

REGIONAL EXPOSURE SUMMARIES

Review main statistic of regional exposure models and create summaries across countries.

# Parameters		region = "Africa"	
1	-	Algeria	
2	-	Angola	
3	-	Benin	
4	-	Botswana	
5	-	Burkina Faso	
6	-	Burundi	
7	-	Cameroon	
8	-	Cape_Verde	
9	-	Central_African_Republic	
10	-	Chad	
11	-	Comoros	
12	-	Congo	
13	-	Democratic_Republic_of_the_Congo	
14	-	Djibouti	
15	-	Egypt	
16	-	Equatorial_Guinea	
17	-	Eritrea	
18	-	Eswatini	
19	-	Ethiopia	
20	-	Gabon	
21	-	Gambia	
22	-	Ghana	
23	-	Guinea	
24	-	Guinea_Bissau	
25	-	Ivory_Coast	
26	-	Kenya	
27	-	Lesotho	
28	-	Liberia	
29	-	Libya	
30	-	Madagascar	
31	-	Malawi	
32	-	Mali	
33	-	Mauritania	
34	-	Mauritius	
35	-	Morocco	
36	-	Mozambique	
37	-	Namibia	
38	-	Niger	
39	-	Nigeria	
40	-	Rwanda	
41	-	Sao_Tome_and_Principe	
42	-	Senegal	
43	-	Seychelles	
44	-	Sierra_Leone	
45	-	Somalia	
46	-	South_Africa	
47	-	South_Sudan	
48	-	Sudan	
49	-	Tanzania	
50	-	Togo	
51	-	Tunisia	
52	-	Uganda	
53	-	Zambia	
54	-	Zimbabwe	

Index(['COUNTRY', 'ID_1', 'NAME_1', 'TAXONOMY', 'OCCUPANCY', 'DWELLINGS',
 'BUILDINGS', 'OCCUPANTS', 'COST_USD', 'COST_STRUCTURAL_USD',
 'COST_NONSTRUCTURAL_USD', 'COST_CONTENTS_USD', 'COST_PER_AREA_USD'],
 dtype='object')

Exposure at National level by occupancy

BUILDINGS

		Com	Ind	Res	Com %	Ind %	Res %
Algeria	Com	306,780	199,404	6,633.3K	4.30%	2.79%	92.91%
	Ind	339,529	59,799	6,579.9K	4.86%	0.86%	94.28%
	Res	85,554	33,931	2,267.7K	3.58%	1.42%	94.99%
Botswana	Com	15,660	5,259	599.5K	2.52%	0.85%	96.63%
	Ind	129,427	59,824	3,520.5K	3.49%	1.61%	94.90%
	Res	20,613	6,132	2,360.2K	0.86%	0.26%	98.88%
Burundi	Com	221,072	82,075	5,033.7K	4.14%	1.54%	94.32%
	Ind	6,596	2,410	127.2K	4.84%	1.77%	93.39%
	Res	17,741	4,205	936.5K	1.85%	0.44%	97.71%
Central_African_Republic	Com	48,792	3,347	2,728.8K	1.76%	0.12%	98.12%
	Ind	18,474	1,111	150.9K	1.86%	0.72%	97.42%
	Res	34,485	15,508	1,618.8K	2.72%	1.22%	96.06%
Congo	Com	335,520	127,165	16,618.8K	1.97%	0.74%	97.29%
	Ind	5,044	983	155.8K	3.12%	0.61%	96.28%
	Res	1,181,551	699,123	22,800.6K	4.79%	2.83%	92.88%
Equatorial_Guinea	Com	12,132	6,298	209.3K	5.33%	2.77%	91.91%
	Ind	19,108	4,305	703.3K	2.63%	0.59%	96.78%
	Res	6,744	2,630	271.9K	2.40%	0.94%	96.67%
Ethiopia	Com	409,896	145,188	25,253.2K	1.59%	0.56%	97.85%
	Ind	13,580	2,714	513.3K	2.56%	0.51%	96.92%
	Res	15,967	4,019	274.2K	5.43%	1.37%	93.21%
Ghana	Com	214,260	101,844	7,934.5K	2.60%	1.23%	96.17%
	Ind	60,800	9,652	2,037.9K	2.88%	0.46%	96.66%
	Res	8,879	2,275	259.5K	3.70%	0.95%	95.35%
Guinea_Bissau	Com	139,278	37,210	4,959.6K	2.72%	0.73%	96.55%
	Ind	175,445	24,155	14,171.2K	1.22%	0.17%	98.61%
	Res	8,461	2,430	218.8K	3.70%	0.44%	98.02%
Liberia	Com	40,282	8,192	940.7K	3.66%	1.03%	95.07%
	Ind	44,674	22,788	1,103.3K	3.82%	1.95%	94.24%
	Res	231,233	80,016	5,998.2K	3.66%	1.31%	95.07%
Madagascar	Com	45,906	12,863	4,050.8K	1.12%	0.31%	98.57%
	Ind	71,615	16,013	3,197.6K	2.18%	0.49%	97.33%
	Res	30,809	11,688	1,768.6K	2.70%	1.03%	96.27%
Mauritania	Com	12,507	5,215	327.4K	3.62%	1.51%	94.87%
	Ind	172,077	102,408	7,983.9K	2.08%	1.24%	96.68%
	Res	141,665	54,628	6,591.1K	2.09%	0.80%	97.11%
Mozambique	Com	24,475	7,099	563.2K	4.11%	1.19%	94.69%
	Ind	68,864	19,884	3,881.1K	1.73%	0.50%	97.76%
	Res	1,011,140	202,312	42,489.6K	2.31%	0.46%	97.22%
Rwanda	Com	44,633	11,106	3,113.7K	1.41%	0.35%	98.24%
	Ind	1,049	264	51.0K	2.00%	0.50%	97.49%
	Res	67,482	14,966	1,769.8K	3.64%	0.81%	95.55%
Seychelles	Com	1,259	386	23.5K	5.01%	1.54%	93.45%
	Ind	54,193	9,644	1,289.0K	4.01%	0.70%	95.29%
	Res	27,174	3,540	2,609.1K	1.03%	0.13%	98.84%
Sierra_Leone	Com	751,869	291,042	17,357.2K	4.09%	1.58%	94.33%
	Ind	44,719	30,200	2,198.6K	2.43%	1.64%	95.94%
	Res	225,413	92,090	7,067.4K	3.05%	1.25%	96.70%
South_Africa	Com	378,941	88,622	12,092.0K	3.02%	0.71%	96.28%
	Ind	52,474	20,108	1,777.7K	2.84%	1.09%	96.08%
	Res	105,092	87,608	2,698.7K	3.63%	3.03%	93.34%
Tanzania	Com	203,025	65,977	9,620.5K	2.05%	0.67%	97.28%
	Ind	81,473	18,737	3,471.7K	2.28%	0.52%	97.19%
	Res	51,870	11,212	3,559.9K	1.43%	0.31%	98.26%

COST_USD

		Com	Ind	Res	Com %	Ind %	Res %
Algeria	Com	39,890.7M	28,843.7M	237,059.4M	13.04%	9.43%	77.52%
	Ind	19,872.7M	4,507.5M	97,534.6M	16.30%	3.70%	80.00%
	Res	4,002.1M	2,234.6M	28,116.5M	11.65%	6.50%	81.85%
Botswana	Com	1,881.5M	719.5M	19,686.3M	8.44%	3.23%	88.33%
	Ind	6,256.9M	4,367.7M	43,048.1M	11.66%	8.14%	80.20%
	Res	711.7M	324.4M	24,408.7M	2.80%	1.27%	95.93%
Burundi	Com	15,452.8M	7,155.7M	99,269.2M	12.63%	5.87%	81.45%
	Ind	394.7M	197.2M	21,219.4M	14.56%	7.77%	78.17%
	Res	499.2M	167.8M	7,515.0M	6.10%	2.05%	91.85%
Central_African_Republic	Com	2,342.8M	219.2M	32,302.0M	7.72%	0.63%	92.65%
	Ind	206.8M	99.2M	2,490.2M	6.40%	3.55%	89.06%
	Res	2,004.3M	1,290.0M	20,035.8M	8.59%	5.53%	85.88%
Democratic_Republic_of_the_Congo	Com	14,995.3M	8,117.5M	207,386.5M	6.51%	3.62%	89.97%
	Ind	258.7M	72.7M	1,040.7M	13.13%	3.68%	83.21%
	Res	81,163.5M	58,230.0M	430,979.7M	14.23%	10.21%	75.56%
Equatorial_Guinea	Com	808.0M	591.8M	3,961.6M	15.07%	11.04%	73.89%
	Ind	1,010.0M	305.8M	9,838.5M	9.05%	2.74%	88.20%
	Res	575.3M	295.4M	6,105.9M	8.25%	4.23%	87.52%
Ethiopia	Com	24,449.6M	9,645.2M	263,670.1M	8.21%	3.24%	88.55%
	Ind	936.1M	267.9M	10,040.7M	8.32%	2.38%	89.29%
	Res	1,215.6M	417.8M	5,966.1M	16.00%	5.50%	78.51%
Ghana	Com	21,229.2M	13,522.6M	216,330.6M	8.46%	5.39%	86.16%
	Ind	5,150.0M	1,244.0M	43,855.2M	10.25%	2.48%	87.28%
	Res	658.7M	238.9M	4,579.4M	12.03%	4.36%	83.61%
Ivory_Coast	Com	7,373.7M	2,048.1M	29,691.9M	9.30%	3.84%	87.21%
	Ind	11,603.3M	2,762.2M	69,134.3M	4.59%	0.84%	94.56%
	Res	363.0M	135.0M	6,963.8M	4.87%	1.81%	93.33%
Liberia	Com	2,060.8M	577.7M	11,256.0M	14.83%	4.16%	81.01%
	Ind	6,494.8M	3,626.1M	44,235.0M	11.95%	6.67%	81.38%
	Res	14,589.6M	6,291.6M	87,416.6M	13.47%	5.81%	80.72%
Madagascar	Com	2,404.0M	960.6M	59,476.9M	3.83%	1.53%	94.65%
	Ind	2,111.5M	700.8M	27,845.0M	6.89%	2.29%	90.83%
	Res	1,739.5M	834.9M	15,907.8M	9.41%	4.52%	86.07%
Mauritania	Com	1,283.0M	611.2M	8,166.5M	12.75%	6.08%	81.17%
	Ind	15,072.0M	10,224.2M	201,806.5M	6.64%	4.50%	88.66%
	Res	7,762.3M	4,413.8M	98,424.1M	7.02%	3.99%	88.99%
Namibia	Com	2,245.8M	791.8M	10,802.0M	16.23%	5.72%	78.05%
	Ind	3,350.2M	1,406.7M	49,530.4M	6.17%	2.59%	91.24%
	Res	86,979.8M	24,605.8M	937,420.4M	8.29%	2.35%	89.36%
Nigeria	Com	2,534.7M	943.7M	48,171.9M	4.91%	1.83%	93.27%
	Ind	60.1M	21.7M	849.6M	6.45%	3.37%	91.23%
	Res	6,598.2M	1,788.2M	48,102.4M	11.68%	2.13%	85.15%
Rwanda	Com	96.5M	25.8M	489.4M	15.78%	4.22%	80.00%
	Ind	2,784.6M	698.6M	17,855.9M	13.05%	3.87%	83.68%
	Res	1,665.9M	274.7M	30,048.0M	5.21%	0.86%	93.93%
Sierra_Leone	Com	104,748.8M	46,398.9M	628,202.5M	13.44%	5.95%	80.61%
	Ind	2,377.3M	913.2M	20,910.6M	9.41%	7.85%	82.75%
	Res	12,808.5M	6,506.5M	91,833.6M	11.52%	5.85%	82.62%
South_Africa	Com	24,339.4M	7,501.0M	216,410.5M	9.80%	3.02%	85.17%
	Ind	1,946.5M	1,055.5M	17,214.5M	9.63%	5.22%	85.15%
	Res	10,091.0M	9,462.4M	71,749.8M	11.05%	10.36%	78.58%
Tanzania	Com	11,760.6M	5,500.3M	157,111.5M	6.74%	3.15%	90.10%
	Ind	7,554.8M	2,347.9M	90,611.7M	7.52%	2.34%	90.15%
	Res	4,796.2M	1,382.2M	82,823.6M	5.39%	1.55%	93.06%

Other metrics to consider

		AVG. BUILDING AREA SQM		AVG. COST PER AREA USD	
COUNTRY	OCCUPANCY				
Algeria	Com	218		\$405	
	Ind	285		\$291	
	Res	92		\$312	
Angola	Com	194		\$222	
	Ind	285		\$172	
	Res	81		\$155	
Benin	Com	187		\$186	
	Ind	285		\$152	
	Res	80		\$129	
Botswana	Com	210		\$394	
	Ind	284		\$287	
	Res	89		\$297	
Burkina_Faso	Com	185		\$195	
	Ind	255		\$169	
	Res	73		\$138	
Burundi	Com	182		\$142	
	Ind	281		\$124	
	Res	80		\$104	
Cameroon	Com	201		\$379	
	Ind	285		\$272	
	Res	82		\$216	
Cape_Verde	Com	188		\$227	
	Ind	284		\$191	
	Res	81		\$166	
Central_African_Republic	Com	188		\$174	
	Ind	285		\$147	
	Res	80		\$126	
Chad	Com	168		\$218	
	Ind	271		\$182	
	Res	70		\$122	
Comoros	Com	203		\$231	
	Ind	285		\$172	
	Res	86		\$176	
Congo	Com	188		\$245	
	Ind	285		\$199	
	Res	82		\$183	
Democratic_Republic_of_the_Congo	Com	182		\$216	
	Ind	284		\$165	
	Res	79		\$152	
Djibouti	Com	185		\$321	
	Ind	285		\$240	
	Res	81		\$226	
Ethiopia	Com	194		\$211	
	Ind	285		\$154	
	Res	71		\$118	
Gabon	Com	187		\$252	
	Ind	280		\$211	
	Res	81		\$186	
Gambia	Com	189		\$300	
	Ind	284		\$239	
	Res	83		\$223	
Ghana	Com	192		\$382	
	Ind	285		\$302	
	Res	82		\$284	
Guinea	Com	186		\$340	
	Ind	285		\$296	
	Res	75		\$236	
Guinea_Bissau	Com	184		\$301	
	Ind	280		\$247	
	Res	80		\$209	
Ivory_Coast	Com	187		\$210	
	Ind	285		\$171	
	Res	80		\$145	
Kenya	Com	187		\$250	
	Ind	281		\$198	
	Res	77		\$173	
Lesotho	Com	183		\$175	
	Ind	278		\$132	
	Res	85		\$135	
Liberia	Com	184		\$208	
	Ind	283		\$165	
	Res	76		\$131	
Libya	Com	220		\$446	
	Ind	285		\$318	
	Res	93		\$344	
Madagascar	Com	191		\$235	
	Ind	285		\$182	
	Res	79		\$154	
Malawi	Com	184		\$212	
	Ind	285		\$174	
	Res	80		\$154	
Mali	Com	184		\$120	
	Ind	285		\$101	
	Res	82		\$88	
Mauritania	Com	190		\$217	
	Ind	284		\$165	
	Res	81		\$150	
Mauritius	Com	205		\$339	
	Ind	283		\$249	
	Res	84		\$234	
Morocco	Com	207		\$311	
	Ind	285		\$223	
	Res	90		\$242	
Mozambique	Com	177		\$222	
	Ind	285		\$186	
	Res	79		\$156	
Namibia	Com	195		\$315	
	Ind	284		\$235	
	Res	77		\$196	
Niger	Com	185		\$196	
	Ind	285		\$165	
	Res	79		\$134	
Nigeria	Com	191		\$332	
	Ind	285		\$276	
	Res	78		\$234	
Rwanda	Com	184		\$231	
	Ind	284		\$199	
	Res	79		\$160	
Sao_Tome_and_Principe	Com	185		\$228	
	Ind	279		\$193	
	Res	81		\$168	
Senegal	Com	195		\$371	
	Ind	285		\$273	
	Res	86		\$275	
Seychelles	Com	161		\$317	
	Ind	170		\$244	
	Res	76		\$214	
Sierra_Leone	Com	187		\$206	
	Ind	285		\$171	
	Res	79		\$148	
Somalia	Com	189		\$237	
	Ind	282		\$181	
	Res	73		\$133	
South_Africa	Com	204		\$470	
	Ind	285		\$333	
	Res	85		\$342	
South_Sudan	Com	190		\$197	
	Ind	285		\$152	
	Res	77		\$126	
Sudan	Com	191		\$211	
	Ind	285		\$163	
	Res	78		\$138	
Tanzania	Com	192		\$249	
	Ind	285		\$194	
	Res	84		\$181	
Togo	Com	187		\$148	
	Ind	285		\$121	
	Res	80		\$101	
Tunisia	Com	216		\$302	
	Ind	285		\$218	
	Res	91		\$233	
Uganda	Com	189		\$229	
	Ind	285		\$192	
	Res	82		\$165	
Zambia	Com	188		\$367	
	Ind	285		\$289	
	Res	82		\$271	
Zimbabwe	Com	189		\$360	
	Ind	284		\$285	
	Res	79		\$249	

National exposure by simplified taxonomy

Adding 'MACRO_TAXO' column

BUILDINGS

COUNTRY	ADO/E %	MCF %	MUR %	OT %	RC %	S %	W %
Algeria	16.62%	12.81%	44.76%	2.87%	20.63%	0.70%	1.62%
Angola	32.88%	5.10%	42.62%	6.00%	4.50%	0.21%	8.70%
Benin	35.06%	2.21%	29.69%	3.84%	1.78%	0.35%	27.05%
Botswana	23.60%	7.34%	59.07%	3.12%	3.72%	0.21%	2.94%
Burkina_Faso	62.45%	1.53%	19.15%	0.07%	1.24%	0.40%	15.16%
Burundi	71.79%	0.23%	10.53%	3.27%	0.20%	0.06%	13.91%
Cameroon	24.02%	11.53%	32.08%	2.70%	9.41%	0.38%	19.88%
Cape_Verde	32.86%	2.86%	34.01%	4.47%	2.29%	0.43%	23.07%
Central_African_Republic	40.53%	0.84%	22.60%	2.67%	1.35%	0.11%	31.90%
Chad	74.40%	2.33%	16.26%	3.04%	1.94%	0.03%	1.99%
Comoros	30.29%	1.27%	30.48%	8.03%	1.03%	0.18%	28.73%
Congo	38.06%	1.50%	26.89%	2.34%	2.42%	0.31%	28.49%
Democratic_Republic_of_the_Congo	40.12%	0.93%	23.26%	2.62%	1.50%	0.19%	31.39%
Djibouti	22.80%	0.91%	19.04%	39.33%	0.36%	0.15%	17.41%
Egypt	24.26%	7.37%	51.16%	3.08%	11.86%	0.71%	1.57%
Equatorial_Guinea	31.95%	2.31%	42.98%	2.20%	3.86%	0.69%	16.01%
Eritrea	3.82%	2.86%	62.34%	10.83%	0.80%	0.15%	18.26%
Eswatini	7.57%	1.66%	62.24%	2.58%	2.01%	0.24%	23.71%
Ethiopia	26.45%	0.01%	9.24%	0.93%	0.01%	0.14%	63.22%
Gabon	36.46%	1.99%	29.71%	2.14%	3.21%	0.13%	26.37%
Gambia	21.57%	5.00%	46.24%	2.39%	4.01%	0.34%	20.45%
Ghana	25.42%	4.92%	46.25%	1.42%	5.28%	0.31%	16.39%