

Online Appendix for “Interethnic and interfaith marriages in sub-Saharan Africa”

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For reference: Models used for estimation

$$Intermarriage_w = \alpha + \beta_1 BirthYear_w + \beta_2 Age_w + \beta_3 Age_w^2 + \epsilon_w \quad (1)$$

$Intermarriage_w$ is an indicator variable, which equals 100 if the union is interethnic (interfaith). I consider unions to be interethnic (interfaith) if spouses do not belong to the same group. When both spouses belong to the group “other”, I consider them to be in an intraethnic (intrafaith) union. $BirthYear_w$ is a continuous variable defined as the year of birth of each woman. It is the main variable of interest: if the coefficient associated to it is positive, it means the share of intermarriages has increased over time. Age is the age at survey date.

$$Intermarriage_w = \alpha + \beta_1 BirthYear_w + \beta_2 Age_w + \beta_3 Age_w^2 + \beta_4 Primary_w + \beta_5 Secondary_w + \beta_6 Urban_w + \beta_7 * Remarried_w + \epsilon_w \quad (2)$$

I add dummies for the highest education level: $Primary_w$ and $Secondary_w$, the reference category being “no education”. $Urban$ is a dummy which takes the value 1 if the respondent lives

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in an urban area. This variable captures the *diversity level factor*. Moreover, to control further for composition effects, I add a dummy variable, *Remarried*, which takes the value 1 if the respondent has remarried.

Appendix A Supplementary Appendix on data

A.1 DHS data

The main sample is made up of 15 countries. Below are listed the criteria for inclusion in the main sample, as well as more detailed methodological information on reweighting and recoding the data. Table 7 in paper lists the data waves used in the main sample. Table 1 lists the survey waves that are not included in the main sample, as well as the reason why they were not included.

A.2 Criteria - Main sample

The criteria for inclusion are as follows: First, countries must have implemented at least two survey waves that include ethnic information¹. How ethnic classifications are chosen is not mentioned in the DHS reports. Second, the ethnic classifications must be comparable across waves. Third, ethnic groups must be ethnolinguistic groups that can be matched to linguistic groups² using Ethnologue (Simons and Fennig [2017]). Fourth, the surveys must include women born between 1955 and 1989, in order to observe women from all of the countries for each birth year within the study period.

¹A question on religious identity is included in all of the surveys except Senegal 1992. I compute the specific weights for specifications run without Senegal 1992. Excluding this survey does not change the study period.

²For instance, DRC and Chad list groups that correspond to geographic areas (e.g. “cuvette central” and “uele lac albert” in DRC). These places are heterogenous in terms of ethnic groups, thus leading me to exclude Chad and DRC from the main sample.

Table 1: DHS – Countries and waves not included in the main sample

Country in main sample	Survey wave ^a	Reason why wave not in main sample
Cameroon	2011 (10)	No common classification
Cote d'Ivoire	1998 ^b	–
Malawi	1992	Ethnicity not available
Niger	12012	Ethnicity not available
Senegal	1997 ^c	
Uganda	2000 2006 2011 (19 / 5 ^d)	Ethnicity not available
Country in maps section 6.1	Survey wave and nb ethnic groups	Reason why country not in main sample
Central African Republic	1994 (10)	Only one wave
Chad	1996 (13) 2004 (13) 2015 (13)	Restricted study period ^f
Congo (Brazzaville)	2005 (85) 2011(12)	No common classification
Congo Democratic Republic	2007 (10) 2013 (11)	Restricted study period
Ethiopia	2000 (42) 2004 (48) 2011 (47) 2016 (42)	Common classification only 2011 and 2016 Restricted study period
Liberia	2007 2013 (18)	Only one wave
Mozambique	1997 (7) 2003 2011 (21)	No common classification
Namibia	2000 (10) 2006 2013	Only one wave
Nigeria	2003 2008 (11) 2013 (400)	No common classification
Sierra Leone	2008 (10) 2013 (12)	Restricted study period
Country not included	Survey wave	Reason why not included
Angola	2015	Ethnicity not available
Burundi	2010 2016	Ethnicity not available
Comoros	1996 2012	Ethnicity not available
Eswatini	2006	Ethnicity not available
Lesotho	2004 2009 2014	Ethnicity not available
Madagascar	1992 1997 2003 2008	Ethnicity not available
Rwanda	1992 (3) 2000 2005 2010 2014	Ethnicity not available
Sao Tome and Principe	2008	Ethnicity not available
South Africa	1998 ^e	Ethnicity not available
Tanzania	1991 1996 1999 2004 2010 2015	Ethnicity not available
Zimbabwe	1994 1999 2005 2010 2015	Ethnicity not available

Listed countries and waves: The list includes only countries and waves for which information about couples was included. For each survey wave, if a question about ethnicity was included, I indicate the number of ethnic groups with at least one female member.

Number of ethnic groups: Number of ethnic groups used when pooling survey waves for a country. The number of groups includes the group "others".
Survey waves in brackets are not included in the sample.

^a When a survey took place during two calendar years, the year listed is the year when data collection started.

^b Cote d'Ivoire 1998: Men were not asked their ethnic identity.

^c Senegal 1997: No information on whether women have remarried or not.

^d Uganda 2011: Men's ethnic identities are classified into 5 groups, while women's are classified into 19 groups. This wave is not included in the sample in order to avoid losing too much information by recoding ethnic groups into 5 categories.

^e South Africa 1998: Race is included, ethnicity is not.

^f *Restricted study period:* Inclusion of this country would lead to studying only a restricted sample, as the overlap of birth cohorts in this country and in countries in the main sample is too small.

A.3 Reweighting - Main sample

When reweighting each survey wave, I take into account several issues associated with weights.

First, the weights provided by DHS do not sum up to population size. Using World Bank population statistics, I make sure that the weights of each survey correspond to the population size. Second,

women aged 15-49 are surveyed in all of the households, but men are surveyed in a fraction of the surveyed households. The lowest sampling rate of men is 25% (Malawi 2000), and the highest is 100% (DHS Ghana 2014, DHS Zambia 2013/2014). I adjust the weights by multiplying them by the inverse of the sampling rate of men. Third, the number of survey waves differs across countries. I correct for these differences.

A.4 Recoding ethnic and religious groups

The common ethnic classification includes only the groups that were listed in all surveys. In a few cases, such as Cameroon, I do not use the survey wave whose classification differs too much from other waves. When the number of groups does not vary much across waves, I recode the ethnic classifications under the assumptions that individuals have a preferred answer to the question “what is your ethnic group?” and that this answer is not affected by changes in the classification. There are two cases: groups that appear only in some waves, and groups that are alternatively listed as several subgroups and as one group. If individuals give an answer that is not in the list (e.g. Maasai), this answer is recoded in “other (ethnicity)”. I hence assume that a Maasai individual would have been coded as belonging to the “other” group in DHS surveys that do not list this group. Based on that assumption, I assign to all of the Maasai individuals the identity “other (ethnicity)” as the common classification for Kenya does not include the group Maasai. I assume that subgroups are recoded into the corresponding group in the classification. For instance, early DHS in Ghana list ethnic groups as “1 Asante, 2 Akwapim, 3 Fante, 4 other Akan 5. Ga/Adangbe (etc.)”, whereas later waves list only “1. Akan 2. Ga/Adangbe (etc)”. I recode all of the Akan answers into a single category. To alleviate concerns about measurement error due to recoding of ethnic groups, I check that the share of respondents listed in the group “other ethnic group” (detailed statistics in Table 7, Appendix A of the paper) remains roughly constant across cohorts and survey waves.

The case of religious groups is more straightforward. I recode the religious groups into three

different groups: Muslims, Christians, and “other (faiths)”. “Others (faiths)” includes members of traditional religions, agnostics/atheists, members of other religions listed as such, and a handful of very small religious groups. The share of members of “other (faiths)” does not remain constant over time, reflecting changes in religious composition of countries rather than errors in categorization of groups, as identification of religious groups is easier than identification of ethnic groups.

Appendix B Descriptive statistics

B.1 Intermarriages: random, observed, and ratio of intermarriages.

Table 2 and table 3 show the results for random, observed and ratio at the country-level. This corresponds to what is displayed in Figures 4 and 5 of the paper. Table 4 shows descriptive statistics on linguistic distances.

B.2 Descriptive statistics on explanatory variables: primary, secondary, and urban residence

Table 2: Observed and random intermarriage shares

Survey year	Country	Interethnic marriages shares			Interfaith marriages shares		
		Observed	Random	Observed /Random	Observed	Random	Observed /Random
2006	Benin	14.0	77.5	18.1	14.9	64.1	23.3
2003	BF	11.5	67.5	17.0	11.3	55.6	20.3
2004	Cameroon	24.3	94.3	25.8	12.1	50.6	23.8
1994	CAR ^a	25.1	81.6	30.8	3.4	16.2	21.1
2004	Chad	19.0	87.3	21.7	7.4	53.7	13.9
2005	Congo	50.5	94.5	53.5	29.6	48.3	61.2
2012	Cote d'Ivoire	26.1	88.4	29.5	20.2	63.8	31.7
2007	DRC ^b	9.2	81.3	11.3	4.9	10.3	48.1
2003	Ethiopia	11.4	76.6	14.9	3.3	45.6	7.3
1900	Gabon	35.8	82.4	43.5	21.4	34.6	61.8
2003	Ghana	19.2	75.5	25.4	16.8	50.5	33.3
2005	Guinea	10.9	75.1	14.5	4.6	27.4	16.7
2003	Kenya	8.7	87.4	9.9	7.9	20.7	38.0
2013	Liberia	35.6	88.1	40.4	14.1	30.0	47.1
2004	Malawi	30.4	79.3	38.4	6.6	25.8	25.6
2006	Mali	28.6	84.3	33.9	5.8	15.4	37.7
2011	Mozambique	22.4	86.5	25.9	21.9	53.2	41.2
2000	Namibia	9.1	80.5	11.4	5.1	7.5	68.9
2006	Niger	11.9	59.7	20.0	2.4	3.3	73.0
2008	Nigeria	9.5	80.6	11.8	3.6	51.1	7.0
2005	Senegal	22.9	73.6	31.1	2.1	7.5	27.8
2008	SL	17.8	73.1	24.3	11.0	29.8	36.7
1998	Togo	11.0	72.3	15.2	21.7	59.8	36.2
1995	Uganda	23.5	93.4	25.2	5.8	22.5	25.7
2007	Zambia	48.9	91.9	53.2	4.2	5.6	75.1

Data: Survey wave (DHS) conducted the closest to 2005. *Sample:* Women currently in union.

These shares correspond to what is plotted in the maps in figure 4 and figure 5 of the paper.

^a Central African Republic

^b Democratic Republic of the Congo

Table 3: Muslim/Christian marriages & religious structure

	Intermarriage share		Population share		
	Interfaith marriage	Christian/Muslim marriage	Muslim	Christian	Other/Traditional
Benin	16.3	2.8	24.9	47.1	28.0
Burkina Faso	11.7	3.7	57.7	28.3	14.0
Cameroon	11.2	1.7	20.7	69.6	9.8
Cote d'Ivoire	18.3	2.7	43.8	35.6	20.6
Gabon	21.2	2.6	6.7	81.6	11.7
Ghana	18.9	2.7	20.6	66.1	13.3
Guinea	4.0	0.9	87.1	8.0	4.9
Kenya	6.5	1.1	9.9	87.5	2.6
Malawi	6.6	2.2	11.1	87.7	1.2
Mali	5.8	1.0	91.3	3.5	5.2
Niger	1.7	0.6	98.8	0.6	0.6
Senegal	1.8	1.0	89.3	3.3	7.3
Togo	19.9	1.2	17.2	43.0	39.9
Uganda	6.7	4.9	10.3	88.2	1.5
Zambia	4.1	0.4	0.5	98.3	1.2

Data: Pooled DHS for each country. Weighted data. *Sample:* Women currently in union.

Table 4: Linguistic distance - descriptive statistics

Linguistic distance	All couples		Intermarried couples	
	Mean	SD	Mean	SD
Benin	0.5	1.3	3.2	1.4
Burkina Faso	0.9	2.0	4.9	1.5
Cameroon	0.8	1.8	3.4	2.1
Cote d'Ivoire	0.9	2.0	3.8	2.5
Gabon	0.9	1.3	2.3	0.9
Ghana	0.6	1.4	3.2	1.2
Guinea	0.9	2.2	6.0	1.7
Kenya	0.5	1.7	4.6	3.2
Malawi	0.9	1.3	2.8	0.4
Mali	2.2	3.3	6.5	1.9
Niger	0.6	1.6	4.4	1.0
Senegal	0.8	1.8	3.7	2.0
Togo	0.4	1.1	3.3	1.1
Uganda	0.5	1.7	2.0	2.7
Zambia	1.1	1.4	2.3	1.1

Data: Pooled DHS for each country. Weighted data. *Sample:* Women currently in union.

Table 5: Descriptive statistics on education and urban residence levels

Country	Primary only		Secondary/higher		Urban residence	
	Mean (1)	Trend (2)	Mean (3)	Trend (4)	Mean (5)	Trend (6)
Benin	15.3	0.0558 (0.0634)	8.3	0.235*** (0.0490)	0.4	0.00414*** (0.000999)
Burkina Faso	9.9	0.348*** (0.0607)	4.3	0.156*** (0.0357)	0.1	0.00401*** (0.000728)
Cameroon	39.8	0.832** (0.407)	24.7	-0.110 (0.309)	0.4	0.0259*** (0.00465)
Cote d'Ivoire	23.3	-0.172 (0.152)	9.1	0.0583 (0.0887)	0.4	-0.000642 (0.00168)
Gabon	31.1	-1.430*** (0.269)	61.5	1.349*** (0.282)	0.8	0.00891*** (0.00216)
Ghana	23.0	-0.742*** (0.152)	41.3	1.603*** (0.142)	0.4	0.0105*** (0.00185)
Guinea	8.2	0.155 (0.106)	5.7	0.199** (0.0936)	0.2	0.00266 (0.00168)
Kenya	59.7	-0.000866 (0.111)	29.3	0.538*** (0.108)	0.3	0.0124*** (0.00109)
Malawi	62.7	0.318** (0.131)	13.6	1.150*** (0.0797)	0.2	0.000716 (0.00123)
Mali	10.2	-0.152** (0.0743)	5.5	0.177*** (0.0647)	0.2	-0.00374*** (0.00105)
Niger	9.5	0.111 (0.0960)	3.1	0.124*** (0.0399)	0.1	-0.000198 (0.00103)
Senegal	19.8	0.478*** (0.0760)	10.2	0.306*** (0.0727)	0.4	0.00514*** (0.00114)
Togo	34.8	0.748*** (0.139)	16.4	0.778*** (0.0998)	0.3	0.00802*** (0.00123)
Uganda	56.7	0.703*** (0.148)	19.6	0.800*** (0.115)	0.2	0.00653*** (0.000968)
Zambia	60.9	-0.397*** (0.112)	25.9	0.606*** (0.102)	0.4	-0.00184 (0.00116)

Sample & data: Women currently in union, weighted DHS data at country level.
Columns (1), (3), and (5): Percentage of women whose highest educational outcome is primary school (column (1)), secondary school or higher (column (3)), and who live in an urban area (column (5)).
Columns (2), (4), and (6): OLS regressions run separately for the 15 countries of the sample. Standard errors are clustered at the DHS-cluster level. The dependent variable is listed on the header of each part of the table: it is a dummy equals either to 0 or to 100. Results in columns (2), (4), and (6) can be interpreted as the change in percentage points associated with being born a year later, once quadratic controls for age are introduced.
 Significance levels are denoted as follows: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Appendix C Ethnic composition over time

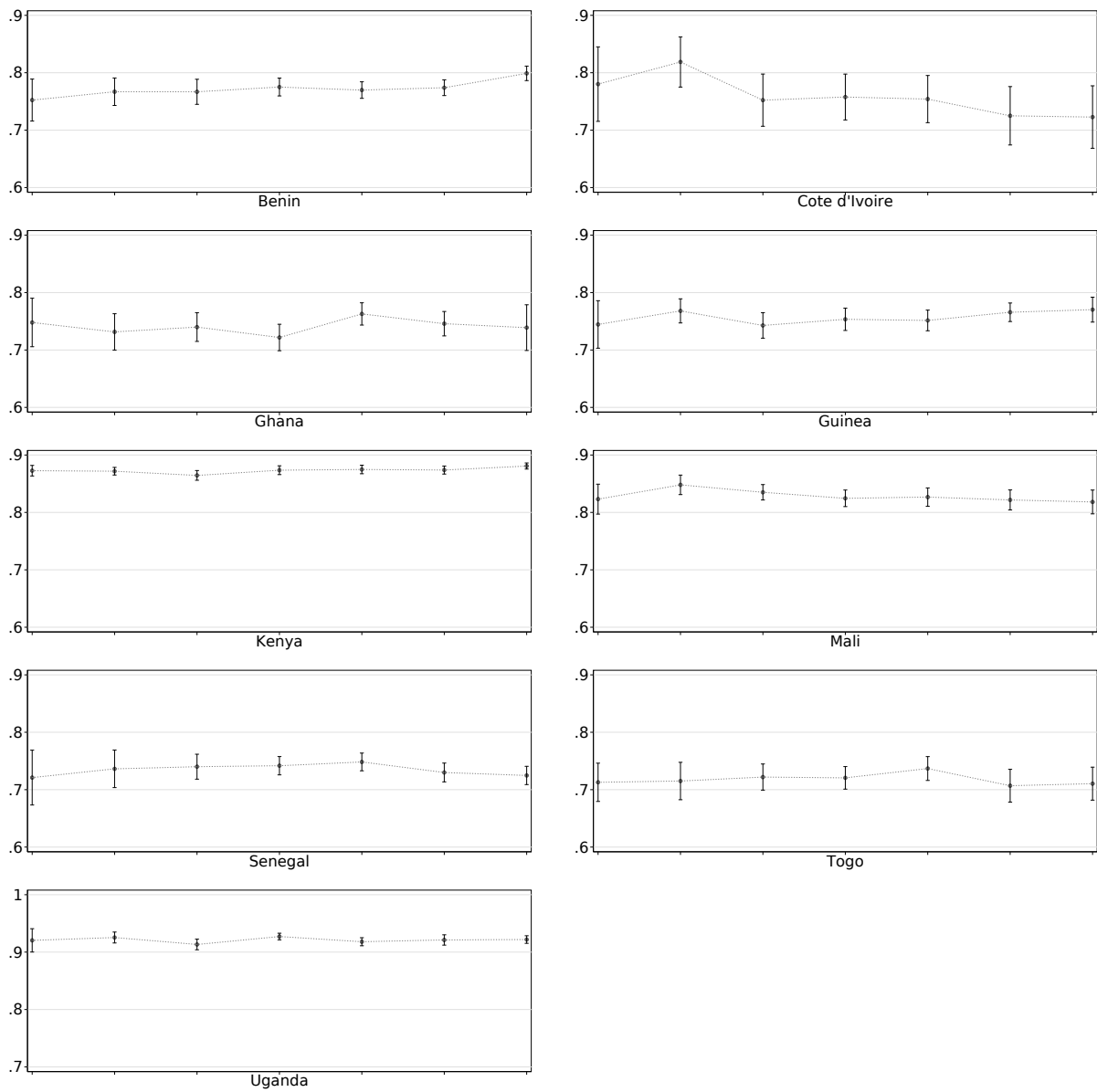
Are changes on intermarriages rates due to changes in market composition? I show below how random shares of intermarriages changed over cohorts.

Figure 1 shows random shares of intermarriages for countries where the share of interethnic marriages increased over time (results from specification 1). For these countries, random shares remained stable over time: the level of ethnic diversity does not change, so it cannot explain the increase in interethnic marriages shares.

Figure 2 shows the random interethnic marriage shares for countries where the share of interethnic marriages did not significantly increase over time. Fluctuations of these random shares are due to changes in the share of “other (ethnicity)” over birth cohorts in Gabon and in Burkina Faso.

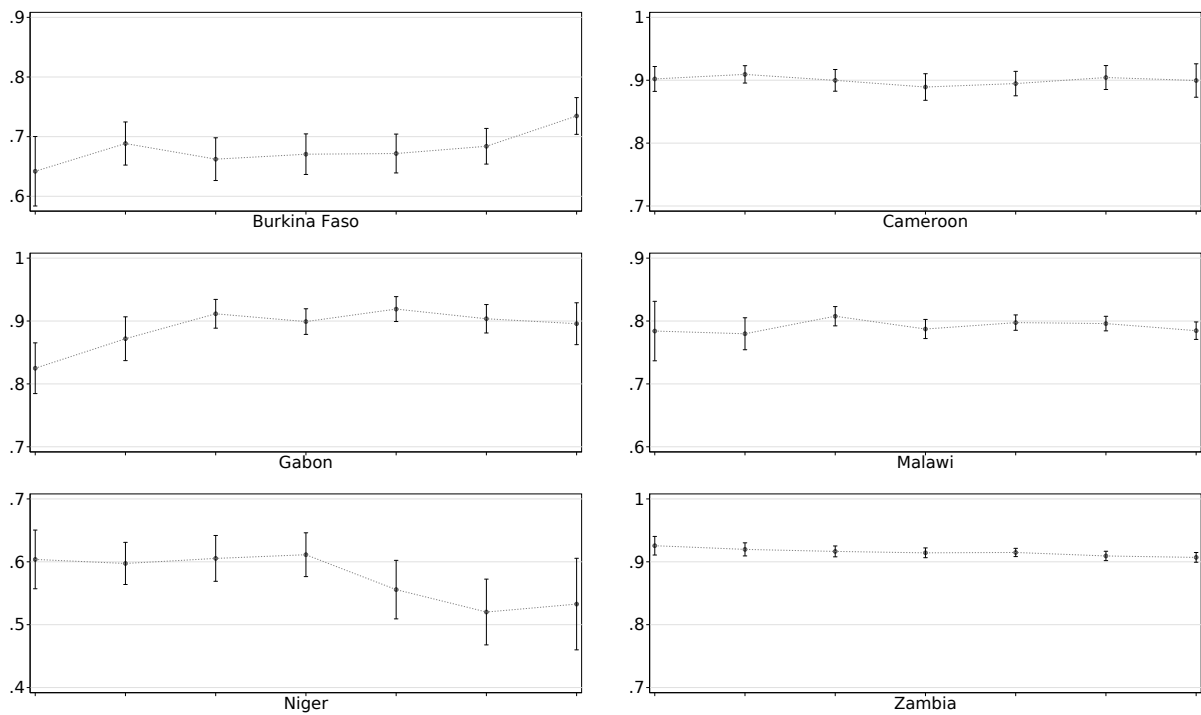
The only country where the level of ethnic diversity may have decreased is Niger. The random shares are lower for the later-born cohorts than for the earlier-born ones, due to the fact that the share of Hausa women increased from 58 to 64% of the married population. This increase is not due to changes in the population, but to the fact that Hausa girls married even younger than other girls. Hence, this composition effect should be controlled for by age effects. In Niger, time trends on interethnic marriages are negative but not significant.

Figure 1: Random interethnic marriage shares - Panel A



Sample & data: Women and men in union at the time of the survey, by birth cohort of women.

Figure 2: Random interethnic marriage shares - Panel B



Sample & data: Women and men in union at the time of the survey, by birth cohort of women.

Appendix D Additional results at country-level

Tables 4 and 5 present the detailed results from a the regression in model 2. Table 8 and Tables 9 present the coefficient for the variable *BirthYear* when the control variables are introduced one-by-one.

Table 6: Women's characteristics and interethnic marriage

Panel A	Benin	Cote d'Ivoire	Ghana	Guinea	Kenya	Mali	Senegal	Togo	Uganda
Dependent variable: Interethnic marriage									
Birth year	0.176** (0.0727)	0.262* (0.134)	0.192 (0.140)	0.694*** (0.203)	0.0820 (0.0538)	0.305** (0.129)	0.177* (0.0913)	0.164 (0.114)	0.413*** (0.123)
Age	0.713* (0.364)	1.326 (0.860)	-1.152* (0.671)	1.003** (0.494)	-1.009* (0.579)	0.359 (0.687)	-0.192 (0.717)	0.215 (0.725)	-1.207 (0.928)
Age squared	-0.00840 (0.00558)	-0.0196 (0.0133)	0.0146 (0.00990)	-0.00664 (0.00697)	0.0147* (0.00860)	-0.000660 (0.0107)	0.00504 (0.0110)	-0.000603 (0.0111)	0.0171 (0.0139)
Primary	6.487*** (1.236)	5.199* (2.818)	1.717 (1.871)	4.087* (2.203)	1.975 (1.251)	7.836*** (2.416)	11.34*** (2.138)	4.347** (1.691)	-4.724* (2.699)
Secondary/Higher	13.53*** (1.775)	21.25*** (3.869)	3.216** (1.635)	12.28*** (3.441)	2.928** (1.405)	22.24*** (3.432)	17.74*** (2.894)	10.38*** (2.900)	-0.526 (3.509)
Urban	10.31*** (1.078)	13.85*** (2.517)	4.469*** (1.497)	3.223* (1.847)	12.46*** (1.634)	16.05*** (2.611)	16.27*** (1.739)	9.563*** (2.126)	17.07*** (4.118)
Remarried	0.0223** (0.0114)	0.0141 (0.0235)	0.0419*** (0.0157)	0.0388** (0.0182)	0.0859*** (0.0221)	0.0427* (0.0244)	0.0699*** (0.0196)	0.0367* (0.0191)	0.125*** (0.0269)
Constant	-352.5** (144.9)	-528.4** (267.6)	-342.4 (278.9)	-1383.2*** (405.3)	-141.0 (106.0)	-588.0** (256.5)	-337.6* (182.2)	-322.8 (226.6)	-773.6*** (245.8)
Observations	10977	2677	6487	4732	9169	8499	8339	3701	2465
R-squared	0.046	0.071	0.013	0.025	0.044	0.049	0.091	0.041	0.050
Share intermarriage	15.1	19.2	19.4	14.0	10.5	30.6	23.5	14.4	24.3
<hr/>									
Panel B and pooled sample	Burkina Faso	Cameroon	Gabon	Malawi	Niger	Zambia	Pooled sample		
Dependent variable: Interethnic marriage									
Birth year	-0.0680 (0.0849)	0.215 (0.317)	0.410 (0.278)	-0.156 (0.120)	-0.114 (0.123)	0.0821 (0.125)	0.168*** (0.0403)		
Age	-0.504 (0.440)	-0.505 (0.790)	1.951 (1.591)	0.426 (0.582)	0.0473 (0.568)	0.0633 (0.555)	-0.152 (0.197)		
Age squared	0.00681 (0.00689)	0.00387 (0.0111)	-0.0270 (0.0241)	-0.00896 (0.00928)	-0.00360 (0.00916)	-0.00476 (0.00860)	0.00202 (0.00292)		
Primary	2.323* (1.355)	0.919 (2.029)	22.33*** (4.073)	3.986*** (1.474)	3.496 (2.439)	3.246* (1.831)	2.925*** (0.637)		
Secondary/Higher	20.61*** (2.650)	5.697** (2.781)	24.74*** (3.732)	13.67*** (2.458)	10.25*** (3.330)	12.29*** (2.236)	7.914*** (0.787)		
Urban	9.881*** (1.343)	11.83*** (2.507)	-1.667 (2.986)	19.22*** (2.094)	10.77*** (1.902)	27.53*** (1.589)	13.12*** (0.661)		
Remarried	0.0201* (0.0114)	0.0817*** (0.0222)	0.138*** (0.0341)	0.0520*** (0.0137)	0.0718*** (0.0181)	0.0818*** (0.0170)	0.0644*** (0.00643)		
Constant	150.3 (169.7)	-400.4 (633.4)	-828.9 (554.2)	327.6 (238.4)	235.1 (246.2)	-130.2 (247.8)			
Country-fixed effects									✓
Observations	9170	3066	2274	9241	5603	10711	97111		
R-squared	0.045	0.037	0.039	0.038	0.029	0.099	0.272		
Share intermarriage	10.4	20.5	38.0	31.8	12.7	46.0	20.4		

Data: Pooled DHS for each country. Weighted data. The pooled sample regression includes country-fixed effects (hence no constant). Sample: Women in union at the time of the survey. Specification: OLS regression. Standard errors are clustered at the DHS-cluster level. Dependent variable is a variable that equals 0 if the union is intraethnic, 100 if the union is interethnic. The regression equation is the same as displayed in column (2) of table 3 of the paper.

Panel A: Countries with a positive and significant trend on interethnic marriages, when only age is controlled for.

Panel B: Countries for which the trend on interethnic marriages is insignificant when only age is controlled for.

Results can be interpreted as changes in percentage points.

Significance levels are denoted as follows: * p<0.10, ** p<0.05, *** p<0.01.

Table 7: Women's characteristics and interfaith marriage

<i>Panels A1&B1</i>	Benin	Burkina Faso	Gabon	Ghana	Kenya	Togo	Zambia	Pooled sample
Dependent variable: Interfaith marriage								
Birth year	-0.103 (0.0753)	-0.237*** (0.0894)	-0.402 (0.244)	-1.301*** (0.131)	-0.123*** (0.0451)	-0.0945 (0.112)	-0.146*** (0.0492)	-0.149*** (0.0287)
Age	-0.672 (0.421)	-0.554 (0.453)	-0.479 (1.277)	-0.960* (0.574)	-0.456 (0.389)	0.198 (0.756)	-0.181 (0.267)	-0.305** (0.141)
Age squared	0.00701 (0.00643)	0.00630 (0.00702)	-0.00484 (0.0187)	-0.00698 (0.00857)	0.00318 (0.00590)	-0.00703 (0.0115)	0.000812 (0.00413)	0.00134 (0.00220)
Primary	-2.268** (1.113)	-0.273 (1.268)	5.925 (5.517)	5.406*** (1.666)	-7.841*** (1.572)	0.0553 (1.887)	-4.198*** (1.150)	0.568 (0.457)
Secondary/Higher	-2.822** (1.422)	5.394** (2.092)	-2.611 (4.867)	-6.159*** (1.359)	-10.19*** (1.564)	-4.480** (2.279)	-5.036*** (1.242)	-1.512*** (0.561)
Urban	-1.549 (0.973)	-3.256*** (1.160)	-3.408 (2.788)	-5.931*** (1.301)	-0.989 (0.756)	-7.608*** (1.854)	-0.496 (0.620)	-2.523*** (0.414)
Remarried	0.0592*** (0.0120)	0.0308** (0.0134)	0.0524* (0.0309)	0.0472*** (0.0146)	0.00353 (0.0132)	0.0551** (0.0231)	0.00903 (0.00797)	0.0381*** (0.00502)
Constant	234.7 (149.8)	490.3*** (178.7)	835.1* (487.8)	2628.1*** (261.7)	267.0*** (88.90)	208.8 (222.0)	300.9*** (97.79)	
Country-fixed effects								✓
Observations	10977	9170	2274	6487	9169	3701	10711	96549
R-squared	0.006	0.005	0.026	0.092	0.019	0.017	0.009	0.139
Share intermarriage	16.7	12.1	18.6	18.3	6.4	18.9	4.4	9.7
Share other	25.6	14.0	7.8	11.2	2.5	36.4	1.3	8.5
“Other (faiths)”	-0.841*** (0.110)	-0.650*** (0.127)	-0.610*** (0.160)	-0.725*** (0.132)	-0.0705** (0.0300)	-1.235*** (0.179)	-0.0355 (0.0299)	-0.288*** (0.0297)

<i>Panels A2&B2 — A3</i>	Cote d'Ivoire	Guinea	Malawi	Mali	Niger	Senegal	Uganda	Cameroon
Dependent variable: Interfaith marriage								
Birth year	0.148 (0.134)	0.0481 (0.122)	-0.0130 (0.0816)	-0.000175 (0.0659)	0.0962* (0.0567)	-0.0469 (0.0585)	0.0140 (0.0603)	0.523** (0.236)
Age	-0.628 (0.979)	-0.493 (0.334)	-0.199 (0.405)	-0.678* (0.358)	0.0450 (0.175)	0.211 (0.235)	-1.403*** (0.540)	1.458* (0.767)
Age squared	0.00904 (0.0151)	0.00742 (0.00520)	0.00316 (0.00660)	0.00941* (0.00553)	0.00102 (0.00329)	-0.00373 (0.00353)	0.0205** (0.00847)	-0.0165 (0.0106)
Primary	9.623*** (2.595)	3.711** (1.518)	-4.231*** (1.196)	0.502 (1.007)	-0.362 (0.725)	-0.0795 (0.617)	0.536 (1.303)	-0.764 (1.441)
Secondary/Higher	12.28*** (3.928)	1.520 (1.408)	-7.307*** (1.317)	0.958 (1.376)	-0.634 (0.693)	2.541** (1.269)	3.275 (2.028)	3.121* (1.755)
Urban	-8.541*** (2.236)	-3.718*** (0.912)	0.265 (1.090)	-4.008*** (0.740)	-0.232 (0.513)	0.0281 (0.582)	3.241* (1.796)	-0.790 (1.337)
Remarried	0.0955*** (0.0360)	0.0316** (0.0127)	0.0320*** (0.0102)	0.0220** (0.0106)	0.00516 (0.00569)	0.00570 (0.00727)	0.0621*** (0.0147)	-0.0137 (0.0165)
Constant	-264.1 (268.2)	-82.25 (244.3)	39.36 (161.8)	18.35 (131.6)	-190.2* (111.2)	91.71 (116.2)	-1.933 (118.4)	-1047.0** (476.0)
Observations	2677	4732	9241	8499	5603	7777	2465	3066
R-squared	0.031	0.009	0.011	0.006	0.002	0.004	0.020	0.006
Share intermarriage	19.3	5.1	7.8	6.2	1.8	1.9	5.7	10.8
Share other	21.9	6.9	1.6	5.2	0.9	0.5	1.1	11.2
“Other (faiths)”	-0.575*** (0.189)	0.0224 (0.222)	-0.120*** (0.0397)	-0.206*** (0.0685)	0.0711** (0.0360)	0.0254* (0.0133)	-0.0208 (0.0237)	0.198 (0.429)

Data: Pooled DHS for each country. Weighted data. The pooled sample regression includes country-fixed effects (hence no constant). *Sample:* Women in union at the time of the survey. *Specification:* OLS regression. Standard errors are clustered at the DHS-cluster level. Dependent variable is a variable that equals 0 if the union is intrafaith, 100 if the union is interfaith. 1 consider three religious groups (Christians, Muslims, Others), intermarriage happens between these three groups. The regression equation is the same as displayed in column (2) of table 5.

Panel A1 & B1: Countries with a negative and significant trend on interfaith marriages, when only age is controlled for.

Panel A2 & B2: Countries for which the trend on interfaith marriages is insignificant when only age is controlled for.

Panel A3: Countries with a positive and significant trend on interfaith marriages, when only age is controlled for.

Trend on “others”: Coefficient associated to birth year, from a regression where the dependent variable is an indicator variable equals to 100 if the respondent is neither Muslim nor Christian. Results can be interpreted as changes in percentage points.

Significance levels are denoted as follows: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 8: Trend on interethnic marriage shares

Dependent variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Interethnic marriage					Mean	N
Birth year coefficient	<i>Each cell: coefficient from a separate regression</i>						
<i>Panel A: Increase in interethnic marriage shares</i>							
Benin	0.242*** (0.0741)	0.193*** (0.0727)	0.188** (0.0737)	0.253*** (0.0743)	0.176** (0.0727)	15.1	10977
Cote d'Ivoire	0.254* (0.136)	0.249* (0.135)	0.265** (0.134)	0.253* (0.137)	0.262* (0.134)	19.2	2677
Ghana	0.262* (0.140)	0.205 (0.142)	0.208 (0.139)	0.277** (0.139)	0.192 (0.140)	19.4	6487
Guinea	0.728*** (0.200)	0.692*** (0.202)	0.712*** (0.202)	0.733*** (0.200)	0.694*** (0.203)	14.0	4732
Kenya	0.257*** (0.0624)	0.224*** (0.0597)	0.0978* (0.0543)	0.252*** (0.0625)	0.0820 (0.0538)	10.5	9169
Mali	0.253* (0.130)	0.215* (0.127)	0.331** (0.130)	0.278** (0.131)	0.305** (0.129)	30.6	8499
Senegal	0.326*** (0.0914)	0.158* (0.0900)	0.213** (0.0903)	0.367*** (0.0926)	0.177* (0.0913)	23.5	8339
Togo	0.338*** (0.113)	0.178 (0.114)	0.241** (0.113)	0.351*** (0.113)	0.164 (0.114)	14.4	3701
Uganda	0.455*** (0.135)	0.445*** (0.131)	0.342*** (0.125)	0.485*** (0.133)	0.413*** (0.123)	24.3	2465
<i>Panel B: No change in interethnic marriage shares</i>							
Burkina Faso	0.00631 (0.0856)	-0.0553 (0.0849)	-0.0531 (0.0854)	0.00936 (0.0855)	-0.0680 (0.0849)	10.4	9170
Cameroon	0.545 (0.332)	0.540 (0.333)	0.213 (0.321)	0.528 (0.331)	0.215 (0.317)	20.5	3066
Gabon	0.364 (0.289)	0.377 (0.278)	0.385 (0.288)	0.413 (0.289)	0.410 (0.278)	38.0	2274
Malawi	0.00730 (0.121)	-0.242** (0.123)	-0.00862 (0.116)	0.0211 (0.121)	-0.156 (0.120)	31.8	9241
Niger	-0.154 (0.120)	-0.181 (0.121)	-0.152 (0.120)	-0.104 (0.123)	-0.114 (0.123)	12.7	5603
Zambia	0.0675 (0.132)	-0.0649 (0.128)	0.124 (0.125)	0.0823 (0.133)	0.0821 (0.125)	46.0	10711
Controls							
Age & Age ²	✓	✓	✓	✓	✓		
Education		✓			✓		
Urban			✓		✓		
Remarried				✓	✓		

Data: Pooled DHS for each country. Weighted data. *Sample:* Women in union at the time of the survey. *Specification:* OLS regression run separately for the 15 countries of the sample. Standard errors are clustered at the DHS-cluster level. Dependent variable is a variable that equals 0 if the union is intraethnic, 100 if the union is interethnic.

Columns (1) to (5) report the coefficient associated to the birth year variable. Each cell corresponds to a separate regression. Column (6) reports the number of observations for each country. When comparing columns (1) and (5), we can see whether there is a trend (column (1)) on the share of interethnic marriage and whether there is a trend (column (5)) once we control for individual characteristics (education, urban residence, whether the woman is not in her first union) which are positively correlated with the likelihood to be in an interethnic union. Results can be interpreted as changes in percentage points.

Results in columns (1) to (5) can be interpreted as changes in percentage points.

Significance levels are denoted as follows: * p<0.10, ** p<0.05, *** p<0.01.

Table 9: Trend on interfaith marriage shares

Dependent variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Interfaith marriage					Mean	N
Birth year coefficient	<i>Each cell: coefficient from a separate regression</i>						
<i>Panel A: Increase in interethnic marriage shares</i>							
	<i>Panel A1: Decrease in interfaith marriage shares</i>						
Benin	-0.150** (0.0754)	-0.140* (0.0754)	-0.141* (0.0753)	-0.118 (0.0755)	-0.103 (0.0753)	16.7	10977
Ghana	-1.520*** (0.133)	-1.351*** (0.129)	-1.433*** (0.137)	-1.498*** (0.133)	-1.301*** (0.131)	18.3	6487
Kenya	-0.189*** (0.0445)	-0.133*** (0.0436)	-0.162*** (0.0456)	-0.190*** (0.0446)	-0.123*** (0.0451)	6.4	9169
Togo	-0.214** (0.109)	-0.142 (0.112)	-0.144 (0.110)	-0.187* (0.108)	-0.0945 (0.112)	18.9	3701
	<i>Panel A2: No change in interfaith marriage shares</i>						
Cote d'Ivoire	0.122 (0.134)	0.133 (0.135)	0.118 (0.133)	0.146 (0.135)	0.148 (0.134)	19.3	2677
Guinea	0.0423 (0.122)	0.0404 (0.124)	0.0505 (0.122)	0.0472 (0.122)	0.0481 (0.122)	5.1	4732
Mali	0.00585 (0.0660)	0.00798 (0.0661)	-0.00809 (0.0659)	0.0149 (0.0658)	-0.000175 (0.0659)	6.2	8499
Senegal	-0.0399 (0.0594)	-0.0508 (0.0594)	-0.0409 (0.0592)	-0.0367 (0.0586)	-0.0469 (0.0585)	1.9	7777
Uganda	0.0496 (0.0570)	0.0136 (0.0612)	0.0232 (0.0560)	0.0644 (0.0559)	0.0140 (0.0603)	5.7	2465
	<i>Panel A3: Increase in interfaith marriage shares</i>						
Cameroon	0.489** (0.233)	0.498** (0.231)	0.482** (0.236)	0.493** (0.233)	0.523** (0.236)	10.8	3066
<i>Panel B: No change in interethnic marriage shares</i>							
	<i>Panel B1: Decrease in interfaith marriage shares</i>						
Burkina Faso	-0.251*** (0.0898)	-0.251*** (0.0896)	-0.242*** (0.0895)	-0.243*** (0.0896)	-0.237*** (0.0894)	12.1	9170
Gabon	-0.570** (0.239)	-0.431* (0.242)	-0.512** (0.244)	-0.549** (0.238)	-0.402 (0.244)	18.6	2274
Zambia	-0.161*** (0.0496)	-0.146*** (0.0487)	-0.164*** (0.0497)	-0.158*** (0.0497)	-0.146*** (0.0492)	4.4	10711
	<i>Panel B2: No change in interfaith marriage shares</i>						
Malawi	-0.123 (0.0786)	-0.0212 (0.0811)	-0.122 (0.0784)	-0.109 (0.0789)	-0.0130 (0.0816)	7.8	9241
Niger	0.0912 (0.0572)	0.0927 (0.0580)	0.0911 (0.0571)	0.0953* (0.0564)	0.0962* (0.0567)	1.8	5603
Controls							
Age & Age ²	✓	✓	✓	✓	✓		
Education		✓			✓		
Urban			✓		✓		
Remarried				✓	✓		

Data: Pooled DHS for each country. Weighted data. *Sample:* Women in union at the time of the survey. *Specification:* OLS regression run separately for the 15 countries of the sample. Standard errors are clustered at the DHS-cluster level. Dependent variable is a variable that equals 0 if the union is intrafaith, 100 if the union is interfaith.

Columns (1) to (5) report the coefficient associated to the birth year variable. Each cell corresponds to a separate regression. Column (6) reports the share of interfaith marriages. Column (7) reports the number of observations for each country. When comparing columns (1) and (5), we can see whether there is a trend (column (1)) on the share of interfaith marriage and whether there is a trend (column (5)) once we control for individual characteristics (education, urban residence, whether the woman is not in her first union) which are positively correlated with the likelihood to be in an interfaith union. Results can be interpreted as changes in percentage points.

Results in columns (1) to (5) can be interpreted as changes in percentage points.

Significance levels are denoted as follows: * p<0.10, ** p<0.05, *** p<0.01.

Appendix E Additional robustness analyzes at country-level

I implement four robustness checks on my findings: I present here the results for each country. First, I relax the assumption that a marriage is intraethnic or intrafaith when both spouses belong to the group “other”. Second, I test whether results are robust to alternative assumptions on remarried women’s first unions. Third, using only women in their first union, I test whether “assimilation” and conversion take place over the length of a marriage. Fourth, using only women in their first union, I compare time trends measured using birth year and using marriage years. Table 13 (ethnicity) and Table 14 (religion) display results from the main regression and from the regressions when varying the assumptions, as mentioned above.

E.1 Testing for heterogeneity in the “other” group

The group “other ethnicity/faith” is a group that is more heterogenous than other groups. In the main specification, I assumed that when both spouses belonged to the group “other”, their union was an in-group one. Assuming that these unions are in fact out-groups unions, more unions are now counted as intermarriages.

In the case of interethnic marriages, the results change in a few countries (main results in columns (1) and (2), results under this hypothesis in columns (7) and (8), Table 13 (ethnicity) and Table 14 (religion)). Among countries where interethnic marriages increased, trends turn insignificant for Cote d’Ivoire and Mali. Among countries where they did not increase using the main specification, trends turn significant for Burkina Faso and Gabon. In Burkina Faso, Gabon and Mali, these changes are due to the fact that the share of “other-other” unions has varied over time. The share of “others” is around 45% in Cote d’Ivoire, the highest share among all countries in the sample, and only 16% of “others” are married outside of their group: the “other” hypothesis shifts a large fraction of unions from intraethnic to interethnic. Even under this hypothesis, there is no country for which interethnic marriage shares decrease. Results on interfaith unions do not change for countries where the share of such unions decreased. Trends on interfaith unions turn negative

in Cote d'Ivoire, Malawi and Mali. This finding is consistent with the fact that the share of members of traditional religions decreased in these countries, so counting unions between members of this group as intrafaith or as interfaith does not affect the trend. By contrast to these results, Niger saw an increase in interfaith marriages. This is due to the fact that the share of "other" increased in the youngest Nigerien cohorts.

E.2 Testing the remarriage story

First, I bound my estimates by making assumptions on first unions of remarried women. Table 13 (ethnicity) and Table 14 (religion) (columns (1) to (6)) show the results at the country-level. The "lower bound" (on the birth year coefficient) hypothesis assigns an interethnic union to all the women who have remarried (translating into an higher share of interethnic marriages. The "higher bound" (on the birth year coefficient) hypothesis assigns an intraethnic union to all the women who have remarried (translating into an lower share of interethnic marriages on average. For Panel A, the sign of the bounds conflict in Benin, Senegal and Togo. Results for other countries and for interfaith marriages are robust to these changes. The fact that, under the lower bound hypothesis, results change in the same direction for both interethnic and interfaith marriages (i.e. trends turn negative, but never positive) indicates that the effect captured is mostly that remarried women are more likely to be older women, and women belonging to earlier-born cohorts, and that I assign to these earlier-born cohorts high shares of intermarriages, which are even higher than what is observed in later-born cohorts.

Second, I test whether trends I observed come from remarried women or from women in their first union (Table 13 (ethnicity) and Table 14 (religion), results on columns (9) to (13)). Look at interethnic marriages, there is no trend in both sub-samples in all countries of Panel B. Any trend found on the whole sample is found among women in their first unions, and there are positive trends for remarried women in Benin, Senegal and Uganda (coefficients are positive and high in all countries but Cote d'Ivoire). In the case of interfaith marriages, I find negative trends for both

sub-samples in all countries where interfaith shares decreases, except in Benin and Togo, where trends turn insignificant. Point estimates are high for the remarried sample, indicating it is likely an issue of power. Coefficient turns negative for Malawi, where remarried women and women in their first unions do not experience the same trends. In Niger the coefficient is positive for remarried women.

E.3 Testing the assimilation/conversion story

Table 10: Ethnic identification and time in union

Panel A	Benin	Cote d'Ivoire	Ghana	Guinea	Kenya	Mali	Senegal	Togo	Uganda
Dependent variable: Interethnic marriage									
Birth year	0.230*** (0.0765)	0.286** (0.143)	0.185 (0.140)	0.746*** (0.204)	0.196*** (0.0649)	0.175 (0.134)	-0.0774 (0.204)	0.320*** (0.114)	0.398*** (0.146)
Number of years since cohabitation	0.0903 (0.0854)	-0.0811 (0.158)	-0.257* (0.152)	0.596*** (0.204)	-0.0948 (0.0747)	0.0466 (0.157)	-0.248 (0.202)	0.148 (0.130)	-0.259 (0.174)
Age at cohabitation	0.941*** (0.125)	1.030*** (0.283)	0.369* (0.206)	1.167*** (0.262)	0.612*** (0.154)	1.110*** (0.235)	1.297*** (0.261)	1.261*** (0.234)	0.413 (0.355)
Constant	-458.3*** (153.2)	-564.5** (283.1)	-350.5 (280.8)	-1487.9*** (407.4)	-386.8*** (127.6)	-335.6 (268.5)	155.6 (408.5)	-643.4*** (226.9)	-767.9*** (291.1)
Observations	9390	2262	5124	3977	8569	7549	6687	3048	1915
R-squared	0.012	0.019	0.010	0.016	0.013	0.007	0.029	0.024	0.016
Share intermarriage	14.9	19.3	18.9	13.5	10.0	30.1	23.6	14.0	22.0
Panel B and pooled sample	Burkina Faso	Cameroon	Gabon	Malawi	Niger	Zambia	Pooled sample		
Dependent variable: Interethnic marriage									
Birth year	-0.0143 (0.0874)	0.500 (0.342)	0.214 (0.306)	0.0501 (0.131)	-0.139 (0.122)	-0.0246 (0.143)	0.210*** (0.0447)		
Number of years since cohabitation	-0.0796 (0.0935)	0.0556 (0.348)	-0.256 (0.359)	-0.0447 (0.133)	-0.209* (0.122)	-0.343** (0.142)	-0.0630 (0.0470)		
Age at cohabitation	0.805*** (0.216)	0.759* (0.427)	0.897** (0.421)	0.732*** (0.256)	0.477* (0.262)	1.403*** (0.240)	0.811*** (0.0812)		
Constant	25.43 (175.2)	-981.5 (684.4)	-404.1 (612.0)	-80.28 (261.8)	280.4 (241.8)	72.78 (284.9)			
Country-fixed effects							✓		
Observations	8040	2452	1553	7196	4305	8743	80810		
R-squared	0.005	0.011	0.018	0.003	0.003	0.015	0.244		
Share intermarriage	10.3	19.5	34.3	31.1	11.2	45.4	19.4		

Data: Pooled DHS for each country. Weighted data. The pooled sample regression includes country-fixed effects (hence no constant). *Sample:* Women still in their first union at the time of the survey. *Specification:* OLS regression. Standard errors are clustered at the DHS-cluster level. Dependent variable is a variable that equals 0 if the union is intraethnic, 100 if the union is interethnic. Under the assumption that the occurrence of divorce and of widowhood are not correlated with a woman's ethnicity, marital status and her husband's ethnicity, then the variable "number of years since cohabitation" would indicate whether women are more likely to declare they belong to the same ethnic group as their husband (thus "assimilating" into his ethnic group as the length of the union increases). The results are more suggestive of a "selection" into divorce/widowhood story than of an "assimilation" story, as the length of the union is not significant in most countries, and as the signs are conflicting when this coefficient is significant. Significance levels are denoted as follows: * p<0.10, ** p<0.05, *** p<0.01.

Older women have spent more time in union than younger women: as spouses spend longer in union, their ethnic or religious identity may change³. Exploiting the fact that I have several survey waves for each country, I can study whether women who married for the first time the same year and were born the same year are more (less) likely to report having the same ethnic (religious)

³Conversation or "assimilation" may take place before cohabitation or marriage, but I cannot estimate those using DHS.

group as their husband when the length of union increases. However, the identification ultimately rests on differences across survey waves, so this will also capture any effect linked to survey wave. Results using this specification should be compared with results on women still in their first union (Table 13 (ethnicity) and Table 14 (religion) (columns (9) to (11)).

Table 10 shows the test of the assimilation story for interethnic marriages. Women who were older when they started cohabiting are more likely to be in an interethnic union, which is consistent with the fact that these women are more educated and more likely to live in an urban area than their counterparts, and that these characteristics are positively correlated to the likelihood to be in an interethnic union. The coefficient of the number of years till cohabitation is not significant in the pooled sample, which hides discrepancies across countries. The length of union is only positively correlated to the likely to be in an interethnic union in Guinea, and insignificant in other countries where the share of interethnic unions has increased. The positive coefficient for Guinean women is indicative of selective divorce: women who were in an intra-ethnic union are more likely to divorce than their counterparts, maybe because they were less likely to have chosen their first husband than women who married outside of their ethnic group. This story is consistent with the fact that point estimates of birth year is high for the sub-sample of remarried women, even if insignificant. In countries where interethnic marriages did not become more frequent, the length of union is always negative, and is significant in Ghana, Niger, and Zambia. This indicates that there might be selective divorces or assimilation in these countries, which might be the reason why we do not observe a trend on interethnic marriage shares.

Table 11 shows the test of the conversion story for interfaith marriages. Patterns differ across panels. When looking at countries where the share of interfaith marriages has not changed (lower panel - A2 & B2), length of union and age at cohabitation are not significant. When looking at Cameroon, the only country where interfaith marriages have become more frequent, results are similar to what is seen when studying interethnic marriages: older women at the time of their first cohabitation are more likely to be in an interfaith union. Looking at countries where the share

Table 11: Religious identification and time in union

<i>Panels A1&B1</i>	Benin	Burkina Faso	Gabon	Ghana	Kenya	Togo	Zambia	Pooled sample
Dependent variable: Interfaith marriage								
Birth year	-0.121 (0.0770)	-0.213** (0.0909)	-0.449* (0.264)	-1.423*** (0.149)	-0.160*** (0.0441)	-0.113 (0.116)	-0.140** (0.0551)	-0.146*** (0.0292)
Number of years since cohabitation	-0.194** (0.0877)	-0.200** (0.0993)	-0.727*** (0.271)	-1.522*** (0.160)	-0.258*** (0.0614)	-0.191 (0.142)	-0.101* (0.0571)	-0.221*** (0.0329)
Age at cohabitation	-0.298** (0.124)	0.0835 (0.200)	-0.886*** (0.303)	-2.096*** (0.182)	-0.504*** (0.0907)	-0.703*** (0.223)	-0.264*** (0.0979)	-0.258*** (0.0544)
Constant	262.6* (154.2)	433.5** (181.7)	930.0* (528.2)	2886.0*** (298.2)	335.0*** (87.85)	257.3 (231.9)	287.0*** (110.2)	
Country-fixed effects								✓
Observations	9390	8040	1553	5124	8569	3048	8743	80810
R-squared	0.001	0.002	0.009	0.069	0.006	0.004	0.003	0.125
Share intermarriage	15.8	11.7	17.0	17.0	6.3	17.8	4.2	9.1
<hr/>								
<i>Panels A2&B2 — A3</i>	Cote d'Ivoire	Guinea	Malawi	Mali	Niger	Senegal	Uganda	Cameroon
Dependent variable: Interfaith marriage								
Birth year	0.0901 (0.135)	0.0318 (0.129)	-0.183** (0.0779)	0.0371 (0.0693)	0.0828 (0.0702)	-0.0268 (0.0601)	0.0989* (0.0566)	0.392* (0.223)
Number of years since cohabitation	-0.209 (0.184)	-0.0509 (0.112)	-0.0751 (0.0765)	-0.0600 (0.0795)	0.0648 (0.0597)	-0.0682 (0.0636)	-0.134 (0.0934)	0.333 (0.254)
Age at cohabitation	0.479 (0.321)	0.0726 (0.141)	-0.146 (0.160)	-0.105 (0.117)	0.134 (0.0992)	0.195 (0.120)	-0.0630 (0.153)	0.791*** (0.297)
Constant	-166.7 (268.6)	-58.77 (258.3)	372.0** (155.4)	-64.73 (138.5)	-164.5 (140.0)	52.21 (120.3)	-188.2* (112.6)	-779.5* (447.2)
Observations	2262	3977	7196	7549	4305	6687	1915	2452
R-squared	0.007	0.001	0.002	0.001	0.002	0.008	0.005	0.004
Share intermarriage	17.8	4.6	6.9	6.0	1.7	1.9	4.5	11.1

Data: Pooled DHS for each country. Weighted data. The pooled sample regression includes country-fixed effects (hence no constant). *Sample:* Women still in their first union at the time of the survey. *Specification:* OLS regression. Standard errors are clustered at the DHS-cluster level. Dependent variable is a variable that equals 0 if the union is intrafaith, 100 if the union is interfaith. I consider three religious groups (Christians, Muslims, Others), intermarriage happens between these three groups. Under the assumption that the occurrence of divorce and of widowhood are not correlated with a woman's religious affiliation, marital status and her husband's religious affiliation, then the variable "number of years since cohabitation" would indicate whether women are more likely to declare they belong to the same religious group as their husband (thus "assimilating" into his religious group as the length of the union increases).

Significance levels are denoted as follows: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

of interfaith unions decreased over time (upper panel - A1 & B1), I find that older women at the time of their first cohabitation are less likely to be in an interfaith union, which is consistent with the fact that they are less likely to belong to a traditional religion, in all countries but Burkina Faso. The length of union is negatively correlated to the likelihood to be in an interfaith union in all countries of this panel, which is consistent with either conversion, or with selective divorces. It seems like that followers of traditional religions convert during their marriage: given intense proselytizing of other faiths, conversions pattern are more likely to go in this direction rather than Muslim or Christian individual converting to the faith of their spouse.

E.4 Testing Birth year v. Year of first cohabitation

The results from Table 12 are commented in the paper.

Table 12: Trend - Year of marriage

Dependent variable	(1)	(2)	(3)	(4)	Dependent variable	Interfaith marriage	Mean	N	
Marriage year coefficient	<i>Each cell: coefficient from a separate regression</i>								
<i>Panel B: No change in interethnic marriage shares (with birth year)</i>					<i>Panels A2&B2: No change in interfaith marriage shares (with birth year)</i>				
Burkina Faso	0.119 (0.0830)	-0.0450 (0.0821)	10.3	8040	Cote d'Ivoire	0.238** (0.119)	0.213* (0.119)	17.8 2262	
Cameroon	0.605*** (0.216)	0.116 (0.231)	21.4	2452	Guinea	0.0675 (0.0968)	0.0892 (0.104)	4.6 3977	
Gabon	0.622*** (0.212)	0.501** (0.210)	34.3	1553	Malawi	-0.167** (0.0675)	-0.0465 (0.0696)	6.9 7196	
Ghana	0.288*** (0.108)	0.171 (0.111)	19.3	5124	Mali	0.0297 (0.0526)	0.0301 (0.0539)	6.0 7549	
Malawi	0.220* (0.116)	-0.142 (0.120)	31.1	7196	Niger	0.0792 (0.0617)	0.0863 (0.0667)	1.7 4305	
Niger	0.0342 (0.0978)	-0.0774 (0.0992)	11.2	4305	Senegal	0.135** (0.0654)	0.126** (0.0558)	1.9 6687	
Zambia	0.407*** (0.122)	0.144 (0.120)	45.5	8743	Uganda	0.120** (0.0546)	0.0725 (0.0590)	4.5 1915	
Controls									
Age & Age ²	✓	✓				✓	✓		
Education		✓					✓		
Urban		✓					✓		

Data: Pooled DHS for each country. Weighted data. *Sample:* Women in their first union at the time of the survey. *Specification:* OLS regression run separately for the 15 countries of the sample. Standard errors are clustered at the DHS-cluster level. Dependent variable is a variable that equals 0 if the union is intraethnic, 100 if the union is interethnic. Columns (1) and (2) report the coefficient associated to the year of marriage variable. Each cell corresponds to a separate regression. Column (3) reports the mean number of interethnic (interfaith) marriages in the regression sample. Column (4) reports the number of observations for each country. Results in columns (1) and (2) can be interpreted as changes in percentage points. Results are displayed only for countries in which interethnic (interfaith) marriages shares did not change using year of birth to measure time trends. Significance levels are denoted as follows: * p<0.10, ** p<0.05, *** p<0.01.

Table 13: Interethnic marriages

Regression results - Dependent variable: Interethnic marriage - Each cell: birth year coefficient from a separate regression														Share of interethnic marriages						
Sample	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	All married women								First union			Remar.		All married women			First Union	Remarried		
Assumptions	Main	Main	Lower	bound	Upper	bound	Bound	Other	Main	Main	Main	Main	Main	Main	Lower bound	Upper bound	Others bound			N All
<i>Panel A: Increase in interethnic marriage shares</i>																				
Benin	0.242*** (0.0741)	0.176** (0.0727)	-0.282*** (0.0871)	-0.344*** (0.0855)	0.271*** (0.0641)	0.198*** (0.0630)	0.243*** (0.0778)	0.181** (0.0764)	0.228*** (0.0782)	0.154** (0.0757)	0.163** (0.0748)	0.387** (0.152)	0.316** (0.152)	15.1	27.6	12.7	16.4	14.9	16.5	10977
Cote d'Ivoire	0.310** (0.137)	0.326** (0.135)	0.148 (0.151)	0.154 (0.146)	0.374*** (0.123)	0.379*** (0.120)	0.143 (0.205)	0.125 (0.199)	0.390*** (0.142)	0.370*** (0.139)	0.346** (0.141)	-0.133 (0.291)	-0.0217 (0.275)	20.4	32.4	17.0	51.2	20.1	22.1	2677
Guinea	0.728*** (0.200)	0.694*** (0.203)	0.501** (0.197)	0.484** (0.199)	0.649*** (0.174)	0.616*** (0.176)	0.892*** (0.214)	0.856*** (0.217)	0.744*** (0.203)	0.703*** (0.206)	0.716*** (0.207)	0.654 (0.405)	0.652 (0.404)	14.0	27.2	11.4	15.1	13.5	16.7	4732
Kenya	0.257*** (0.0624)	0.0820 (0.0538)	0.293*** (0.0707)	0.148** (0.0662)	0.227*** (0.0613)	0.0684 (0.0518)	0.286*** (0.0763)	0.221*** (0.0743)	0.247*** (0.0649)	0.0801 (0.0550)	0.0605 (0.0554)	0.332 (0.291)	0.125 (0.300)	10.5	15.1	9.5	15.1	10.0	18.2	9169
Mali	0.253* (0.130)	0.305** (0.129)	-0.0803 (0.129)	-0.0417 (0.124)	0.370*** (0.123)	0.387*** (0.120)	0.121 (0.143)	0.172 (0.141)	0.261* (0.134)	0.293** (0.129)	0.256** (0.130)	0.548 (0.349)	0.553 (0.341)	30.6	37.7	26.8	33.2	30.1	35.2	8499
Senegal	0.326*** (0.0914)	0.177* (0.0913)	-0.241** (0.107)	-0.395*** (0.108)	0.369*** (0.0831)	0.197** (0.0811)	0.384*** (0.0954)	0.212** (0.0943)	0.291*** (0.102)	0.106 (0.101)	0.0702 (0.102)	0.644*** (0.193)	0.443** (0.186)	23.5	34.8	19.1	26.7	23.6	32.4	8339
Togo	0.338*** (0.113)	0.164 (0.114)	-0.0762 (0.132)	-0.222* (0.134)	0.367*** (0.0928)	0.206** (0.0932)	0.314** (0.139)	0.173 (0.139)	0.382*** (0.115)	0.178 (0.117)	0.170 (0.116)	0.255 (0.245)	0.146 (0.240)	14.4	29.6	11.5	18.2	14.0	16.3	3701
Uganda	0.455*** (0.135)	0.413*** (0.123)	0.137 (0.151)	0.0870 (0.150)	0.387*** (0.116)	0.257** (0.106)	0.581*** (0.149)	0.655*** (0.137)	0.453*** (0.149)	0.288** (0.140)	0.261* (0.140)	0.596** (0.251)	0.740*** (0.234)	24.3	39.1	17.1	30.9	22.0	32.8	2465
<i>Panel B: No change in interethnic marriage shares</i>																				
Burkina Faso	0.00631 (0.0856)	-0.0680 (0.0849)	-0.241** (0.104)	-0.299*** (0.103)	0.0337 (0.0763)	-0.0374 (0.0756)	0.265** (0.128)	0.190 (0.127)	0.00690 (0.0878)	-0.0636 (0.0870)	-0.0665 (0.0867)	0.0557 (0.189)	-0.106 (0.185)	10.4	20.7	9.1	18.4	10.3	11.3	9170
Cameroon	0.344 (0.348)	0.0297 (0.334)	0.412 (0.370)	0.318 (0.364)	0.143 (0.312)	-0.145 (0.300)	0.505 (0.482)	0.239 (0.462)	0.259 (0.372)	-0.0267 (0.359)	0.0272 (0.357)	0.612 (0.714)	0.326 (0.709)	22.3	36.6	17.2	34.0	21.4	26.3	3066
Gabon	0.364 (0.289)	0.410 (0.278)	-0.0121 (0.279)	0.0609 (0.271)	0.320 (0.240)	0.186 (0.233)	0.844*** (0.298)	0.763*** (0.287)	0.282 (0.311)	0.212 (0.294)	0.176 (0.287)	0.707 (0.541)	0.882* (0.533)	38.0	51.9	25.1	60.4	34.3	48.0	2274
Ghana	0.199 (0.140)	0.133 (0.140)	-0.170 (0.153)	-0.169 (0.152)	0.195* (0.108)	0.101 (0.109)	0.134 (0.162)	0.0929 (0.160)	0.162 (0.142)	0.0621 (0.142)	0.0408 (0.142)	0.380 (0.268)	0.367 (0.270)	19.8	36.4	15.2	22.5	19.3	21.5	6487
Malawi	0.00730 (0.121)	-0.156 (0.120)	-0.230* (0.129)	-0.291** (0.128)	0.161 (0.111)	-0.0585 (0.113)	-0.109 (0.125)	-0.269** (0.127)	0.0513 (0.135)	-0.163 (0.135)	-0.155 (0.131)	-0.0690 (0.238)	-0.131 (0.233)	31.8	46.4	24.2	35.1	31.1	34.4	9241
Niger	-0.154 (0.120)	-0.114 (0.123)	-0.745*** (0.137)	-0.749*** (0.137)	0.0209 (0.0916)	0.00617 (0.0923)	-0.168 (0.122)	-0.127 (0.125)	-0.0894 (0.118)	-0.102 (0.119)	-0.110 (0.122)	-0.167 (0.294)	-0.160 (0.290)	12.7	30.7	8.8	13.5	11.2	18.1	5603
Zambia	0.0666 (0.132)	0.0808 (0.124)	-0.138 (0.122)	-0.129 (0.118)	0.174 (0.128)	0.128 (0.122)	0.0513 (0.134)	0.0600 (0.127)	0.0382 (0.145)	0.0402 (0.138)	0.0272 (0.135)	0.275 (0.291)	0.208 (0.252)	46.1	55.0	37.6	48.6	45.5	49.1	10711
Age & Age ²	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓							
Education & Urban		✓		✓		✓		✓		✓			✓							
Remarried		✓																		
Length of union & Age at cohabitation																				

Data: Pooled DHS for each country. Weighted data. Specification: OLS regression run separately for the 15 countries of the sample. Standard errors are clustered at the DHS-cluster level. Dependent variable is a variable that equals 0 if the union is intraethnic, 100 if the union is interethnic. Definition of the dependent variable varies in specifications (1) to (8). Results are estimated under the main specification, but on two sub-samples in columns (9) to (13). Columns (14) to (19) show the observed share of intermarriages for the different specifications and sub-samples. Column (20) displays the number of observations.

Columns (1) to (13) report the coefficient associated to the birth year variable. Each cell corresponds to a separate regression.

(1), (2), (14) : Main specification, All women: Dependent variable: Interethnic marriages as observed in the data.

(3), (4), (15) : Lower bound, All women: Dependent variable: Interethnic marriages, with all women who remarried counted as being in an interethnic union.

(5), (6), (16) : Higher bound, All women: Dependent variable: Interethnic marriages, with all women who remarried counted as being in an intraethnic union.

(7), (8), (17) : Higher bound, All women: Dependent variable: Interethnic marriages, with "other"-other unions counted as interethnic ones.

(9), (10), (11), (18) : Main specification, First unions: Only women in their first union.

(12), (13), (19) : Main specification, Remarried: Only women who have remarried.

Significance levels are denoted as follows: * p<0.10, ** p<0.05, *** p<0.01.

Table 14: Interfaith marriages

Regression results - Dependent variable: interfaith marriage - Each cell: birth year coefficient from a separate regression														Share of interfaith marriages						
Sample	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	All married women								First union			Remar.		All married women			First Union	Remarried	N	
Assumptions	Main	Main	Lower	bound	Upper	bound	Bound	Other	Main	Main	Main	Main	Main	Main	Lower bound	Upper bound	Others bound			All
<i>Panel A1 & B1: Decrease in interfaith marriage shares</i>																				
Benin	-0.150** (0.0754)	-0.103 (0.0753)	-0.559*** (0.0815)	-0.535*** (0.0818)	-0.00572 (0.0645)	0.00693 (0.0646)	-0.810*** (0.120)	-0.695*** (0.118)	-0.108 (0.0779)	-0.0934 (0.0780)	-0.106 (0.0770)	-0.147 (0.173)	-0.145 (0.170)	16.7	28.4	13.4	36.4	15.8	21.5	10977
Burkina Faso	-0.251*** (0.0898)	-0.237*** (0.0894)	-0.424*** (0.0966)	-0.409*** (0.0960)	-0.149* (0.0800)	-0.147* (0.0800)	-0.772*** (0.0798)	-0.694*** (0.153)	-0.205** (0.0908)	-0.201** (0.0904)	-0.207** (0.0905)	-0.491** (0.221)	-0.465** (0.218)	12.1	22.0	10.4	23.3	11.7	15.2	9170
Gabon	-0.570** (0.239)	-0.402 (0.244)	-0.619** (0.282)	-0.313 (0.290)	-0.287 (0.192)	-0.187 (0.198)	-0.584** (0.246)	-0.354 (0.248)	-0.469* (0.263)	-0.260 (0.274)	-0.249 (0.275)	-0.787* (0.465)	-0.722 (0.458)	18.6	39.2	12.4	20.9	17.0	22.9	2274
Ghana	-1.520*** (0.133)	-1.301*** (0.131)	-1.443*** (0.140)	-1.203*** (0.139)	-1.078*** (0.117)	-0.932*** (0.117)	-2.101*** (0.164)	-1.686*** (0.155)	-1.478*** (0.146)	-1.274*** (0.145)	-1.266*** (0.147)	-1.576*** (0.242)	-1.411*** (0.242)	18.3	34.5	13.4	26.3	17.0	23.4	6487
Kenya	-0.189*** (0.0445)	-0.123*** (0.0451)	-0.101* (0.0593)	-0.1018 (0.0588)	-0.167*** (0.0417)	-0.0985** (0.0417)	-0.213*** (0.0513)	-0.115** (0.0554)	-0.173*** (0.0443)	-0.0987** (0.0443)	-0.101** (0.0440)	-0.469** (0.212)	-0.508** (0.218)	6.4	11.7	6.0	7.7	6.3	7.3	9169
Togo	-0.214** (0.109)	-0.0945 (0.112)	-0.481*** (0.119)	-0.384*** (0.125)	-0.0375 (0.0975)	0.0428 (0.101)	-1.054*** (0.177)	-0.385** (0.163)	-0.148 (0.118)	-0.0422 (0.123)	-0.0327 (0.122)	-0.447 (0.279)	-0.400 (0.282)	18.9	32.7	14.6	47.1	17.8	23.9	3701
Zambia	-0.161*** (0.0496)	-0.146*** (0.0492)	-0.414*** (0.0998)	-0.349*** (0.0983)	-0.102** (0.0448)	-0.0916** (0.0441)	-0.158*** (0.0506)	-0.141*** (0.0499)	-0.141** (0.0560)	-0.127** (0.0552)	-0.130** (0.0543)	-0.213* (0.113)	-0.208* (0.114)	4.4	20.9	3.4	4.6	4.2	5.5	10711
<i>Panel A2 & B2: No change in interfaith marriage shares</i>																				
Cote d'Ivoire	0.122 (0.134)	0.148 (0.134)	-0.0716 (0.150)	-0.0656 (0.148)	0.155 (0.114)	0.159 (0.116)	-0.357* (0.212)	-0.323 (0.206)	0.141 (0.134)	0.142 (0.135)	0.101 (0.136)	0.185 (0.405)	0.184 (0.392)	19.3	30.4	15.0	34.0	17.8	27.8	2677
Guinea	0.0423 (0.122)	0.0481 (0.122)	-0.103 (0.166)	-0.0857 (0.166)	0.0453 (0.109)	0.0470 (0.110)	-0.0381 (0.230)	-0.0165 (0.232)	0.0469 (0.129)	0.0504 (0.130)	0.0356 (0.130)	0.0381 (0.279)	0.0245 (0.279)	5.1	19.7	3.9	9.1	4.6	7.6	4732
Malawi	-0.123 (0.0786)	-0.0130 (0.0816)	-0.500*** (0.129)	-0.274** (0.132)	-0.109* (0.0586)	-0.0417 (0.0584)	-0.163** (0.0820)	-0.0376 (0.0838)	-0.182** (0.0778)	-0.0788 (0.0772)	-0.0810 (0.0768)	0.113 (0.187)	0.186 (0.200)	7.8	27.6	5.4	8.5	6.9	10.8	9241
Mali	0.00585 (0.0660)	-0.000175 (0.0659)	-0.385*** (0.0845)	-0.379*** (0.0861)	0.0649 (0.0618)	0.0498 (0.0617)	-0.172* (0.0899)	-0.177** (0.0895)	0.0474 (0.0682)	0.0310 (0.0681)	0.0158 (0.0690)	-0.217 (0.188)	-0.227 (0.183)	6.2	16.2	5.3	8.0	6.0	7.7	8499
Niger	0.0912 (0.0572)	0.0962* (0.0567)	-0.690*** (0.123)	-0.678*** (0.122)	0.0758 (0.0544)	0.0767 (0.0549)	0.111* (0.0620)	0.115* (0.0614)	0.0840 (0.0691)	0.0854 (0.0697)	0.0820 (0.0692)	0.137* (0.0817)	0.139* (0.0795)	1.8	23.3	1.3	2.0	1.7	2.1	5603
Senegal	-0.0399 (0.0594)	-0.0469 (0.0585)	-0.695*** (0.160)	-0.677*** (0.158)	0.00852 (0.0510)	0.00101 (0.0509)	-0.0347 (0.0605)	-0.0426 (0.0595)	-0.00466 (0.0620)	-0.0112 (0.0619)	-0.0305 (0.0609)	-0.160 (0.172)	-0.203 (0.168)	1.9	15.7	1.6	2.0	1.9	2.3	7777
Uganda	0.0496 (0.0570)	0.0140 (0.0603)	-0.148 (0.129)	-0.0970 (0.132)	0.103** (0.0430)	0.0728 (0.0453)	0.0515 (0.0576)	0.0166 (0.0615)	0.127** (0.0567)	0.0881 (0.0613)	0.0643 (0.0616)	-0.114 (0.145)	-0.167 (0.143)	5.7	25.5	3.5	6.1	4.5	9.9	2465
<i>Panel A3: Increase in interfaith marriage shares</i>																				
Cameroon	0.489** (0.233)	0.523** (0.236)	0.588* (0.311)	0.771** (0.309)	0.319* (0.192)	0.308 (0.193)	0.481 (0.472)	0.736 (0.458)	0.432* (0.232)	0.445* (0.234)	0.413* (0.226)	0.727 (0.573)	0.805 (0.570)	10.8	28.3	8.9	18.7	11.1	9.8	3066
Controls																				
Age & Age ²	✓		✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓						✓
Education		✓		✓				✓			✓	✓	✓							✓
Urban		✓		✓				✓			✓	✓	✓							✓

Data: Pooled DHS for each country. Weighted data. Specification: OLS regression run separately for the 15 countries of the sample. Standard errors are clustered at the DHS-cluster level. Dependent variable is a variable that equals 0 if the union is intrafaith, 100 if the union is interfaith. Definition of the dependent variable varies in specifications (1) to (8). Results are estimated under the main specification, but on two sub-samples in columns (9) to (13). Columns (14) to (19) show the observed share of intermarriages for the different specifications and sub-samples. Column (20) displays the number of observations.

Columns (1) to (13) report the coefficient associated to the birth year variable. Each cell corresponds to a separate regression.

(1), (2), (14) : Main specification, All women: Dependent variable: Interfaith marriages as observed in the data.

(3), (4), (15) : Lower bound, All women: Dependent variable: Interfaith marriages, with all women who remarried counted as being in an interfaith union.

(5), (6), (16) : Higher bound, All women: Dependent variable: Interfaith marriages, with all women who remarried counted as being in an intrafaith union.

(7), (8), (17) : Higher bound, All women: Dependent variable: Interfaith marriages, with "other"-other unions counted as interfaith ones.

(9), (10), (11), (18) : Main specification, First unions: Only women in their first union.

(12), (13), (19) : Main specification, Remarried: Only women who have remarried.

Significance levels are denoted as follows: * p<0.10, ** p<0.05, *** p<0.01.

References

Gary F Simons and Charles D Fennig. Ethnologue: Languages of the world. *SIL International*, 20, 2017. [2](#)