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 S hapely GEOS version (3.9.1-CAPI-1.14.2) is incompatible with the GEOS version PyGEOS was compil ed with (3.10.1-CAPI-1.16.0). Conversions between both will be slow.

warnings.warn(

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_Com_Timor_Leste.csv Exposure/Exposure_Ind_Timor_Leste.csv Exposure/Exposure_Res_Timor_Leste.csv Occupants / Dwellings = 5.8 Reference avg household size (2019) = 5.28Population (exposure / UN 2021) = 0.88 Exposure models OK

Exposure at National level

Summary by occupancy type

	OCCUPANTS	BUILDINGS	COST_USD	BUILDINGS_%	COST_USD_%
OCCUPANCY					
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

BUILDINGS_%

OCCUPANTS_%

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 COST_USD **BUILDINGS** OCCUPANTS COST_USD_%

NAME_1						
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%

Adding `MACRO_TAXO` column

Exposure by simplified taxonomy

COST USD BUILDINGS OCCUPANTS COST_USD_% BUILDINGS_% OCCUPANTS_% MACRO TAXO

MACKO_IAXO						
MUR	\$2,499.1M	73 ,247	3 89.3K	37.53%	34.17%	<mark>3</mark> 2.85%
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%
ОТ	\$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%

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

Exposure by taxonomy

COST_USD BUILDINGS COST_USD_% BUILDINGS_% MACRO_TAXO **TAXONOMY**

MUR	MUR/LWAL+DNO/H:2/RES	\$1,319.1M	31,188	22.39%	17.34%
	MUR/LWAL+DNO/H:1/RES	\$935.7M	33,1 87	15. <mark>88%</mark>	18.45%
	W+WRR/I PR+DIIM/RMT8/H·1/RFS	\$769.5M	43 318	13.06%	24 08%

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+WBB/LPB+DUM/RMT8/H:1/RES	\$76 9.5M	43,318	13.06%	24.08%
W+WBB/LPB+DUM/RMT6/H:1/RES	\$76 9.5M	43,318	13.06%	24.08%
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+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%
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/LWAL+DNO/H:2/COM	\$131.2M	3,016	2.23%	1.68%
CR+CIP/LFINF+DUL/HBET:3-/COM	\$126.3M	539	2.14%	0.30%
	MUR/LWAL+DNO/H:1/RES W+WBB/LPB+DUM/RMT8/H:1/RES W+WBB/LPB+DUM/RMT6/H:1/RES CR+CIP/LFM+DUL/HBET:3-/RES CR+CIP/LFM+DUL/H:2/RES W+WO/LN+DUL/H:1+HFAPP:1/RES CR+CIP/LFM+DUL/H:1/RES CR+CIP/LFM+DUM/HBET:3-5/COM CR+CIP/LWAL+DUL/HBET:1-2/IND MUR/LWAL+DNO/H:2/COM	MUR/LWAL+DNO/H:1/RES \$935.7M W+WBB/LPB+DUM/RMT8/H:1/RES \$769.5M W+WBB/LPB+DUM/RMT6/H:1/RES \$769.5M CR+CIP/LFM+DUL/HBET:3-/RES \$639.1M CR+CIP/LFM+DUL/H:2/RES \$304.3M W+WO/LN+DUL/H:1+HFAPP:1/RES \$302.2M CR+CIP/LFM+DUL/H:1/RES \$253.6M CR+CIP/LFM+DUM/HBET:3-5/COM \$177.3M CR+CIP/LWAL+DUL/HBET:1-2/IND \$164.2M MUR/LWAL+DNO/H:2/COM \$131.2M	MUR/LWAL+DNO/H:1/RES \$935.7M 33,187 W+WBB/LPB+DUM/RMT8/H:1/RES \$769.5M 43,318 W+WBB/LPB+DUM/RMT6/H:1/RES \$769.5M 43,318 CR+CIP/LFM+DUL/HBET:3-/RES \$639.1M 999 CR+CIP/LFM+DUL/H:2/RES \$304.3M 1,333 W+WO/LN+DUL/H:1+HFAPP:1/RES \$302.2M 17,011 CR+CIP/LFM+DUL/H:1/RES \$253.6M 3,998 CR+CIP/LFM+DUM/HBET:3-5/COM \$177.3M 757 CR+CIP/LWAL+DUL/HBET:1-2/IND \$164.2M 1,198 MUR/LWAL+DNO/H:2/COM \$131.2M 3,016	MUR/LWAL+DNO/H:1/RES \$935.7M 33,187 15.88% W+WBB/LPB+DUM/RMT8/H:1/RES \$769.5M 43,318 13.06% W+WBB/LPB+DUM/RMT6/H:1/RES \$769.5M 43,318 13.06% CR+CIP/LFM+DUL/HBET:3-/RES \$639.1M 999 10.85% CR+CIP/LFM+DUL/H:2/RES \$304.3M 1,333 5.17% W+WO/LN+DUL/H:1+HFAPP:1/RES \$302.2M 17,011 5.13% CR+CIP/LFM+DUL/H:1/RES \$253.6M 3,998 4.30% CR+CIP/LFM+DUM/HBET:3-5/COM \$177.3M 757 3.01% CR+CIP/LWAL+DUL/HBET:1-2/IND \$164.2M 1,198 2.79% MUR/LWAL+DNO/H:2/COM \$131.2M 3,016 2.23%