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Early marriage and early childbearing in West Africa: Does ethnicity matter?

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Abstract

Recently, Corno et al. (2020) show that aggregate adverse income shocks increase early marriage and early childbearing in sub-Saharan Africa. We argue that early marriage and early childbearing are two phenomenons that are mainly determined by ethnic groups with the strongest cultural norms and practices. In particular, we replicate their empirical results and show that the Fulani ethnic group which is widely dispersed across West Africa region strongly affects early marriage and early childbearing.

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1. Introduction

Empirical investigations related to early marriage and early childbearing have produced a large body of evidence in the literature. This stems from the fact that early marriage and early childbearing are reported to have had detrimental effects on education and labor market outcomes of the woman. See for instance Chevalier and Viitanen (2003) and Fletcher and Wolfe (2009) for the case of developed countries, and Field and Ambrus (2008), Herrera *et al*. (2019) and Sunder (2019) for the developing ones.[1] On the other hand, other studies have attempted to identify the main determinants of early marriage and early childbearing with the objective of suggesting policies to combat these phenomenons. In particular, (Corno *et al*. (2020) show that adverse income shocks, and mainly droughts significantly increase early marriage and early childbearing in sub-Saharan Africa. They also find that the positive effect of these shocks is concentrated within countries and ethnic groups that traditionally pay bride price at marriage, and not in those where bride price is not a customary. Thus, they conclude that successful policies to reduce early marriage should take into account this culture of marriage payments.

We replicate their empirical work and argue that early marriage and early childbearing are two phenomenons that are mainly determined by ethnic groups with the strongest cultural norms and practices. In particular, we show that the Fulani ethnic group which is widely dispersed across West Africa region positively and strongly affects early marriage and early childbearing, regardless of the presence of droughts.

To this end, we combine Corno *et al*. (2020)'s data with the Demographic and Health Survey data from sub-Saharan Africa where the ethnicity variable is reported. We then re-estimate their model while including the Fulani ethnicity dummy variable. The rationale for focussing on this particular variable is that people from the Fulani ethnic group usually promise their daughters in marriage to someone as soon as they are born. This is a common practice that prevails among the Fulani community members. Furthermore, many of them believe that girl marriage reinforce friendly relationship

[1] All these studies are carried out at the national level. Other contributions include multi-country and comparative analyses. See for example Azevedo *et al*. (2012), McQueston *et al*. (2012) and Burger *et al*. (2020).

between community members. In some countries like Mali and Niger, marriage is seen as a strategy to protect the physical integrity and the virginity of girls, and thereby protecting their own honor and that of their parents (Plan international, 2017). In this paper, we rely on West Africa not only because Fulani ethnic group is widespread but also because West Africa region is home to more than four countries with the highest prevalence rates of child marriage in the world. Besides, it is natural to think that fertility and marriage are closely connected. Notice also that Corno *et al*. (2020) have identified the countries in West Africa as those associated with high prevalence of bride price. Therefore, examining the two phenomenons while focusing on West Africa might be a relevant choice to show opposite results.

The rest of the paper is organized as follows. Section 2 presents the model and the main findings and Section 3 concludes.

2. Empirical strategy and results

Corno *et al*. (2020) estimate a linear model where the dependent variable is a binary variable for marriage and fertility. For early marriage, the dependent variable is coded to 1 if the woman married at the age corresponding to the observation (from 12 to 17 years old). For early childbearing, the dependent variable is coded to 1 if the woman had her first child at the age corresponding to the observation (from 12 to 17 years old).[2] We re-estimate the model using the same covariates including a binary variable for drought, birth year fixed effects, age fixed effects and country fixed effects. As mentioned in the previous section, and contrary to Corno *et al*. (2020), we include a binary variable for belonging to the Fulani ethnic group as an additional covariate. We also restrict the sample of Corno *et al*. (2020) to most countries from West Africa available in their dataset. These include Burkina Faso, Benin, Côte d'Ivoire, Ghana, Guinea, Liberia, Mali, Niger, Senegal, Sierra Leone and Togo.

[2] Corno et al. (2020)'s data and supplemental material are available online at https://www.econometricsociety.org/publications/econometrica/2020/05/01/age-marriage-weather-shocks-and-direction-marriage-payments

2.1 Main findings

Tables 1 and 2 present the results we obtain from the estimations. As we can see, the results are no longer significant at conventional levels. In addition, when adding the Fulani dummy variable in the regressions, we find that its effect on early marriage and early childbearing is positive and strongly significant. Hence, it is not because bride price traditionally prevails in West Africa that droughts significantly affect early marriage and early childbearing. Results provided in Tables 1 and 2 are not consistent with such a view.

Table 1: Effects of drought on early marriage

	West Africa		
	(1)	(2)	(3)
Drought	0.00162	0.00160	0.00150
	(0.00126)	(0.00127)	(0.00124)
Birth year FE	Yes	Yes	Yes
Age FE	Yes	Yes	Yes
Country FE	No	Yes	Yes
Country FE x Cohort FE	No	No	Yes
N	738,530	738,530	738,530
Adjusted R^2	0.0676	0.0678	0.0682

* p<0.1, ** p<0.05, *** p<0.01. Standard errors in parentheses.

Table 2: Effects of drought and Fulani on early marriage

	West Africa		
	(1)	(2)	(3)
Drought	0.00151	0.00149	0.00134
	(0.00155)	(0.00155)	(0.00151)
Fulani	0.01969***	0.01959***	0.01970***
	(0.00310)	(0.00310)	(0.00312)
Birth year FE	Yes	Yes	Yes

Age FE	Yes	Yes	Yes
Country FE	No	Yes	Yes
Country FE x Cohort FE	No	No	Yes
N	492,856	492,856	492,856
Adjusted R^2	0.0691	0.0692	0.0696

* p<0.1, ** p<0.05, *** p<0.01. Standard errors in parentheses.

2.2 Comparison between Burkina Faso and Guinea

We now discuss some characteristics related to two countries in West Africa, Burkina Faso and Guinea. In the first country, the largest ethnic group is Mossi (51.6%) whereas in the second one, it is Fulani (38.7%). Guinea is the only country in sub-Saharan Africa with a majority of Fulani ethnic group in the population. We define another dummy variable for the Mossi ethnic group. Using the same regressions as above, we find that Fulani and Mossi do not have the same effects on early marriage and early childbearing. Results are given in Tables 3 and 4.

Table 3: Effects of drought and Mossi in the case of Burkina Faso

	Burkina Faso		
	Early marriage	Early childbearing	Age of first marriage
Drought	0.00167	0.00061	-0.04542
	(0.00280)	(0.00214)	(0.02763)
Mossi	-0.01075*	-0.00902***	-0.03953
	(0.00610)	(0.00276)	(0.19508)
Birth year FE	Yes	Yes	Yes
Age FE	Yes	Yes	Yes
N	92,137	98,467	101,400
Adjusted R^2	0.1324	0.0638	0.0862

* p<0.1, ** p<0.05, *** p<0.01. Standard errors in parentheses.

As shown in Table 3, droughts have no effect on early marriage and early childbearing. However, Mossi negatively affects the two phenomenons. Although the coefficient is only significant at 10% for early marriage, Mossi has a stronger negative effect on early childbearing. This contrasts with what is reported below for Guinea regarding the effect of Fulani.

Table 4: Effects of drought and Fulani in the case of Guinea

	Guinea		
	Early marriage	Early childbearing	Age of first marriage
Drought	0.00001	0.00323	0.00652
	(0.00607)	(0.00333)	(0.03878)
Fulani	0.01494***	0.0323***	-0.55993***
	(0.00364)	(0.00588)	(0.12834)
Birth year FE	Yes	Yes	Yes
Age FE	Yes	Yes	Yes
N	66,954	56,360	73,818
Adjusted R^2	0.0485	0.0698	0.0444

* p<0.1, ** p<0.05, *** p<0.01. Standard errors in parentheses.

In the case of Guinea, findings suggest that people may marry their daughters not because of droughts which have negative effects on their agricultural outputs but certainly because of cultural and traditional customary practices and norms. Fulani women also bear children when they are very young. Table 4 shows that age of first marriage significantly decreases with the Fulani ethnic group. This is consistent with the fact that Fulani girls are given in marriage very early. Therefore, any policy action that aims at fighting against early marriage and early childbearing while relying on cash or in-kind transfers would lead to unsatisfactory results. We argue that successful policies should have the ability to change the mentalities and the incentives that lead to the persistence of cultural practices. An example of a successful policy would be the one implemented in Burkina Faso during the 2019 year. The policy was a national awareness campaign

named "*Ne m'appelez pas Madame!*" ("*Don't call me Mrs!*") initiated by UNICEF and supported by the government, local authorities, traditional chiefs and religious leaders as well as civil society organizations and artists to end girl marriage. This policy yielded a positive outcome in the country (UNFPA-UNICEF, 2020).[3] To sum up, the results presented in this paper could call for caution in examining the effect of drought on early marriage and early childbearing in some developing countries. Nevertheless, one may think that Corno et al. (2020)'s view still applies if Fulani parents are generally poorer than parents from other ethnicities. Unfortunately, retrospective information on the income of parents is not available in the Demographic and Health Survey. Although we cannot control for this potential confound, some evidence may show that Fulani people are not poorer than the other people. For instance, let us consider the case of Burkina Faso. In this country, Fulani people are located in the Sahel region. However, this region is among the four richest ones of the thirteen regions in Burkina Faso, according to the last four living standard measurement surveys (INSD, 2003, 2012, 2015, 2022).[4] Another example is given by Nigeria. Indeed, using a sample of girls aged 15–19 years extracted from the 2013 Nigeria Demographic and Health Survey, Mobolaji et al. (2020) showed that Fulani and Hausa girls had the highest prevalence of early marriage in Nigeria. At the same time, Fulani and Hausa are among the top three richest tribes in this country.

3. Conclusion

We investigate whether early marriage and early childbearing stem from the fact that parents marry their daughters in their younger age in order to cope with rainfall shocks. Early marriage is then considered as a source of income for consumption smoothing. We argue that this may not be the case when focussing on the Fulani ethnic group. We show that the cultural and traditional practices that prevail among Fulani people may explain the two phenomenons. The findings also suggest that successful policies that should be

[3] Launched on March 6 and completed on September 7, 2019, this awareness campaign was a caravan that traveled through several regions in order to convey the message to all generations. Many people were reached and they voluntarily participated in the concerts and other activities planned by the committee allowing to impact many parents and youth across the country.

[4] In fact, while the national poverty rate varied from 36.2% to 48.6% between 2003 and 2018, the poverty rate in the Sahel region varied from 20.6% to 41.5%.

implemented to fight against early marriage and early childbearing should have the ability to change the mentalities and the incentives that lead to the persistence of cultural practices.

References

Azevedo, J. P., Favara, M., Haddock, S. E., Lopez-Calva, L. F., Muller, M. and E. Perova (2012): "Teenage pregnancy and opportunities in Latin America and Caribbean," World Bank.

Burger, R., Zabsonré, A., Ahmed, V., Conchada, M. and A. Kassouf (2020): "Examining the impact of early childbearing on labor market outcomes in four African countries", PEP Working Paper.

Chevalier, A. and T.K. Viitanen (2003): "The long-run labour market consequences of teenage motherhood in Britain," *Journal of Population Economics* 16(2), 323–343.

Corno, L., Hildebrandt, N. and A. Voena (2020): "Age of Marriage, weather shocks, and the direction of marriage payments," *Econometrica*, 88(3), 879–915.

Field, E. and A. Ambrus (2008): "Early marriage, age of menarche, and female schooling attainment in Bangladesh," *Journal of Political Economy*, 116(5), 881–930.

Fletcher, J. M. and B. L. Wolfe (2009): "Education and labor market consequences of teenage childbearing: Evidence using the timing of pregnancy: Outcomes and community fixed effects," *Journal of Human Resources* 44(2), 303–325.

Herrera, C., Sahn, D. and K. Villa (2019): "Teen Fertility and Female Employment Outcomes: Evidence from Madagascar," *Journal of African Economies*, 28(3), 277–303.

INSD (2003): "La pauvreté en 2003," Institut National de la Statistique et de la Démographie, Burkina Faso.

INSD (2012): "Profil de pauvreté et d'inégalité en 2009," Institut National de la Statistique et de la Démographie, Burkina Faso.

INSD (2015): "Enquête Multisectorielle continue de 2014 – Profil de pauvreté et d'inégalité," Institut National de la Statistique et de la Démographie, Burkina Faso.

INSD (2022): "Enquête Multisectorielle continue de 2018 – Analyse des données," Institut National de la Statistique et de la Démographie, Burkina Faso.

McQueston, K., Silverman, R. and A. Glassman (2012): "Adolescent Fertility in Low and Middle-Income Countries: Effects and Solutions," Center for Global Development, Working Paper 295.

Mobolaji, J. W., Fatusi, A. O. and S. A. Adedini (2020): "Ethnicity, religious affiliation and girl-child marriage: a cross-sectional study of nationally representative sample of female adolescents in Nigeria," *BMC Public Health*, 20, 1-10.

Plan International (2017): "Famille, honneur et rêves brisés: Le cas des filles-épouses au Mali, Niger et Sénégal", Rapport de synthèse, Afrique de l'Ouest.

Sunder, N. (2019): "Marriage Age, Social Status and Intergenerational Effects in Uganda," *Demography* 56, 2123–2146.

UNFPA-UNICEF (2020): "Global programme to End Child Marriage", Phase I (2016–2019) Report, United Nations Population Fund.