

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 = "Nauru"
```

Exposure files:
Exposure_Com_Nauru.csv
Exposure_Ind_Nauru.csv
Exposure_Res_Nauru.csv

Sanity checks and formats

Exposure at National level

Summary by occupancy type

	OCCUPANTS	BUILDINGS	COST_USD	BUILDINGS_%	COST_USD_%
OCCUPANCY					
Res	9.9K	2,290	\$413.5M	89.14%	67.32%
Ind	0.0K	104	\$83.9M	4.05%	13.65%
Com	0.0K	175	\$116.9M	6.81%	19.03%

Other metrics to consider

	AREA_SQM	COST_BUILDING_USD	AVG_BUILDING_AREA_SQM	AVG_COST_PER_AREA_USD
OCCUPANCY				
Total	380.9K	\$392.7M	148	\$1,613
Res	286.5K	\$282.4M	125	\$1,443
Ind	31.8K	\$40.5M	306	\$2,635
Com	62.6K	\$69.7M	358	\$1,868

Exposure summary at Admin level 1

	COST_USD	BUILDINGS	OCCUPANTS	COST_USD_%	BUILDINGS_%	OCCUPANTS_%
NAME_1						
Aiwo	\$178.4M	502	1,220	29.05%	19.54%	12.27%
Denigomodu	\$109.9M	287	1,804	17.89%	11.17%	18.14%
Meneng	\$92.7M	410	1,380	15.09%	15.96%	13.88%
Yaren	\$40.5M	186	747	6.59%	7.24%	7.51%
Nibok	\$33.4M	182	484	5.44%	7.08%	4.87%
Buada	\$29.6M	169	739	4.83%	6.58%	7.43%
Boe	\$24.5M	163	851	3.99%	6.34%	8.56%
Anetan	\$22.2M	135	587	3.62%	5.25%	5.90%
Ewa	\$22.1M	118	446	3.61%	4.59%	4.48%
Baiti	\$18.6M	122	513	3.03%	4.75%	5.16%
Anabar	\$12.9M	93	452	2.10%	3.62%	4.54%
Uaboe	\$12.3M	74	318	1.99%	2.88%	3.20%
Anibare	\$11.2M	76	226	1.83%	2.96%	2.27%
Ijuw	\$5.8M	52	178	0.94%	2.02%	1.79%

Exposure by simplified taxonomy

Adding `MACRO_TAXO` column						
	COST_USD	BUILDINGS	OCCUPANTS	COST_USD_%	BUILDINGS_%	OCCUPANTS_%
MACRO_TAXO						
MCF	\$288.7M	1,457	5,897	47.00%	56.71%	59.30%
W	\$172.7M	932	3,495	28.11%	36.28%	35.14%
RC	\$113.6M	88	386	18.50%	3.43%	3.88%
S	\$39.2M	92	168	6.38%	3.58%	1.69%

Exposure by taxonomy

Showing only taxonomies that represent 90% of the total `COST_USD`

		COST_USD	BUILDINGS	COST_USD_%	BUILDINGS_%
MACRO_TAXO	TAXONOMY				
MCF	MCF/LWAL+DUL/H:1/RES	\$247.3M	1,374	45.23%	63.06%
W	W+WLI/LFBR+DUL/H:1/RES	\$90.0M	588	16.47%	26.98%
RC	CR+CIP/LFINF+DUL/HBET:2-3/RES	\$55.4M	69	10.12%	3.17%
	CR+CIP/LFINF+DUL/HBET:2-3/IND	\$40.1M	7	7.33%	0.32%
W	W+WLI/LFBR+DUL/H:1/COM	\$39.3M	60	7.19%	2.75%
MCF	MCF/LWAL+DUL/H:1/COM	\$37.1M	65	6.79%	2.98%
S	S+SL/LPB+DUL/EWME/RME1/HBET:2-3/IND	\$19.4M	4	3.55%	0.18%
RC	CR+CIP/LFINF+DUL/HBET:2-3/COM	\$18.2M	12	3.32%	0.55%

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