), we have conducted the calculations and computed multi-decrement life tables based on the information about total death counts and homicide-specific ones.

The core of our quantitative research has been to investigate the effect of homicide prevalence on life expectancy. Using cause-decomposition techniques (Preston et al., 2000), we have been able to calculate life expectancy at any given age taking into account all causes of death, and compare it to the life expectancy if homicides were to be eliminated as causes of death. These numbers describe the hypothetical situation that a cause of decrement has been eliminated and, consequently, that cause of death has no effect on the risk of dying from the remaining causes (Siegel & Swanson, 2004). The death rates without homicide were used to recalculate the core life table functions, which finally resulted in figures for age-specific life

expectancy if homicides were eliminated as a cause of death. In this case, we assumed that the probability of dying from homicide is zero and that the various causes of decrement are assumed to act independently of each other. More technical details of the calculations can be made available upon request.

3.2 Data

Our research stems from data and statistics collected at the UNODC Data Portal. It uses the data on crime and criminal justice produced by national statistical systems and relevant international bodies. The UNODC Data Portal includes the Data Series on Homicide and Other Criminal Offences collected through the annual UN Surveys on Crime Trends and the Operations of Criminal Justice Systems (UN-CTS), which seeks to “collect data on the incidence of reported crime and the operations of criminal justice systems” and “provide an overview of trends and relationships between various parts of the criminal justice system to promote informed decision-making in administration, nationally and internationally” (UNODC, 2017).

Several problems have arisen during the research, particularly with regard to gaps in *data availability* and *data quality*.

Concerning *data availability*, the data collected and disseminated by the UNODC have been produced by the two types of sources within national statistical systems: public health systems and criminal justice systems. However, there is still quite a high number of countries where these types of sources do not provide the UNODC data on regular basis, and these gaps often have to be filled by the estimates of standardised statistical models. While the use of these models ensures a certain degree of validity, the lack of national homicide data presents a major challenge for anyone analysing the trends and patterns of homicide at the international level.

The data unavailability on homicides for all the countries has been one of our main obstacles. The fact that the data is non-existent for all the countries for the years 2015 and 2016, might have crucial effect on our conclusions. Additionally, the proportion of countries with disaggregated data by gender is extremely low. Countries with no data or incomplete data by sex were the rule, while only 5 countries provided disaggregated data in 2016.

With respect to *data quality*, when calculating the demographic impact of violence, two key elements of data quality have been important to us. First, *the accuracy of data*, which defines how closely data represent the reality, and to what extent the errors accumulating along the victim process and police recording process influence outcomes we get. Second, *the comparability of data* relates to different definitions used to record intentional homicide across the world. While definitions of individual countries often correspond with the one provided by the UNODC, notable discrepancies exist in the way specific categories of homicide are treated or classified.

4 Results

a) Cross-country analysis

Figure 2 shows the overall homicide rates in 5 regions: Africa, Americas, Asia, Europe and Oceania. The data corresponds to 2015 and the rates range from 0 to 105,4. Red tone cells correspond to above average rates (the darker the higher), blue tone cells correspond to below average rates (the darker the lower). Grey cells indicate missing homicide rates.

The American and the African continent appear to be the regions with the highest homicide rates in the world. Lesotho and South Africa are the countries with the highest rates in Africa in this year. Botswana, Namibia, Swaziland and Uganda also exhibit notable rates in the previous years, but data is missing in the latest years. In 2015, El Salvador, Honduras, Jamaica, Guatemala, Brazil and Colombia display the most alarming rates, making the Americas the most dangerous continent in the world in terms of homicides. El Salvador is undoubtedly the most critical case: the rate increased dramatically from 62,4 per 100 000 people in 2014 to 105,4 in 2015. This means that 6656 people died in 2015 due to intentional homicide in this country. It is also worth considering the United States of America and Venezuela since they presented higher rates from 2000 to 2014, although the data for 2015 is not available.

The Asian region shows two countries with a relatively high number of intentional homicide in 2015: Mongolia and Laos. However, Central Iraq shows more alarming rates from 2008 to 2014, although the data for 2015 is not available. In the same way, Philippines presents the highest number of intentional homicides from 2000 to 2014.

In Europe, Russia has the most notable rates, followed by Lithuania and Latvia, although all of them were decreasing from 2000. Belarus, Moldova and Ukraine also present declining rates from 2000 to 2015. Oceania presents particularly low rates in comparison to the other regions.

Figure 2. *Tile grid map with the overall Homicide Rates per 100,000 population in 2015. Red tone cells correspond to above average rates (the darker the higher), blue tone cells correspond to below average rates (the darker the lower). Grey cells indicate missing homicide rates.*

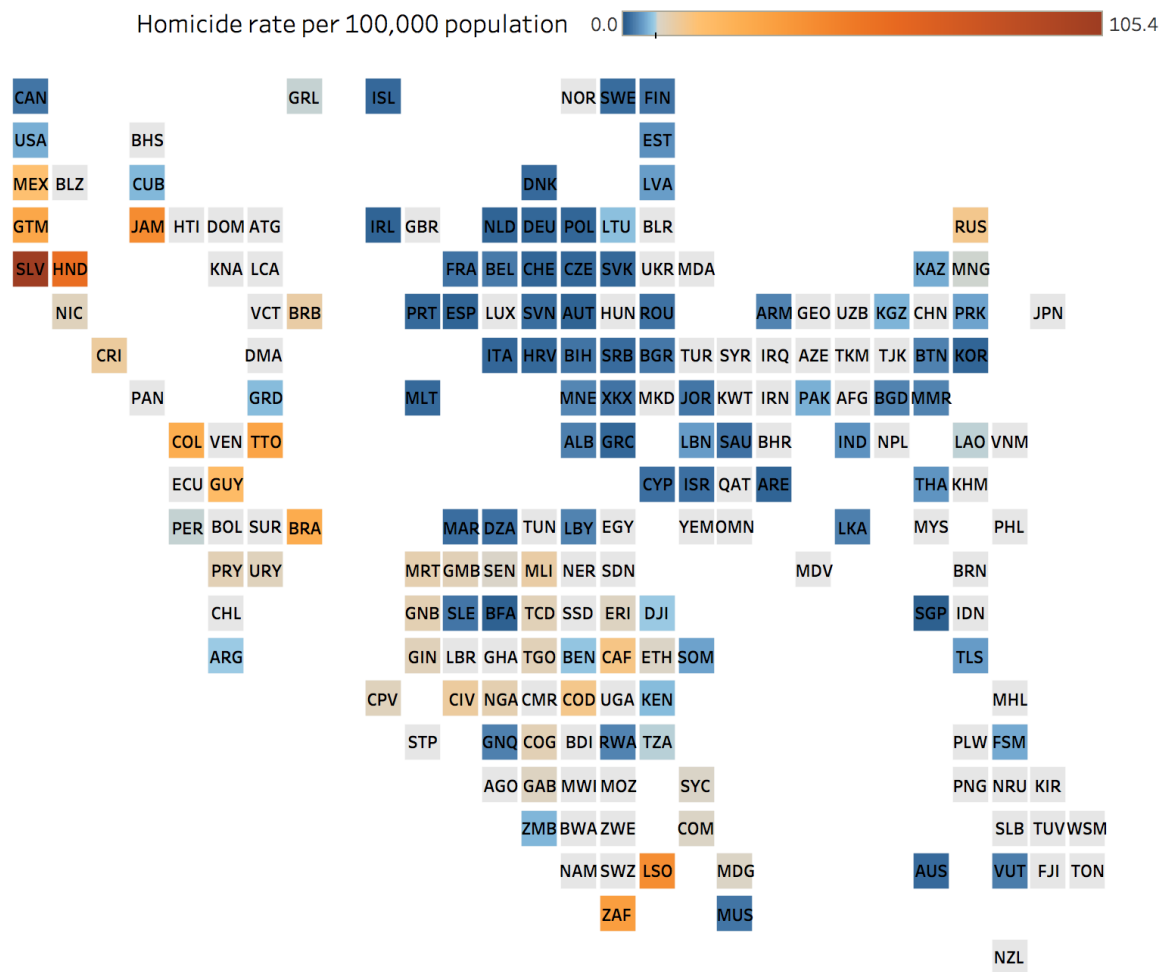
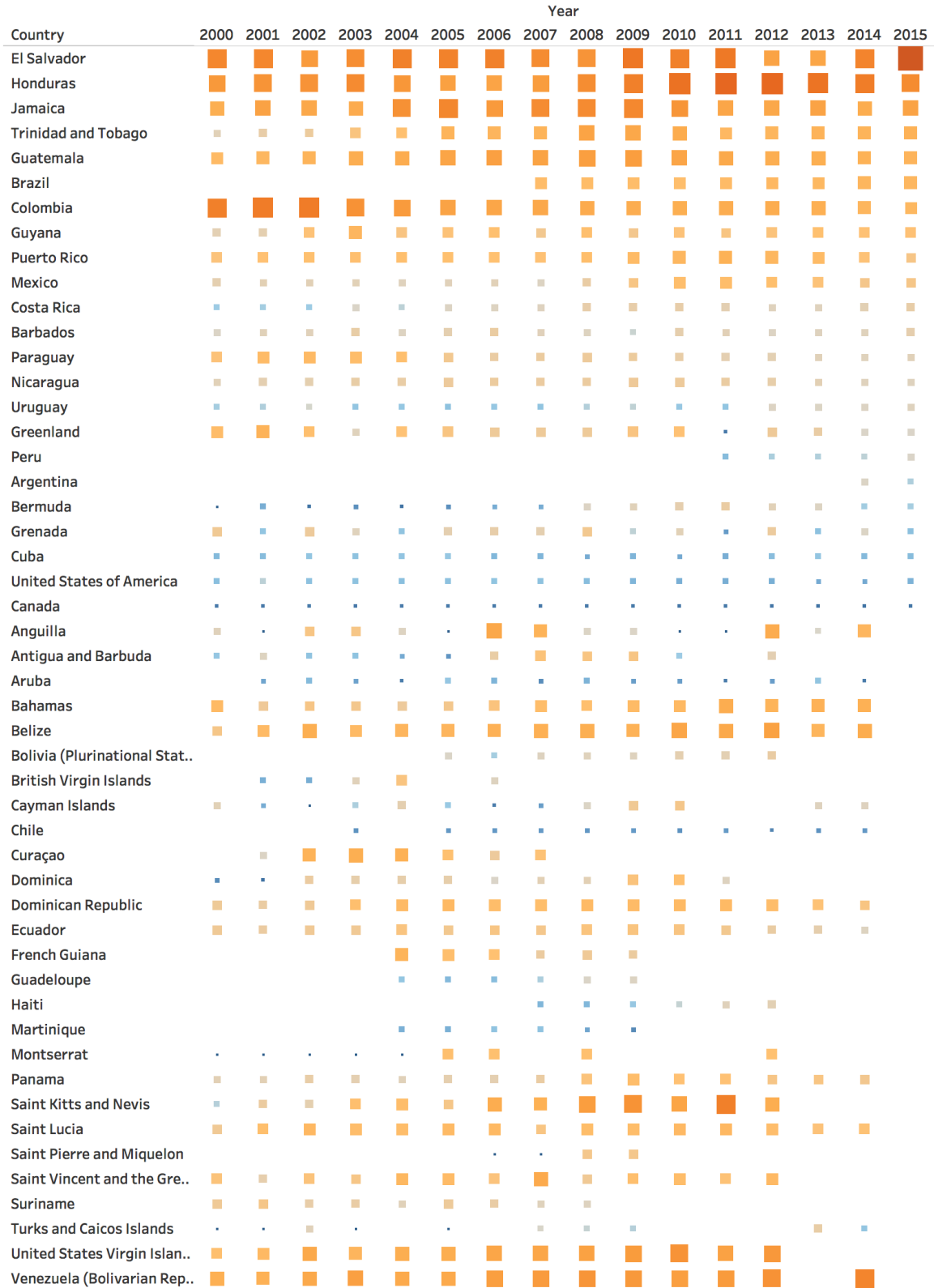


Figure 3 shows the American region in detail. The data is filtered from 2000 to 2015 and ordered decreasingly from the year 2015. The rates range from 0 to 150, and colour and size of the squares indicate the homicide rate for each country. Missing values are represented by empty cells.

Figure 3. Overall Homicide Rates per 100000 in the Americas (2000-2015). Orange-coloured larger squares correspond to higher rates, while blue-coloured smaller squares refer to lower rates. Empty cells indicate missing homicide counts. Countries are in decreasing order for homicide rates in 2015.

Americas



In order to study the homicide rates by gender, the research first focuses on the 5 countries with the highest rates per region in 2015, looking particularly at female and male rates. Table 1 shows that the highest numbers of homicides for both men and women as victims, are founded in the Americas, specifically in El Salvador, followed by Honduras, Jamaica and Lesotho.

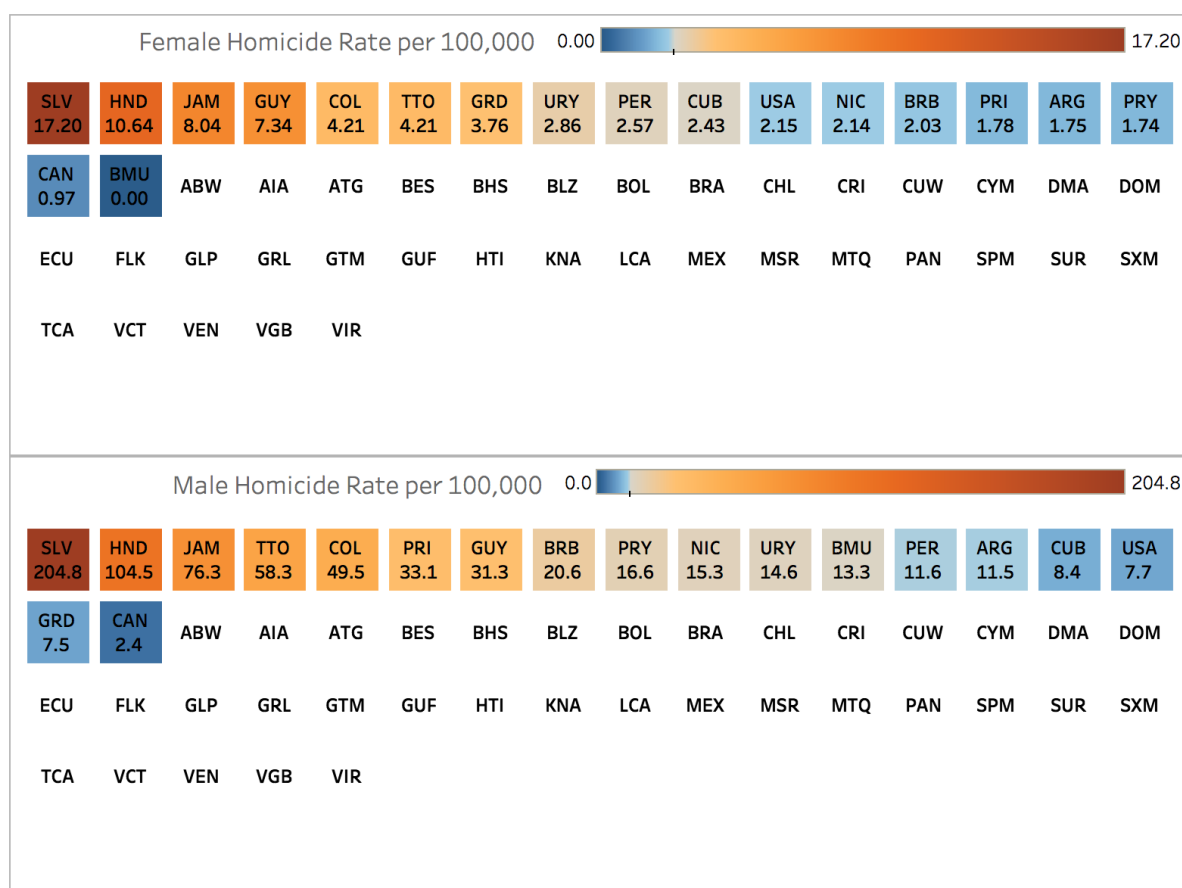
Table 1. Top 5 highest Homicide Rate per region and per gender in 2015.

Female			Male		
Region	Country	2015	Region	Country	2015
Africa	Lesotho	8.90	Africa	Lesotho	75.6
	Guinea-Bissau	8.55		Democratic Republic of the Congo	22.0
	Côte d'Ivoire	7.51		Mali	16.7
	Mauritania	5.17		Central African Republic	23.9
	Democratic Republic of the Congo	5.14		Gambia	16.6
Americas	El Salvador	17.20	Americas	El Salvador	204.8
	Honduras	10.64		Honduras	104.5
	Jamaica	8.04		Jamaica	76.3
	Guyana	7.34		Colombia	49.5
	Colombia	4.21		Trinidad and Tobago	58.3
Asia	Mongolia	3.39	Asia	Mongolia	11.1
	Lao People's Democratic Republic	3.20		Lao People's Democratic Republic	10.8
	Democratic People's Republic of Korea	2.96		Kazakhstan	7.0
	Kazakhstan	2.74		Pakistan	7.5
	India	2.71		Lebanon	6.6
Europe	Latvia	3.30	Europe	Latvia	5.0
	Lithuania	3.10		Lithuania	9.1
	Estonia	1.43		Estonia	5.2
	Slovenia	1.32		Albania	3.5
	France	1.17		Montenegro	4.5
Oceania	Micronesia (Federated States of)	2.37	Oceania	Micronesia (Federated States of)	6.9
	Vanuatu	1.07		Vanuatu	3.2
	Australia	0.71		Australia	1.3

Figure 4 shows the homicide rates in 2015 for men and women separately. Red tone cells correspond to above average rates (the darker the higher), blue tone cells correspond to below average rates (the darker the lower). White cells indicate missing homicide rates.

As it is possible to observe, regarding *females*, El Salvador, Honduras, Lesotho, Guinea Bissau and Jamaica are the countries with the highest rates, followed by Côte d'Ivoire and Guyana. In the case of *males*, El Salvador, Honduras, Jamaica and Lesotho are the countries with the most alarming rates. It is important to mention here that only some countries provide disaggregated data by gender in 2015, hence the results are based on the available data.

Figure 4. *Female and Male Homicide Rates per 100000 in 2015. Red-coloured squares correspond to higher rates, while blue-coloured squares refer to lower rates. Empty cells indicate missing homicide counts.*



b) Multi-decrement life tables and cause-decomposition technique

In the figures below, we show (i) most recent figures for El Salvador and Honduras - countries with highest rates of homicide in 2015, (ii) difference in life expectancy in El Salvador and Honduras when homicide rates were at their peak and (iii) longitudinal overview of difference between life expectancy at birth with and without homicides (El Salvador and Honduras, 2000-2015).

Figure 5. *Age-specific life expectancy in El Salvador (2015) for male and female. The orange stack in the bars represents the gain in years of life if homicide was eliminated as a cause of death.*

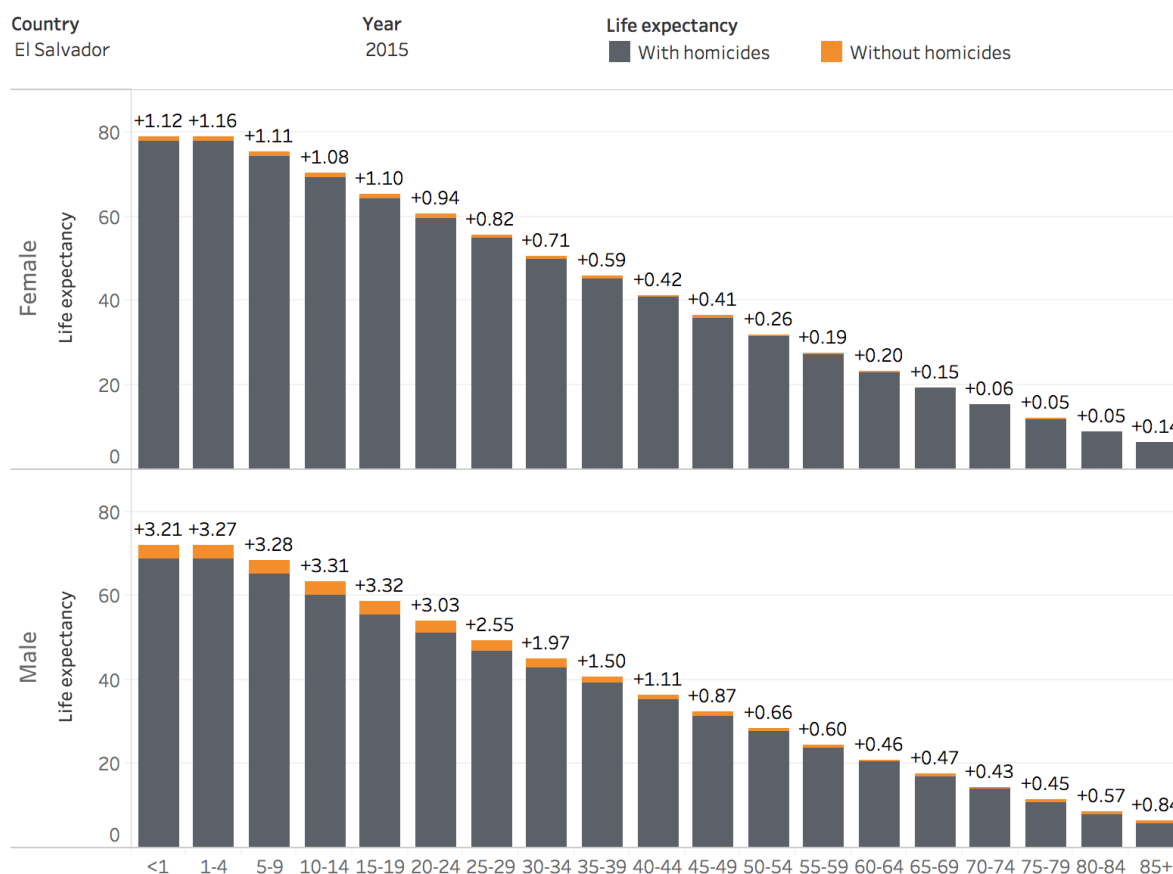


Figure 6: Age-specific life expectancy in Honduras (2015) for male and female. The orange stack in the bars represents the gain in years of life if homicide was eliminated as a cause of death.

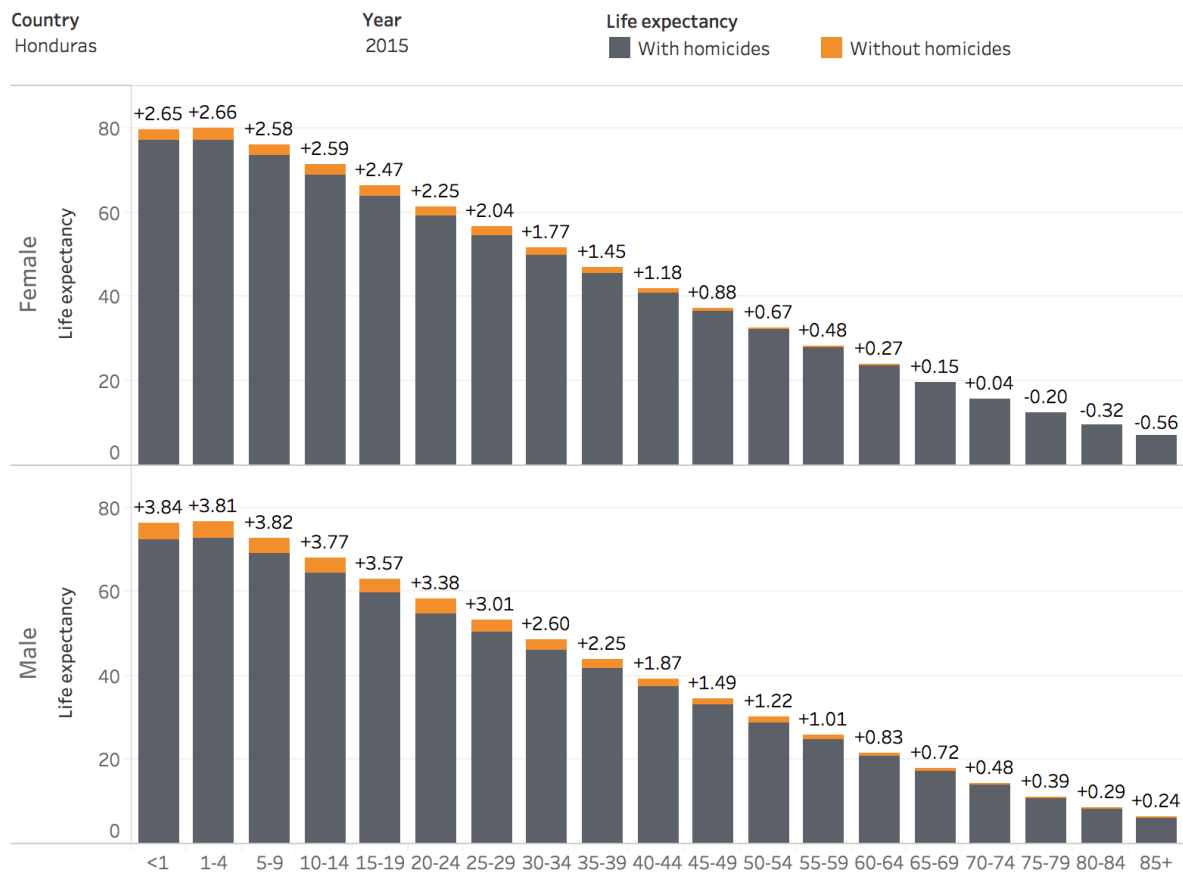
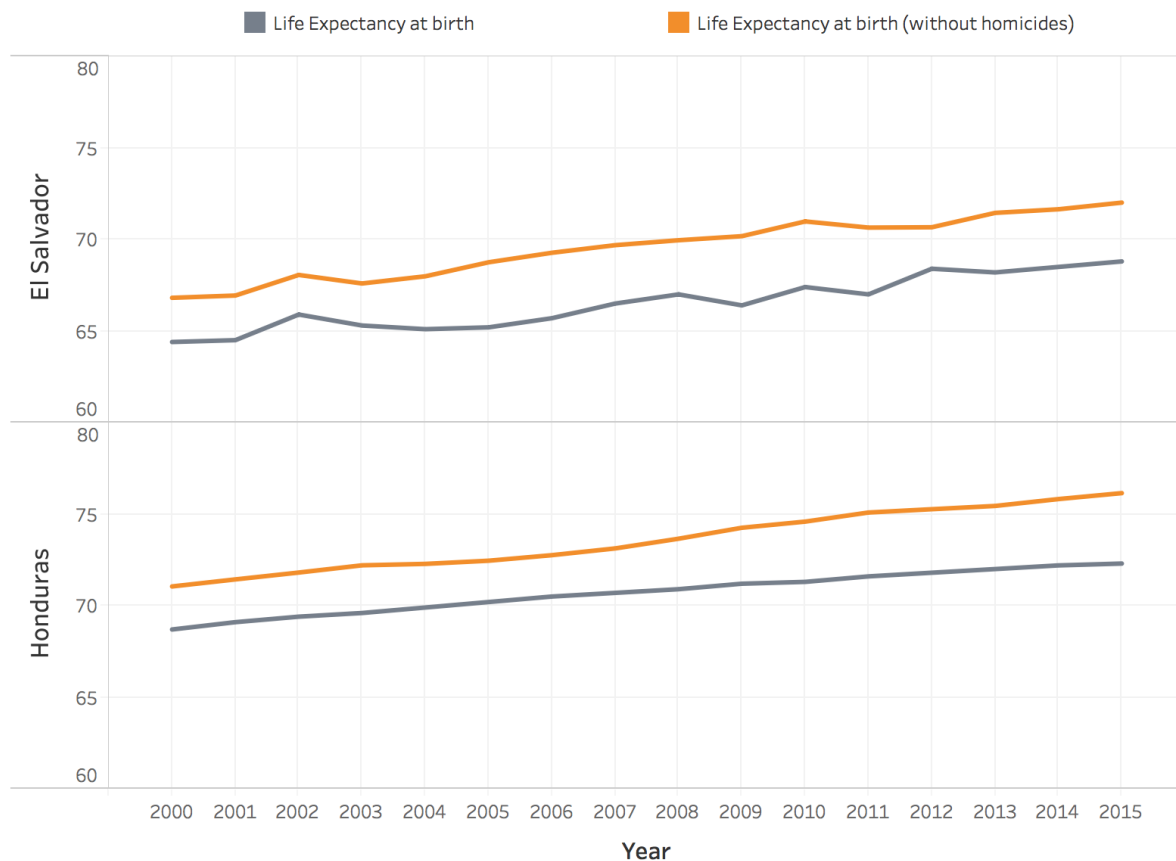


Figure 7: Male life expectancy at birth over time in Honduras and El Salvador (2000-2015)



Life expectancy in El Salvador visibly exhibits more fluctuations than Honduras. However, in both countries the difference is fairly consistent and persistent across time. The largest difference is observed in 2009 in El Salvador, where the difference between life expectancy at birth, with and without homicide, amounts to almost four years.

5 Conclusion

In summary, the cross-country analysis showed that out of the five regions - Africa, Americas, Asia, Europe and Oceania - the first two reported the highest homicide rates in 2015. The situation was particularly critical in El Salvador, which recorded the highest - and yet still increasing - rate of intentional homicide in the world. On the other hand, Asia, Europe and Oceania presented lower rates in comparison to the other regions in this year.

In the second step of our research, we took into account the gender perspective, too, and focused on the five countries with the highest rates in every of the five regions in 2015, looking at female and male homicide rates separately. This part also showed that the situation is very alarming in Africa, but even more in Americas, as again El Salvador and Honduras dominated the list of the most affected countries for both female and male rates of intentional homicide.

Finally, our assessment of the impact of intentional homicide on life expectancy displays further worrisome implications. The two countries that were identified as most dangerous in the first step - El Salvador and Honduras - were in focus. The effect of homicides on male life expectancy at birth reaches almost 4 years of difference (El Salvador, year 2009). The difference becomes even more pronounced if we focus on age specific life expectancy at the age of 15. In other words, a boy's expected length of life in El Salvador is reduced by around four years due to prevalence of homicides.

The statistics presented in this paper, which are tangible indicators of years of life lost, are yet another loud alarm to policy makers and institutions of authority in the area of violence prevention and sanction. Open research avenues in this field are calling for additional longitudinal analyses and identification of country-specific factors that contribute to the upsurge in violent behaviour, particularly homicide. It is high time relevant bodies accepted their responsibility, understood the importance of the issue, and took actions to reduce violence all over the world.

6 Appendix

Appendix 1: Country Codes.

Country	Code	Country	Code	Country	Code	Country	Code
Afghanistan	AFG	Denmark	DNK	Lesotho	LSO	Saint Vincent and the Grenadines	VCT
Albania	ALB	Djibouti	DJI	Liberia	LBR	Samoa	WSM
Algeria	DZA	Dominica	DMA	Libya	LBY	San Marino	SMR
American Samoa	ASM	Dominican Republic	DOM	Liechtenstein	LIE	Sao Tome and Principe	STP
Andorra	AND	Ecuador	ECU	Lithuania	LTU	Saudi Arabia	SAU
Angola	AGO	Egypt	EGY	Luxembourg	LUX	Senegal	SEN
Anguilla	AIA	El Salvador	SLV	Madagascar	MDG	Serbia	SRB
Antigua and Barbuda	ATG	Equatorial Guinea	GNQ	Malawi	MWI	Seychelles	SYC
Argentina	ARG	Eritrea	ERI	Malaysia	MYS	Sierra Leone	SLE
Armenia	ARM	Estonia	EST	Maldives	MDV	Singapore	SGP
Aruba	ABW	Ethiopia	ETH	Mali	MLI	Sint Maarten (Dutch part)	SXM
Australia	AUS	Falkland Islands (Malvinas)	FLK	Malta	MLT	Slovakia	SVK
Austria	AUT	Faroe Islands	FRO	Marshall Islands	MHL	Slovenia	SVN
Azerbaijan	AZE	Fiji	FJI	Martinique	MTQ	Solomon Islands	SLB
Bahamas	BHS	Finland	FIN	Mauritania	MRT	Somalia	SOM
Bahrain	BHR	France	FRA	Mauritius	MUS	South Africa	ZAF
Bangladesh	BGD	French Guiana	GUF	Mayotte	MYT	South Sudan	SSD
Barbados	BRB	French Polynesia	PYF	Mexico	MEX	Spain	ESP
Belarus	BLR	Gabon	GAB	Micronesia (Federated States of)	FSM	Sri Lanka	LKA
Belgium	BEL	Gambia	GMB	Monaco	MCO	State of Palestine	PSE
Belize	BLZ	Georgia	GEO	Mongolia	MNG	Sudan	SDN
Benin	BEN	Germany	DEU	Montenegro	MNE	Suriname	SUR
Bermuda	BMU	Ghana	GHA	Montserrat	MSR	Swaziland	SWZ

Bhutan	BTN	Gibraltar	GIB	Morocco	MAR	Sweden	SWE
Bolivia	BOL	Greece	GRC	Mozambique	MOZ	Switzerland	CHE
Bonaire, Sint Eustatius and Saba	BES	Greenland	GRL	Myanmar	MMR	Syrian Arab Republic	SYR
Bosnia and Herzegovina	BIH	Grenada	GRD	Namibia	NAM	Tajikistan	TJK
Botswana	BWA	Guadeloupe	GLP	Nauru	NRU	Thailand	THA
Brazil	BRA	Guam	GUM	Nepal	NPL	The former Yugoslav Republic of Macedonia	MKD
British Virgin Islands	VGB	Guatemala	GTM	Netherlands	NLD	Timor-Leste	TLS
Brunei Darussalam	BRN	Guinea	GIN	New Caledonia	NCL	Togo	TGO
Bulgaria	BGR	Guinea-Bissau	GNB	New Zealand	NZL	Tokelau	TKL
Burkina Faso	BFA	Guyana	GUY	Nicaragua	NIC	Tonga	TON
Burundi	BDI	Haiti	HTI	Niger	NER	Trinidad and Tobago	TTO
Cabo Verde	CPV	Holy See	VAT	Nigeria	NGA	Tunisia	TUN
Cambodia	KHM	Honduras	HND	Niue	NIU	Turkey	TUR
Cameroon	CMR	Hungary	HUN	Northern Mariana Islands	MNP	Turkmenistan	TKM
Canada	CAN	Iceland	ISL	Norway	NOR	Turks and Caicos Islands	TCA
Cayman Islands	CYM	India	IND	Oman	OMN	Tuvalu	TUV
Central African Republic	CAF	Indonesia	IDN	Pakistan	PAK	Uganda	UGA
Chad	TCD	Iran (Islamic Republic of)	IRN	Palau	PLW	Ukraine	UKR
Channel Islands	CHANN	Iraq	IRQ	Panama	PAN	United Arab Emirates	ARE
Chile	CHL	Iraq (Central Iraq)	IQ-CTL	Papua New Guinea	PNG	United Kingdom (England and Wales)	GB-EAW
China	CHN	Iraq (Kurdistan Region)	IQ-KDT	Paraguay	PRY	United Kingdom (Northern Ireland)	GB-NIR
China, Hong Kong Special Administrative Region	HKG	Ireland	IRL	Peru	PER	United Kingdom (Scotland)	GB-SCT
China, Macao Special Administrative Region	MAC	Isle of Man	IMN	Philippines	PHL	United Kingdom of Great Britain and Northern Ireland	GBR
China, Taiwan Province of China	TWN	Israel	ISR	Poland	POL	United Republic of Tanzania	TZA

Colombia	COL	Italy	ITA	Portugal	PRT	United States of America	USA
Comoros	COM	Jamaica	JAM	Puerto Rico	PRI	United States Virgin Islands	VIR
Congo	COG	Japan	JPN	Qatar	QAT	Uruguay	URY
Cook Islands	COK	Jordan	JOR	Republic of Korea	KOR	Uzbekistan	UZB
Costa Rica	CRI	Kazakhstan	KAZ	Republic of Moldova	MDA	Vanuatu	VUT
Côte d'Ivoire	CIV	Kenya	KEN	Réunion	REU	Venezuela	VEN
Croatia	HRV	Kiribati	KIR	Romania	ROU	Viet Nam	VNM
Cuba	CUB	Kosovo under UNSCR 1244	XXK	Russian Federation	RUS	Wallis and Futuna Islands	WLF
Curaçao	CUW	Kuwait	KWT	Rwanda	RWA	Western Sahara	ESH
Cyprus	CYP	Kyrgyzstan	KGZ	Saint Helena	SHN	Yemen	YEM
Czechia	CZE	Lao People's Democratic Republic	LAO	Saint Kitts and Nevis	KNA	Zambia	ZMB
Democratic People's Republic of Korea	PRK	Latvia	LVA	Saint Lucia	LCA	Zimbabwe	ZWE
Democratic Republic of the Congo	COD	Lebanon	LBN	Saint Pierre and Miquelon	SPM		

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