## **COUNTRY EXPOSURE MODEL**

Review main statistic of a exposure model and create summaries for a given Country.

/home/risk/venvs/py38w/lib/python3.8/site-packages/geopandas/\_compat.py:111: UserWarning: The Sh apely GEOS version (3.9.1-CAPI-1.14.2) is incompatible with the GEOS version PyGEOS was compiled with (3.10.1-CAPI-1.16.0). Conversions between both will be slow.

warnings.warn(

# Parameters country = "Bangladesh"

Exposure files:

Exposure\_Com\_Bangladesh.csv Exposure\_Ind\_Bangladesh.csv

Exposure\_Res\_Bangladesh.csv

#### Sanity checks and formats

## **Exposure at National level**

## Summary by occupancy type

	OCCUPANTS	BUILDINGS	COST_USD	BUILDINGS_%	COST_USD_%
OCCUPANCY					
Res	144.0M	28,248.6K	\$312.3B	98.01%	87.80%
Ind	0.0M	101.4K	\$15.9B	0.35%	4.46%
Com	0.0M	472.0K	\$27.5B	1.64%	7.74%

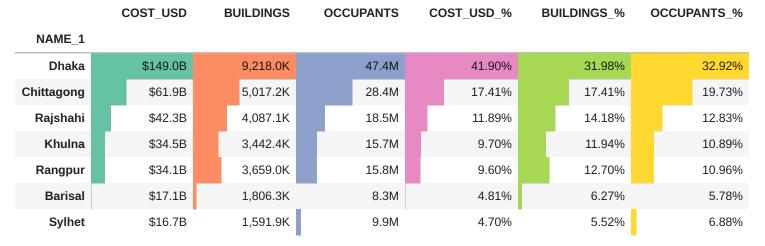
#### Other metrics to consider

**OCCUPANCY** 

AREA\_SQM COST\_BUILDING\_USD AVG\_BUILDING\_AREA\_SQM AVG\_COST\_PER\_AREA\_USD

1,480.0M \$240 Total \$287.9B 51 Res 1,414.8M \$259.2B 50 \$221 26.0M \$9.2B 257 \$610 Ind Com 39.1M \$19.5B 83 \$704

# Exposure summary at Admin level 1



## **Exposure by simplified taxonomy** Adding `MACRO\_TAXO` column

COST\_USD **BUILDINGS OCCUPANTS** COST\_USD\_% BUILDINGS\_% MACRO\_TAXO 12,932.3K 28.78% OT \$102.4B 59.1M 44.87% 41.00% \$99.3B 5.1M 27.92% RC 278.2K 0.97% 3.57% MUR **\$**64.3B 5,991.8K 33.1M 18.08% 20.79% 22.98% W \$43.5B 4,795.6K 23.2M 12.22%16.64% 16.08% ADO/E \$41.0B 4,798.1K 23.6M 11.54% 16.65% 16.37% S 25.9K 0.0M 1.45% 0.09% 0.00% \$5.2B

### **Exposure by taxonomy** Showing only taxonomies that represent 90% of the total `COST USD`

ADO/E

EU/LWAL+DNO/H:1/RES2

Showing only taxonomies that represent 90% of the total `COST_USD`								
		COST_USD	BUILDINGS	COST_USD_%	BUILDINGS_%			
MACRO_TAXO	TAXONOMY							
ОТ	MATO/LN/H:1/EWME/RES	\$93,339.5M	12,024,416	29.37%	43.80%			
W	W+WBB/LPB+DNO/H:1/RES	\$29,995.7M	3,864,182	9.44%	14.08%			
RC	CR/LFINF+DUL/H:6/RES	\$29,715.9M	18,710	9.35%	0.07%			
MUR	MUR/LWAL+DNO/H:1/RES	\$22,784.8M	3,302,142	7.17%	12.03%			
ADO/E	EU/LWAL+DNO/H:1/RES	\$16,723.4M	2,154,381	5.26%	7.85%			
	MUR+ADO/LWAL+DNO/H:1/RES	\$16,719.3M	2,153,860	5.26%	7.85%			
RC	CR/LFINF+DUL/H:4/RES	\$15,923.9M	18,799	5.01%	0.07%			
	CR/LFINF+DUL/H:5/RES	\$15,907.5M	12,019	5.01%	0.04%			
MUR	MUR/LWAL+DNO/H:1/RES2	\$11,637.5M	843,300	3.66%	3.07%			
RC	CR/LFINF+DUL/H:3/RES	\$11,514.1M	135,930	3.62%	0.50%			
MUR	MUR/LWAL+DNO/H:2/RES2	\$9,975.2M	722,843	3.14%	2.63%			
	MUR/LWAL+DNO/H:2/RES	\$8,679.0M	838,551	2.73%	3.05%			
RC	CR/LFM+DUL/HBET:1-2/IND1	\$7,940.3M	17,330	2.50%	0.06%			
ОТ	MATO/LN/HBET:1-2/EWME/RES	\$6,792.6M	583,371	2.14%	2.12%			
RC	CR/LDUAL+DUL/HBET:6-12/RES	\$4,433.1M	1,163	1.39%	0.00%			
W	W+WBB/LPB+DNO/H:1/RES2	\$4,135.3M	266,364	1.30%	0.97%			
ADO/E	MUR+ADO/LWAL+DNO/H:1/RES2	\$4,085.2M	263,138	1.29%	0.96%			
S	S/LFM+DUL/HBET:1-2/IND1	\$4,020.3M	7,445	1.26%	0.03%			

\$3,505.4M

225,789

1.10%

0.82%