



STA 199 Project: International Crime



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Introduction:



ODC's Definition of Crime:

"The punishable contravention or violation of the limits on human behavior as imposed by national criminal legislation."

Context and Background:

- The homicide and crime data was originally curated by the United Nations Office on Drugs and Crime (ODC) Homicide Statistics.
- The GDP data, also collected by the UN, shows the GDP of each country through the years 1995-2020 (in approx. 5-year intervals), demonstrating how many countries have managed to increase their GDP substantially.

Research Question:

Has the world become more violent
in the past 15 years, and if so, how
does this break down across regions?

Given this, does GDP correlate with
these observations?

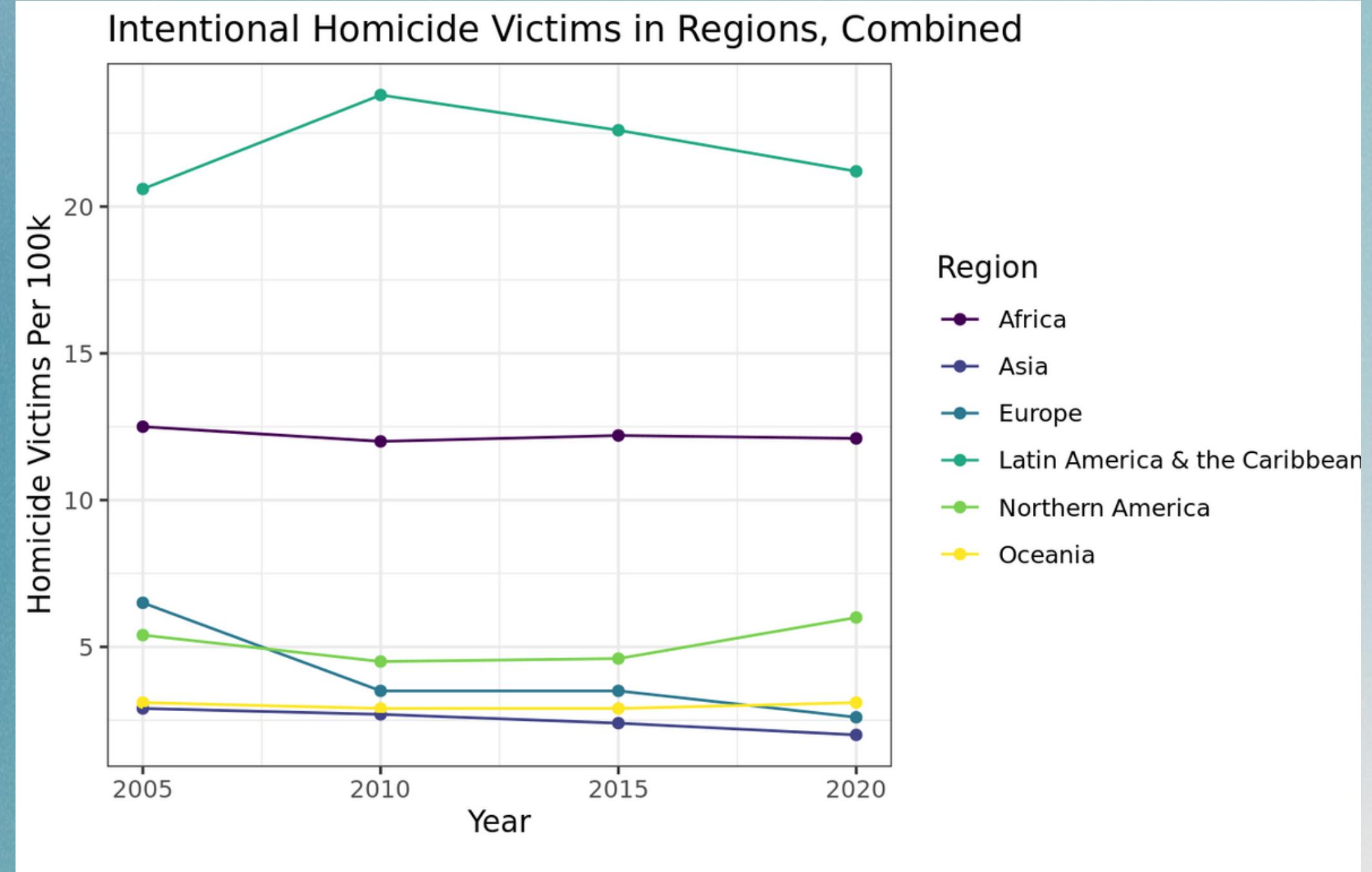
Hypothesis:



- Contrary to portrayals in media, much of the world is actually becoming less violent.
- Volatile and unstable regions of the world are responsible for a large share of the violent crimes and homicides that fold into the worldwide statistics.

- Given the 1976 UN Social Defense Research Institute claim regarding the often-cited observation that GDP and violent crime are correlated, we also hypothesize that as a region's GDP increases, its rates of violent crimes decrease.

Intentional Homicide Victims, Globally:



Regression Model:

Determining the level of correlation between homicides and GDP via their R² values.

Region:	GDP Regression - R2 (0-1):	
Global	0.935	
Africa	0.602	
North America	0.135	
Latin America	0.689	
Asia	0.948	
Europe	0.975	
Oceania	0.099	

Results:



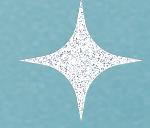
question (homicides over time)

Our hypothesis that the world has become less violent is supported by the UN data. Global homicides have been consistently declining over 5 year intervals.

sub-question (homicides & gdp correlation)

Our hypothesis that as GDP increases, violence decreases did not hold true. There is mixed correlation between GDP and homicides across regions. These results call into question the application of the UN's claim that GDP and violent crime are correlated.

Thank you!



We hope you have enjoyed our presentation.