COUNTRY EXPOSURE MODEL

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

```
# Parameters
country = "Bangladesh"
```

```
Exposure files:
  Exposure_Com_Bangladesh.csv
  Exposure_Ind_Bangladesh.csv
  Exposure_Res_Bangladesh.csv
```

Sanity checks and formats

Exposure at National level

Summary by occupancy type

OCCUPANCY	OCCUPANTS	BUILDINGS	COST_USD	BUILDINGS_%	COST_USD_%
Res	144.0M	28,248.6K	$312.3B	98.01%	87.80%
Ind	0.0M	101.4K	$15.9B	0.35%	4.46%
Com	0.0M	472.0K	$27.5B	1.64%	7.74%

Other metrics to consider

OCCUPANCY	AREA_SQM	COST_BUILDING_USD	AVG_BUILDING_AREA_SQM	AVG_COST_PER_AREA_USD
Total	1,480.0M	$287.9B	51	$240
Res	1,414.8M	$259.2B	50	$221
Ind	26.0M	$9.2B	257	$610
Com	39.1M	$19.5B	83	$704

Exposure summary at Admin level 1

NAME_1	COST_USD	BUILDINGS	OCCUPANTS	COST_USD_%	BUILDINGS_%	OCCUPANTS_%
Dhaka	$149.0B	9,218.0K	47.4M	41.90%	31.98%	32.92%
Chittagong	$61.9B	5,017.2K	28.4M	17.41%	17.41%	19.73%
Rajshahi	$42.3B	4,087.1K	18.5M	11.89%	14.18%	12.83%
Khulna	$34.5B	3,442.4K	15.7M	9.70%	11.94%	10.89%
Rangpur	$34.1B	3,659.0K	15.8M	9.60%	12.70%	10.96%
Barisal	$17.1B	1,806.3K	8.3M	4.81%	6.27%	5.78%
Sylhet	$16.7B	1,591.9K	9.9M	4.70%	5.52%	6.88%

Exposure by simplified taxonomy

Adding `MACRO_TAXO` column

MACRO_TAXO	COST_USD	BUILDINGS	OCCUPANTS	COST_USD_%	BUILDINGS_%	OCCUPANTS_%
OT	$102.4B	12,932.3K	59.1M	28.78%	44.87%	41.00%
RC	$99.3B	278.2K	5.1M	27.92%	0.97%	3.57%
MUR	$64.3B	5,991.8K	33.1M	18.08%	20.79%	22.98%
W	$43.5B	4,795.6K	23.2M	12.22%	16.64%	16.08%
ADO/E	$41.0B	4,798.1K	23.6M	11.54%	16.65%	16.37%
S	$5.2B	25.9K	0.0M	1.45%	0.09%	0.00%

Exposure by taxonomy

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

MACRO_TAXO	TAXONOMY	COST_USD	BUILDINGS	COST_USD_%	BUILDINGS_%
OT	MATO/LN/H:1/EWME/RES	$93,339.5M	12,024,416	29.37%	43.80%
W	W+WBB/LPB+DNO/H:1/RES	$29,995.7M	3,864,182	9.44%	14.08%
RC	CR/LFINF+DUL/H:6/RES	$29,715.9M	18,710	9.35%	0.07%
MUR	MUR/LWAL+DNO/H:1/RES	$22,784.8M	3,302,142	7.17%	12.03%
ADO/E	EU/LWAL+DNO/H:1/RES	$16,723.4M	2,154,381	5.26%	7.85%
	MUR+ADO/LWAL+DNO/H:1/RES	$16,719.3M	2,153,860	5.26%	7.85%
RC	CR/LFINF+DUL/H:4/RES	$15,923.9M	18,799	5.01%	0.07%
	CR/LFINF+DUL/H:5/RES	$15,907.5M	12,019	5.01%	0.04%
MUR	MUR/LWAL+DNO/H:1/RES2	$11,637.5M	843,300	3.66%	3.07%
RC	CR/LFINF+DUL/H:3/RES	$11,514.1M	135,930	3.62%	0.50%
MUR	MUR/LWAL+DNO/H:2/RES2	$9,975.2M	722,843	3.14%	2.63%
	MUR/LWAL+DNO/H:2/RES	$8,679.0M	838,551	2.73%	3.05%
RC	CR/LFM+DUL/HBET:1-2/IND1	$7,940.3M	17,330	2.50%	0.06%
OT	MATO/LN/HBET:1-2/EWME/RES	$6,792.6M	583,371	2.14%	2.12%
RC	CR/LDUAL+DUL/HBET:6-12/RES	$4,433.1M	1,163	1.39%	0.00%
W	W+WBB/LPB+DNO/H:1/RES2	$4,135.3M	266,364	1.30%	0.97%
ADO/E	MUR+ADO/LWAL+DNO/H:1/RES2	$4,085.2M	263,138	1.29%	0.96%
S	S/LFM+DUL/HBET:1-2/IND1	$4,020.3M	7,445	1.26%	0.03%
ADO/E	EU/LWAL+DNO/H:1/RES2	$3,505.4M	225,789	1.10%	0.82%