

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 Shapely 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 = "Fiji"
```

Exposure files:
Exposure_Com_Fiji.csv
Exposure_Ind_Fiji.csv
Exposure_Res_Fiji.csv

Sanity checks and formats

Exposure at National level

Summary by occupancy type

	OCCUPANTS	BUILDINGS	COST_USD	BUILDINGS_%	COST_USD_%
OCCUPANCY					
Res	879.8K	178,097	\$10,145.3M	94.45%	87.91%
Ind	0.0K	1,740	\$330.9M	0.92%	2.87%
Com	0.0K	8,718	\$1,064.1M	4.62%	9.22%

Other metrics to consider

	AREA_SQM	COST_BUILDING_USD	AVG_BUILDING_AREA_SQM	AVG_COST_PER_AREA_USD
OCCUPANCY				
Total	14,474.5K	\$8,140.0M	77	\$797
Res	13,224.1K	\$7,298.2M	74	\$767
Ind	295.8K	\$177.1M	170	\$1,118
Com	954.6K	\$664.7M	110	\$1,115

Exposure summary at Admin level 1

	COST_USD	BUILDINGS	OCCUPANTS	COST_USD_%	BUILDINGS_%	OCCUPANTS_%
NAME_1						
Central	\$5,082.9M	76.8K	378.3K	44.05%	40.73%	43.00%
Western	\$4,665.7M	74.2K	337.0K	40.43%	39.33%	38.31%
Northern	\$1,416.0M	29.6K	131.3K	12.27%	15.70%	14.92%
Eastern	\$375.7M	8.0K	33.2K	3.26%	4.24%	3.77%

Exposure by simplified taxonomy

Adding `MACRO_TAXO` column

	COST_USD	BUILDINGS	OCCUPANTS	COST_USD_%	BUILDINGS_%	OCCUPANTS_%
MACRO_TAXO						
RC	\$5,917.6M	41.5K	238.0K	51.28%	21.99%	27.05%
OT	\$2,365.9M	67.1K	286.0K	20.50%	35.60%	32.51%
W	\$2,333.2M	50.3K	225.1K	20.22%	26.65%	25.59%
MUR	\$923.7M	29.7K	130.7K	8.00%	15.76%	14.85%

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+CIP/LFM+DUL/H:1/RES	\$2,897.0M	32,374	28.65%	18.57%
	CR+CIP/LFM+DUL/HBET:2-4/RES	\$2,358.5M	5,896	23.32%	3.38%
W	W+WLI/LPB+DUL/HBET:1-2/RES	\$2,074.2M	44,389	20.51%	25.46%
OT	ME+MEIR/LN+DNO/RMT6/H:1/RES	\$1,131.9M	42,570	11.19%	24.42%
MUR	MUR+CB/LWAL+DNO/RMT6+RWO1/H:1/RES	\$872.1M	28,674	8.62%	16.45%
OT	ME+MEIR/LPB+DUL/RMT8/H:1/RES	\$485.1M	18,244	4.80%	10.47%
	ME+MEIR/LPB+DUL/RMT8/H:1/COM	\$293.4M	2,179	2.90%	1.25%

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