Economic Clustering Summary Report: Malawi 2015-16

Data Summary

Country Code-year: MW15

Number of observations: 26109

Number of variables used: 21

Variable set used: 1

Variables used in the algorithm: hv206, hv207, hv208, hv210, hv225, hv227, hv237, hv243a, hv243b, hv244, hv246, hv247, sh121i, sh121j, sh121k, water, toilet, floor, roof, cookfuel, wall

Top 10 Variable Sets (Sorted by ASW)

Set	ASW	Var.1	Var.2	Var.3	Var.4
1	0.916	has electricity	has television	has mobile telephone	floor
2	0.9151	has electricity	has television	household has a bed with a mattress	floor
3	0.91	has electricity	has radio	has television	household has a bed with a mattress
4	0.9092	has electricity	has television	floor	roof
5	0.908	has electricity	has radio	has television	floor
6	0.9057	has electricity	has television	household has a sofa set	floor
7	0.9049	has electricity	has television	floor	wall
8	0.9028	has electricity	has television	has mobile telephone	household has a sofa set
9	0.9019	has electricity	has television	household has a bed with a mattress	roof
10	0.9	has electricity	has television	has bank account	household has a bed with a mattress

Marginal Distributions

Variable	Description	% in Top Sets	Distribution
hv206	has electricity	100%	Binary, 12.8% (1/yes)
hv208	has television	100%	Binary, 13% (1/yes)
hv207	has radio	20%	Binary, 42% (1/yes)
hv243a	has mobile telephone	20%	Binary, 56% (1/yes)
sh121j	household has a bed with a mattress	40%	Binary, 29.7% (1/yes)
floor	floor	60%	Categorical, 0 (finished) = 28.2%, 1 (natural) = 71.8%, 2 (other) = 0%, 3 (rudimentary) = 0%
sh121k	household has a sofa set	20%	Binary, 15.1% (1/yes)
hv247	has bank account	10%	Binary, 19.8% (1/yes)
roof	roof	20%	Categorical, 0 (finished) = 48.4%, 1 (natural) = 51%, 2 (other) = 0%, 3 (rudimentary) = 0.6%
wall	wall	10%	Categorical, 0 (finished) = 78.4%, 1 (natural) = 2.4%, 2 (other) = 0%, 3 (rudimentary) = 19.1%

Cluster Configuration (Set #1)

Cluster Group	has electricity	has television	has mobile telephone	floor	Proportion (%)
1	0	0	0	finished	3.76
1	0	1	0	finished	
1	1	0	0	finished	
2	0	1	1	finished	13.93
2	1	0	1	finished	
2	1	1	0	finished	
2	1	1	1	finished	
2	1	1	1	natural	
3	0	0	1	natural	31.59
3	0	0	1	other	
3	0	0	1	rudimentary	
3	0	1	1	natural	
3	1	0	1	natural	
3	1	0	1	other	
4	0	0	1	finished	10.76
5	0	0	0	natural	39.97
5	0	0	0	other	
5	0	0	0	rudimentary	
5	0	1	0	natural	
5	1	0	0	natural	
5	1	1	0	natural	

Validation Tables

a.1) Using Children Deceased (Sorted by proportion of 0%)

Cluster ID/Children Deceased	0%	1-33%	34-66%	67+%
2[*]	3,757 (89.0%)	303 (7.2%)	124 (2.9%)	38 (0.9%)
4	2,376 (83.7%)	333 (11.7%)	107 (3.8%)	23 (0.8%)
1	567 (81.9%)	84 (12.1%)	31 (4.5%)	10 (1.4%)
3	6,610 (79.4%)	1,222 (14.7%)	396 (4.8%)	95 (1.1%)
5	6,330 (76.5%)	1,388 (16.8%)	468 (5.7%)	84 (1.0%)
Total	19,640 (80.7%)	3,330 (13.7%)	1,126 (4.6%)	250 (1.0%)

[*]The chi-squared p-value is 0

a.2) Aggregating proportions greater than 0%

Cluster ID/Children Deceased	0%	>0%
2[*]	3,757 (89.0%)	465 (11.0%)
4	2,376 (83.7%)	463 (16.3%)
1	567 (81.9%)	125 (18.1%)
3	6,610 (79.4%)	1,713 (20.6%)
5	6,330 (76.5%)	1,940 (23.5%)
Total	19,640 (80.7%)	4,706 (19.3%)

[*]The chi-squared p-value is 0

b) Using Individual Education Level Attained (Sorted by weighted average by row)

Cluster ID/Education	0	1	2	3	4	5	W. Avg.
2[*][a]	92 (2.2%)	926 (21.9%)	311 (7.4%)	1,401 (33.2%)	931 (22.1%)	561 (13.3%)	2.91
4	165 (5.8%)	1,199 (42.2%)	313 (11.0%)	787 (27.7%)	290 (10.2%)	85 (3.0%)	2.03
1	62 (9.0%)	369 (53.3%)	76 (11.0%)	149 (21.5%)	32 (4.6%)	4 (0.6%)	1.61
3	881 (10.6%)	4,877 (58.6%)	863 (10.4%)	1,335 (16.0%)	341 (4.1%)	26 (0.3%)	1.45
5	1,555 (18.8%)	5,453 (65.9%)	540 (6.5%)	624 (7.5%)	95 (1.1%)	3 (0.0%)	1.06
Total	2,755 (11.3%)	12,824 (52.7%)	2,103 (8.6%)	4,296 (17.6%)	1,689 (6.9%)	679 (2.8%)	1.65

[*]The chi-squared p-value is 0

[a]0=none, 1=incomplete primary, 2=primary, 3=incomplete secondary, 4=secondary, 5=higher

c) Using Primary Healthcare Source (Sorted by % enrolled in public healthcare [ascending order])

Cluster ID/Primary Healthcare Source	0	1	2
2[*][a]	1,087 (63.0%)	635 (36.8%)	3 (0.2%)
4	925 (73.6%)	329 (26.2%)	3 (0.2%)
1	257 (81.6%)	57 (18.1%)	1 (0.3%)
3	3,261 (82.7%)	674 (17.1%)	8 (0.2%)
5	3,135 (86.1%)	491 (13.5%)	15 (0.4%)
Total	8,665 (79.6%)	2,186 (20.1%)	30 (0.3%)

[*]The chi-squared p-value is 0

[a]0=public/government, 1=private, 2=other