COUNTRY EXPOSURE MODEL

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

```
# Parameters
country = "Timor_Leste"
```

```
Exposure files:
  Exposure_Com_Timor_Leste.csv
  Exposure_Ind_Timor_Leste.csv
  Exposure_Res_Timor_Leste.csv
```

Sanity checks and formats

```
Timor_Leste
  Exposure/Exposure/Exposure_Com_Timor_Leste.csv
  Exposure/Exposure/Exposure_Ind_Timor_Leste.csv
  Exposure/Exposure/Exposure_Res_Timor_Leste.csv
  Occupants / Dwellings = 5.8
  Reference avg household size (2019) = 5.28
  Population (exposure / UN_2021) = 0.88
  Exposure models  OK
```

Exposure at National level

Summary by occupancy type

OCCUPANCY	OCCUPANTS	BUILDINGS	COST_USD	BUILDINGS_%	COST_USD_%
Res	1,185.1K	196,935	$5,595.4M	91.88%	84.04%
Ind	0.0K	4,123	$311.0M	1.92%	4.67%
Com	0.0K	13,286	$752.0M	6.20%	11.29%

Other metrics to consider

OCCUPANCY	AREA_SQM	COST_BUILDING_USD	AVG_BUILDING_AREA_SQM	AVG_COST_PER_AREA_USD
Total	22,572.3K	$5,246.1M	105	$295
Res	18,949.0K	$4,584.5M	96	$295
Ind	843.1K	$162.8M	205	$369
Com	2,780.2K	$498.8M	209	$270

Exposure summary at Admin level 1

NAME_1	COST_USD	BUILDINGS	OCCUPANTS	COST_USD_%	BUILDINGS_%	OCCUPANTS_%
Dili	$2,269.8M	43.7K	277.3K	34.09%	20.39%	23.40%
Baucau	$594.4M	24.2K	122.7K	8.93%	11.28%	10.35%
Ermera	$568.2M	21.8K	122.2K	8.53%	10.16%	10.31%
Bobonaro	$499.7M	18.5K	100.9K	7.50%	8.63%	8.52%
SAR Oecusse	$384.9M	15.1K	67.3K	5.78%	7.03%	5.68%
Viqueque	$375.4M	15.9K	75.1K	5.64%	7.42%	6.34%
Liquiçá	$340.7M	12.6K	68.2K	5.12%	5.88%	5.75%
Lautém	$335.9M	12.3K	74.9K	5.05%	5.73%	6.32%
Covalima	$332.8M	13.5K	64.2K	5.00%	6.32%	5.42%
Ainaro	$278.4M	11.5K	63.1K	4.18%	5.38%	5.33%
Manufahi	$243.6M	9.5K	53.8K	3.66%	4.42%	4.54%
Manatuto	$229.9M	7.7K	46.6K	3.45%	3.61%	3.93%
Aileu	$204.8M	8.1K	48.8K	3.08%	3.76%	4.12%

Exposure by simplified taxonomy

Adding `MACRO_TAXO` column

MACRO_TAXO	COST_USD	BUILDINGS	OCCUPANTS	COST_USD_%	BUILDINGS_%	OCCUPANTS_%
MUR	$2,499.1M	73,247	389.3K	37.53%	34.17%	32.85%
W	$2,053.4M	115,377	621.3K	30.84%	53.83%	52.43%
RC	$1,915.4M	10,434	89.7K	28.77%	4.87%	7.57%
OT	$114.3M	11,919	70.1K	1.72%	5.56%	5.91%
S	$58.7M	775	0.0K	0.88%	0.36%	0.00%
ADO/E	$17.5M	2,592	14.6K	0.26%	1.21%	1.24%

Exposure by taxonomy

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

MACRO_TAXO	TAXONOMY	COST_USD	BUILDINGS	COST_USD_%	BUILDINGS_%
MUR	MUR/LWAL+DNO/H:2/RES	$1,319.1M	31,188	22.39%	17.34%
	MUR/LWAL+DNO/H:1/RES	$935.7M	33,187	15.88%	18.45%
W	W+WBB/LPB+DUM/RMT8/H:1/RES	$769.5M	43,318	13.06%	24.08%
	W+WBB/LPB+DUM/RMT6/H:1/RES	$769.5M	43,318	13.06%	24.08%
RC	CR+CIP/LFM/DUL/HBET:3-/RES	$639.1M	999	10.85%	0.56%
	CR+CIP/LFM/DUL/H:2/RES	$304.3M	1,333	5.17%	0.74%
W	W+WO/LN/DUL/H:1+HFAPP:1/RES	$302.2M	17,011	5.13%	9.46%
	CR+CIP/LFM/DUL/H:1/RES	$253.6M	3,998	4.30%	2.22%
RC	CR+CIP/LFM/DUM/HBET:3-5/COM	$177.3M	757	3.01%	0.42%
	CR+CIP/LWAL+DUL/HBET:1-2/IND	$164.2M	1,198	2.79%	0.67%
MUR	MUR/LWAL+DNO/H:2/COM	$131.2M	3,016	2.23%	1.68%
RC	CR+CIP/LFINF/DUL/HBET:3-/COM	$126.3M	539	2.14%	0.30%