The Hidden Costs of Violence: How Crime Shapes Women's Labor Market Outcomes in Latin America

Replication Package - README

The following Readme file explains in detail how to obtain the raw databases, and how to run the DoFiles that create the main using databases and replicate the paper graphs. The document is organized in 3 parts:

Replication Package Files – describes the folders of the replication package.

Raw Databases – explains how to set up the raw data.

Replication – explains how to run the do-files that reproduce the graphs in the paper.

Any third party can run the code just by modifying the folder path.

1. Replication Package

The replication folder contains three main subfolders:

1. Data

- 01 Raw Data: contains the raw data exactly as downloaded from the original sources/websites.
- **02 Intermediate Data:** contains datasets generated during cleaning or transformation steps; these are not yet ready for analysis.
- **03 Use Data:** contains the final datasets used for analysis and graph replication.

2. Dofiles

- **00 Master Dofile.do:** sets all required global paths and runs the scripts below.
- **01 Data Consolidation.do:** consolidates the final databases from the raw and intermediate data.
- **02 Graphs.do**: generates the graphs presented in the paper.
- 3. Graphs: This folder contains the paper graphs generated by the dofiles.

2. Raw Databases:

We used three sources of information: i) World Development indicators ii) the specific indicator of World Bank *Intentional homicides* (for total population, males and females), iii) and the Women Business and the Law (WBL) data. The following steps describe how the raw data are prepared to replicate the estimations.

A. World Development indicators

- Download the database int txt format from: https://databank.worldbank.org/source/world-development-indicators
- 2. Select the following variables for all the available economies from 1960 to 2023 in a long format (country–year–indicators as columns)¹.
 - **Homicides:** Intentional homicides (per 100,000 people); Intentional homicides, female (per 100,000 female); Intentional homicides, male (per 100,000 male)
 - Economic indicator: GDP per capita (constant 2015 US\$)
 - **Life expectancy:** Life expectancy at birth, female (years); Life expectancy at birth, male (years); Life expectancy at birth, total (years)
 - Employment to population ratio: Female (%) (modeled ILO estimate); Female (%) (national estimate); Male (%) (modeled ILO estimate); Male (%) (national estimate); Total (%) (modeled ILO estimate); Total (%) (national estimate)
 - Self-employment: Female (% of female employment) (modeled ILO estimate); Male (% of male employment) (modeled ILO estimate); Total (% of total employment) (modeled ILO estimate)
 - Unpaid domestic & care work: Female (% of 24 hour day); Male (% of 24 hour day)
 - Unemployment: Female (% of female labor force) (modeled ILO estimate); Female (% of female labor force) (national estimate); Male (% of male labor force) (modeled ILO estimate); Male (% of male labor force) (national estimate); Total (% of total labor force) (modeled ILO estimate); Total (% of total labor force) (national estimate)
- **3.** This database is in the Raw Data folder with the *name "e2ae7abf-21ab-48ee-a8e8-726cf7ecdef5_Data.txt"*

B. Database: Intentional homicides

We use three series (total, female, male). Each must be downloaded and saved separately:

- Intentional homicides (per 100,000 people):
 - **4.** Download the data base in excel format from the following link²: https://data.worldbank.org/indicator/VC.IHR.PSRC.P5

¹ The codes for the variables are: vc.ihr.psrc.p5; vc.ihr.psrc.p6; vc.ihr.psrc.ma.p5; ny.gdp.pcap.kd; sp.dyn.leoo.fe.in; sp.dyn.leoo.ma.in; sp.dyn.leoo.in; sl.emp.totl.sp.fe.z8; sl.emp.totl.sp.fe.ne.z8; sl.emp.totl.sp.ma.z8; sl.emp.totl.sp.

² When downloaded, the fille name is "API_VC.IHR.PSRC.P5_DS2_en_excel_v2_810972.xls"

5. Eliminate the first 3 complete rows from "Data" sheet (showed below).

Data Source	World Development Indicators	
Last Updated Date	7/1/2025	

- **6.** Save the excel as "WB_homicide_rate" in the "Intermediate Data" folder of the Replication Package.
- Database: Intentional homicides, female (per 100,000 female)
 - 7. Download the data base in excel format from the following link³: https://data.worldbank.org/indicator/VC.IHR.PSRC.P5
 - 8. Eliminate the first 3 complete rows from "Data" sheet (showed below).
 - **9.** Save the excel as "WB_homicide_rate_F" in the "Intermediate Data" folder of the Replication Package.
- Database: Intentional homicides, male (per 100,000 male)
 - **10.** Download the data base in excel format from the following link⁴: https://data.worldbank.org/indicator/VC.IHR.PSRC.P5
 - **11.** Eliminate the first 3 complete rows from "Data" sheet (showed below).
 - **12.** Save the excel as "WB_homicide_rate_M"" in the "Intermediate Data" folder of the Replication Package.
- C. Database: Women, Business and the Law
- Database: Women, Business and the Law 1.0 Data for 1971-2024
 - **13.** Download de Stata version of "Women, Business and the Law 1.0 Data for 1971-2024" at https://wbl.worldbank.org/en/wbl-data6.
- Database: Women, Business and the Law 2.0 Data for 2024
 - **14.** Download de Stata version at https://wbl.worldbank.org/en/wbl-data. Specifically: Stata by 2.0 pillar: | Legal frameworks | Supportive frameworks | Expert opinions by economy.

³ When downloaded, the fille name is "API_VC.IHR.PSRC.FE.P5_DS2_en_excel_v2_812537"

⁴ When downloaded, the fille name is "API_VC.IHR.PSRC.MA.P5_DS2_en_excel_v2_814323.xls"

⁵ This database is in the Raw Data folder with the name "WBL1-0-1971-2024.dta"

⁶ This database is in the Raw Data folder with the name "WBL1-0-1971-2024.dta"

⁷ These databases are in the Raw Data folder with the name "WBL2024_LEGAL_EconLevel_ToPublish.dta",

[&]quot;WBL2024_SUPPORTIVE_EconLevel_ToPublish.dta", and "WBL2024_ExpertOpinion_EconLevel_ToPublish2", respectively.

Table 1. Summary of databases used in the code

Source	Variables	File name	Folder
World Development Indicators (WDI)	Homicides (total, female, male); GDP per capita; Life expectancy (female, male, total); Employment to population ratio (female, male, total – modeled & national); Self-employment (female, male, total); Unpaid domestic & care work (female, male); Unemployment (female, male, total – modeled & national)	e2ae7abf-21ab-48ee-a8e8-726cf7ecdef5_Data.txt	01 Raw Data
World Bank Intentional Homicides	Intentional homicides (per 100,000 people); Intentional homicides, female (per 100,000 female); Intentional homicides, male (per 100,000 male)	WB_homicide_rate_xlsx; WB_homicide_rate_F.xlsx; WB_homicide_rate_M.xlsx	02 Intermediate Data ⁸
Women, Business and the Law (WBL)	Women, Business and the Law Index and components (1971–2024); Women, Business and the Law 2.0 Data for 2024 (Legal frameworks Supportive frameworks Expert opinions by economy)	WBL1-0-1971-2024.dta WBL2024_LEGAL_EconLevel_ToPublish.dta WBL2024_SUPPORTIVE_EconLevel_ToPublish.dta WBL2024_ExpertOpinion_EconLevel_ToPublish2.dta	

⁸ We consider these intermediate databases because they are modified version from the raw database.

3. Replication

To replicate the graphs of the paper:

- Place all databases described in **Section 2** (See Table 1. Summary of databases) into their corresponding folders.
- Open the do-file "00 Master Dofile.do" located in the Dofiles folder.
- Update the file path on **line 29** to the directory where you saved the **Replication Package** folder.
- Run the entire master do-file.
- The outputs will be saved automatically in the following locations:
 - o Intermediate datasets → 02 Intermediate Data9
 - Final datasets → 03 Use Data
 - o Final graphs → **Graphs** folder, saved under the following names:

Table 2. Summary of graphs

Graph	File name	Final database used
Figure 1. Homicides in LAC and rest of the World	homicide_rate_WBL_quartiles_v2.png	WB_homicide_tfm.dta
Figure 3. Countries with higher homicide rates tend to have weaker legal protections for women	homicide_rate_corr_WBL_v1.png	GenderCrime_Merged2.dta
Figure 4. Challenges in Legal Supportive Frameworks Across LAC	homicide_rate_WBL_quartiles_v2.png	GenderCrime_Merged2.dta
Figure A.1. Comparison of Averaged Legal Frameworks, Supportive Frameworks, and Expert Opinions Scores Across Regions	WBL_comparison_2024.png	WBL_2024.dta

⁹ The intermediate databases are: *GenderCrime_WDI.dta, WB_homicide_rate.dta*, and *WB_homicide_rate_F.dta*, which are generated from the DoFiles. The other excel intermediate databases are: *WB_homicide_rate.xls*, *WB_homicide_rate_F.xls*, and *WB_homicide_rate_M.xls*. Even these are not generated by the code, we consider them intermediate because they are modified version from the raw database.

4. Data Availability Statement

Datasets:

- World Development Indicators (WDI)
 - o Filename: e2ae7abf-21ab-48ee-a8e8-726cf7ecdef5_Data.txt
 - o Source: World Bank World Development Indicators
 - o *URL*: https://databank.worldbank.org/source/world-development-indicators
 - o Access year: 2024
 - Access notes: Data can be freely accessed and downloaded in Excel, CSV, or TXT format by selecting indicators and years in the World Bank DataBank portal.

World Bank Intentional Homicides

- Filenames: WB_homicide_rate.xlsx, WB_homicide_rate_F.xlsx,
 WB_homicide_rate_M.xlsx
- Source: World Bank World Development Indicators, indicator
 VC.IHR.PSRC.P5
- o *URL*: https://data.worldbank.org/indicator/VC.IHR.PSRC.P5
- o Access year: 2024
- Access notes: Data can be downloaded directly from the indicator page in Excel format.
- Women, Business and the Law (WBL) 1.0 Data (1971–2024)
 - o Filename: WBL1-0-1971-2024.dta
 - o Source: World Bank Women, Business and the Law Project
 - o *URL*: https://wbl.worldbank.org/en/wbl-data
 - o Access year: 2024
 - Access notes: The dataset is publicly available in multiple formats (Stata, Excel, CSV) from the WBL data portal.
- Women, Business and the Law 2.0 Data for 2024 (Legal frameworks | Supportive frameworks | Expert opinions by economy)
 - Filename: WBL2024_LEGAL_EconLevel_ToPublish.dta;
 WBL2024_SUPPORTIVE_EconLevel_ToPublish.dta;
 WBL2024_ExpertOpinion_EconLevel_ToPublish2.dta.
 - o Source: World Bank Women, Business and the Law Project
 - o URL: https://wbl.worldbank.org/en/wbl-data
 - Access year: 2024

 Access notes: The dataset is publicly available in multiple formats (Stata, Excel, CSV) from the WBL data portal.

Restrictions:

All datasets are open-access and distributed under the World Bank's open data license. There are no restrictions on data access, publication, or retention beyond proper attribution to the World Bank as the source.

Rights statement:

The authors had legitimate access to all datasets used in the manuscript. All data are publicly accessible and were obtained directly from official World Bank databases.