Columbian Violence and Displacement Flows- Summary Statistics, 5/12/2020

I have appended the province and region information to the flows dataset, creating a new numerical variable that represents the province ("province_code"). This updated data file is saved as "/output/COL_muni_flows.csv" in this Dropbox folder.

I have also checked that the cumulative variables are correct.

1. Correlation Matrx of the five cumulative displacement measures, using observations from 2012.

Table 1: 2012 Only

	AS	CODHES	RUV	CEDE	JYP
AS	1.000	0.720	0.874	0.869	0.919
CODHES	0.720	1.000	0.636	0.668	0.712
RUV	0.874	0.636	1.000	0.840	0.884
CEDE	0.869	0.668	0.840	1.000	0.871
JYP	0.919	0.712	0.884	0.871	1.000

2. Year-by-year correlation matrices of five displacement flows

Table 2: 1996

	AS	CODHES	RUV	CEDE	JYP
AS	1	NA	NA	NA	NA
CODHES	NA	1.000	0.205	NA	0.148
RUV	NA	0.205	1.000	NA	0.960
CEDE	NA	NA	NA	1	NA
JYP	NA	0.148	0.960	NA	1.000

Table 3: 1997

	AS	CODHES	RUV	CEDE	JYP
AS	1.000	0.628	0.643	0.656	0.624
CODHES	0.628	1.000	0.390	0.380	0.398
RUV	0.643	0.390	1.000	0.731	0.998
CEDE	0.656	0.380	0.731	1.000	0.726
JYP	0.624	0.398	0.998	0.726	1.000

Table 4: 1998

	AS	CODHES	RUV	CEDE	JYP
AS	1.000	0.569	0.909	0.685	0.831
CODHES	0.569	1.000	0.436	0.165	0.421
RUV	0.909	0.436	1.000	0.796	0.953
CEDE	0.685	0.165	0.796	1.000	0.777
JYP	0.831	0.421	0.953	0.777	1.000

Table 5: 1999

	AS	CODHES	RUV	CEDE	JYP
AS	1.000	0.635	0.953	0.812	0.875
CODHES	0.635	1.000	0.587	0.444	0.556
RUV	0.953	0.587	1.000	0.876	0.841
CEDE	0.812	0.444	0.876	1.000	0.669
JYP	0.875	0.556	0.841	0.669	1.000

Table 6: 2000

	AS	CODHES	RUV	CEDE	JYP
AS	1.000	0.644	0.944	0.861	0.906
CODHES	0.644	1.000	0.646	0.606	0.625
RUV	0.944	0.646	1.000	0.889	0.955
CEDE	0.861	0.606	0.889	1.000	0.876
JYP	0.906	0.625	0.955	0.876	1.000

Table 7: 2001

	AS	CODHES	RUV	CEDE	JYP
AS	1.000	0.442	0.853	0.833	0.858
CODHES	0.442	1.000	0.548	0.437	0.543
RUV	0.853	0.548	1.000	0.843	0.953
CEDE	0.833	0.437	0.843	1.000	0.842
JYP	0.858	0.543	0.953	0.842	1.000

Table 8: 2002

	AS	CODHES	RUV	CEDE	JYP
AS	1.000	0.451	0.789	0.811	0.849
CODHES	0.451	1.000	0.500	0.538	0.499
RUV	0.789	0.500	1.000	0.856	0.926
CEDE	0.811	0.538	0.856	1.000	0.904
JYP	0.849	0.499	0.926	0.904	1.000

Table 9: 2003

	AS	CODHES	RUV	CEDE	JYP
AS	1.000	0.515	0.821	0.840	0.921
CODHES	0.515	1.000	0.581	0.694	0.672
RUV	0.821	0.581	1.000	0.794	0.855
CEDE	0.840	0.694	0.794	1.000	0.917
JYP	0.921	0.672	0.855	0.917	1.000

Table 10: 2004

	AS	CODHES	RUV	CEDE	JYP
AS	1.000	0.619	0.799	0.829	0.891
CODHES	0.619	1.000	0.515	0.717	0.669
RUV	0.799	0.515	1.000	0.807	0.908
CEDE	0.829	0.717	0.807	1.000	0.907
JYP	0.891	0.669	0.908	0.907	1.000

Table 11: 2005

	AS	CODHES	RUV	CEDE	JYP
AS	1.000	0.337	0.796	0.807	0.893
CODHES	0.337	1.000	0.473	0.505	0.541
RUV	0.796	0.473	1.000	0.803	0.907
CEDE	0.807	0.505	0.803	1.000	0.897
JYP	0.893	0.541	0.907	0.897	1.000

Table 12: 2006

	AS	CODHES	RUV	CEDE	JYP
AS	1.000	0.429	0.837	0.894	0.937
CODHES	0.429	1.000	0.500	0.478	0.563
RUV	0.837	0.500	1.000	0.801	0.885
CEDE	0.894	0.478	0.801	1.000	0.905
JYP	0.937	0.563	0.885	0.905	1.000

Table 13: 2007

	AS	CODHES	RUV	CEDE	JYP
AS	1.000	0.423	0.581	0.760	0.722
CODHES	0.423	1.000	0.778	0.772	0.834
RUV	0.581	0.778	1.000	0.865	0.911
CEDE	0.760	0.772	0.865	1.000	0.948
JYP	0.722	0.834	0.911	0.948	1.000

Table 14: 2008

	AS	CODHES	RUV	CEDE	JYP
AS	1.000	0.607	0.773	0.861	0.892
CODHES	0.607	1.000	0.497	0.571	0.620
RUV	0.773	0.497	1.000	0.777	0.799
CEDE	0.861	0.571	0.777	1.000	0.919
JYP	0.892	0.620	0.799	0.919	1.000

Table 15: 2009

	AS	CODHES	RUV	CEDE	JYP
AS	1.000	0.545	0.820	0.768	0.947
CODHES	0.545	1.000	0.510	0.284	0.635
RUV	0.820	0.510	1.000	0.545	0.813
CEDE	0.768	0.284	0.545	1.000	0.687
JYP	0.947	0.635	0.813	0.687	1.000

Table 16: 2010

	AS	CODHES	RUV	CEDE	JYP
AS	1.000	0.928	0.834	NA	0.954
CODHES	0.928	1.000	0.825	NA	0.927
RUV	0.834	0.825	1.000	NA	0.854
CEDE	NA	NA	NA	1	NA
JYP	0.954	0.927	0.854	NA	1.000

Table 17: 2011

	AS	CODHES	RUV	CEDE	JYP
AS	1.000	0.475	0.803	NA	0.843
CODHES	0.475	1.000	0.568	NA	0.574
RUV	0.803	0.568	1.000	NA	0.885
CEDE	NA	NA	NA	1	NA
JYP	0.843	0.574	0.885	NA	1.000

Table 18: 2012

	AS	CODHES	RUV	CEDE	JYP
AS	1	NA	NA	NA	NA
CODHES	NA	1.000	0.678	NA	0.492
RUV	NA	0.678	1.000	NA	0.630
CEDE	NA	NA	NA	1	NA
JYP	NA	0.492	0.630	NA	1.000

3. Identify outliers in displacement flows measures

I define an observation as an outlier if at least one of the displacement flows is three standard deviations from the mean. I have collected these observations into a seperate CSV folder, saved as "../figures/outliers.csv" in this Dropbox folder.

4. Pairwise scatter plots of displacement flows by year.

The figures are saved in the folder "../figures/pairwise_plots_year/" on Dropbox. Note that I have excluded outliers from these figures.

5. Identify instances where there is an increase in displacement when there is an increase in violence

I have collected the observations that meet this condition for each of the five displacement measures. These observations are reported in a seperate CSV files called "../figures/X_instances.csv" where X is the name of one of the five displacement measures. For example, observations for the AS displacement flows are reported under "../figures/displaced_AS_instances.csv"

6. Distribution between number of years between an increase in violence and an increase in displacement

The figures are saved under the folder "..figures/dist_displaced" on Dropbox.

7. Figures of cumulative violence on cumulative displacements (per capita) at time periods with violence increments

I create one graph for each municipality and save under the folder "../figures/cum_viol_disp_bymuni/". The name of each graph is the municipality code.

8. How many instances there are in which one of the displacement measures records a zero, while the other four record positive numbers?

```
## [1] 5558
```

How many of these are found in years (1996,2010, 2011, 2012) where one of the measures has zeroes for all municipalities?

```
## [1] 1239
```

9. How many instances there are in which two of the displacement measures records a zero, while the other three record positive numbers?

```
## [1] 1104
```

10. Figures of displacement flows by municipality

The figures are saved in the folder "../figures/disp_flow_bymuni/" on Dropbox. For municipalities that had $v\_t > 0$ for some t (group 1), I saved their figures in the "v_t pos" sub folder. For municipalities that had $v\_t == 0$ for all t (group 2), I saved their figures in the "v_t all zero" sub folder.

11. How many instances there are where v_1>0 and d_t =0 for some of the measures?

```
## [1] 763
```