

Child Fostering in sub-Saharan Africa: What Has Changed over Time?

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Abstract

Child fostering has been documented over time in many parts of sub-Saharan Africa. We know little, however, about how the prevalence of fostering differs across countries and broad regions, nor about how fostering – and its predictors – have changed within countries over time. To explore prevalence, trends, and predictors of child fostering, I leverage Demographic and Health Survey (DHS) data from 133 surveys in 37 countries collected between 1986 and 2017, representing all regions of sub-Saharan Africa. Preliminary results suggest significant variation in the prevalence of fostering, ranging from 4.9% of children in Burundi to 34.3% in Namibia at most recent survey. Fostering trends have changed significantly over time in the majority of countries, with nearly one-third of countries experiencing a significant increase over time. Early results suggest that while the prevalence of fostering has changed over time in many countries, predictors have largely remained the same.

Introduction

Child fostering is a common living arrangement for many children throughout sub-Saharan Africa (Bachan 2014; Grant & Yeatman 2014; Madhavan 2004; Isiugo-Abanihe 1985; Bledsoe 1990). In some regions, fostering is institutionalized and normalized, with as much as 15% to 25% of children under age 15 living with someone other than their biological parents (Monasch & Boerma 2004). Extensive anthropological and ethnographic work has demonstrated the commonality of fostering across a wide range of ethnic groups and countries (Notermans 2014; Verhoef & Morelli 2007; Alber 2003; Bledsoe 1990; Page 1989; Isiugo-Abanihe 1985; Goody 1982). Earlier studies suggest fostering was a prominent feature of family life in West Africa and parts of Southern Africa, but far less so in some Central African and many East African countries (Monasch & Boerma 2004; McDaniel & Zulu 1996; Page 1989; Isiugo-Abanihe 1985). However, few recent studies exist that explore the phenomenon in depth with current data from around sub-Saharan Africa. In light of significant social, demographic, and economic change across sub-Saharan Africa, the prevalence of fostering in traditionally ‘high-fostering’ and ‘low-fostering’ countries may have changed greatly over time.

Though much of the recent literature on fostering has focused on orphaned children as a result of the HIV/AIDS epidemic (Tanga 2013; Goldberg & Short 2012; Madhavan 2004; Nyambedha et al. 2003), growing attention has highlighted the role that fostering plays when living biological parents are unable to co-reside with their children (Gaydosh 2018, 2017, 2015; Lachaud et al. 2016; Bachan 2014; Grant & Yeatman 2014). Indeed, the risk of maternal absence is often greater as a result of fostering, marital transitions, or migration than from maternal death (Gaydosh 2015). The majority of recent research on voluntary fostering by living mothers has focused on one country only (Grant & Yeatman 2014; Brown 2011; Notermans 2014) , meaning

we still lack knowledge of contemporary fostering in its diverse forms across countries and regions in sub-Saharan Africa.

If child fostering is common in many countries throughout sub-Saharan Africa, it may not matter if fostering has increased over time. However, increased attention has been focused on the negative implications of fostering for children. International organizations, NGOs, and governments of some African countries have called for the practice to be banned, arguing that fostering is harmful to children (Feneyrol 2011; Howard 2008). Some research suggests that fostered children are at increased risk of poor health and educational outcomes (Lachaud et al. 2016; Hampshire et al. 2015; Pilon 2003; Bledsoe et al. 1988). Other studies, however, demonstrate that fostered children fare as well as their non-fostered counterparts (Schrijner & Smits 2018; Zimmerman 2003; Castle 1995). With divided results and opinions on the potential benefits and challenges of fostering for children across different contexts, it is important to determine how common fostering is and whether patterns of fostering have changed over time across African countries.

In this paper, I aim to explore three dimensions of child fostering in sub-Saharan Africa: 1) how common is child fostering in different countries and regions?; 2) how has the prevalence of fostering changed in countries and regions over time?; and 3) what factors are associated with child fostering? To answer these questions, I leverage Demographic and Health Survey (DHS) data from 133 surveys collected from 1986 to 2017 in 37 countries in sub-Saharan Africa.

Has Child Fostering Increased, Decreased, or Stayed the Same?

Child fostering has been documented in countries throughout sub-Saharan Africa. In light of the HIV/AIDS epidemic, much of the recent literature on fostering in sub-Saharan Africa has focused on orphaned children, estimating prevalence and living arrangements (Beegle et al.

2010; Monasch & Boerma 2004; Bicego et al. 2003; Nyambedha et al. 2003) and the health and educational outcomes of such children (Goldberg & Short 2012; Case et al. 2004; Bicego et al. 2003). As a result, we know a great deal about fostering of orphaned children and how it has changed over the course of the HIV epidemic (Grant & Yeatman 2012; Madhavan 2004; Nyambedha et al. 2003).

Less is known about the current prevalence of non-orphan fostering across sub-Saharan Africa. While extensive work in the 1980s and 1990s provides estimates of the prevalence and practice of fostering, particularly in West and Southern Africa (McDaniel & Zulu 1996; Page 1989; Isiugo-Abanihe 1985; Bledsoe 1990), it is unclear if children in less-studied regions including East and Central Africa are currently fostered at similar rates compared to those living in 'high fostering' countries of West and Southern Africa. Similarly, it is not known if trends in fostering have remained constant over time as significant social, demographic, and economic change has occurred across sub-Saharan Africa.

There is reason to believe that fostering may have declined amidst changes in family structure and dynamics. Historically, child fostering in many African contexts occurred due to complex kinship ties and expectations about shared childrearing within kinship groups. Ethnographic studies of the Mende in Sierra Leone (Bledsoe 1990), the Baatombu in Benin (Alber 2003), the Gonja in Ghana (Goody 1982), the Ovambo in Namibia (Brown 2011), and the Nso' in Cameroon (Verhoef 2005) suggest that extended families often claim children to be fostered for some or all of childhood. These shared parenting arrangements, though institutionalized and common, are not always welcomed by biological mothers who wish to raise their own children (Notermans 2014; Verhoef & Morelli 2007; Verhoef 2005). Researchers have long suggested that increased industrialization and modernization would result in fertility

declines and the nuclearization of African families, with greater focus on raising fewer, high-quality children (Locoh & Mouvagha-Sow 2008; Maffioli et al. 2007; Wusu & Isiugo-Abanihe 2006; Cordell & Piche 1997; Pilon et al. 1997; Weisner et al. 1997). As norms and values about parenting shift greater importance toward the role of the biological parents, traditional expectations and practices surrounding shared childrearing may decline (Archambault & de Laat 2010; Wusu & Isiugo-Abanihe 2006; Isiugo-Abanihe 1994). Fewer children may be fostered as parents have greater freedom to choose to parent within the nuclear family context.

Alongside the HIV/AIDS epidemic, particularly in East and Southern Africa, studies have warned of strained support networks and the weakening of extended family ties (Tanga 2013; Goldberg & Short 2012; Madhavan 2004; Bicego et al. 2003; Foster 2000; Caldwell 1997). Qualitative studies in some contexts where fostering was traditionally extensive suggest the practice is fading in light of strained extended family networks (Tanga 2013; Wusu & Isiugo-Abanihe 2006). These strained kinship ties affect not only those families affected by HIV/AIDS, but also other vulnerable families. Single mothers, for example, may have a far smaller network of close kin to provide support and resources to them and their children (Madhavan et al. 2018; Clark et al. 2017). Weakened family ties driven by economic crises have been linked to a decline in fostering arrangements, suggesting these safety nets may be increasingly strained during economic downturns (Mokomane 2013; Eloundou-Enyegue & Stokes 2002). Fewer strong, close ties with kin or others may provide mothers with fewer opportunities to foster their children even when they desire to do so.

Over recent decades, the majority of sub-Saharan Africa has seen a rise in urbanization and industrialization, with the proportion of residents living in urban areas rising from 27% in 1990 to 39% in 2015 (UN DESA 2018). Increased rural-urban migration has resulted in greater

concentration in urban centers, where parents may prefer to reside together with children to receive the benefits of the ‘urban advantage’ of better education and employment opportunities (Marie 1997; Ocholla-Ayayo 1997). This process of industrialization and urbanization may be linked to changing values and norms about childrearing, with parents focusing greater attention on co-residence and reducing reliance on extended family members (Wusu & Isiugo-Abanihe 2006; Ocholla-Ayayo 1997). If fostering has, in the past, been linked to providing educational opportunities for rural children by sending them to live with urban relatives (Archambault & de Laat 2010; Eloundou-Enyegue & Shapiro 2004; Eloundou-Enyegue & Stokes 2002), increased modernization and industrialization, through provision of education in rural areas, may decrease the need to send children out.

Conversely, fostering may have increased over time for a number of reasons, including divorce and remarriage, non-marital childbearing, and changes in women’s status. Divorce remains common across much of sub-Saharan Africa, though rates of divorce have not increased over time (Clark & Brauner-Otto 2015). Within many patrilineal groups in sub-Saharan Africa, children traditionally belong to the father’s family. Following divorce, children may thus reside with paternal relatives apart from their mothers (Page 1989; Isiugo-Abanihe 1985; Schildkrout 1973). Divorce may also negatively impact mothers’ financial situation, pushing women to seek employment elsewhere to support children while leaving children in the care of kin (Blanc & Lloyd 1994; Page 1989). Finally, maternal remarriage following divorce is linked to increased out-fostering of children, as some women find their new spouses are unwilling to care for children from a previous union (Grant & Yeatman 2014).

In many countries in sub-Saharan Africa, premarital childbearing is common and has increased over recent years (Clark et al. 2017). Young single mothers, in particular, may send

their children to maternal relatives to be fostered if they lack kin support within their household to assist them in childrearing. Like in the case of maternal divorce and remarriage, mothers may foster children resulting from premarital births if they later marry a man who is not the biological father (Shell-Duncan & Wimmer 1999; Shell-Duncan 1994; Kilbride & Kilbride 1990; Page 1989). Thus, children born to unmarried women may be at increased risk of being fostered.

Women's labor force participation has increased slightly in recent decades across sub-Saharan Africa (ILO 2016). Increased women's employment, especially in the formal economy, has been associated with fostering (Blanc & Lloyd 1994; Isiugo-Abanihe 1985). This may be the result of the difficulty balancing reproductive and productive roles, especially for women working in formal employment or who must migrate to seek employment opportunities. There have also been increases in girls' and women's access to education over time. These significant gains in women's schooling since 1990 have resulted in higher levels of educational attainment in many sub-Saharan African countries (UNESCO 2008). Increased women's education may be linked to greater likelihood of fostering through greater participation in formal employment. Education may also work in the opposite direction, however, giving women greater knowledge of potential risk factors in children living separately.

This study is unique in that it focuses solely on children with living mothers. Studies of fostering often focus on the child or the receiving household as the unit for analysis, whether fostered children are orphans (Tanga 2013; Goldberg & Short 2012; Beegle et al. 2010; Nyambedha et al. 2003) or non-orphans (Gaydosha 2018; Bachan 2014; Archambault & de Laat 2010). These studies provide important detail on the circumstances in which foster children live, but rarely offer insight into the living mothers of non-orphaned foster children. This paper will

outline the prevalence, trends, and predictors related to the fostering of children by living biological mothers in sub-Saharan Africa.

Research Questions

In this paper, I seek to answer three research questions:

- 1) How common is child fostering across sub-Saharan Africa?
- 2) Has the prevalence of child fostering increased, decreased, or remained steady over time?
- 3) What mother and child-level predictors are associated with child fostering in sub-Saharan Africa?

Data & Methods

To explore these questions, I leverage Demographic and Health Survey (DHS) data collected across 37 countries in sub-Saharan Africa and spanning a thirty-year period from the late 1980s to 2017. The DHS are nationally-representative, cross-sectional surveys conducted approximately every five years. The DHS program has collected data in 42 countries in sub-Saharan Africa since the late 1980s. Surveys from five countries are restricted or otherwise not publically available. Thus, I rely on 133 surveys from 37 countries conducted between 1986 and 2017 (see Appendix A for a list of countries and years included).

In order to determine the prevalence, trends, and correlates of child fostering across sub-Saharan Africa, an indicator of who a child resides with is necessary. In each DHS, detailed birth histories are collected from each mother. For all living children, mothers are asked whether she co-resides with the child. The question and responses have varied slightly across waves. In Phase I (1984-1989), Phase III (1992-1997), Phase IV surveys (1997-2003), Phase V (2003-2008), Phase VI (2008-2013), and Phase VII surveys (2013-2018), mothers were asked “Is he/she living with you?” with responses coded as “yes” or “no.” In Phase II surveys (1988-1993), mothers

were asked “With whom does he/she live?” for all children under 15 years of age, with responses coded as “respondent,” “father,” “other relative,” or “somewhere else.” I recode responses for all surveys to “with respondent” and “elsewhere.” I use this as an indicator of child fostering, with children living with mothers considered not fostered and those living elsewhere considered fostered. While it can be debated whether children residing with biological fathers should be considered ‘fostered’, some suggest such children are likely to suffer “differential treatment” on the part of fathers or step-mothers (Bledsoe 1990: 85), and relatively few children with living mothers reside with fathers only (Beegle et al. 2010; McDaniel & Zulu 1996).

To answer the first research question about the prevalence of child fostering in sub-Saharan Africa, I use the most recent DHS in 37 countries. For 36 countries, the most recent survey was conducted between 2007 and 2017. The remaining country’s most recent survey dates from the mid-1990s (Central African Republic) and is included for illustrative purposes.

To explore the second question concerning trends in fostering over time, I rely on a sample of 26 countries with three or more surveys. The average number of surveys per country is 4, ranging from 3 to 9, spanning between 10 and 30 years. These 115 surveys are distributed across all regions in sub-Saharan Africa. Appendix A indicates which countries are included in these analyses.

To examine predictors of child fostering over time, I conduct multivariate logistic regression using all available survey rounds for 37 countries. I group surveys into broad time periods: an early period running from 1986 to 1995; a middle period from 1996 to 2005, and a late period from 2006 to present. The majority of countries have only one survey per period, although a small number have two or more. In addition to the measure of child fostering, I include other mother-level and child-level variables previously noted as potential predictors of

fostering. These controls include rural versus urban residence, mother's education (none, any primary, any secondary or more), mother's marital status (never, ever, or formerly married), and mother's total number of children, as well as child characteristics such as age and sex. Not all survey rounds include measures of mother's employment status and household wealth, thus these variables – though likely important in relation to child fostering – are not included in the standard models. In addition, household wealth should be interpreted with caution, as wealth quintiles are survey-specific and not directly comparable across countries and over time. It is important to note that due to the nature of the DHS questionnaire, we lack important variables including mother's migrant status, which may be an important predictor of fostering, as well as duration of fostering episodes, motivations for fostering, and with whom the fostered child resides with. Despite these limitations, the DHS offer the best opportunity for analyzing child fostering broadly in sub-Saharan Africa where few other data sources allow for comparisons over time and across different countries.

I run multivariate logistic regression models measuring predictors of fostering over time separately for the earliest period of DHS data (1986-1995), the middle period (1996-2005), and for the most recent period (2006-2017). All models include dummies for each country included in the analyses. This country-level fixed effects approach allows me to control for unobserved factors that may influence child fostering in different sub-Saharan Africa countries. Multi-level models with random effects at the country level show substantively similar results (not shown). Models for the middle and late periods account for complex survey design including adjustments for sample weights, strata, and primary sampling unit (PSU) (Rutstein & Rojas 2006). Models for the earliest period incorporate sample weights but lack the necessary information to account for strata and PSU.

Results

How common is child fostering across sub-Saharan Africa?

(Table 1 about here)

Table 1 shows estimates of the proportion of interviewed women's children who are fostered in the most recent DHS for 37 countries in sub-Saharan Africa. On average (unweighted), 14.4% of all children across the 37 countries are fostered, but there is significant variation by region and within regions. In general, fostering is somewhat less common in East Africa (11.1% of children) compared to Central Africa (14.6%), West Africa (14.8%), and Southern Africa (23.1%). In Figure 1, the proportions of children with living mothers who are fostered in the most recent DHS are shown in a map of sub-Saharan Africa. Some regional is apparent; however, even within broad regions, there are clear differences in the commonality of fostering. In West Africa, for example, just 8.1% of children are fostered in Mali, versus more than 25% of children in Liberia. In East Africa, very few children are fostered in Burundi – less than 5% - but nearly 20% of children are fostered in Uganda. Of all countries included in the analyses, Namibia has the largest proportion (34.2%) of children with living mothers who are fostered.

(Figure 1 about here)

Has the prevalence of child fostering increased, decreased, or remained steady over time?

Trends in fostering over multiple rounds of the DHS are shown in Figure 2. Predicted probabilities of fostering by year, without controls, are graphed for all countries with at least three survey rounds, and are grouped by region. Between the earliest survey round and the latest survey round for each country, eight countries experienced an overall increase in the probability of a child being fostered (Burundi, Cameroon, Guinea, Kenya, Lesotho, Namibia, Tanzania,

Zimbabwe). Ten countries experienced a significant overall decline in the likelihood of fostering (Benin, Chad, Ethiopia, Ghana, Liberia, Madagascar, Mali, Niger, Togo, and Zambia). A further eight countries demonstrate no significant change in fostering probabilities when comparing the beginning to the end of the period (Burkina Faso, Cote D'Ivoire, Malawi, Mozambique, Nigeria, Rwanda, Senegal, and Uganda).

(insert Figure 2 about here)

Comparisons of only the beginning and end points mask significant variability over time, particularly for countries that exhibit similar trends in the early and most recent periods.

Countries like Burkina Faso and Nigeria experienced significant increases between the early 1990s and the mid-2000s followed by declines. Uganda, Rwanda, and Mozambique demonstrated significant declines in fostering in the early 2000s but later experienced increases that returned levels of fostering to those noted in the earliest time period. Countries like Malawi and Senegal experienced significant fluctuations over time, with the probability of fostering increasing and decreasing before stabilizing. Only Cote D'Ivoire experienced steady probabilities of fostering over time. Even among countries that increase significant increases or decreases in fostering over time, there is often some fluctuation in those upward or downward trends.

What predictors are associated with child fostering over time?

Results of multivariate logistic regressions on predictors of fostering are shown in Table 2. In Model 1, I explore mother and child-level predictors of the likelihood of being fostered during the earliest period of DHS data, collected between 1986 and 1995. In Model 2, the sample includes all surveys between 1996 and 2005, and in Model 3, I explore predictors of fostering in the latest surveys, carried out from 2006 to 2016. Similar patterns are noted in each of the three

time periods with regards to direction and magnitude of effects. In each period, children of mothers aged 25 and older are less likely to be fostered versus children of younger mothers. Older children have higher odds of being fostered versus children under age 5, in keeping with previous research that suggests very children are rarely fostered. In all time periods, girls are more likely to be fostered than boys.

(insert Table 2 about here)

Children with mothers residing in urban areas experience greater odds of being fostered relative to children of women living in rural areas. The magnitude of the effect of urban residence is higher in the earliest period (OR 1.21) versus the latest surveys (OR 1.06). Children of mothers who experienced union dissolution are more than two times as likely to be fostered relative to children of married mothers, while children of never married women are about 80% more likely to be fostered versus children of married women. With each living child women report, the risk of an individual child being fostered decreases by between 4% (earliest time period) and 2% (latest time period). The only predictor where we note differences in both significance and magnitude of the effect is for maternal education. In the earliest period, children of women with primary education had 5% higher odds of being fostered versus children of women with no education; children of women with secondary or higher education had 12% higher odds of being fostered. In the latest period, children of women with any education were less likely to be fostered than children of mothers with no education, although the effect is significant only for primary education. Predicted probabilities of a child being fostered are graphed for each country over each time period in Figure 3.

Discussion

This study offers a unique contribution and expansion of the existing body of research on child fostering in sub-Saharan Africa. First, this study demonstrates the wide range of fostering patterns across sub-Saharan Africa, highlighting the variation not only across countries but importantly, within regions. Earlier cross-national studies on child fostering in sub-Saharan Africa suggest strong regional differences, with exceptionally high rates of fostering in West and Southern Africa, somewhat lower rates of fostering in Central Africa, and very low prevalence of fostering in East Africa (McDaniel & Zulu 1996; Page 1989; Isiugo-Abanihe 1985). The present study suggests that for all countries with a DHS, over 14% of children under fifteen live apart from their mothers in the most recent survey, ranging from 11.1% in East Africa to 23.1% in Southern Africa. Within these broad sub-regions, there is significant variation. In West Africa, for example, where fostering has assumed to be high, just 8% of children lived apart from mothers in Mali versus more than 25% in Liberia. The larger proportion of children who are fostered in Southern Africa is driven primarily by Namibia, where over one-third of all children live apart from their mothers, while many other countries in the sub-region show fewer than 25% of children are fostered.

Second, this study highlights changes in fostering patterns over time within a broad range of countries in sub-Saharan Africa. Fostering has remained stable in approximately one-third of countries with at least three DHS, but comparing only the earliest and most recent data masks fluctuations – both significant increases and decreases – in many countries. Several countries have experienced significant increases in the proportion of children who are fostered, including both traditionally ‘high fostering’ countries like Lesotho and Namibia as well as ‘low fostering’ countries like Burundi and Kenya. Other countries, primarily in West Africa, experienced declines in the prevalence of fostering over time. While several of these countries note only

modest declines – between 1 and 2% – others, like Benin, experienced a drop of nearly 6% over time. Namibia experienced an increase of approximately 8% between the earliest DHS in 1992 and the latest in 2013. Using the extended period of data collection by the DHS in much of sub-Saharan Africa thus provides a broader understanding of how the prevalence of fostering has changed across many African countries over a period of great social, demographic, and economic change.

Even as levels of fostering have changed across sub-Saharan Africa, many of the predictors of fostering have remained important over time. In all time periods, children are more likely to be fostered when their mothers are not currently married, reside in urban areas, and are younger. Older children have always experienced higher odds of being fostered, as do girls. Models testing interactions between key predictors and time periods, both for all DHS surveys and for countries separately, show relatively few differences in the marginal effect of the predictors over time. This suggests that fostering may be an enduring institution in many African countries, changing little in response to characteristics of women and their children.

This study, unlikely many recent studies of fostering, focuses exclusively on children with living mothers. It should be noted that while these children have not been fostered as a result of maternal orphanhood from HIV/AIDS, it is possible that the AIDS epidemic in certain countries may have influenced fostering decisions for certain mothers. Other studies have documented the migration and fostering of children upon death of a family member, including from AIDS, in parts of sub-Saharan Africa (Ansell & Van Blerk 2004; Young & Ansell 2003). Mothers who are ill, from HIV or other diseases, may also foster children if their illness becomes too severe (Ansell & Van Blerk 2004; Young & Ansell 2003). Thus, though this study focuses

on children with living biological mothers, there may be an impact of HIV/AIDS on fostering via other means than maternal orphanhood.

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Table 1. Proportion of Children Fostered (Most Recent DHS)

	Survey Year	% Children Fostered
Central Africa		
Angola	2015-16	9.61
Cameroon	2011	18.2
Central African Republic	1994-95	17.3
Chad	2014-15	8.36
Congo	2011-12	18.81
DRC	2013-14	10.65
Gabon	2012	23.03
Sao Tome & Principe	2008-09	11.2
West Africa		
Benin	2011-12	10.61
Burkina Faso	2010	10.56
Cote D'Ivoire	2011-12	22.9
Gambia	2013	13.65
Ghana	2014	14.27
Guinea	2012	15.11
Liberia	2013	25.27
Mali	2012-13	8.08
Niger	2012	10.4
Nigeria	2013	12.68
Senegal	2016	12.96
Sierra Leone	2013	23.3
Togo	2013-14	12.34
East Africa		
Burundi	2016-17	4.87
Comoros	2012	10.97
Ethiopia	2016	6.7
Kenya	2014	8.81
Madagascar	2008-09	10.77
Malawi	2015-16	9.61
Mozambique	2011	11.86
Rwanda	2014-15	8.19
Tanzania	2015-16	13.9
Uganda	2016	19.23
Zambia	2013-14	10.16
Zimbabwe	2015	17.73
Southern Africa		
Eswatini	2006-07	22.6
Lesotho	2014	15.34
Namibia	2013	34.2
South Africa	2016	20.16

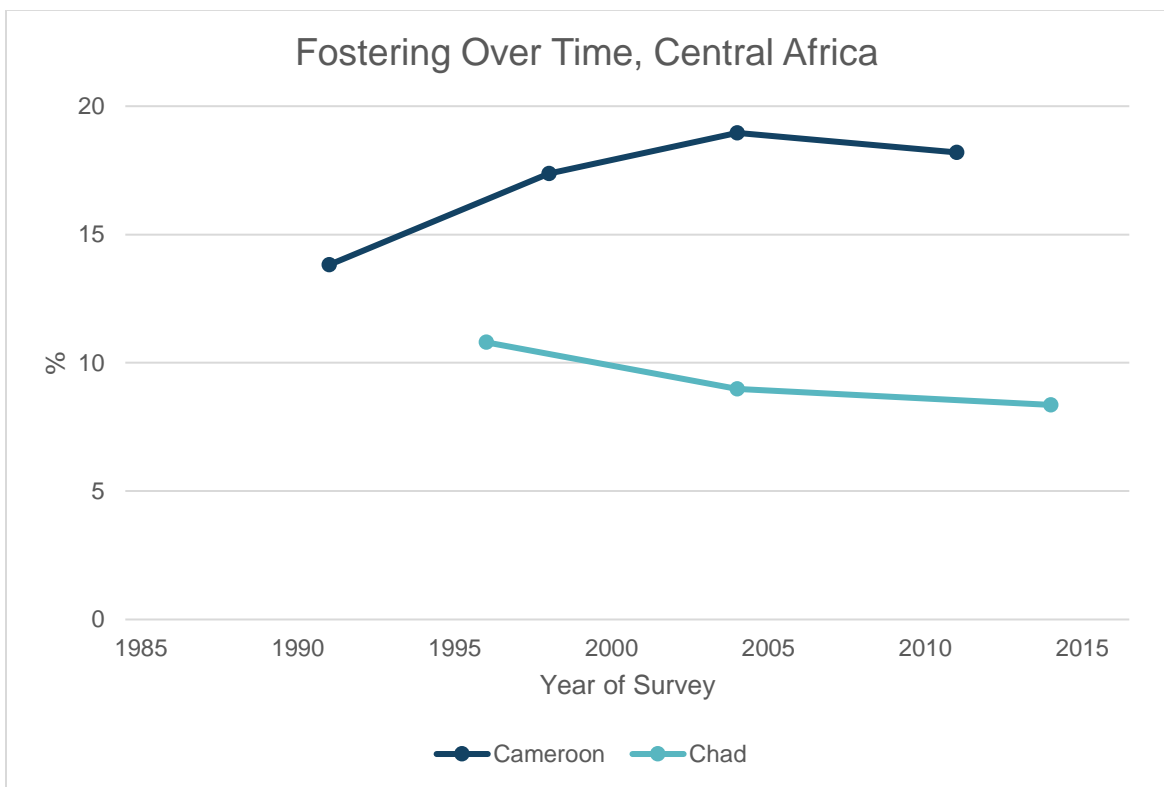
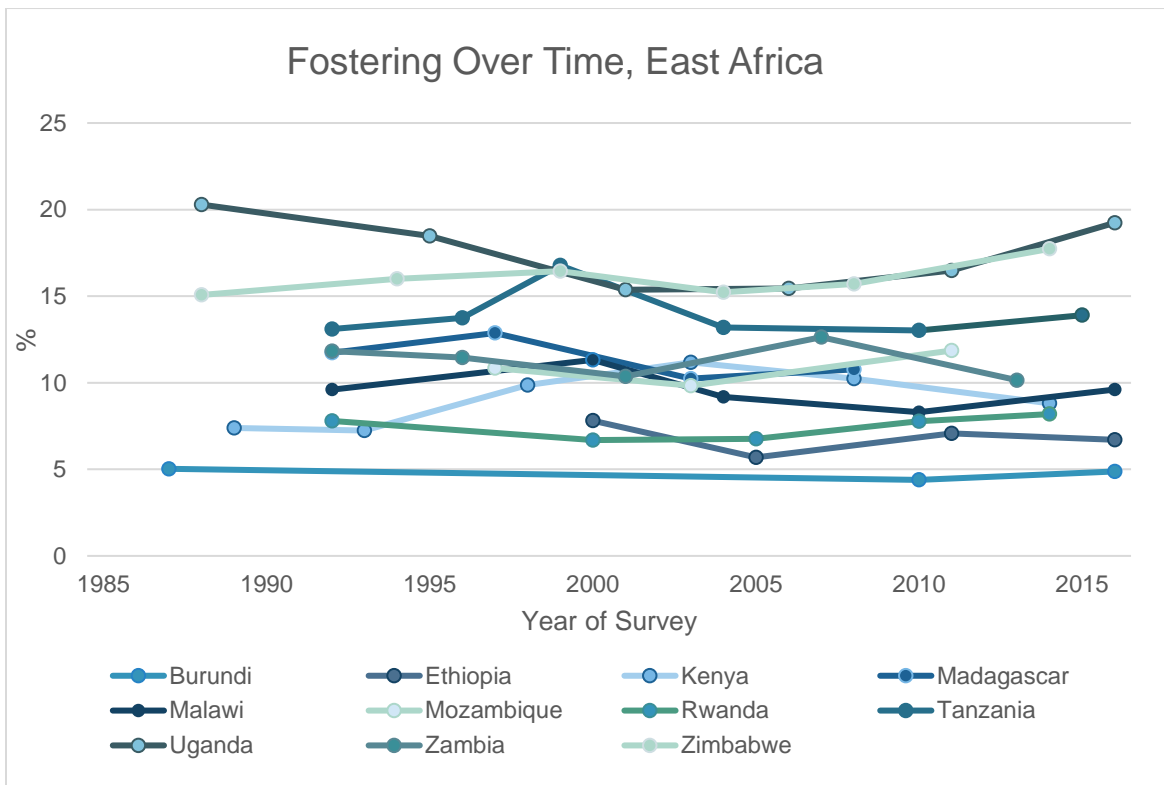
*Unweighted

Table 2. Odds of a Child Being Fostered

	1986-1995			1996-2005			2006-2016		
	OR	Std. Err.	Sig.	OR	Std. Err.	Sig.	OR	Std. Err.	Sig.
Mother's Age									
15-24 (ref)	1.00			1.00			1.00		
25-29	0.76	0.03	***	0.76	0.03	***	0.72	0.02	***
30-34	0.60	0.03	***	0.59	0.02	***	0.56	0.01	***
35-39	0.51	0.02	***	0.48	0.02	***	0.46	0.01	***
40+	0.45	0.02	***	0.44	0.02	***	0.39	0.01	***
Mother's Marital Status									
Married (ref)	1.00			1.00			1.00		
Never Married	1.82	0.08	***	1.84	0.10	***	1.84	0.07	***
Formerly Married	2.31	0.06	***	2.28	0.06	***	2.29	0.04	***
Mother's Education									
None (ref)	1.00			1.00			1.00		
Primary	1.05	0.02	*	1.04	0.02		0.97	0.01	*
Secondary+	1.12	0.04	**	0.96	0.03		0.98	0.02	
Mother's Place of Residence									
Rural (ref)	1.00			1.00			1.00		
Urban	1.21	0.02	***	1.09	0.03	**	1.06	0.02	***
Mother's Total Living Children									
	0.96	0.01	***	0.97	0.01	***	0.98	0.00	***
Child's Age									
0-4 (ref)	1.00			1.00			1.00		
5-9 Years	4.71	0.15	***	4.52	0.11	***	4.38	0.07	***
10-15 Years	10.21	0.34	***	10.56	0.28	***	10.35	0.19	***
Child's Sex									
Male (ref)	1.00			1.00			1.00		
Female	1.15	0.02	***	1.17	0.02	***	1.12	0.01	***
N (children)	331,269			706,008			1,430,795		
N (surveys)	27			46			60		

*** p<0.001, ** p<0.01, * p<0.05

Figure 2. Predicted Probabilities of Children Being Fostered by Year of DHS in 26 Countries



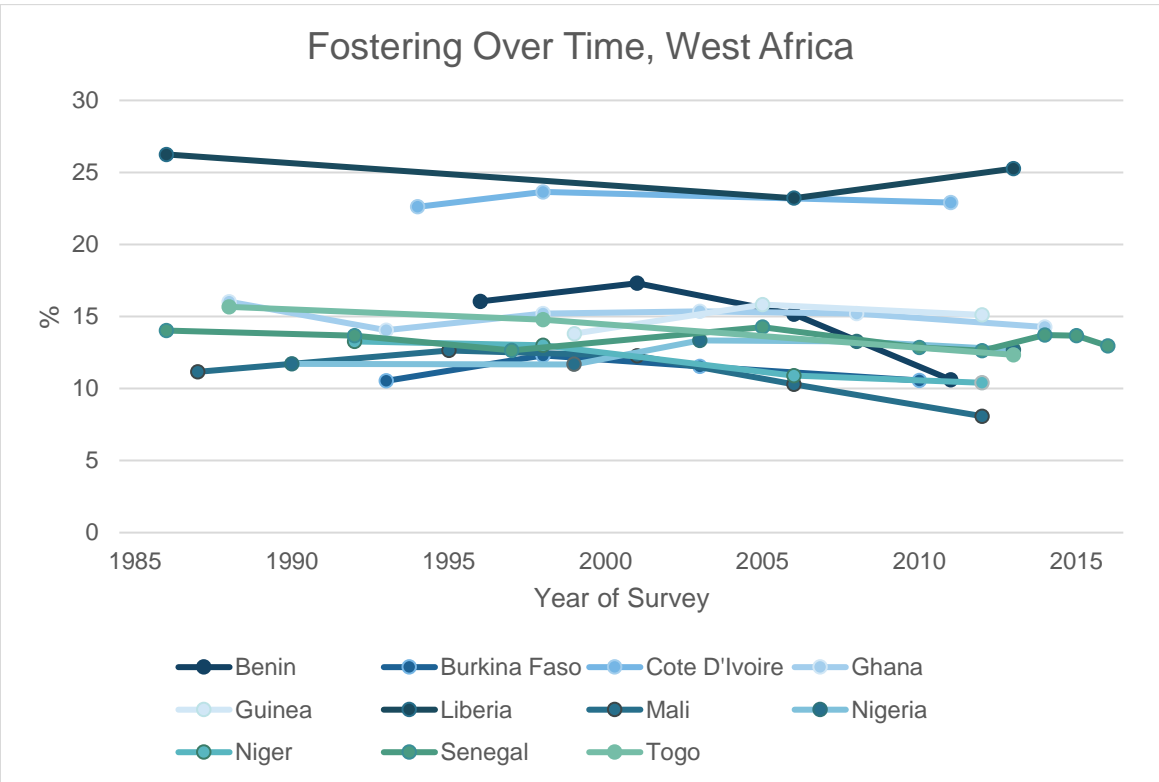
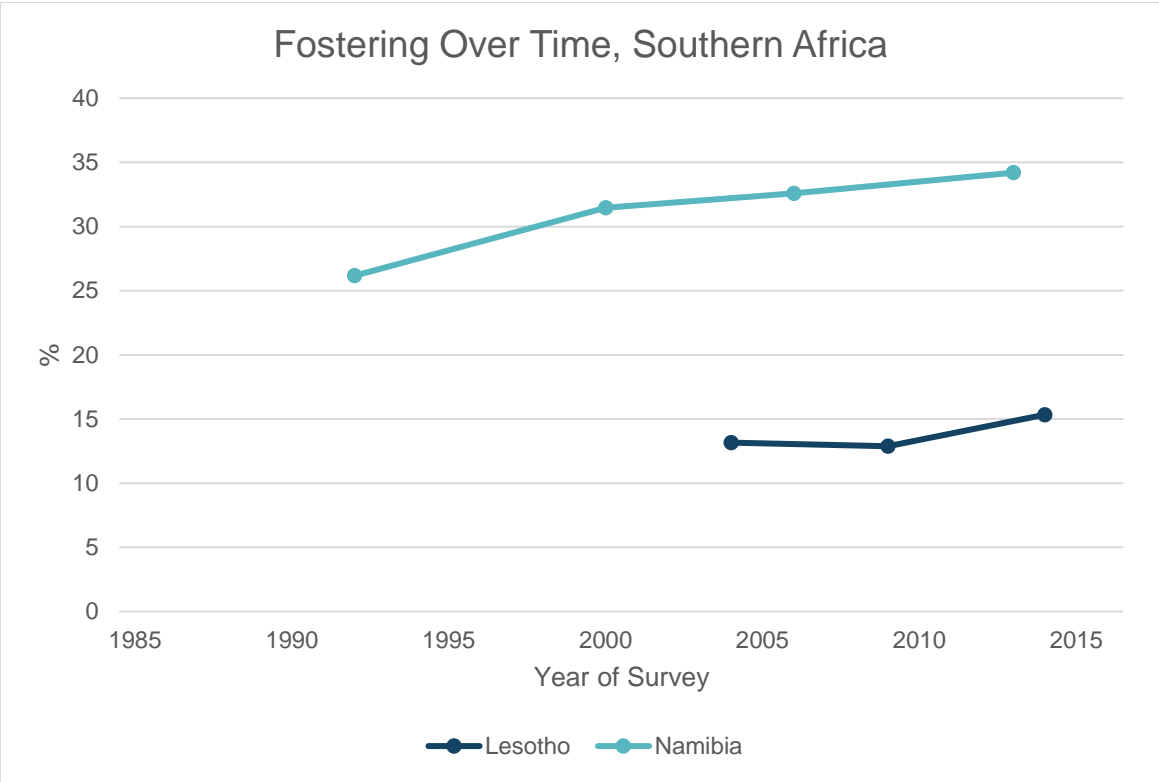
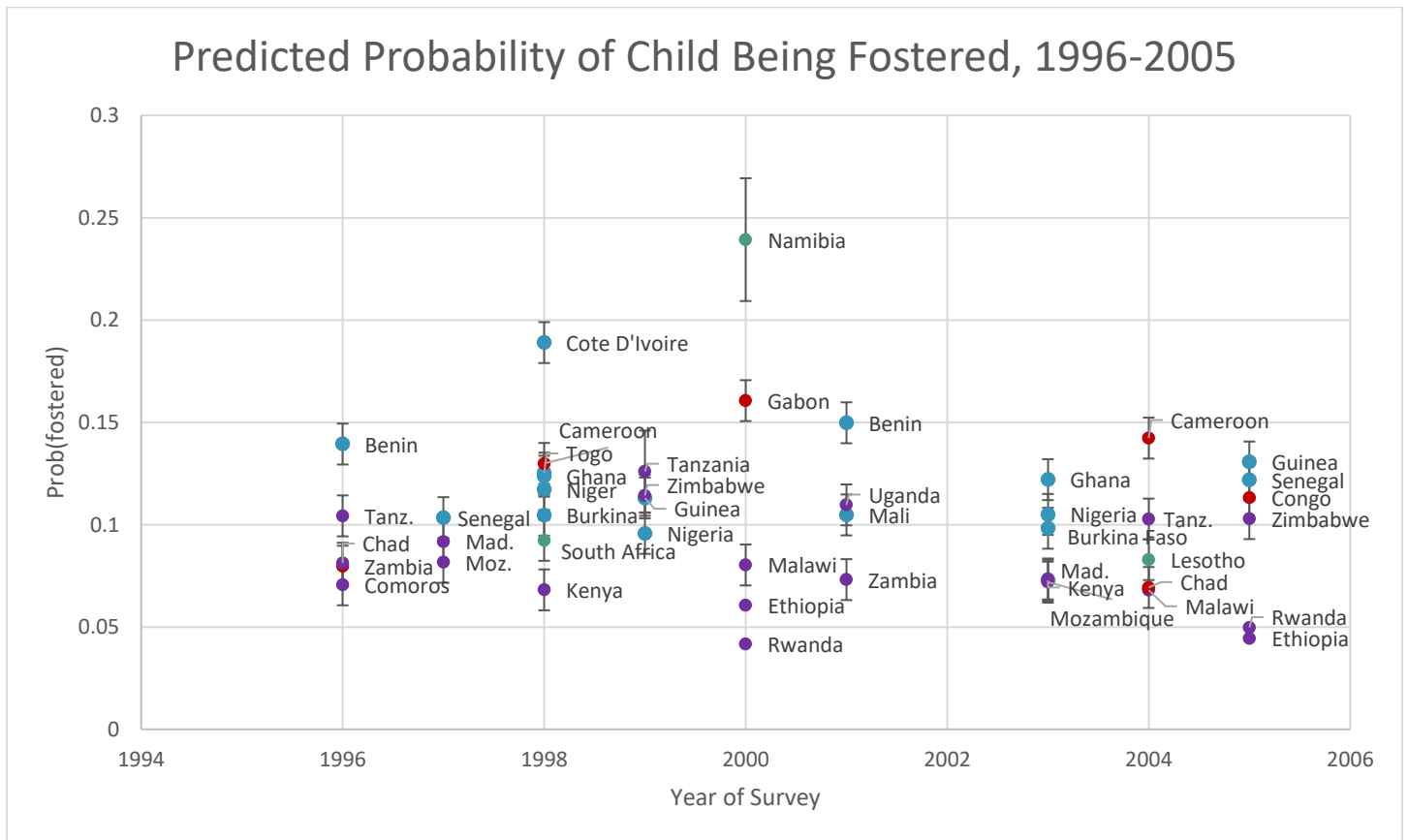
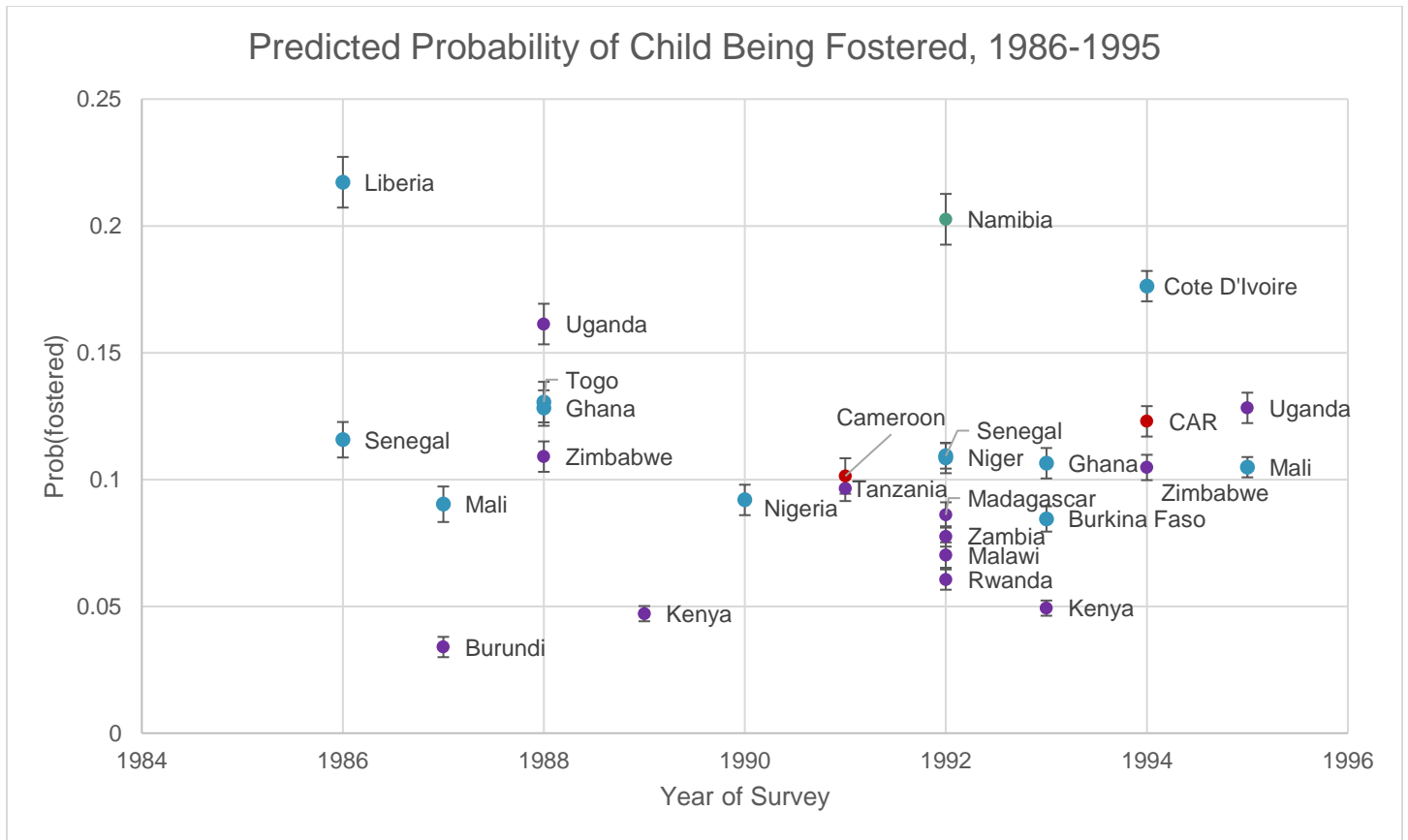


Figure 3. Predicted Probabilities of Children Being Fostered in Each DHS Over Time



Appendix A. Countries & Surveys Included in Analyses

	Early Period (1986-1995)	Mid Period (1996-2005)	Late Period (2006-2017)
Central Africa			
Angola ²			2015
Cameroon ^{1 2}	1991	1998, 2004	2011
Central African Republic ²	1994		
Chad ^{1 2}		1996, 2004	2014
Congo ²		2005	2011
DRC ²			2007, 2013
Gabon ²		2000	2012
Sao Tome & Principe ²			2008
West Africa			
Benin ^{1 2}		1996, 2001	2006, 2011
Burkina Faso ^{1 2}	1993	1998, 2003	2010
Cote D'Ivoire ^{1 2}	1994	1998	2011
Gambia ²			2013
Ghana ^{1 2}	1988, 1993	1998, 2003	2008, 2014
Guinea ^{1 2}		1999, 2005	2012
Liberia ^{1 2}	1986		2007, 2013
Mali ^{1 2}	1987, 1995	2001	2006, 2011
Niger ^{1 2}	1992	1998	2006, 2012
Nigeria ^{1 2}	1990	2003	2008, 2013
Senegal ^{* 1 2}	1986, 1992	1997, 2005	2010, 2012, 2014, 2015, 2016
Sierra Leone ²			2008, 2013
Togo ^{1 2}	1988	1998	2013
East Africa			
Burundi ^{1 2}	1987		2010, 2016
Comoros ²		1996	2012
Ethiopia ^{1 2}		2000, 2005	2011, 2016
Kenya ^{1 2}	1989, 1993	1998, 2003	2008, 2014
Madagascar ^{1 2}	1992	1997, 2003	2008
Malawi ^{1 2}	1992	2000, 2004	2010, 2016
Mozambique ^{1 2}		1997, 2003	2011
Rwanda ^{1 2}	1992	2000, 2005	2010, 2014
Tanzania ^{1 2}	1991	1996, 1999, 2004	2010, 2015
Uganda ^{1 2}	1988, 1995	2000	2006, 2011, 2016
Zambia ^{1 2}	1992	1996, 2001	2007, 2013
Zimbabwe ^{1 2}	1988, 1994	1999, 2005	2010, 2015
Southern Africa			
Eswatini ²			2006
Lesotho ^{1 2}		2004	2009, 2014
Namibia ^{1 2}	1992	2000	2006, 2013
South Africa ²		1998	2016

* The DHS program has conducted a continuous DHS in Senegal for the period 2012-2016.

¹ Included in analyses of trends in fostering over time.

² Included in regression analyses of predictors of fostering over time.