

Young Women, Rich(er) Men, and the spread of HIV¹

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Abstract: In this paper, we examine whether there is a relationship between gender inequality and the HIV status of individuals in Kenya. We construct a measure of gender inequality based on economic status, which is different than other measures of gender inequality considered in the literature (such as intimate partner violence or sexual relationship power scales). Using a unique combination of data sets for our analysis – Kenya Demographic Health Survey (2003), Kenya Population Census (1998), and a poverty map of Kenya at the sub-location level – we estimate gender inequality between young women and older men at the sub-location level. We find that gender inequality in the sub-location has a strong and positive correlation with an individual's likelihood of being HIV positive, conditional on a set of individual and community characteristics. The effects are stronger for females and in Western Kenya. Conditional on inequality, poverty of young women in the sub-location is either uncorrelated with an individual's HIV status or negatively correlated. We also find significant correlations between an individual's HIV status and his/her age, sex, education, schooling status, ethnicity, and household assets. The results contribute to our understanding of the socioeconomic determinants of the spread of HIV/AIDS and may have important implications for prevention policies.

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Table 0: Prevalence of HIV in Kenya

	Females 15-49	Males 15-49	Females 15-49 non-Luo	Females 15-49 Luo	Males 15-49 non-Luo	Males 15-49 Luo
Central	7.7%	2.1%	7.5%	29.4%	2.2%	0.0%
Coast	6.6%	4.3%	5.7%	26.4%	4.0%	9.9%
Eastern	5.5%	1.4%	5.5%	na	1.4%	0.0%
Nyanza	17.9%	12.1%	7.0%	25.6%	0.8%	20.4%
Rift Valley	7.0%	3.5%	6.3%	35.9%	2.7%	29.2%
Western	5.8%	3.6%	6.0%	0.0%	3.4%	23.0%
	Females 15-24	Males 20-39	Females 15-24 non-Luo	Females 15-24 Luo	Males 20-39 non-Luo	Males 20-39 Luo
Central	6.3%	2.9%	5.7%	41.7%	3.0%	0.0%
Coast	4.0%	5.2%	2.6%	24.0%	5.6%	0.0%
Eastern	1.5%	1.8%	1.5%	na	1.8%	0.0%
Nyanza	14.5%	15.5%	5.0%	21.4%	0.2%	28.8%
Rift Valley	5.1%	4.6%	4.7%	31.1%	3.8%	25.5%
Western	2.9%	4.8%	3.0%	0.0%	4.5%	29.4%

Notes: HIV estimates from Kenya DHS 2003, population weighted.

Table 1: Summary statistics

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Kenya	East	West	Females	Male	West Females	West Males	Nyanza	Rift Valley & Western
<i>Individual Characteristics</i>									
HIV status (1= positive)	0.06 (0.23)	0.04 (0.19)	0.08 (0.27)	0.06 (0.24)	0.06 (0.23)	0.07 (0.26)	0.08 (0.27)	0.15 (0.36)	0.04 (0.21)
Age	23.98 (6.50)	24.24 (6.55)	23.77 (6.46)	19.23 (2.87)	28.27 (5.86)	19.18 (2.85)	28.14 (5.87)	23.31 (6.51)	23.93 (6.38)
Male	0.53 (0.50)	0.54 (0.50)	0.51 (0.50)	0.00 (0.00)	1.00 (0.00)	0.00 (0.00)	1.00 (0.00)	0.45 (0.50)	0.54 (0.50)
Ever married	0.53 (0.50)	0.49 (0.50)	0.56 (0.50)	0.41 (0.49)	0.63 (0.48)	0.44 (0.50)	0.67 (0.47)	0.57 (0.50)	0.56 (0.50)
Years of education	7.85 (3.57)	7.97 (3.67)	7.74 (3.49)	7.20 (3.23)	8.44 (3.76)	7.09 (3.02)	8.37 (3.79)	8.16 (2.97)	7.58 (3.70)
Protestant	0.63 (0.48)	0.57 (0.50)	0.69 (0.46)	0.67 (0.47)	0.60 (0.49)	0.72 (0.45)	0.65 (0.48)	0.67 (0.47)	0.70 (0.46)
Catholic	0.26 (0.44)	0.26 (0.44)	0.25 (0.44)	0.25 (0.43)	0.27 (0.44)	0.24 (0.43)	0.26 (0.44)	0.33 (0.47)	0.22 (0.42)
Luo	0.11 (0.31)	0.03 (0.18)	0.17 (0.37)	0.12 (0.33)	0.09 (0.29)	0.19 (0.39)	0.14 (0.35)	0.50 (0.50)	0.03 (0.16)
Household asset index	-2.22 (7.77)	-0.56 (8.62)	3.60 (6.70)	2.65 (7.78)	1.84 (7.75)	3.94 (6.45)	3.28 (6.91)	2.91 (7.27)	3.86 (6.44)
<i>Community Characteristics</i>									
Urban	0.20 (0.40)	0.20 (0.40)	0.19 (0.40)	0.19 (0.39)	0.21 (0.41)	0.19 (0.39)	0.20 (0.40)	0.22 (0.42)	0.18 (0.39)
Population ratio (M/F)	3.41 (1.81)	3.72 (1.58)	3.16 (1.95)	3.33 (1.74)	3.48 (1.87)	3.07 (1.81)	3.24 (2.06)	2.70 (0.70)	3.38 (2.32)

Table 1: Summary statistics

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Kenya	East	West	Females	Male	West Females	West Males	Nyanza	Rift Valley & Western
Education ratio (M/F)	1.18	1.16	1.19	1.18	1.17	1.19	1.20	1.17	1.20
	(0.27)	(0.22)	(0.30)	(0.26)	(0.27)	(0.26)	(0.33)	(0.06)	(0.35)
Migrant share	0.24	0.25	0.23	0.24	0.24	0.23	0.24	0.24	0.23
	(0.22)	(0.22)	(0.23)	(0.23)	(0.22)	(0.23)	(0.22)	(0.25)	(0.22)
Gender inequality	0.39	0.45	0.33	0.41	0.36	0.33	0.33	0.17	0.39
	(0.87)	(1.20)	(0.44)	(0.93)	(0.81)	(0.46)	(0.42)	(0.18)	(0.50)
Number of observations	2449	1108	1341	1162	1287	654	687	407	951

Notes: Standard deviations are in parentheses.

Table 2: Determinants of HIV status (basic model)

	(1) All Kenya	(2) East	(3) West	(4) Females	(5) Males
<i>Individual Characteristics</i>					
Age	0.002 [0.006]***	0.000 [0.890]	0.003 [0.002]***	0.003 [0.055]*	0.002 [0.017]**
Male	-0.032 [0.001]***	-0.018 [0.094]*	-0.039 [0.008]***		
Ever married	0.012 [0.191]	0.028 [0.004]***	0.002 [0.891]	0.015 [0.164]	0.008 [0.555]
Years of education	-0.001 [0.214]	-0.001 [0.418]	-0.001 [0.385]	-0.002 [0.083]*	-0.001 [0.617]
Male currently in school	0.003 [0.893]	0.046 [0.197]	-0.015 [0.640]		0.004 [0.896]
Female currently in school	-0.039 [0.001]***	-0.023 [0.013]**	-0.048 [0.007]***	-0.036 [0.010]***	
Protestant	-0.014 [0.229]	-0.013 [0.301]	-0.013 [0.472]	0.001 [0.930]	-0.026 [0.080]*
Catholic	-0.021 [0.057]*	-0.013 [0.260]	-0.027 [0.111]	-0.006 [0.702]	-0.031 [0.020]**
Luo	0.114 [0.000]***	0.042 [0.127]	0.134 [0.000]***	0.058 [0.006]***	0.188 [0.000]***
Household asset index	0.001 [0.038]**	0.000 [0.376]	0.002 [0.074]*	0.001 [0.030]**	0.001 [0.487]
<i>Community characteristics</i>					
Urban	0.014 [0.170]	-0.003 [0.729]	0.018 [0.286]	0.009 [0.382]	0.019 [0.324]
Population ratio (M/F)	-0.003 [0.229]	-0.002 [0.496]	-0.003 [0.304]	-0.004 [0.112]	-0.002 [0.560]
Education ratio (M/F)	-0.032 [0.116]	-0.041 [0.116]	-0.029 [0.166]	-0.047 [0.071]*	-0.024 [0.265]
Migrant share	0.026 [0.100]*	0.004 [0.803]	0.030 [0.202]	0.020 [0.230]	0.031 [0.219]
Gender inequality	0.007 [0.078]*	-0.001 [0.714]	0.030 [0.006]***	0.007 [0.099]*	0.006 [0.274]
Pseudo R-squared	0.197	0.121	0.226	0.229	0.188
Number of observations	2449	1108	1341	1162	1287

Notes: Probit regression models, marginal effects reported. Specifications include province dummies. Robust p-values are in brackets. * denotes statistical significance at the 10% level; ** at 5%, and *** at 1%. Females 15-24 years and males 20-39 years.

Table 3: Determinants of HIV status (basic model), Western Kenya

	(1)	(2)	(3)	(4)
	Females	Males	Nyanza	Rift Valley & Western
<i>Individual Characteristics</i>				
Age	0.005 [0.018]**	0.003 [0.013]**	0.010 [0.004]***	0.002 [0.057]*
Male			-0.109 [0.019]**	-0.019 [0.263]
Ever married	0.004 [0.753]	-0.001 [0.967]	0.066 [0.119]	0.003 [0.853]
Years of education	-0.001 [0.366]	-0.002 [0.405]	0.005 [0.387]	-0.002 [0.267]
Currently in school	-0.035 [0.043]**	-0.021 [0.596]		
Protestant	-0.007 [0.741]	-0.030 [0.213]	0.082 [0.010]**	-0.019 [0.241]
Catholic	-0.020 [0.255]	-0.032 [0.096]*		-0.015 [0.298]
Luo	0.038 [0.044]**	0.271 [0.000]***	0.186 [0.000]***	0.068 [0.021]**
Household asset index	0.002 [0.082]*	0.001 [0.532]	0.002 [0.548]	0.002 [0.002]***
<i>Community Characteristics</i>				
Urban	0.005 [0.763]	0.029 [0.353]	-0.011 [0.825]	0.022 [0.176]
Population ratio (M/F)	-0.008 [0.107]	-0.002 [0.659]	0.013 [0.460]	-0.003 [0.337]
Education ratio (M/F)	-0.041 [0.230]	-0.018 [0.311]	0.213 [0.423]	-0.027 [0.223]
Migrant share	0.011 [0.588]	0.051 [0.173]	0.079 [0.283]	0.028 [0.140]
Gender inequality	0.028 [0.007]***	0.021 [0.294]	-0.026 [0.823]	0.028 [0.003]***
Pseudo R-squared	0.270	0.237	0.235	0.139
Number of observations	654	687	407	951

Notes: Probit regression models, marginal effects reported. Specifications include province dummies. Robust p-values are in brackets. * denotes statistical significance at the 10% level; ** at 5%, and *** at 1%. Females 15-24 years and males 20-39 years.

Table 4: Determinants of HIV status (interacted model)

	(1)	(2)	(3)	(4)	(5)	(6)
	All Kenya	East	West	Males	Females	West Females
<i>Individual Characteristics</i>						
Age	0.003 [0.000]***	0.000 [0.686]	0.004 [0.000]***	0.002 [0.026]**	0.004 [0.002]***	0.004 [0.002]***
Male	-0.035 [0.000]***	-0.019 [0.053]*	-0.037 [0.007]***			
Ever married	0.009 [0.347]	0.026 [0.009]***	-0.005 [0.727]	0.018 [0.165]	0.003 [0.697]	-0.008 [0.278]
Years of education	-0.002 [0.016]**	-0.001 [0.332]	-0.003 [0.026]**	-0.002 [0.120]	-0.003 [0.006]***	-0.001 [0.107]
Male currently in school	0.008 [0.720]		-0.009 [0.714]	0.010 [0.728]		
Female currently in school	-0.028 [0.067]*	-0.020 [0.020]**	-0.028 [0.193]		-0.017 [0.213]	-0.012 [0.313]
Protestant	-0.020 [0.070]*	-0.020 [0.130]	-0.009 [0.653]	-0.026 [0.044]**	-0.004 [0.734]	-0.003 [0.790]
Catholic	-0.026 [0.005]***	-0.014 [0.195]	-0.027 [0.080]*	-0.037 [0.001]***	-0.009 [0.412]	-0.010 [0.214]
Luo	0.141 [0.000]***	0.073 [0.249]	0.138 [0.000]***	0.255 [0.000]***	0.047 [0.037]**	0.011 [0.323]
Household asset index	0.001 [0.041]**	0.000 [0.368]	0.002 [0.055]*	0.000 [0.543]	0.001 [0.021]**	0.002 [0.009]***
<i>Community Characteristics</i>						
Urban	0.015 [0.231]	0.001 [0.930]	0.024 [0.251]	0.024 [0.268]	0.004 [0.684]	-0.006 [0.408]
Population ratio (M/F)	-0.002 [0.294]	-0.003 [0.286]	-0.001 [0.643]	0.001 [0.661]	-0.005 [0.044]**	-0.007 [0.034]**
Education ratio (M/F)	-0.053 [0.013]**	-0.082 [0.034]**	-0.057 [0.108]	-0.066 [0.044]**	-0.021 [0.221]	0.026 [0.219]
Migrant share	0.020 [0.226]	0.016 [0.346]	0.021 [0.370]	0.024 [0.303]	0.010 [0.436]	-0.002 [0.872]
Gender inequality	-0.011 [0.691]	-0.028 [0.674]	-0.063 [0.563]	-0.085 [0.120]	0.077 [0.169]	0.215 [0.059]*

Table 4: Determinants of HIV status (interacted model)

	(1)	(2)	(3)	(4)	(5)	(6)
	All Kenya	East	West	Males	Females	West Females
<i>Interactions with gender inequality</i>						
Age	-0.003 [0.002]***	-0.002 [0.002]***	-0.005 [0.069]*	0.000 [0.971]	-0.007 [0.003]***	-0.004 [0.107]
Male	0.021 [0.112]	0.015 [0.068]*	0.017 [0.468]			
Ever married	0.009 [0.439]	-0.000 [0.993]	0.022 [0.459]	-0.037 [0.034]**	0.026 [0.068]*	0.042 [0.097]*
Years of education	0.004 [0.019]**	0.002 [0.110]	0.008 [0.034]**	0.006 [0.026]**	0.005 [0.002]***	0.003 [0.022]**
Male currently in school	0.003 [0.903]		0.002 [0.952]	0.013 [0.636]		
Female currently in school	-0.075 [0.342]	-0.013 [0.110]	-0.131 [0.348]		-0.054 [0.310]	-0.034 [0.595]
Protestant	0.018 [0.028]**	0.014 [0.031]**	0.011 [0.850]	0.017 [0.124]	0.015 [0.411]	-0.006 [0.762]
Catholic	0.032 [0.009]***	-0.005 [0.676]	0.040 [0.502]	0.086 [0.000]***	0.010 [0.577]	-0.005 [0.821]
Luo	-0.047 [0.116]	-0.064 [0.677]	-0.040 [0.318]	-0.098 [0.018]**	-0.004 [0.864]	0.013 [0.467]
Household asset index	-0.001 [0.461]	-0.000 [0.593]	-0.002 [0.312]	0.000 [0.969]	-0.002 [0.276]	-0.005 [0.039]**
Urban	0.029 [0.143]	0.098 [0.354]	0.024 [0.473]	0.040 [0.170]	0.017 [0.515]	0.067 [0.008]***
Population ratio (M/F)	0.004 [0.013]**	0.007 [0.002]***	0.000 [0.981]	-0.009 [0.037]**	0.012 [0.028]**	0.030 [0.027]**
Education ratio (M/F)	0.032 [0.111]	0.031 [0.122]	0.063 [0.393]	0.044 [0.111]	-0.007 [0.752]	-0.272 [0.010]***
Migrant share	-0.008 [0.518]	-0.051 [0.005]***	-0.003 [0.906]	-0.011 [0.716]	-0.015 [0.387]	0.048 [0.089]*
Pseudo R-squared	0.216	0.143	0.250	0.276	0.218	0.326
Observations	2449	1108	1341	1287	1162	654

Notes: Probit regression models, marginal effects reported. Specifications include province dummies and their interactions with gender inequality. Robust p-values are in brackets. * denotes statistical significance at the 10% level; ** at 5%, and *** at 1%. Females 15-24 years and males 20-39 years.

Table 5: Determinants of HIV status, controlling for community poverty rate

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Kenya	East	West	Females	Male	West Females	West Males
<i>Individual Characteristics</i>							
Age	0.002 [0.006]***	0.000 [0.966]	0.003 [0.002]***	0.003 [0.055]*	0.002 [0.022]**	0.005 [0.019]**	0.003 [0.016]**
Male	-0.032 [0.001]***	-0.018 [0.094]*	-0.040 [0.005]***				
Ever married	0.012 [0.194]	0.029 [0.002]***	0.002 [0.913]	0.015 [0.163]	0.009 [0.498]	0.004 [0.723]	0.000 [0.992]
Years of education	-0.001 [0.241]	-0.001 [0.398]	-0.001 [0.423]	-0.002 [0.084]*	-0.001 [0.725]	-0.001 [0.359]	-0.001 [0.495]
Male currently in school	0.003 [0.888]	0.045 [0.199]	-0.014 [0.645]		0.005 [0.861]		-0.017 [0.631]
Female currently in school	-0.038 [0.001]***	-0.023 [0.012]**	-0.047 [0.006]***	-0.036 [0.010]**		-0.035 [0.044]**	
Protestant	-0.014 [0.216]	-0.013 [0.302]	-0.013 [0.451]	0.001 [0.930]	-0.027 [0.067]*	-0.007 [0.739]	-0.033 [0.177]
Catholic	-0.021 [0.059]*	-0.013 [0.244]	-0.027 [0.113]	-0.006 [0.704]	-0.030 [0.026]**	-0.021 [0.258]	-0.031 [0.117]
Luo	0.109 [0.000]***	0.040 [0.134]	0.130 [0.000]***	0.058 [0.007]***	0.174 [0.000]***	0.040 [0.043]**	0.254 [0.000]***
Household asset index	0.001 [0.139]	0.000 [0.661]	0.001 [0.182]	0.001 [0.052]*	0.000 [0.907]	0.002 [0.100]*	0.000 [0.882]

Table 5: Determinants of HIV status, controlling for community poverty rate

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Kenya	East	West	Females	Male	West Females	West Males
<i>Community Characteristics</i>							
Urban	0.017 [0.136]	-0.001 [0.954]	0.020 [0.271]	0.009 [0.428]	0.025 [0.200]	0.003 [0.833]	0.038 [0.227]
Population ratio (M/F)	-0.003 [0.189]	-0.003 [0.234]	-0.004 [0.283]	-0.004 [0.108]	-0.003 [0.424]	-0.008 [0.119]	-0.003 [0.541]
Education ratio (M/F)	-0.035 [0.112]	-0.040 [0.124]	-0.032 [0.185]	-0.047 [0.068]*	-0.029 [0.271]	-0.038 [0.240]	-0.022 [0.297]
Migrant share	0.025 [0.111]	0.000 [0.974]	0.029 [0.206]	0.020 [0.224]	0.029 [0.242]	0.011 [0.592]	0.046 [0.197]
Poverty	-0.036 [0.168]	-0.043 [0.074]*	-0.032 [0.464]	0.003 [0.920]	-0.081 [0.026]**	0.016 [0.710]	-0.095 [0.092]*
Gender inequality	0.007 [0.081]*	-0.001 [0.772]	0.029 [0.007]***	0.007 [0.099]*	0.006 [0.240]	0.028 [0.006]***	0.022 [0.266]
Pseudo R-squared	0.192	0.121	0.220	0.228	0.181	0.270	0.225
Number of observations	2449	1108	1341	1162	1287	654	687

Notes: Probit regression models, marginal effects reported. Specifications include province dummies. Robust p-values are in brackets. * denotes statistical significance at the 10% level; ** at 5%, and *** at 1%. Females 15-24 years and males 20-39 years.

Table 6: Determinants of HIV status (basic model), ages 15-49

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Kenya	East	West	Females	Male	West Females	West Males
<i>Individual Characteristics</i>							
Age	0.000 [0.353]	-0.001 [0.272]	0.001 [0.090]*	-0.000 [0.951]	0.000 [0.199]	0.001 [0.528]	0.001 [0.071]*
Male	-0.031 [0.000]***	-0.034 [0.000]***	-0.027 [0.001]***				
Ever married	0.018 [0.066]*	0.026 [0.025]**	0.012 [0.384]	0.014 [0.391]	0.020 [0.022]**	0.003 [0.895]	0.016 [0.114]
Years of education	0.000 [0.679]	0.000 [0.701]	0.000 [0.887]	0.000 [0.998]	0.000 [0.790]	-0.000 [0.962]	-0.000 [0.911]
Male currently in school	-0.038 [0.001]***	-0.008 [0.624]	-0.053 [0.000]***		-0.021 [0.030]**		-0.035 [0.001]***
Female currently in school	-0.046 [0.000]***	-0.036 [0.001]***	-0.047 [0.004]***	-0.078 [0.000]***		-0.087 [0.001]***	
Protestant	-0.010 [0.390]	0.003 [0.803]	-0.027 [0.106]	0.003 [0.894]	-0.017 [0.066]*	-0.043 [0.295]	-0.017 [0.151]
Catholic	-0.015 [0.219]	-0.010 [0.472]	-0.023 [0.134]	-0.006 [0.815]	-0.017 [0.039]**	-0.038 [0.258]	-0.013 [0.197]
Luo	0.133 [0.000]***	0.064 [0.008]***	0.138 [0.000]***	0.136 [0.000]***	0.135 [0.000]***	0.134 [0.000]***	0.166 [0.000]***
Household asset index	0.001 [0.013]**	0.001 [0.115]	0.002 [0.075]*	0.002 [0.003]***	0.000 [0.559]	0.003 [0.042]**	0.000 [0.608]

Table 6: Determinants of HIV status (basic model), ages 15-49

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Kenya	East	West	Females	Male	West Females	West Males
<i>Community Characteristics</i>							
Urban	0.012 [0.262]	-0.009 [0.337]	0.019 [0.299]	0.008 [0.566]	0.015 [0.238]	0.015 [0.531]	0.019 [0.287]
Population ratio (M/F)	-0.001 [0.569]	-0.003 [0.188]	-0.000 [0.904]	-0.001 [0.741]	-0.001 [0.560]	-0.000 [0.988]	-0.000 [0.873]
Education ratio (M/F)	-0.020 [0.118]	-0.047 [0.052]*	-0.016 [0.249]	-0.044 [0.054]*	-0.004 [0.669]	-0.040 [0.125]	-0.001 [0.938]
Migrant share	0.009 [0.580]	-0.008 [0.657]	0.015 [0.540]	0.001 [0.980]	0.016 [0.272]	0.001 [0.970]	0.020 [0.243]
Gender inequality	0.005 [0.231]	-0.003 [0.346]	0.016 [0.063]*	0.008 [0.176]	0.001 [0.673]	0.027 [0.057]*	0.007 [0.500]
Pseudo R-squared	0.149	0.085	0.182	0.114	0.200	0.142	0.248
Number of observations	5110	2370	2740	2709	2401	1445	1295

Notes: Probit regression models, marginal effects reported. Specifications include province dummies. Robust p-values are in brackets. * denotes statistical significance at the 10% level; ** at 5%, and *** at 1%. Females and males 15-49 years.

Table 7: Determinants of HIV status, alternative age/sex categories for gender inequality measure

	West All				West Females			
	(1) Younger fem./ /Older males	(2) Older fem./ Older males	(3) Younger fem./ Younger males	(4) Older fem./ Younger males	(5) Younger fem./ Older males	(6) Older fem./ Older males	(7) Younger fem./ Younger males	(8) Older fem./ Younger males
<i>Individual Characteristics</i>								
Age	0.001 [0.090]*	0.001 [0.092]*	0.001 [0.085]*	0.001 [0.105]	0.001 [0.528]	0.001 [0.539]	0.001 [0.493]	0.001 [0.556]
Male	-0.027 [0.001]***	-0.028 [0.001]***	-0.027 [0.001]***	-0.027 [0.001]***				
Ever married	0.012 [0.384]	0.012 [0.396]	0.011 [0.414]	0.012 [0.399]	0.003 [0.895]	0.003 [0.893]	0.001 [0.966]	0.003 [0.902]
Years of education	0.000 [0.887]	0.000 [0.849]	0.000 [0.933]	0.000 [0.788]	-0.000 [0.962]	-0.000 [0.991]	-0.000 [0.926]	0.000 [0.943]
Male currently in school	-0.053 [0.000]***	-0.053 [0.000]***	-0.053 [0.000]***	-0.052 [0.000]***				
Female currently in school	-0.047 [0.004]***	-0.048 [0.003]***	-0.048 [0.003]***	-0.047 [0.003]***	-0.087 [0.001]***	-0.088 [0.001]***	-0.089 [0.001]***	-0.089 [0.001]***
Protestant	-0.027 [0.106]	-0.028 [0.111]	-0.025 [0.133]	-0.023 [0.157]	-0.043 [0.295]	-0.044 [0.286]	-0.041 [0.314]	-0.039 [0.340]
Catholic	-0.023 [0.134]	-0.023 [0.142]	-0.022 [0.159]	-0.022 [0.157]	-0.038 [0.258]	-0.039 [0.258]	-0.038 [0.273]	-0.036 [0.284]
Luo	0.138 [0.000]***	0.137 [0.000]***	0.135 [0.000]***	0.125 [0.000]***	0.134 [0.000]***	0.133 [0.000]***	0.130 [0.000]***	0.123 [0.000]***
Household asset index	0.002 [0.075]*	0.002 [0.084]*	0.002 [0.062]*	0.002 [0.034]**	0.003 [0.042]**	0.003 [0.046]**	0.003 [0.041]**	0.003 [0.035]**

Table 7: Determinants of HIV status, alternative age/sex categories for gender inequality measure

	West All				West Females			
	(1) Younger fem./ /Older males	(2) Older fem./ Older males	(3) Younger fem./ Younger males	(4) Older fem./ Younger males	(5) Younger fem./ Older males	(6) Older fem./ Older males	(7) Younger fem./ Younger males	(8) Older fem./ Younger males
<i>Community Characteristics</i>								
Urban	0.019 [0.299]	0.020 [0.288]	0.015 [0.411]	0.003 [0.825]	0.015 [0.531]	0.014 [0.555]	0.012 [0.641]	-0.000 [0.992]
Population ratio (M/F)	-0.000 [0.904]		-0.005 [0.459]	-0.019 [0.046]**	-0.000 [0.988]		-0.005 [0.594]	-0.019 [0.199]
Education ratio (M/F)	-0.016 [0.249]	-0.005 [0.460]	-0.023 [0.257]	-0.010 [0.359]	-0.040 [0.125]	-0.014 [0.375]	-0.043 [0.156]	-0.017 [0.333]
Migrant share	0.015 [0.540]	0.017 [0.467]	0.019 [0.414]	0.020 [0.343]	0.001 [0.970]	0.005 [0.893]	0.009 [0.782]	0.012 [0.705]
Gender inequality	0.016 [0.063]*	1.277 [0.369]	0.757 [0.517]	-0.964 [0.562]	0.027 [0.057]*	3.529 [0.116]	2.820 [0.170]	0.027 [0.991]
Pseudo R-squared	0.182	0.180	0.181	0.184	0.142	0.141	0.141	0.140
Number of observations	2740	2740	2740	2740	1445	1445	1445	1445

Notes: Probit regression models, marginal effects reported. Specifications include province dummies. Robust p-values are in brackets. * denotes statistical significance at the 10% level; ** at 5%, and *** at 1%. Females and males 15-49 years. Community variables adjusted for the appropriate age/sex grouping.

Table 8: Determinants of multiple partners in the past 12 months

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Kenya	East	West	Females	Males	West Females	West Males
<i>Individual Characteristics</i>							
Age	-0.001 [0.013]**	-0.001 [0.174]	-0.002 [0.028]**	-0.001 [0.060]*	-0.003 [0.175]	-0.002 [0.003]***	-0.004 [0.277]
Male	0.109 [0.000]***	0.107 [0.000]***	0.141 [0.000]***				
Ever married	0.007 [0.195]	-0.006 [0.611]	0.018 [0.039]**	0.012 [0.002]***	-0.012 [0.622]	0.018 [0.003]***	0.009 [0.816]
Years of education	-0.001 [0.033]**	-0.002 [0.142]	-0.002 [0.103]	0.000 [0.861]	-0.007 [0.009]***	0.000 [0.677]	-0.007 [0.060]*
Male currently in school	-0.020 [0.024]**	-0.015 [0.618]	-0.025 [0.019]**		-0.094 [0.017]**		-0.132 [0.014]**
Female currently in school	-0.036 [0.000]***		-0.034 [0.006]***	-0.013 [0.003]***		-0.007 [0.110]	
Protestant	-0.017 [0.008]***	-0.020 [0.112]	-0.023 [0.039]**	-0.001 [0.870]	-0.074 [0.003]***	0.002 [0.480]	-0.115 [0.009]***
Catholic	-0.011 [0.107]	-0.015 [0.283]	-0.013 [0.217]	-0.003 [0.525]	-0.035 [0.232]		-0.062 [0.202]
Luo	0.034 [0.001]***	-0.023 [0.243]	0.048 [0.000]***	0.017 [0.002]***	0.079 [0.051]*	0.017 [0.002]***	0.113 [0.033]**
Household asset index	0.001 [0.133]	0.001 [0.391]	0.001 [0.247]	0.000 [0.996]	0.004 [0.012]**	0.000 [0.413]	0.004 [0.122]
<i>Community Characteristics</i>							
Urban	-0.005 [0.545]	-0.005 [0.813]	-0.008 [0.482]	0.004 [0.486]	-0.040 [0.220]	-0.001 [0.831]	-0.038 [0.439]
Population ratio (M/F)	-0.002 [0.298]	0.002 [0.493]	-0.003 [0.111]	0.000 [0.761]	-0.009 [0.135]	0.000 [0.748]	-0.017 [0.046]**
Education ratio (M/F)	0.007 [0.382]	0.035 [0.183]	0.004 [0.604]	0.007 [0.044]**	0.013 [0.630]	0.004 [0.120]	0.004 [0.882]

Table 8: Determinants of multiple partners in the past 12 months

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Kenya	East	West	Females	Males	West Females	West Males
Migrant share	-0.006 [0.639]	0.009 [0.736]	-0.017 [0.304]	-0.005 [0.513]	-0.001 [0.984]	-0.010 [0.187]	0.002 [0.979]
Gender inequality	-0.001 [0.718]	-0.005 [0.533]	0.014 [0.048]**	0.001 [0.235]	-0.010 [0.514]	0.002 [0.296]	0.064 [0.072]*
Pseudo R-squared	0.190	0.130	0.212	0.161	0.064	0.245	0.064
Number of observations	4268	1684	2206	2719	1549	1443	763

Notes: Probit regression models, marginal effects reported. Specifications include province dummies. Robust p-values are in brackets. * denotes statistical significance at the 10% level; ** at 5%, and *** at 1%. Females 15-24 years and males 20-39 years.

Table 9: Determinants of having been ever married

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Kenya	East	West	Females	Males	West Females	West Males
<i>Individual Characteristics</i>							
Age	0.080 [0.000]***	0.073 [0.000]***	0.088 [0.000]***	0.066 [0.000]***	0.070 [0.000]***	0.068 [0.000]***	0.062 [0.000]***
Male	-0.399 [0.000]***	-0.386 [0.000]***	-0.407 [0.000]***				
Years of education	-0.035 [0.000]***	-0.034 [0.000]***	-0.036 [0.000]***	-0.039 [0.000]***	-0.016 [0.000]***	-0.042 [0.000]***	-0.013 [0.015]**
Male currently in school	-0.296 [0.042]**		-0.336 [0.052]*		-0.412 [0.020]**		-0.334 [0.050]*
Female currently in school	-0.580 [0.000]***	-0.509 [0.000]***	-0.644 [0.000]***	-0.508 [0.000]***		-0.577 [0.000]***	
Protestant	-0.083 [0.071]*	-0.089 [0.089]*	-0.074 [0.351]	-0.144 [0.011]**	-0.015 [0.759]	0.082 [0.021]**	-0.073 [0.234]
Catholic	-0.079 [0.096]*	-0.036 [0.511]	-0.104 [0.198]	-0.157 [0.002]***	0.034 [0.526]		-0.004 [0.958]
Luo	0.153 [0.001]***	0.304 [0.007]***	0.149 [0.008]***	0.122 [0.003]***	0.112 [0.048]**	0.107 [0.025]**	0.075 [0.199]
Household asset index	-0.006 [0.014]**	-0.002 [0.420]	-0.010 [0.006]***	-0.006 [0.006]***	-0.001 [0.693]	-0.011 [0.006]***	-0.002 [0.634]

Table 9: Determinants of having been ever married

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Kenya	East	West	Females	Males	West Females	West Males
<i>Community Characteristics</i>							
Urban	-0.008 [0.854]	-0.014 [0.765]	0.040 [0.537]	0.006 [0.892]	-0.030 [0.514]	0.046 [0.447]	-0.006 [0.920]
Population ratio (M/F)	-0.005 [0.561]	-0.004 [0.765]	-0.005 [0.723]	-0.005 [0.518]	-0.004 [0.630]	0.001 [0.926]	-0.009 [0.129]
Education ratio (M/F)	-0.072 [0.220]	0.253 [0.002]***	-0.116 [0.023]**	-0.033 [0.528]	-0.092 [0.023]**	-0.072 [0.179]	-0.093 [0.002]***
Migrant share	-0.094 [0.105]	0.048 [0.550]	-0.147 [0.069]*	-0.090 [0.072]*	-0.048 [0.473]	-0.159 [0.016]**	-0.000 [0.997]
Gender inequality	-0.007 [0.734]	0.013 [0.426]	-0.074 [0.055]*	-0.008 [0.579]	-0.016 [0.479]	-0.054 [0.048]**	-0.082 [0.206]
Pseudo R-squared	0.442	0.402	0.473	0.441	0.423	0.469	0.458
Number of observations	4271	2038	2207	2721	1550	1443	764

Notes: Probit regression models, marginal effects reported. Specifications include province dummies. Robust p-values are in brackets. * denotes statistical significance at the 10% level; ** at 5%, and *** at 1%. Females 15-24 years and males 20-39 years.

Table 10: Determinants of HIV status, alternative gender inequality measures, males 20-39 females 15-24

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Individual Characteristics</i>							
Age	0.002	0.002	0.002	0.002	0.002	0.002	0.002
	[0.006]***	[0.006]***	[0.006]***	[0.006]***	[0.006]***	[0.007]***	[0.008]***
Male	-0.032	-0.032	-0.031	-0.032	-0.031	-0.031	-0.030
	[0.001]***	[0.001]***	[0.002]***	[0.001]***	[0.001]***	[0.002]***	[0.002]***
Ever married	0.012	0.012	0.012	0.012	0.012	0.012	0.012
	[0.191]	[0.196]	[0.198]	[0.193]	[0.194]	[0.173]	[0.177]
Years of education	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
	[0.214]	[0.233]	[0.245]	[0.226]	[0.228]	[0.224]	[0.240]
Male currently in school	0.003	0.003	0.002	0.003	0.003	0.003	0.003
	[0.893]	[0.907]	[0.926]	[0.896]	[0.908]	[0.891]	[0.898]
Female currently in school	-0.039	-0.039	-0.039	-0.039	-0.039	-0.038	-0.038
	[0.001]***	[0.001]***	[0.001]***	[0.001]***	[0.001]***	[0.001]***	[0.001]***
Protestant	-0.014	-0.014	-0.012	-0.015	-0.013	-0.012	-0.011
	[0.229]	[0.230]	[0.296]	[0.204]	[0.272]	[0.265]	[0.336]
Catholic	-0.021	-0.021	-0.020	-0.022	-0.020	-0.020	-0.019
	[0.057]*	[0.059]*	[0.079]*	[0.051]*	[0.071]*	[0.067]*	[0.087]*
Luo	0.114	0.114	0.114	0.113	0.114	0.117	0.115
	[0.000]***	[0.000]***	[0.000]***	[0.000]***	[0.000]***	[0.000]***	[0.000]***
Household asset index	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	[0.038]**	[0.049]**	[0.042]**	[0.048]**	[0.038]**	[0.069]*	[0.048]**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Community Characteristics</i>							
Urban	0.014 [0.170]	0.012 [0.247]	0.013 [0.211]	0.012 [0.227]	0.013 [0.189]	0.014 [0.155]	0.016 [0.110]
Population ratio (M/F)	-0.003 [0.229]	-0.003 [0.191]	-0.004 [0.099]*	-0.003 [0.205]	-0.008 [0.016]**	-0.003 [0.152]	-0.006 [0.009]***
Education ratio (M/F)	-0.032 [0.116]	-0.031 [0.139]	-0.032 [0.136]	-0.030 [0.137]	-0.031 [0.132]	-0.031 [0.153]	-0.035 [0.121]
Migrant share	0.026 [0.100]*	0.027 [0.095]*	0.026 [0.103]	0.027 [0.094]*	0.026 [0.099]*	0.026 [0.096]*	0.026 [0.087]*
	<i>Alternative measure: Base</i>	<i>dif</i>	<i>wdif</i>	<i>ratio</i>	<i>wratio</i>	<i>log_ratio</i>	<i>log_wratio</i>
Gender inequality	0.007 [0.078]*	0.000 [0.089]*	0.000 [0.017]**	0.010 [0.205]	0.004 [0.028]**	0.068 [0.014]**	0.019 [0.004]***
Pseudo R-squared	0.190	0.189	0.190	0.188	0.189	0.192	0.193
Number of observations	2449	2449	2449	2449	2449	2449	2449

Notes: Probit regression models, marginal effects reported. Specifications include province dummies. Robust p-values are in brackets. * denotes statistical significance at the 10% level; ** at 5%, and *** at 1%. Females 15-24 years and males 20-39 years.