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ILLCIT SMALL ARMS PRICES—COUNTRIES DATASET: CODEBOOK V. 2017-01

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The SADO-WP Series is intended to disseminate works in progress on the scope, scale, causes, and consequences of the manufacture, trade, and use of small arms. The Series prioritizes timely publication over flawless presentation. Neither SADO nor its affiliates necessarily endorse the findings, interpretations, conclusions, or opinions expressed in this paper.

ILLICIT SMALL ARMS PRICES—COUNTRIES DATASET: CODEBOOK V. 2017-01**1. Introduction**

This codebook documents variables in a dataset described in Marsh, McDougal, Khan, and Lison (2017) as the “Illicit Small Arms Prices—Countries” (iSAP-C) dataset. The dataset is one of two (the other being the “Illicit Small Arms Prices—Transactions”, or iSAP-T, dataset, documented in SADO Working Paper 201604-02) to come out of a joint effort of the Norwegian Initiative on Small Arms Transfers (NISAT) and the Small Arms Data Observatory (SADO).

The iSAP-T has an observational unit of arm(s) sold in a single transaction, whilst the iSAP-C, which derives from the iSAP-T, has the more standard country-year observational unit. The iSAP-T has the advantage that its observations are all directly reported and documented; the data presented is gathered entirely on the basis of verifiable observation. On the other hand, the only way that it can be merged with other datasets is on a many-to-one basis, in which country-level data might be joined and related to transactional prices. Moreover, the iSAP-T does not permit many of the most useful longitudinal econometric analyses, which often require panel data. The pros and cons of iSAP-C dataset are the converse of those of the first: the country-year dataset is easily joined to other well-known datasets of economic, demographic, social, political, conflict, and other variables; and its panel structure permits time-series analysis. On the downside, the creation of this dataset, as detailed by Marsh et al. (2017), entailed the adjustment of original price data on the basis of weapons model, the loss of data richness through collapsing, as well as data manufacture via temporal interpolation and spatial lags. The resulting caveat is that observations are usually only indirect proxies for small arms prices in the country-year in question.

2. Variables

id

[Integer]

A unique numerical identifier for each record.

year

[Integer]

Year of the observation. Years range from 1965 to 2015.

iso3c

[String-3]

The International Standards Organization 3-character code corresponding to the observation country.

cow

[Integer]

The Correlates of War code for the observation country.

country

[String]

The standard name of the country.

region

[String]

United Nations-designated broad geographic regions.¹ Regions include:

1. Africa
2. Americas
3. Asia
4. Europe
5. Oceania

region_detail

[String]

United Nations-designated detailed geographic regions in which the transaction (sale) occurred.² Sub-regions include:

1. Australia and New Zealand
2. Caribbean
3. Central America
4. Central Asia
5. Eastern Africa
6. Eastern Asia
7. Eastern Europe
8. Melanesia
9. Middle Africa
10. Northern Africa
11. Northern America
12. Northern Europe
13. South America

¹ These regions were generated from ISO3C codes by the STATA module KOUNTRY.

² These detailed regions were generated from ISO3C codes by the STATA module KOUNTRY.

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14. South-Eastern Asia
15. Southern Africa
16. Southern Asia
17. Southern Europe
18. Western Africa
19. Western Asia
20. Western Europe

lat

[Double]

The mean latitude at which illicit transactions took place. Derived from collapsing the iSAP-T dataset to obtain a mean for the variable *lat_trans*. If no observations are available for that country-year, then it takes the value of the mean latitude of previous illicit transactions in that country. If no such previous observational coordinates are available, it takes on the latitude of the country centroid.

lng

[Double]

The mean longitude at which illicit transactions took place. Derived from collapsing the iSAP-T dataset to obtain a mean for the variable *lng_trans*. If no observations are available for that country-year, then it takes the value of the mean longitude of previous illicit transactions in that country. If no such previous observational coordinates are available, it takes on the longitude of the country centroid.

price_cusd_wa

[Float]

Mean weapon-adjusted price of the arm in constant 2010 US dollars, derived from averaging the variable of the same name from the iSAP-T dataset. The latter “converts” all prices to estimates for PRIO weapons code 233, denoting assault-type rifles such as the AK-47 and AR-15. “Weapons-adjustment” is much like “seasonal adjustment” in the retail sales or tourist industries. The original iSAP-T variable represents a best pick from additive, multiplicative, and exponential methods of adjustment. (See Marsh et al. (2017, pp. 4-5) for details.)

sdprice_cusd_wa

[Float]

Standard deviation of the weapon-adjusted price (*price_cusd_wa*) of the arm in constant 2010 US dollars.

ctprice_cusd_wa

[Float]

The count of the weapon-adjusted prices (*price_cusd_wa*) for the country-year observation as collapsed from the iSAP-T dataset.

price_usd_wa_lo

[Float]

The low end of the 95% confidence interval for *price_cusd_wa*, calculated as $price_cusd_wa - 1.96 * sdprice_cusd_wa$.

price_usd_wa_hi

[Float]

The high end of the 95% confidence interval for *price_cusd_wa*, calculated as $price_cusd_wa + 1.96 * sdprice_cusd_wa$.

price_index

[Float]

Proxy for price of assault rifles generally – similar to *price_cusd_wa*, but covers vastly more country-year observations. Generated as a weighted average of inferred values based on spatial lags and interpolated and extrapolated values based on temporal lags. Methodology is described in Marsh et al. (2017).

indexrel

[Byte]

Indicator of reliability for the *price_index* variable. Coded as:

1. *Very low*. We only have no imputed / interpolated measures, but do have augmented (extrapolated) imputations/ interpolations.
2. *Low*. We have one of the imputed / interpolated measures, but also rely on one augmented (extrapolated) measure.
3. *Medium-low*. We have both imputed / interpolated measures but no year-specific spatial lag estimate.
4. *Medium*. We have both imputed / interpolated measures, as well as a year-specific spatial lag estimate.
5. *Medium-high*. We have a single reported prices for that country-year.
6. *High*. We have a multiple reported prices for that country-year, but the variance exceeds the mean.
7. *Very high*. We have a multiple reported prices for that country-year, and the variance does not exceed the mean.

References

Marsh, N., McDougal, T. L., Khan, I. A., & Lison, J. (2017). Illicit Small Arms Prices: Introducing Two New Datasets. *SADO Working Paper Series*(201701-01).