**Research Question**

How did smuggling prices for migrants attempting to enter the United States through U.S. Customs and Border Protection’s Rio Grande Valley sector change between 2015 – 2017?

*So what:* The Rio Grande Valley sector sees some of the largest migration flows in the United States. Examining the cost of migrant smuggling between 2015 and 2017— spanning roughly a year before and after President Trump was elected – could provide an interesting, if preliminary, insight into the “Trump effect” on smuggling prices in the area.

**Price of Smuggling Data**

To evaluate the prices that Transnational Criminal Groups (TCOs) charged migrants in exchange for assistance entering the United States without authorization, I consulted EMIF Norte, a multi-year survey questionnaire of migrants who have been deported from the United States. This extensive survey was conducted by researchers at the Mexican university, Colegio de la Frontera Norte (COLEF).

Survey results can be found at the following website:<https://www.colef.mx/emif/eng/>

However, this website is very difficult to navigate; data downloads exist in very piecemeal fashion, and so we relied on an aggregated COLEF dataset compiled by Stephanie Leutert, Director of the Mexican Security Center at the Strauss Institute. I extracted relevant variables to create new datasets in excel.

**CBP Sector Data**

I used migrants’ response to the COLEF survey question “Through what Mexican border city did you cross into the United States?” as a starting point to determine what CBP enforcement sector migrants pass through when they entered the United States. This data was obtained qualitatively. First, I located the Mexican city on a map and compared it to CBP’s enforcement sector map (obtained through a photograph taken during a CBP PowerPoint presentation at CBP facility). I validated/cross-referenced this visual estimation by locating the nearest U.S. city or town across the border from the Mexican city named and searching CBP’s website and press releases to determine what CBP sector the U.S. city fell under.

**Data Dictionary**

Variables / Column headings:

1. month: the month that the survey respondent entered the United States (1 = January, and so on according to Roman Calendar values)

2. year: the year that the survey respondent entered the United States (2015 and so on)

3. currency\_amt: numerical value of price paid to smuggler

4. currency\_type: type of currency that migrant paid with.

1 = Honduran Lempiras

2 = Mexican Pesos

3 = U.S. Dollars

5. code: EMIF code documenting response to question, “Survey Question: øCu·nto pagÛ o quedÛ de pagarle a esa persona? Unidad / How much did you pay or end up paying that person? Currency unit”[[1]](#footnote-1)

6. mx\_city\_response: name of the Mexican city on the U.S. – Mexico border where the survey respondent crossed into the United States

7. cbp sector: geographic enforcement region of U.S. Customs and Border Protection, a federal government agency charged with enforcing U.S. immigration law.

8. cur\_rate: currency exchange rate for survey respondent’s year of entry. Calculated by using January 1, 2015 as a proxy for all currency exchange rates in 2015, and so on.

9. USD\_conv: price that migrant paid smuggler converted into U.S. dollars

10. USD\_inf: price that migrant paid smuggler adjusted for inflation to 2019 U.S. dollars

**Workflow**

1. Pull relevant observations from COLEF’s EMIF Norte 2016-2017 survey to create two different spreadsheets: 1) “code\_sector.xlsx,” and 2) “smuggling$.xlsx.”

Add a new variable to the “code\_sector” dataset titled “cbp sector.” Using the name of the Mexican city listed under the “mx\_city\_value” column, determine which CBP sector a migrant likely attempted to enter the United States. See “CBP Sector Data” section above for a more detailed description of data collection.

1. Use python to merge the “code\_sector” and “sector currency” datasets. The new dataset will be called “sector\_currency.xlsx”
2. Clean “sector\_currency” dataset, removing “survey year” columns and all codes under “currency\_type” column that are not 1, 2, or 3. As noted in the data dictionary, survey respondents reported using three forms of currency to pay smugglers: Honduran Lempiras (1), Mexican Pesos (2), and U.S. Dollars (3).
3. Export dataset to excel
4. Filter survey responses by year and create separate excel sheets for each year (2015, 2016, 2017).
5. Using Oanda.com [currency converter tool](https://oanda.com/currency/converter/), determine the Lempiras-USD and Pesos-USD Exchange Rate for the years 2015, 2016, and 2017. The dates used to determine yearly currency rates are: January 1, 2015; January 1, 2016; and January 1, 2017.

For each year sheet, create a new “cur\_rate” column and enter the currency rate for values 1 (Lempiras), 2 (Pesos), and 3 (US dollars).

1. For each year sheet, create a new column “USD\_conv” in which the raw price paid to a smuggler (“currency\_amt”) is multiplied by corresponding “cur\_rate” to convert the price into U.S. dollars.
2. For each year sheet, create a new column “USD\_inf” to convert 2015-2017 USD values for “USD\_conv” into 2019 USD values. This will help account for inflation.
3. Clean sheets to remove rows with blank responses under “cbp sector” and variables under the column mx\_city\_value that contain “otras ciudades de…,” meaning “other cities in [Mexican state].” I removed these values because they are not geographically specific enough to provide a strong estimation for where a migrant likely crossed the US-Mexico border, and therefore do not provide strong information regarding CBP sectors.
4. Filter each year sheet to view only data pertaining to the “cbp\_sector” observation “Rio Grande Valley.” Take the median and mean for “USD\_inf” values in the Rio Grande Valley sector for each year.

**Research results:**

Mean and median smuggling prices appear to have dropped slightly between 2015 and 2016. From 2016 to 2017, they rose by 151 and 63 percent, respectively.

**Mean & Median Smuggling Prices in the Rio Grande Valley, 2015-2017**

Much more research would need to be done to determine if there was indeed a “Trump effect” on smuggling prices, but this graph provides an interesting snapshot of the years 2015-2017, a period when many observers speculate that President Trump’s anti-immigrant rhetoric was having an impact on various migration patterns.

**APPENDIX I: EMIF VARIABLE CODES**

|  |  |  |
| --- | --- | --- |
| **Survey Question: øCu·nto pagÛ o quedÛ de pagarle a esa persona? Unidad**  **How much did you pay or end up paying that person? Currency unit**  **COLEF Descriptor: Found in tab “2016 – 2017 Valores,” variable p28\_1u** | | |
| **Variable Code** | **Survey Response** | **English Translation** |
| -2 | No contratÛ persona o pollero para que le ayudara a cruzar a EUA | Did not contract with a person or guide to enter the United States |
| -1 | NaciÛ en otro paÌs diferente a Honduras | Born in a country other than Honduras |
| 0 | Nada | Nothing |
| 1 | Lempiras | (Honduran) Lempiras |
| 2 | Pesos | (Mexican) Pesos |
| 3 | Dûlares | (United States) Dollars |
| 4 | Otra | Other |
| 97 | No sabe | Unknown |
| 98 | No responde | No response |
| 99 | No especificado | None Specified |

|  |  |  |
| --- | --- | --- |
| **Survey Question: øPor cu·l ciudad fronteriza de Mèxico cruzÛ usted a Estados Unidos?**  **Through what Mexican border city did you cross into the United States?**  **COLEF Descriptor: Found in tab “2016-2017 Valores,” variable p26** | | |
| **Variable Code** | **Survey Response** | **English Translation** |
| -1 | NaciÛ en otro paÌs diferente a Honduras | Born in a country other than Honduras |
| 0 | EntrÛ a Estados Unidos por aviÛn | Entered the United States by Airplane |
| 20020001 | Mexicali (Baja California) |  |
| 20020111 | Vicente Guerrero (Algodones) (Baja California) |  |
| 20030001 | Tecate (Baja California) |  |
| 20040001 | Tijuana (Baja California) |  |
| 29999999 | Otras Ciudades de B.C. | Other cities in B.C. |
| 50020001 | Ciudad AcuÒa (Coahuila de Zaragoza) |  |
| 50120001 | Guerrero (Coahuila de Zaragoza) |  |
| 50250001 | Piedras Negras (Coahuila de Zaragoza) |  |
| 59999999 | Otras Ciudades de Coahuila | Other cities in Coahuila |
| 80050068 | Puerto Palomas de Villa (Chihuahua) |  |
| 80280016 | Doctor Porfirio Parra (La Caseta) (Chihuahua) |  |
| 80280163 | Emilio Carranza (Porvenir) (Chihuahua) |  |
| 80320001 | Hidalgo del Parral (Chihuahua) |  |
| 80360001 | JosÈ Mariano JimÈnez (Chihuahua) |  |
| 80370001 | Ju·rez (Chihuahua) |  |
| 80410082 | San JerÛnimo (Chihuahua) |  |
| 80520001 | Manuel Ojinaga (Chihuahua) |  |
| 89999999 | Otras Ciudades de Chihuahua | Other cities in Chihuahua |
| 190050209 | Colombia (Nuevo LeÛn) |  |
| 199999999 | Otras Ciudades de Nuevo LeÛn | Other cities in Nuevo Leon |
| 260020001 | Agua Prieta (Sonora) |  |
| 260040001 | Altar (Sonora) |  |
| 260190001 | Heroica Ciudad de Cananea (Sonora) |  |
| 260390001 | Naco (Sonora) |  |
| 260430001 | Heroica Nogales (Sonora) |  |
| 260550001 | San Luis RÌo Colorado (Sonora) |  |
| 260600001 | S·ric (Sonora) |  |
| 260600044 | S·sabe (Sonora) |  |
| 260700001 | Sonoyta (Sonora) |  |
| 260700053 | San Emeterio (Sonora) |  |
| 269999999 | Otras Ciudades de Sonora | Other cities in Sonora |
| 280070001 | Ciudad Camargo (Tamaulipas) |  |
| 280140001 | Nueva Ciudad Guerrero (Tamaulipas) |  |
| 280150001 | Ciudad Gustavo DÌaz Ordaz (Tamaulipas) |  |
| 280220001 | Heroica Matamoros (Tamaulipas) |  |
| 280270001 | Nuevo Laredo (Tamaulipas) |  |
| 280320001 | Reynosa (Tamaulipas) |  |
| 280330282 | Miguel Alem·n (Brecha 124 entre KilÛmetro 15 y 16 Norte) (Tamaulipas) |  |
| 280330291 | Nuevo Progreso (Tamaulipas) |  |
| 280331097 | RÌo Bravo (Tamaulipas) |  |
| 289999999 | Otras Ciudades de Tamaulipas | Other cities in Tamaulipas |
| 999999997 | No sabe | Unknown |
| 999999998 | No responde | No response |
| 999999999 | No especificado | None specified |

1. Please consult Appendix 1 for more information [↑](#footnote-ref-1)