

The Relationship Between Land and Sea Border Lengths With the Illicit Trade of Cigarettes

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Background

Policy and price differences between countries can incentivize the movement of products across borders, but illicit trade is not a foregone conclusion.

This analysis looks at whether sea and land border lengths are correlated with the illicit trade of cigarettes.

Methods

- World Factbook was used for data on land borders (166 countries/territories) and coastlines (199)
- Illicit cigarette trade data is from Euromonitor’s Illicit Trade Penetration analysis for 2022
- One coastline length (Canada, 202,080 km) was an outlier, more than three times the next longest (Indonesia, 54,716 km)
- Land border analysis included 91 countries, coastline analysis included 81 countries (80 without Canada), and the combined border analysis was 97 countries (96 without Canada)

Results

- Total border length ranged from 193 km (Singapore) to 210,972 km (Canada)
- Estimated size of the illicit cigarette trade in 2022 ranged from 0% (Japan) to 81% (Panama)
- Correlation between these two sets of data is -0.0024
- When removing the outlier border length of Canada, the variation in total border length explained 0.82% of the variation in the estimated size of the illicit cigarette market
 - Variation in coastline length (excluding Canada) only explained 2.8 % of the differences in illicit cigarette markets
 - Variation in the length of land borders explained <0.001% of the variation in illicit cigarette markets

Conclusions

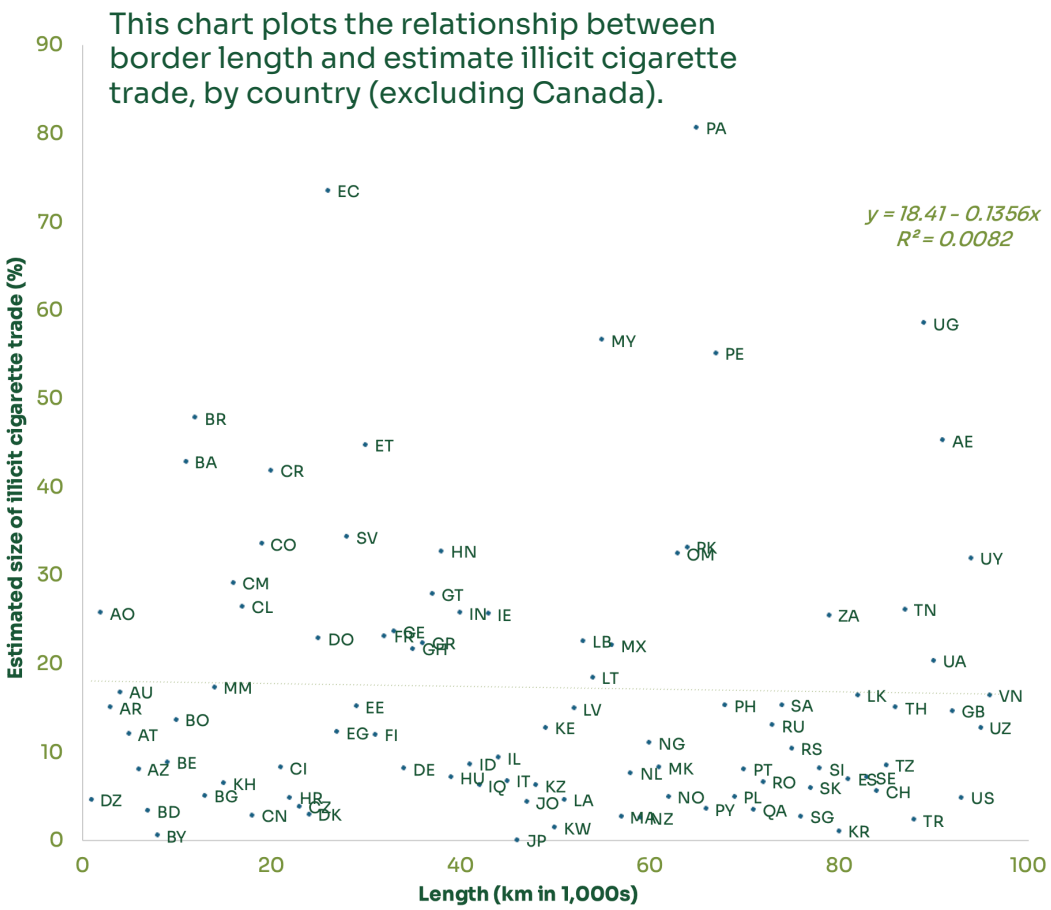
Border length alone is not significantly correlated with illicit cigarette trade.

Previous research has found that illicit trade is best mitigated by a secure supply chain and strong governance, which can include industry-independent tracking and tracing system and strengthening enforcement efforts.

Future analysis will include variables such as border characteristics, governance strength and price differentials.

The rate of **illicit cigarette trade** in a given country **does not correlate solely with physical border length**; strong surveillance and enforcement measures remain effective deterrents

Relationship Between Border Length & Illicit Trade



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Competing Interests:

None.

