# **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 = "Finland"

Exposure files:

Exposure\_Com\_Finland.csv Exposure\_Ind\_Finland.csv Exposure\_Res\_Finland.csv

### Sanity checks and formats

# **Exposure at National level**

### Summary by occupancy type

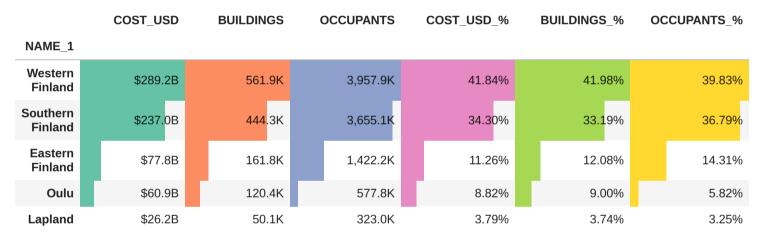
	OCCUPANTS	BUILDINGS	COST_USD	BUILDINGS_%	COST_USD_%
OCCUPANCY					
Res	5,520.0K	1,236.9K	\$392.8B	92.41%	56.83%
Ind	2,208.0K	40.0K	\$185.2B	2.99%	26.80%
Com	2,208.0K	61.6K	\$113.1B	4.60%	16.36%

#### Other metrics to consider

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

OCCUPANCY				
Total	191.4M	\$444.9B	143	\$3,610
Res	<b>14</b> 2.9M	\$314.2B	116	\$2,749
Ind	30.3M	\$74.1B	757	\$6,118
Com	18.3M	\$56.5B	297	\$6,178

### **Exposure summary at Admin level 1**



### **Exposure by simplified taxonomy**

Adding `MACRO\_TAXO` column COST\_USD **BUILDINGS OCCUPANTS** COST\_USD\_% **BUILDINGS\_%** OCCUPANTS\_% MACRO\_TAXO

RC	\$406.8B	641.3K	5,988.3K	58.86%	47.91%	60.27%
MUR	\$114.1B	44 <mark>2.0K</mark>	1,714.7K	16.51%	33.02%	17.26%
w	\$96.9B	239.2K	1,349.8K	14.02%	17.87%	13.59%
S	\$73.4B	16.0K	883.2K	10.62%	1.20%	8.89%

# **Exposure by taxonomy**

Showing only taxonomies that represent 90% of the total `COST\_USD` COST\_USD BUILDINGS COST\_USD\_% **BUILDINGS\_%** 

MACRO_TAXO	TAXONOMY				
RC	CR/LFINF+CDN/H:3/RES	\$219.7B	562.6K	36.09%	46.50%
	CR+PC/LFM+CDN/H:1/IND	\$67.4B	14.0K	11.08%	1.16%
	CR/LFINF+CDL/H:3/COM	\$65.2B	29.0K	10.72%	2.40%
MUR	MUR+CB/LWAL+CDN/HBET:1- 2/RES	\$56.8B	316.6K	9.33%	26.16%
S	S+SL/LFM+CDN/H:1/IND	\$45.9B	10.0K	7.53%	0.83%
RC	CR/LWAL+CDN/HBET:4- 10/RES	\$43.2B	33.2K	7.10%	2.74%
W	W/LWAL+CDN/H:1/IND	\$34.8B	8.0K	5.73%	0.66%
	W/LPB+CDL/HBET:1-3/RES	\$27.5B	153.4K	4.52%	12.68%
S	S/LFM+CDN/H:1/IND	\$27.5B	6.0K	4.52%	0.50%
MUR	MUR+CL/LWAL+CDN/HBET:1- 4/RES	\$20.6B	77.2K	3.38%	6.38%