

Appendix III – Assessing consistency of final models for complete case analyses with the Hausman test

Table C1. Results of the Hausman test on final models

	Inpatient Admissions					Skilled Birth Attendance					Diarrhoea treatment for children				
	Fixed- effects		Random- effects		Hausman	Fixed- effects		Random- effects		Hausman	Fixed- effects		Random- effects		Hausman
	Coefficient (95% CI)	p-value	Coefficient (95% CI)	p-value	p-value	Coefficient (95% CI)	p-value	Coefficient (95% CI)	p-value	p-value	Coefficient (95% CI)	p-value	Coefficient (95% CI)	p-value	p-value
Poverty gap \$1.90 (2011 PPP)	-0.222 (-0.472 – 0.029)	0.082	-0.196 (-0.399 – -0.007)	0.059	<0.001	-0.209 (-0.290 – -0.125)	<0.001	-0.179 (-0.236 – -0.123)	<0.001	0.014	-0.267 (-0.408 – -0.127)	<0.001	-0.137 (-0.218 – -0.056)	0.001	<0.001
Poverty gap \$3.20 (2011 PPP)	-0.588 (-1.07 – -0.109)	0.017	-0.543 (-0.945 – -0.141)	0.008	0.004	-0.264 (-0.374 – -0.155)	<0.001	-0.259 (-0.330 – -0.187)	<0.001	0.110	-0.335 (-0.514 – -0.156)	<0.001	-0.185 (-0.289 – -0.081)	0.001	<0.001
Poverty gap \$5.50 (2011 PPP)	-0.782 (-1.38 – -0.173)	0.016	-0.716 (-1.28 – -0.156)	0.012	0.107	-0.238 (-0.367 – -0.109)	<0.001	-0.262 (-0.342 – -0.182)	<0.001	0.628	-0.326 (-0.573 – -0.079)	0.010	-0.168 (-0.283 – -0.054)	0.004	0.001
Poverty headcount ratio \$1.90 (2011 PPP)	-0.790 (-1.41 – -0.153)	0.021	-0.722 (-1.26 – -0.182)	0.009	<0.001	-0.372 (-0.529 – -0.216)	<0.001	-0.364 (-0.465 – -0.262)	<0.001	0.042	-0.437 (-0.702 – -0.173)	0.001	-0.249 (-0.398 – -0.100)	0.001	<0.001
Poverty headcount ratio \$3.20 (2011 PPP)	-1.190 (-2.18 – -0.193)	0.020	-0.928 (-1.80 – -0.059)	0.036	0.054	-0.298 (-0.497 – -0.098)	0.004	-0.358 (-0.472 – -0.245)	<0.001	0.435	-0.387 (-0.768 – -0.007)	0.046	-0.176 (-0.336 – -0.016)	0.031	0.003
Poverty headcount ratio \$5.50 (2011 PPP)	-0.922 (-1.69 – -0.152)	0.020	-0.871 (-1.56 – -0.181)	0.013	0.897	-0.136 (-0.258 – -0.015)	0.029	-0.203 (-0.302 – -0.103)	<0.001	0.108	-0.244 (-0.599 – 0.110)	0.175	-0.102 (-0.237 – 0.033)	0.139	0.006

Note: These fixed-effects regressions do not represent the ones tested in the Hausman test, but the ones presented in the complete case analyses, which use robust standard errors. Both have the same coefficients, but CIs and p-values vary slightly

Table C1. [continued]

	Acute respiratory infection treatment					Antenatal care utilization						Full immunization				
	Fixed- effects		Random- effects		Hausman	Fixed- effects		Random- effects		Hausman		Fixed- effects		Random- effects		Hausman
	Coefficient (95% CI)	p-value	Coefficient (95% CI)	p-value	p-value	Coefficient	p-value	Coefficient	p-value	p-value		Coefficient	p-value	Coefficient	p-value	p-value
Poverty gap \$1.90 (2011 PPP)	-0.108 (-0.296 – 0.081)	0.259	-0.101 (-0.197 – -0.004)	0.040	0.439	-0.231 (-0.330 – -0.131)	<0.001	-0.184 (-0.254 – -0.114)	<0.001	0.019		-0.191 (-0.323 - -0.060)	0.005	-0.140 (-0.204 – -0.076)	<0.001	0.008
Poverty gap \$3.20 (2011 PPP)	-0.124 (-0.314 – 0.066)	0.198	-0.137 (-0.256 – -0.017)	0.025	0.748	-0.357 (-0.494 – -0.221)	<0.001	-0.314 (-0.404 – -0.224)	<0.001	0.363		-0.229 (-0.381 - -0.077)	0.004	-0.197 (-0.280 – -0.114)	<0.001	0.142
Poverty gap \$5.50 (2011 PPP)	-0.088 (-0.244 - 0.068)	0.267	-0.122 (-0.246 – 0.003)	0.055	0.911	-0.411 (-0.592 – -0.229)	<0.001	-0.375 (-0.472 – -0.279)	<0.001	0.823		-0.218 (-0.362 - -0.073)	0.004	-0.209 (-0.301 – -0.117)	<0.001	0.558
Poverty headcount ratio \$1.90 (2011 PPP)	-0.188 (-0.452 – 0.077)	0.162	-0.207 (-0.378 – -0.037)	0.017	0.662	-0.483 (-0.6492 – -0.276)	<0.001	-0.423 (-0.557 – -0.289)	<0.001	0.351		-0.316 (-0.524 - -0.109)	0.003	-0.263 (-0.382 – -0.144)	<0.001	0.015
Poverty headcount ratio \$3.20 (2011 PPP)	-0.101 (-0.282 – 0.079)	0.267	-0.149 (-0.319 – 0.020)	0.084	0.907	-0.559 (-0.848 – -0.271)	<0.001	-0.514 (-0.651 – -0.378)	<0.001	0.922		-0.255 (-0.452 - -0.059)	0.011	-0.268 (-0.397 – -0.139)	<0.001	0.615
Poverty headcount ratio \$5.50 (2011 PPP)	0.019 (-0.106 – 0.145)	0.755	-0.053 (-0.194 – 0.088)	0.459	0.052	-0.381 (-0.642 – -0.119)	0.005	-0.377 (-0.499 – -0.254)	<0.001	0.624		-0.149 (-0.289 - -0.009)	0.037	-0.182 (-0.292 – -0.072)	0.001	0.463

Table C1 [end]

	Breast cancer screening					Cervical cancer screening				
	Fixed- effects		Random- effects		Hausman	Fixed- effects		Random- effects		Hausman
	Coefficient (95% CI)	p-value	Coefficient (95% CI)	p-value	p-value	Coefficient	p-value	Coefficient	p-value	p-value
Poverty gap \$1.90 (2011 PPP)	-0.015 (-0.041 – 0.012)	0.264	-0.032 (-0.096 – 0.032)	0.323	0.178	0.026 (-0.054 – 0.106)	0.521	-0.011 (-0.063 – 0.041)	0.677	0.585
Poverty gap \$3.20 (2011 PPP)	0.004 (-0.078 - 0.086)	0.922	-0.043 (-0.155 – 0.069)	0.449	0.043	0.025 (-0.090 – 0.141)	0.663	-0.051 (-0.159 – 0.058)	0.298	0.106
Poverty gap \$5.50 (2011 PPP)	0.027 (-0.084 - 0.138)	0.623	-0.034 (-0.172 – -0.104)	0.629	0.082	-0.019 (-0.150 – 0.112)	0.775	-0.048 (-0.183 – 0.086)	0.069	0.192
Poverty headcount ratio \$1.90 (2011 PPP)	0.008 (-0.099 – 0.115)	0.875	-0.061 (-0.217 – 0.091)	0.434	0.031	0.036 (-0.128 -0.199)	0.662	-0.057 (-0.175 – 0.061)	0.342	0.787
Poverty headcount ratio \$3.20 (2011 PPP)	0.023 (-0.133 - 0.178)	0.771	-0.053 (-0.240 – 0.135)	0.582	0.028	-0.002 (-0.197 – 0.194)	0.984	-0.129 (-0.283 – 0.026)	0.081	0.477
Poverty headcount ratio \$5.50 (2011 PPP)	0.080 (-0.105 - 0.266)	0.388	0.0004 (-0.190 – 0.191)	0.997	0.583	-0.149 (-0.358 – 0.059)	0.157	-0.184 (-0.315 - -0.054)	0.006	0.178