

HDCA-OPHI Summer School, Delft 2011

Exercise on standard errors of percentage changes for cross sections

Consider the following point estimates and confidence intervals of the adjusted headcount ratio for Nigeria in 2003 and 2008.

Value of k cut-off	2033			2008		
	P.E.	L.C.I	U.C.I	P.E.	L.C.I	U.C.I
1	0.422499	0.403746	0.441253	0.373905	0.363948	0.383862
2	0.406707	0.387125	0.426289	0.354392	0.343826	0.364958
3	0.367777	0.346649	0.388906	0.310021	0.298508	0.321533
4	0.311516	0.288791	0.334241	0.262522	0.250751	0.274294
5	0.277244	0.254842	0.299647	0.231585	0.219991	0.24318
6	0.214972	0.193817	0.236127	0.17803	0.167039	0.189021
7	0.145111	0.126483	0.163739	0.116383	0.107062	0.125705
8	0.089765	0.07603	0.103501	0.064468	0.057661	0.071275
9	0.044482	0.034631	0.054333	0.029339	0.024892	0.033785

For each k cut-off compute:

1. The percentage changes in the adjusted headcount ratio, together with their asymptotic confidence intervals. For these intervals consider adding and subtracting from the point estimate *twice* the standard error. (This gives a confidence interval with about 96% of confidence). In order to retrieve the standard errors from the table (which are needed in the asymptotic standard errors' formula) bear in mind that the table's confidence intervals have been produced also by adding/subtracting twice the standard error.