



*Colloque international / International Seminar*

**L'enfant et ses proches.**  
**Dynamiques familiales en Afrique Subsaharienne**  
*Children and family dynamics in sub-Saharan Africa*



**26-28 octobre 2016**

Institut national d'études démographiques (Ined)  
133, boulevard Davout, 75020 Paris

**Child fostering in Senegal: Insights from an original longitudinal survey /**  
*Le confiage des enfants au Sénégal : enseignements tirés d'une enquête longitudinale*

**Philippe De Vreyer (PSL, Université Paris-Dauphine, LEDa-DIAL, France), Sylvie Lambert (PSE / INRA, France) and Karine Marazyan (UMR « Développement et Sociétés », IEDES-P1, France)**

La présence de la mère et du père : quels enjeux pour les enfants ?  
*The presence of mothers and fathers: to what extent do they matter for children?*

# Child fostering in Senegal: new insights from an original Panel survey

*Colloque INED: Children and family dynamics in sub-Saharan Africa*

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26-28 octobre 2016

## Motivations

- Context

- Objectives

## The Data

- The survey and the sample

- Determinants of being fostered out to another household

- Shocks and fostering

## Foster-children's welfare: short-term analysis

- Average effect

- Heterogeneity

- Robustness

## Conclusion

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## Child fostering: definition and prevalence

- ▶ Definition : a practice whereby a child, whose parents are alive, is temporarily sent to live with a host family (Isiugo-Abanihe, 1986)
- ▶ Prevalence : widespread in West-Africa (the proportion among children younger than 14 years old varies between 5.9% in Burkina Faso to 16.8% in Liberia and equals in average to 9.5% according to DHS reports)
  - ▶ Prevalence in Senegal in 2006 using the indirect measure: 12.5%
  - ▶ Prevalence in Senegal in 2006 using the direct measure: 9% (the remaining: informal foster-children)

## Child fostering: Motivations

From Goody, 1978; Isiugo-Abanihe, 1985; Notermans, 1999; Oponng and Bleek, 1982

- ▶ **Social status** for receiving households (grannies surrounded by many children; # of dependants) and for sending parents (political alliance)
- ▶ **Social mobility** (education, apprenticeship)
- ▶ **Risk-management and labor re-allocation**
  - ▶ Challenge : effects of fostering on the child ?

◀ Empirical evidence

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## Child fostering: effects at the child level ?

Difficult to assess empirically

- ▶ Right counterfactual : the child herself if she had not been fostered-out **but not observed**
- ▶ Alternative comparison group : groups of children who are the **closest** to children fostered-out **before fostering**
  - ▶ (a) children not fostered out in a household where a child has been fostered-out ?
  - ▶ (b) siblings not fostered out ?
  - ▶ (c) children not involved in child fostering but 'similar' in terms of household and individual characteristics

Existing evidence

- ▶ using (b) and (c): Akresh (2004) [← Results](#)
- ▶ using (a) : Beck et al. (2015) [← Results](#)



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Exploiting the two waves (2006/2007 and 2011/2012) of the PSF data

- ▶ (1) compare the trajectory of children fostered-out in the interval to the one of their **siblings** left behind
  - ▶ on an unusual wide range of dimensions: school enrolment, work (economic and domestic) and consumption (food and non-food)
  - ▶ evaluate how effects are heterogeneous along the child's **gender**, the **foster-child status** in the host household (formal/informal) and along the **distance** separating the child to his origin household
- ▶ (2) describe the mid-term effects of fostering extending the set of outcomes examined in Beck et al. (2015)
- ▶ (3) evaluate the extent of the knowledge biological parents have on the actual situation of the child fostered-out between the two waves of the survey

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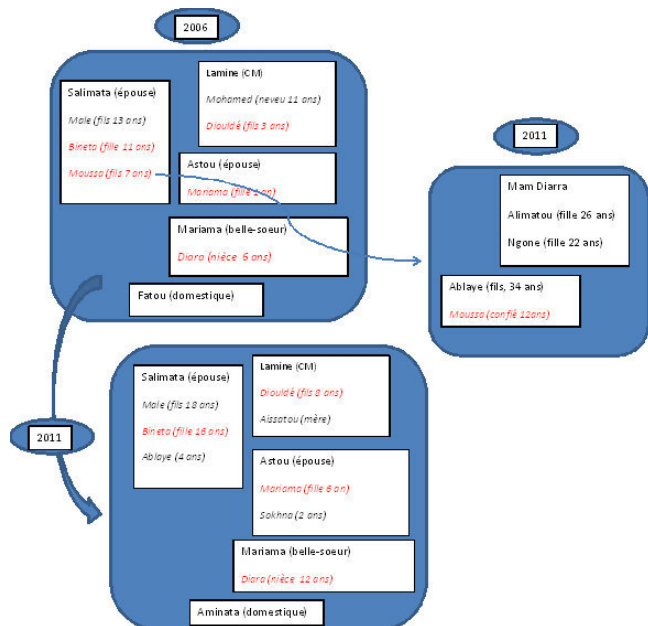
## The PSF Survey

- ▶ Nationally representative individual panel data : 2006/2007 and 2011/2012
- ▶ 1,781 households or 14,379 individuals in baseline
- ▶ Tracking: 84% of individuals were found and re-interviewed (among the 16% not found : a quarter died and 15% migrated internationally)
- ▶ Covers the usual information on individual and household characteristics + several features that make it particularly suited for our analysis
  - ▶ Tracking of children fostered-out **to another household** in the interval
  - ▶ Data on consumption to evaluate monetary poverty
    - ▶ at the household level
    - ▶ at the cell level

## Sample definition

- ▶ Children **under 12** in 2006/2007 living with at least one parent who belong to the panel ('bio children' thereafter)
- ▶ in 2011: 6.51% of them are now foster-children
  - ▶ half as formal foster-children
  - ▶ half as informal ones (domestics excluded)

## Illustration





## Sample characteristics

Table: Sample characteristics

	Boy					Girl				
	Formal foster (a)	Inf. foster (b)	Bio (c)	Diff (a)-(c)	Diff (b)-(c)	Formal foster (d)	Inf. foster (e)	Bio(f)	Diff (d)-(f)	Diff (e)-(f)
age in 2006	49.00	53.00	1805.00			77.00	73.00	1773.00		
	5.55	6.45	5.46	-0.06	-0.99	4.82	6.32	5.52	0.74	* -0.79
child of hh head in 2006	49.00	53.00	1805.00			77.00	73.00	1773.00		
	0.39	0.38	0.66	0.26	*** 0.28	0.57	0.53	0.65	0.08	0.12
did not move	49.00	52.00	1802.00			76.00	72.00	1768.00		
	0.49	0.62	0.86	0.36	*** 0.24	0.36	0.43	0.86	0.48	*** 0.42
distance per 10 km to origin hh (movers)	25.00	20.00	261.00			49.00	41.00	256.00		
	9.37	7.70	3.54	-5.54	*** -4.16	9.78	5.33	2.75	-6.67	*** -2.58

Table: Sample characteristics

	Boy					Girl				
	Formal foster (a)	Inf. foster (b)	Bio (c)	Diff (a)-(c)	Diff (b)-(c)	Formal foster (d)	Inf. foster (e)	Bio(f)	Diff (d)-(f)	Diff (e)-(f)
age in 2006	21.00	28.00	855.00			30.00	37.00	838.00		
	8.95	9.75	8.80	-0.13	-0.95	8.23	9.73	8.80	0.61	-0.93
child of hh head in 2006	21.00	28.00	855.00			30.00	37.00	838.00		
	0.57	0.54	0.74	0.16	* 0.21	0.77	0.62	0.74	-0.03	0.12
did not move	21.00	27.00	855.00			30.00	36.00	836.00		
	0.52	0.48	0.87	0.34	*** 0.39	0.37	0.31	0.88	0.49	*** 0.58
distance per 10 km to origin hh (movers)	10.00	14.00	108.00			19.00	25.00	98.00		
	11.53	6.83	3.03	-8.06	*** -3.80	10.38	6.24	2.32	-7.26	*** -3.92

## Sample characteristics

- ▶ Age pattern:
  - ▶ Informal foster children are older in average
- ▶ Link to the origin hh head
  - ▶ Formal and informal : less likely to be the child of the household's head in 2006 (balanced for school-age daughters)
  - ▶ Formal compared to informal : more likely to be the child of the household head
- ▶ Spatial mobility
  - ▶ Formal and informal : less likely to be re-interviewed in the same place but % is not zero !
  - ▶ Among those who did not move: more informal than formal (informal fostering when parents have left ?)
  - ▶ Among those who moved: formal foster children move further away than informal ones

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# Determinants : Daughters

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Table: - Determinants of being fostered out (formal + informal)

	Daughter 0-12	Daughter 0-12	Daughter 6-12	Daughter 6-12
age in 2006	0.05 (0.03)*	0.03 (0.03)	0.05 (0.08)	0.08 (0.09)
child of hh head in 2006	-0.47 (0.23)**	-0.35 (0.26)	-0.59 (0.36)	-0.74 (0.35)**
first-born child (among siblings alive and of same father and mother) in 2006	-0.15 (0.19)	-0.12 (0.21)	-0.88 (0.33)***	-1.02 (0.34)***
N. siblings of same father and mother in 2006	-0.11 (0.06)*	-0.08 (0.06)	-0.22 (0.10)**	-0.23 (0.10)**
N. siblings of same father only in 2006	0.05 (0.03)*	0.06 (0.03)*	0.05 (0.05)	0.05 (0.05)
N. siblings of same mother only in 2006	-0.03 (0.11)	-0.07 (0.13)	-0.11 (0.15)	-0.09 (0.15)
Father's educ.: 0-4	0.06 (0.12)	0.06 (0.12)	0.09 (0.17)	0.17 (0.17)
Mothers' educ.: 0-4	-0.04 (0.16)	-0.13 (0.15)	-0.19 (0.22)	-0.20 (0.24)
region 2006: Dakar	-0.94 (0.32)***	-1.24 (0.37)***	-1.46 (0.55)***	-1.56 (0.59)***
household food consumption level per capita (in log) in 2006		-0.05 (0.20)	0.04 (0.25)	0.13 (0.24)
household non-food consumption level per capita (in log) in 2006		0.09 (0.13)	0.01 (0.16)	0.05 (0.16)
hh is net receiver of transfers from KIN in 2006		0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
mother is not a hh member in 2006		1.47 (0.52)***	0.56 (0.66)	0.58 (0.67)
father is not a hh member in 2006		0.28 (0.26)	-0.10 (0.39)	-0.22 (0.39)
place of residence (rural=1) in 2006		-0.33 (0.31)	-0.48 (0.40)	-0.23 (0.43)
currently enrolled in a French/Arab education in 2006				-0.22 (0.35)
currently enrolled in a Koranic school in 2006				-0.52 (0.65)
Constant	-1.95 (0.25)***	-1.89 (2.31)	-1.04 (3.33)	-2.98 (3.32)
N	1,549	1,498	706	690

## Determinants of fostering-out a daughter to another household: summary

- ▶ 0-12: probability decreases with living in Dakar or with the sibship size (of same parents)
- ▶ 6-12: probability decreases with being the first born child or being the head's child
- ▶ 0-6: probability increases with the absence of the mother or with the # siblings of same father only (role of polygyny)

Determinants : Sons [← back](#)

Table: - Determinants of being fostered out (formal + informal)

	Son 0-12	Son 0-12	Son 6-12	Son 6-12
age in 2006	0.10 (0.03)***	0.09 (0.04)**	0.18 (0.09)*	0.18 (0.09)**
child of hh head in 2006	-0.85 (0.26)***	-0.22 (0.27)	-0.26 (0.40)	-0.19 (0.42)
first-born child (among siblings alive and of same father and mother) in 2006	-0.30 (0.26)	-0.35 (0.29)	-0.65 (0.41)	-0.66 (0.42)
N. siblings of same father and mother in 2006	-0.27 (0.08)***	-0.23 (0.08)***	-0.20 (0.11)*	-0.20 (0.11)*
N. siblings of same father only in 2006	-0.03 (0.05)	-0.02 (0.05)	-0.07 (0.07)	-0.07 (0.08)
N. siblings of same mother only in 2006	0.24 (0.11)**	0.20 (0.12)*	0.29 (0.16)*	0.26 (0.17)
Father's educ.: 0-4	-0.03 (0.14)	0.06 (0.15)	0.14 (0.25)	0.16 (0.24)
Mothers' educ.: 0-4	0.18 (0.14)	0.15 (0.14)	0.07 (0.22)	0.05 (0.25)
region 2006: Dakar	-0.45 (0.39)	0.73 (0.45)	1.44 (1.05)	1.52 (1.05)
household food consumption level per capita (in log)in 2006		-0.35 (0.23)	-0.37 (0.33)	-0.50 (0.49)
household non-food consumption level per capita (in log) in 2006		0.16 (0.18)	0.26 (0.25)	0.23 (0.30)
hh is net receiver of transfers from KIN in 2006		0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
mother is not a hh member in 2006		1.61 (0.51)***	1.54 (0.56)***	1.51 (0.57)***
father is not a hh member in 2006		1.56 (0.28)***	0.54 (0.47)	0.46 (0.50)
place of residence (rural=1) in 2006		1.51 (0.45)***	2.89 (0.99)***	2.78 (0.98)***
currently enrolled in a French/Arab education in 2006				0.16 (0.45)
currently enrolled in a Koranic school in 2006				-0.02 (0.75)
Constant	-2.19 (0.36)***	-3.74 (2.95)	-7.70 (4.40)*	-5.82 (5.24)
N	1,554	1,511	713	692

## Determinants of fostering-out a son to another household: summary

- ▶ 0-12: probability increases with age, with mother's absence and living in a rural area, with # of siblings of same mother only (role of mother's re-marriage)
- ▶ 0-12: probability decreases with # of siblings of same parents
- ▶ 0-6 : probability increases with the absence of the father

## Determinants of fostering-out a child to another household: back to motivations

- ▶ Education demand : for boys (living in a rural area matters)
- ▶ Vulnerability-management tool : absence of a parent, belong to a marginal cell (girls), be the child of previous unions (boys), polygyny (girls)



## Reasons for (formal) fostering

Table: Reasons for fostering (for formal foster-children)

	Sex				Distance		
	Boy	Girl	Diff		Non-movers	Movers	Diff
b124_11==Pour aider le ménage d'accueil à l'occasion d'une naissance	46.00 0.00	70.00 0.01	-0.01		49.00 0.00	66.00 0.02	-0.02
b124_11==Pour aider le ménage d'accueil dans d'autres cas	46.00 0.00	70.00 0.10	-0.10	**	49.00 0.06	66.00 0.06	0.00
b124_11==Maladie d'un ou des parents	46.00 0.04	70.00 0.00	0.04	*	49.00 0.04	66.00 0.00	0.04
b124_11==Décès d'un ou des parents	46.00 0.11	70.00 0.11	-0.01		49.00 0.18	66.00 0.06	0.12
b124_11==Divorce/dispute des parents	46.00 0.09	70.00 0.10	-0.01		49.00 0.04	66.00 0.14	-0.10
b124_11==Pour aller à l'école	46.00 0.37	70.00 0.16	0.21	***	49.00 0.20	66.00 0.26	-0.05
b124_11==Pour étudier le corant	46.00 0.09	70.00 0.03	0.06		49.00 0.04	66.00 0.06	-0.02
b124_11==Situation difficile dans le ménage d'origine	46.00 0.11	70.00 0.13	-0.02		49.00 0.06	66.00 0.17	-0.11
b124_11==Parents sans enfants	46.00 0.02	70.00 0.06	-0.04		49.00 0.02	66.00 0.06	-0.04
b124_11==pour laisser la mère travailler	46.00 0.04	70.00 0.11	-0.07		49.00 0.08	66.00 0.09	-0.01
b124_11==pour laisser la mère migrer	46.00 0.02	70.00 0.03	-0.01		49.00 0.06	66.00 0.00	0.06
b124_11==Autre raison(précisez)	46.00 0.11	70.00 0.16	-0.05		49.00 0.20	66.00 0.09	0.11

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## Rain shocks (of the current hh of origin cell head)

Table: Rainfall shocks btw the two waves measured at the address of the current household of the origin cell head

	Bio boy	Foster boy	mean test (p value)	Bio girl	Foster girl	mean test (p value)
N. of negative rainfall shocks during rainy season	1765 1.15	81 1.20	0.48	1732 1.12	127 1.28	0.02
N. of positive rainfall shocks during rainy season	1765 1.45	81 1.31	0.06	1732 1.49	127 1.49	1.00
N. of negative rainfall shocks during dry season	1765 0.72	81 0.86	0.19	1732 0.73	127 0.61	0.13
N. of positive rainfall shocks during dry season	1765 1.42	81 1.56	0.05	1732 1.46	127 1.53	0.19

## Rain shocks (of the current hh of origin cell head)

Table: - Determinants of being fostered out: Children of the panel, 6- 12 in 2006

	Girl 6-12	Girl 6-12	Girl 6-12	Boy 6-12	Boy 6-12	Boy 6-12
age in 2006	0.05 (0.78)	-0.15 (0.83)	-0.28 (0.84)	-0.42 (0.88)	-0.24 (0.99)	-0.26 (1.00)
age in 2006 squarred	0.00 (0.04)	0.01 (0.05)	0.02 (0.05)	0.03 (0.05)	0.02 (0.05)	0.02 (0.05)
first-born child (among siblings alive and of same father and mother) in 2006	-0.89 (0.34)***	-1.09 (0.38)***	-1.18 (0.41)***	-0.67 (0.41)	-0.78 (0.51)	-0.73 (0.51)
N. siblings of same father and mother in 2006	-0.23 (0.10)**	-0.19 (0.10)*	-0.22 (0.11)**	-0.21 (0.11)*	-0.15 (0.11)	-0.15 (0.10)
N. siblings of same father only in 2006	0.03 (0.05)	0.01 (0.05)	0.02 (0.05)	-0.07 (0.08)	-0.04 (0.07)	-0.04 (0.07)
N. siblings of same mother only in 2006	-0.08 (0.15)	-0.06 (0.16)	-0.06 (0.16)	0.25 (0.17)	0.29 (0.14)**	0.30 (0.14)**
educationPère_06	0.14 (0.16)	0.15 (0.17)	0.18 (0.18)	0.15 (0.24)	-0.21 (0.32)	-0.21 (0.32)
educationMère_06	-0.20 (0.24)	-0.31 (0.29)	-0.35 (0.24)	0.05 (0.25)	0.00 (0.28)	0.01 (0.29)
region_harmo_06==Dakar	-1.53 (0.60)**	-1.47 (0.64)**	-1.07 (0.67)	1.52 (1.05)	1.28 (1.02)	1.09 (1.03)
household food consumption level per capita (in log)in 2006	0.06 (0.25)	0.07 (0.28)	0.02 (0.26)	-0.52 (0.48)	-0.35 (0.46)	-0.41 (0.46)
household non-food consumption level per capita (in log) in 2006	0.09 (0.15)	0.11 (0.16)	0.13 (0.16)	0.23 (0.29)	0.37 (0.29)	0.37 (0.29)
hh is net receiver of transfers from KIN in 2006	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
mother is not a hh member in 2006	0.59 (0.69)	0.76 (0.71)	0.67 (0.76)	1.47 (0.58)**	1.45 (0.61)**	1.36 (0.63)**
father is not a hh member in 2006	0.07 (0.37)	0.05 (0.39)	-0.01 (0.40)	0.54 (0.47)	-0.05 (0.58)	-0.10 (0.61)
place of residence (rural=1) in 2006	-0.20 (0.43)	-0.24 (0.45)	-0.24 (0.50)	2.76 (1.00)***	2.37 (0.91)***	2.42 (0.90)***
currently enrolled in a French/Arab education in 2006	-0.22 (0.36)	-0.36 (0.36)	-0.39 (0.38)	0.18 (0.45)	0.28 (0.50)	0.27 (0.51)
currently enrolled in a Koranic school in 2006	-0.52 (0.64)	-0.46 (0.64)	-0.30 (0.65)	-0.02 (0.74)	-0.02 (0.77)	0.02 (0.78)
N. of positive rainfall shocks faced by the hh of 2006 cell head btw 2 waves dur			0.25 (0.33)			-0.44 (0.36)
N. of negative rainfall shocks faced by the hh of 2006 cell head btw 2 waves dur			0.83 (0.33)**			-0.16 (0.32)
Constant	-3.03 (4.41)	-2.60 (4.74)	-3.20 (4.96)	-3.12 (7.48)	-6.71 (7.66)	-5.05 (7.86)
N	690	669	669	692	669	669

## Shocks and fostering: summary

- ▶ Daughters (of school age in 2006): positive association between being fostered-out and origin cell head declaring negative rain shocks in the interval
  - ▶ Daughters' fostering-out as ex-post risk management tool ?
- ▶ Boys: no association

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## The empirical model

On the sample of biological children aged 6-12 in 2006 and who belong to the panel, we estimate in OLS:

$$Welfare_{i,h,t} = \alpha_0 + \beta Foster_{i,h,t} + \delta X_{i,h,t} + \pi_h + \gamma_d * \theta_t * \mu_r + \varepsilon_{i,h,t}$$

$Welfare_{i,h,t}$  : a set of outcomes

$Foster_{i,h,t}$  : a dummy equal to 1 if the child is a foster-child in household  $h$  in period  $t$  and 0 otherwise

$X_{i,h,t}$  is a set of time-varying controls measured at the individual, cell and household levels.

$\pi_h$  : a household fixed effect

$\gamma_d * \theta_t * \mu_r$  the interaction between 2006 department, 2006 place of residence and time fixed effects

$\varepsilon_{i,h,t}$  is the error term (clustered at the household level)

The coefficient of interest is  $\beta$ .



## The empirical model

$\beta$  measures the difference between being fostered and not fostered accounting for differences due to time within households fostering out a child. It is a double-difference (DD) [◀ exemple](#)

- ▶  $\beta =$  DD comparing Moussa's trajectory to the one of Bineta (sibling) and Diara (cousin)
- ▶ If we retain only children of 2006 household head:  $\beta =$  DD comparing Moussa's trajectory to the one of Bineta (sibling)

## Outcomes

- ▶ household level consumption per capita (food and non-food) [from Lamine's hh to Mam Diarra' hh taking time effect into account]
- ▶ cell level consumption per capita (food and non-food) [from Salimata's cell to Ablaye's cell taking time effect into account]
- ▶ share of cell consumption (food and non-food) [cell's relative position taking time effect into account]
- ▶ work, school enrolment, hours doing domestic work per week [taking time effect into account]

Average effect of fostering ← mean

Table: OLS with household fixed effects

	household level		cell level		share alim	share non alim	work	domestic hours	scol
	A	NA	A	NA					
Fostered-out	0.06 (0.07)	0.01 (0.10)	0.05 (0.08)	0.12 (0.11)	-0.01 (0.01)	0.10 (0.07)	-0.01 (0.05)	-1.44 (1.22)	-0.06 (0.05)
female	-0.01 (0.01)	-0.00 (0.01)	-0.01 (0.01)	-0.00 (0.02)	-0.01 (0.01)	-0.01 (0.02)	-0.08 (0.01)***	4.73 (0.63)***	0.03 (0.02)+
age_	0.00 (0.00)	0.01 (0.00)**	0.00 (0.00)	0.01 (0.00)***	0.00 (0.00)	0.01 (0.00)**	0.02 (0.00)***	1.20 (0.13)***	-0.01 (0.00)
T*dept_06*milieu_06 FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	3,468	3,471	3,463	3,460	3,463	3,460	3,371	3,473	3,415

Note: The table controls for time varying characteristics: sex and education of the household head, sex and education of the cell head, hh size, cell size, season of interview (dry=1), place of residence (rural=1)  
Standard errors are in parentheses and significance levels are denoted as follows: \* p<0.10, \*\* p<0.05, \*\*\* p<0.01.

Table: OLS with household fixed effects

	household level		cell level		share alim	share non alim	work	domestic hours	scol
	A	NA	A	NA					
Fostered-out	0.04 (0.10)	-0.05 (0.13)	0.04 (0.10)	0.11 (0.16)	-0.00 (0.02)	0.10 (0.10)	0.04 (0.06)	0.91 (1.78)	0.04 (0.07)
female	-0.00 (0.01)	0.01 (0.01)	-0.01 (0.01)	0.02 (0.02)	-0.01 (0.00)*	0.02 (0.02)	-0.09 (0.02)***	5.62 (0.86)***	0.03 (0.03)
age_	-0.00 (0.00)	0.01 (0.00)*	-0.00 (0.00)	0.01 (0.00)**	0.00 (0.00)	0.00 (0.00)*	0.02 (0.00)***	1.40 (0.16)***	-0.01 (0.01)
T*dept_06*milieu_06 FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	2,554	2,556	2,552	2,548	2,552	2,548	2,493	2,557	2,522

Note: The table controls for time varying characteristics: sex and education of the household head, sex and education of the cell head, hh size, cell size, season of interview (dry=1), place of residence (rural=1)

Standard errors are in parentheses and significance levels are denoted as follows: \* p<0.10, \*\* p<0.05, \*\*\* p<0.01.

## Motivations

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Determinants of being fostered out to another household

Shocks and fostering

## Foster-children's welfare: short-term analysis

Average effect

**Heterogeneity**

Robustness

## Conclusion

Heterogeneity across type of fostering (formal; informal) ← mean tab 1← mean tab 2

Table: OLS with household fixed effects and interaction term

	household level		cell level		share alim	share non alim	work	domestic hours	scol
	A	NA	A	NA					
Fostered-out (formal)	-0.09 (0.10)	-0.10 (0.15)	-0.12 (0.10)	-0.07 (0.16)	-0.02 (0.02)	0.09 (0.11)	-0.09 (0.08)	-0.50 (1.27)	0.03 (0.08)
Fostered-out (informal)	0.19 (0.09)**	0.10 (0.12)	0.20 (0.09)**	0.28 (0.14)**	0.01 (0.02)	0.11 (0.07)+	0.05 (0.07)	-2.25 (1.84)	-0.14 (0.06)**
female	-0.01 (0.01)	-0.00 (0.01)	-0.01 (0.01)	-0.00 (0.02)	-0.01 (0.01)	-0.01 (0.02)	-0.08 (0.01)***	4.73 (0.63)***	0.03 (0.02)
age_	0.00 (0.00)	0.01 (0.00)**	0.00 (0.00)	0.01 (0.00)***	0.00 (0.00)	0.01 (0.00)**	0.02 (0.00)***	1.21 (0.13)***	-0.01 (0.00)
T*dept_06*milieu_06 FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	3,468	3,471	3,463	3,460	3,463	3,460	3,371	3,473	3,415

Note: The table controls for time varying characteristics: sex and education of the household head, sex and education of the cell head, hh size, cell size, season of interview (dry=1), place of residence (rural=1). Standard errors are in parentheses and significance levels are denoted as follows: \* p<0.10, \*\* p<0.05, \*\*\* p<0.01.

Table: OLS with household fixed effects and interaction term

	household level		cell level		share alim	share non alim	work	domestic hours	scol
	A	NA	A	NA					
Fostered-out (formal)	-0.13 (0.13)	-0.20 (0.19)	-0.15 (0.13)	-0.11 (0.22)	-0.02 (0.02)	0.08 (0.14)	-0.05 (0.09)	1.71 (1.91)	0.17 (0.09)**
Fostered-out (informal)	0.22 (0.13)+	0.11 (0.18)	0.23 (0.13)*	0.34 (0.20)*	0.01 (0.02)	0.11 (0.09)	0.13 (0.07)*	0.10 (2.88)	-0.09 (0.08)
female	-0.00 (0.01)	0.01 (0.01)	-0.01 (0.01)	0.02 (0.02)	-0.01 (0.00)*	0.02 (0.02)	-0.09 (0.02)***	5.61 (0.85)***	0.03 (0.03)
age_	-0.00 (0.00)	0.01 (0.00)+	-0.00 (0.00)	0.01 (0.00)**	0.00 (0.00)	0.00 (0.00)*	0.02 (0.00)***	1.40 (0.16)***	-0.00 (0.01)
T*dept_06*milieu_06 FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	2,554	2,556	2,552	2,548	2,552	2,548	2,493	2,557	2,522

Note: The table controls for time varying characteristics: sex and education of the household head, sex and education of the cell head, hh size, cell size, season of interview (dry=1), place of residence (rural=1). Standard errors are in parentheses and significance levels are denoted as follows: \* p<0.10, \*\* p<0.05, \*\*\* p<0.01.

## Heterogeneity across gender (triple difference estimation)

Table: OLS with household fixed effects and interaction term

	household level		cell level		share alim	share non alim	work	domestic hours	scol
	A	NA	A	NA					
Fostered-out*female	-0.15 (0.15)	-0.10 (0.19)	-0.12 (0.15)	0.16 (0.21)	0.03 (0.03)	0.19 (0.10)*	-0.09 (0.10)	-1.67 (2.62)	0.10 (0.09)
female*T	0.00 (0.04)	-0.07 (0.05)	0.01 (0.04)	-0.01 (0.06)	0.00 (0.01)	-0.00 (0.03)	-0.11 (0.02)***	4.70 (0.79)***	-0.02 (0.03)
Ever fostered-out*female	0.03 (0.05)	0.09 (0.09)	0.03 (0.05)	-0.12 (0.12)	-0.01 (0.01)	-0.17 (0.07)**	-0.01 (0.05)	0.10 (2.32)	-0.09 (0.08)
Fostered-out	0.14 (0.12)	0.04 (0.13)	0.12 (0.12)	0.06 (0.15)	-0.02 (0.02)	0.05 (0.08)	0.05 (0.08)	-0.82 (1.50)	-0.09 (0.07)
female	-0.01 (0.02)	0.03 (0.02)	-0.02 (0.02)	0.01 (0.04)	-0.01 (0.01)	-0.00 (0.03)	-0.02 (0.02)+	2.41 (0.68)***	0.05 (0.03)*
age_	0.00 (0.00)	0.01 (0.00)**	0.00 (0.00)	0.01 (0.00)***	0.00 (0.00)	0.01 (0.00)**	0.02 (0.00)***	1.20 (0.13)***	-0.01 (0.00)
T*dept_06*milieu_06 FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	3,468	3,471	3,463	3,460	3,463	3,460	3,371	3,473	3,415

Note: The table controls for time varying characteristics: sex and education of the household head, sex and education of the cell head, hh size, cell size, season of interview (dry=1), place of residence (rural=1)  
Standard errors are in parentheses and significance levels are denoted as follows: \* p<0.10, \*\* p<0.05, \*\*\* p<0.01.

Table: OLS with household fixed effects and interaction term

	household level		cell level		share alim	share non alim	work	domestic hours	scol
	A	NA	A	NA					
Fostered-out*female	-0.27 (0.21)	-0.17 (0.26)	-0.26 (0.21)	0.18 (0.30)	-0.00 (0.03)	0.27 (0.14)*	-0.10 (0.12)	-3.08 (3.44)	0.01 (0.12)
female*T	0.01 (0.04)	-0.02 (0.05)	0.01 (0.04)	-0.04 (0.06)	0.01 (0.01)	-0.04 (0.03)*	-0.13 (0.03)***	5.22 (0.95)***	-0.02 (0.03)
Ever fostered-out*female	-0.02 (0.07)	0.13 (0.12)	-0.05 (0.08)	-0.03 (0.15)	-0.04 (0.02)**	-0.12 (0.09)	-0.02 (0.07)	-0.11 (3.69)	-0.05 (0.11)
Fostered-out	0.22 (0.16)	0.02 (0.18)	0.22 (0.16)	0.01 (0.22)	0.01 (0.03)	-0.03 (0.09)	0.13 (0.11)	2.20 (2.27)	0.06 (0.10)
female	0.00 (0.02)	0.01 (0.03)	-0.00 (0.02)	0.04 (0.04)	-0.01 (0.00)*	0.04 (0.03)+	-0.02 (0.02)	3.09 (0.88)***	0.05 (0.03)+
age_	-0.00 (0.00)	0.01 (0.00)*	-0.00 (0.00)	0.01 (0.00)**	0.00 (0.00)	0.00 (0.00)*	0.02 (0.00)***	1.40 (0.16)***	-0.01 (0.01)
T*dept_06*milieu_06 FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	2,554	2,556	2,552	2,548	2,552	2,548	2,493	2,557	2,522

Note: The table controls for time varying characteristics: sex and education of the household head, sex and education of the cell head, hh size, cell size, season of interview (dry=1), place of residence (rural=1)  
Standard errors are in parentheses and significance levels are denoted as follows: \* p<0.10, \*\* p<0.05, \*\*\* p<0.01.

## Heterogeneity across distance (triple difference estimation)

Table: OLS with household fixed effects and interaction term

	household level		cell level		share alim	share non alim	work	domestic hours	scol
	A	NA	A	NA					
Fostered-out*dist (per 10km) fixed	-0.01 (0.01)	-0.01 (0.02)	-0.01 (0.01)	-0.01 (0.01)	-0.00 (0.00)	0.01 (0.01)	0.01 (0.01)**	-0.10 (0.14)	-0.02 (0.01)**
dist (per 10 km) fixed *T	0.01 (0.01)*	-0.00 (0.01)	0.01 (0.01)*	0.00 (0.01)	0.00 (0.00)	0.00 (0.00)*	-0.00 (0.00)	-0.17 (0.09)*	0.01 (0.00)***
Ever fostered-out*dist (per 10km) fixed	-0.00 (0.01)	0.00 (0.01)	-0.00 (0.01)	0.01 (0.01)	-0.00 (0.00)	0.01 (0.01)	-0.00 (0.00)	-0.06 (0.14)	0.01 (0.01)
distance (per 10km) fixed	-0.00 (0.00)	-0.00 (0.01)	-0.00 (0.01)	-0.01 (0.01)	0.00 (0.00)	-0.01 (0.01)+	-0.00 (0.00)	0.04 (0.07)	-0.01 (0.00)*
Fostered-out	0.05 (0.09)	0.08 (0.11)	0.04 (0.09)	0.14 (0.13)	-0.01 (0.02)	0.05 (0.08)	-0.06 (0.06)	-0.07 (1.41)	-0.03 (0.06)
female	-0.01 (0.01)	-0.00 (0.01)	-0.01 (0.01)	-0.00 (0.02)	-0.01 (0.01)	-0.01 (0.02)	-0.08 (0.01)***	4.73 (0.63)***	0.03 (0.02)+
age_	0.00 (0.00)	0.01 (0.00)**	0.00 (0.00)	0.01 (0.00)***	0.00 (0.00)	0.01 (0.00)**	0.02 (0.00)***	1.21 (0.13)***	-0.01 (0.00)
T*dept_06*milieu_06 FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	3,468	3,471	3,463	3,460	3,463	3,460	3,371	3,473	3,415

Note: The table controls for time varying characteristics: sex and education of the household head, sex and education of the cell head, hh size, cell size, season of interview (dry=1), place of residence (rural=1)  
Standard errors are in parentheses and significance levels are denoted as follows: \* p<0.10, \*\* p<0.05, \*\*\* p<0.01.

Table: OLS with household fixed effects and interaction term

	household level		cell level		share alim	share non alim	work	domestic hours	scol
	A	NA	A	NA					
Fostered-out*dist (per 10km) fixed	-0.00 (0.01)	-0.03 (0.02)	-0.01 (0.01)	-0.01 (0.02)	-0.00 (0.00)	0.02 (0.01)*	0.01 (0.01)	0.12 (0.22)	-0.01 (0.01)+
dist (per 10 km) fixed *T	0.01 (0.01)	-0.01 (0.01)	0.01 (0.01)	-0.01 (0.01)	0.00 (0.00)	-0.00 (0.00)	-0.00 (0.01)	-0.34 (0.16)**	0.01 (0.01)+
Ever fostered-out*dist (per 10km) fixed	-0.01 (0.01)*	0.01 (0.01)	-0.01 (0.01)**	0.02 (0.01)*	-0.00 (0.00)**	0.02 (0.01)**	0.00 (0.00)	-0.12 (0.18)	-0.01 (0.01)+
distance (per 10km) fixed	0.00 (0.00)	-0.01 (0.01)	0.01 (0.00)+	-0.02 (0.01)**	0.00 (0.00)***	-0.02 (0.01)***	-0.00 (0.00)	0.03 (0.09)	0.00 (0.00)
Fostered-out	0.06 (0.12)	0.13 (0.14)	0.07 (0.12)	0.18 (0.19)	0.01 (0.02)	-0.03 (0.11)	0.01 (0.07)	2.15 (2.15)	0.11 (0.07)+
female	-0.00 (0.01)	0.00 (0.01)	-0.01 (0.01)	0.02 (0.02)	-0.01 (0.00)+	0.01 (0.02)	-0.09 (0.02)***	5.58 (0.86)***	0.03 (0.03)
age_	-0.00 (0.00)	0.01 (0.00)+	-0.00 (0.00)	0.01 (0.00)**	0.00 (0.00)	0.01 (0.00)*	0.02 (0.00)***	1.39 (0.16)***	-0.01 (0.01)
T*dept_06*milieu_06 FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	2,554	2,556	2,552	2,548	2,552	2,548	2,493	2,557	2,522

Note: The table controls for time varying characteristics: sex and education of the household head, sex and education of the cell head, hh size, cell size, season of interview (dry=1), place of residence (rural=1)  
Standard errors are in parentheses and significance levels are denoted as follows: \* p<0.10, \*\* p<0.05, \*\*\* p<0.01.

## Motivations

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The survey and the sample

Determinants of being fostered out to another household

Shocks and fostering

## Foster-children's welfare: short-term analysis

Average effect

Heterogeneity

**Robustness**

## Conclusion

Robustness: what is the right counterfactual ?

- ▶ Control added: whether a parent died between the two waves of interview or not
- ▶ Patterns: robust [← Results](#)



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- ▶ **Formal fostering** : no effect whatever outcome is considered or positive effect on school enrolment when comparing to other children of the household's head
  - ▶ Given that fostering is partly due to shocks : this result suggests that fostering has a protective effect
- ▶ **Informal fostering** : a positive effects on consumption (food and non-food) but a negative one on school enrolment (no effect if compared to other children of the household's head)
- ▶ No gender effect but distance matters

## Child fostering: Motivations [← back](#)

- ▶ The role of education demand :
- ▶ The role of labor demand :
- ▶ The role of shocks :
- ▶ The role of gender imbalances within the sibship :

Akresh (2004) [◀ back](#)

- ▶ Data: original data representative of a rural area in Burkina-Faso with **retrospective** information on school enrolment up the two year before data collection (in 2001) + **tracking** of siblings left behind
- ▶ Outcome of interest: school enrolment one year after fostering
- ▶ Comparison group : siblings left behind first, and children not involved in fostering then
- ▶ Results

Beck et al. (2015) [◀ back](#)

- ▶ Data : PSF data representative of Senegal collected in 2006/2007
  - ▶ which enables to identify if a child ( $< 18$ ) in a household is a foster-child or not (formal/informal)
  - ▶ which enables to identify households with a child fostered-out
- ▶ Outcome of interest : school enrolment, economic and domestic work
- ▶ Comparison group : children not fostered out in a household with a child fostered-out
- ▶ Results

## Descriptive statistics for children 0-12 in 2006

Table:

	Bio boy N	mean	Foster boy N	mean	Bio girl N	mean	Foster girl N	mean	pval (boy)	pval (girl)
age in 2006	1805	5.46	102	6.02	1773	5.52	150	5.55	0.15	0.94
child of hh head in 2006	1805	0.66	102	0.38	1773	0.65	150	0.55	0.00	0.02
first-born child (among siblings alive and of same father and mother) in 2006	1805	0.38	102	0.50	1773	0.39	150	0.37	0.02	0.73
N. siblings of same father and mother in 2006	1790	3.23	101	2.01	1763	3.23	147	2.86	0.00	0.05
N. siblings of same father only in 2006	1787	1.73	101	1.47	1760	1.82	147	2.07	0.35	0.37
N. siblings of same mother only in 2006	1787	0.26	100	0.62	1759	0.27	147	0.30	0.05	0.61
Father's educ.: 0-4	1590	0.74	90	0.92	1548	0.76	138	0.73	0.20	0.81
Mothers' educ.: 0-4	1634	0.46	93	0.56	1584	0.48	138	0.38	0.31	0.15
region 2006: Dakar	1805	0.25	102	0.22	1773	0.25	150	0.13	0.42	0.00
household food consumption level per capita (in log) in 2006	1800	11.61	102	11.51	1767	11.61	149	11.55	0.19	0.42
household non-food consumption level per capita (in log) in 2006	1804	11.15	102	11.06	1770	11.18	150	11.08	0.47	0.29
hh is net receiver of transfers from KIN in 2006	1762	113.05	99	260.94	1722	126.24	146	158.86	0.07	0.52
mother is not a hh member in 2006	1805	0.04	102	0.09	1773	0.02	150	0.07	0.08	0.02
father is not a hh member in 2006	1805	0.20	102	0.57	1773	0.23	150	0.33	0.00	0.01
place of residence (rural=1) in 2006	1805	1.57	102	1.68	1773	1.58	150	1.62	0.03	0.30
currently enrolled in a French/Arab education in 2006	1238	0.44	71	0.52	1218	0.46	104	0.38	0.21	0.10
currently enrolled in a Koranic school in 2006	1238	0.09	71	0.08	1218	0.07	104	0.09	0.77	0.66

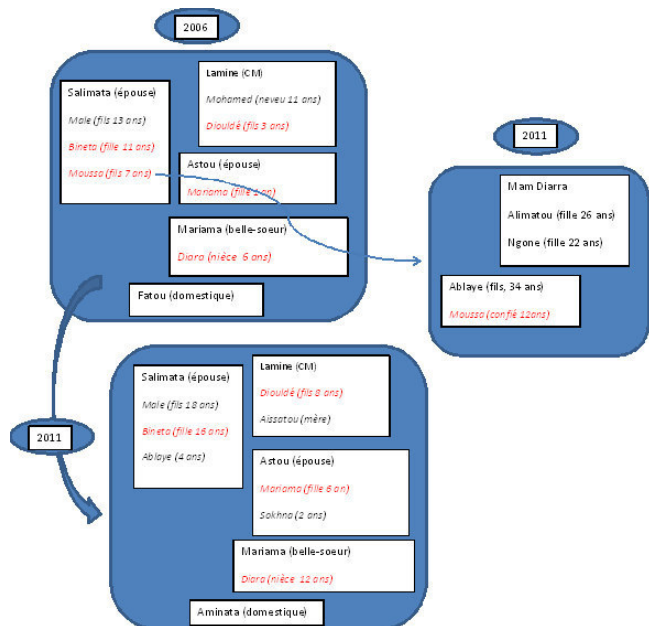
## Descriptive statistics for children 6-12 in 2006

[← back to daughters](#)[← back to sons](#)

Table:

	Bio boy N	mean	Foster boy N	mean	Bio girl N	mean	Foster girl N	mean	pval (boy)	pval (girl)
age in 2006	855	8.80	49	9.41	838	8.80	67	9.06	0.05	0.34
child of hh head in 2006	855	0.74	49	0.55	838	0.74	67	0.69	0.01	0.37
first-born child (among siblings alive and of same father and mother) in 2006	855	0.36	49	0.39	838	0.38	67	0.28	0.68	0.09
N. siblings of same father and mother in 2006	847	3.89	48	2.81	834	3.86	67	3.30	0.00	0.04
N. siblings of same father only in 2006	845	2.04	48	1.77	831	2.16	67	2.45	0.48	0.52
N. siblings of same mother only in 2006	844	0.33	47	0.85	831	0.30	67	0.30	0.14	0.97
Father's educ.: 0-4	754	0.76	44	0.82	735	0.77	65	0.69	0.76	0.58
Mothers' educ.: 0-4	772	0.44	45	0.36	745	0.43	64	0.34	0.44	0.39
region 2006: Dakar	855	0.25	49	0.20	838	0.24	67	0.10	0.49	0.00
household food consumption level per capita (in log) in 2006	853	11.61	49	11.50	837	11.59	67	11.60	0.32	0.93
household non-food consumption level per capita (in log) in 2006	855	11.10	49	10.94	838	11.17	67	11.17	0.34	0.98
hh is net receiver of transfers from KIN in 2006	832	130.95	48	109.53	811	130.75	64	243.46	0.77	0.25
mother is not a hh member in 2006	855	0.06	49	0.16	838	0.04	67	0.07	0.05	0.29
father is not a hh member in 2006	855	0.19	49	0.35	838	0.22	67	0.27	0.03	0.43
place of residence (rural=1) in 2006	855	1.57	49	1.71	838	1.58	67	1.63	0.04	0.44
currently enrolled in a French/Arab education in 2006	812	0.60	47	0.70	796	0.61	62	0.56	0.16	0.49
currently enrolled in a Koranic school in 2006	812	0.11	47	0.06	796	0.08	62	0.08	0.22	0.91

## Illustration

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Table: Expenses in FCFA

	Ever fostered: year 06	Ever fostered: year 11	Time diff	Not fostered : year= 06	Not fostered : year=11	Time diff	
dep_pcap_alim_men_	116.00 165848.6966	115.00 156885.2274	-8963.47	1690.00 152910.9505	1686.00 165569.2245	12658.27	
interaction							-21621.74
dep_pcap_nonalim_men_	116.00 165941.5645	116.00 110180.7771	-55760.79	1693.00 165600.2331	1689.00 119665.9446	-45934.29	***
interaction							-9826.50

Table: School enrolment

	Ever fostered: year 06	Ever fostered: year 11	Time diff	Not fostered : year= 06	Not fostered : year=11	Time diff	
scol_un_jour_fra_	109.00 0.6972	114.00 0.7368	0.04	1608.00 0.6511	1684.00 0.7500	0.10	***
interaction							-0.06

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Table: Expenses in FCFA (informal foster-children only)

	Ever fostered: year 06	Ever fostered: year 11	Time diff		Not fostered : year= 06	Not fostered : year=11	Time diff
dep_pcap_alim_men_	65.00 122065.6447	64.00 174636.9299	52571.29	**	1690.00 152910.9505	1686.00 165569.2245	12658.27
interaction							39913.01
dep_pcap_nonalim_men_	65.00 178808.0063	65.00 121867.7977	-56940.21		1693.00 165600.2331	1689.00 119665.9446	-45934.29 ***
interaction							-11005.92

Table: School enrolment (informal foster-children only)

	Ever fostered: year 06	Ever fostered: year 11	Time diff		Not fostered : year= 06	Not fostered : year=11	Time diff
scol_un_jour_fra_	62.00 0.7097	63.00 0.6667	-0.04		1608.00 0.6511	1684.00 0.7500	0.10 ***
interaction							-0.14 *

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Table: School enrolment (formal foster-children only)

	Ever fostered: year 06	Ever fostered: year 11	Time diff		Not fostered : year= 06	Not fostered : year=11	Time diff	
scol_un_jour_fra_	33.00	35.00			1199.00	1247.00		
interaction	0.6364	0.8857	0.25	**	0.6447	0.7370	0.09	***
								0.16

## Average effect of fostering

Table: OLS with household fixed effects

	household level		cell level		share alim	share non alim	work	domestic hours	scol
	A	NA	A	NA					
Fostered-out	0.06 (0.08)	-0.01 (0.10)	0.05 (0.08)	0.10 (0.11)	-0.01 (0.01)	0.10 (0.07)	-0.01 (0.05)	-1.68 (1.23)	-0.06 (0.05)
female	-0.01 (0.01)	-0.00 (0.01)	-0.01 (0.01)	-0.01 (0.02)	-0.01 (0.01)	-0.01 (0.02)	-0.08 (0.01)***	4.74 (0.63)***	0.03 (0.02)+
age_	0.00 (0.00)	0.01 (0.00)**	0.00 (0.00)	0.01 (0.00)***	0.00 (0.00)	0.01 (0.00)**	0.02 (0.00)***	1.20 (0.13)***	-0.01 (0.00)
mere_pere_died_0611_	-0.01 (0.07)	0.16 (0.10)+	-0.00 (0.07)	0.12 (0.11)	-0.02 (0.01)	-0.03 (0.05)	-0.07 (0.05)	1.97 (1.49)	0.01 (0.04)
T*dept_06*milieu_06 FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	3,468	3,471	3,463	3,460	3,463	3,460	3,371	3,473	3,415

Note: The table controls for time varying characteristics: sex and education of the household head, sex and education of the cell head, hh size, cell size, season of interview (dry=1), place of residence (rural=1) Standard errors are in parentheses and significance levels are denoted as follows: \* p<0.10, \*\* p<0.05, \*\*\* p<0.01.

Table: OLS with household fixed effects

	household level		cell level		share alim	share non alim	work	domestic hours	scol
	A	NA	A	NA					
Fostered-out	0.04 (0.10)	-0.05 (0.13)	0.04 (0.10)	0.11 (0.16)	-0.00 (0.02)	0.10 (0.09)	0.04 (0.06)	0.90 (1.77)	0.04 (0.07)
female	-0.00 (0.01)	0.01 (0.01)	-0.01 (0.01)	0.02 (0.02)	-0.01 (0.00)*	0.02 (0.02)	-0.09 (0.02)***	5.63 (0.85)***	0.03 (0.03)
age_	-0.00 (0.00)	0.01 (0.00)*	-0.00 (0.00)	0.01 (0.00)**	0.00 (0.00)	0.00 (0.00)*	0.02 (0.00)***	1.40 (0.16)***	-0.01 (0.01)
mere_pere_died_0611_	0.05 (0.10)	0.24 (0.12)**	0.02 (0.10)	0.13 (0.13)	-0.03 (0.02)+	-0.07 (0.05)	-0.05 (0.07)	3.64 (1.78)**	0.05 (0.04)
T*dept_06*milieu_06 FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	2,554	2,556	2,552	2,548	2,552	2,548	2,493	2,557	2,522

Note: The table controls for time varying characteristics: sex and education of the household head, sex and education of the cell head, hh size, cell size, season of interview (dry=1), place of residence (rural=1)

Standard errors are in parentheses and significance levels are denoted as follows: \* p<0.10, \*\* p<0.05, \*\*\* p<0.01.

## Heterogeneity across type of fostering (formal; informal)

Table: OLS with household fixed effects and interaction term

	household level		cell level		share alim	share non alim	work	domestic hours	scol
	A	NA	A	NA					
Fostered-out (formal)	-0.09 (0.11)	-0.12 (0.15)	-0.12 (0.10)	-0.09 (0.17)	-0.02 (0.02)	0.09 (0.11)	-0.08 (0.08)	-0.78 (1.30)	0.03 (0.08)
Fostered-out (informal)	0.19 (0.09)**	0.08 (0.12)	0.20 (0.10)**	0.27 (0.14)*	0.01 (0.02)	0.11 (0.07)+	0.06 (0.07)	-2.44 (1.84)	-0.14 (0.06)**
female	-0.01 (0.01)	-0.00 (0.01)	-0.01 (0.01)	-0.00 (0.02)	-0.01 (0.01)	-0.01 (0.02)	-0.08 (0.01)***	4.73 (0.63)***	0.03 (0.02)
age_	0.00 (0.00)	0.01 (0.00)**	0.00 (0.00)	0.01 (0.00)***	0.00 (0.00)	0.01 (0.00)**	0.02 (0.00)***	1.20 (0.13)***	-0.01 (0.00)
mere_pere_died_0611_	-0.00 (0.07)	0.16 (0.10)*	0.00 (0.07)	0.13 (0.11)	-0.01 (0.01)	-0.03 (0.05)	-0.06 (0.05)	1.95 (1.49)	0.01 (0.04)
T*dept_06*milieu_06 FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	3,468	3,471	3,463	3,460	3,463	3,460	3,371	3,473	3,415

Note: The table controls for time varying characteristics: sex and education of the household head, sex and education of the cell head, hh size, cell size, season of interview (dry=1), place of residence (rural=1)  
Standard errors are in parentheses and significance levels are denoted as follows: \* p<0.10, \*\* p<0.05, \*\*\* p<0.01.

Table: OLS with household fixed effects and interaction term

	household level		cell level		share alim	share non alim	work	domestic hours	scol
	A	NA	A	NA					
Fostered-out (formal)	-0.13 (0.13)	-0.20 (0.19)	-0.15 (0.13)	-0.11 (0.22)	-0.02 (0.02)	0.08 (0.14)	-0.06 (0.09)	1.81 (1.90)	0.18 (0.09)**
Fostered-out (informal)	0.22 (0.13)+	0.10 (0.18)	0.23 (0.13)*	0.34 (0.20)*	0.01 (0.02)	0.11 (0.09)	0.13 (0.07)*	-0.02 (2.86)	-0.09 (0.08)
female	-0.00 (0.01)	0.01 (0.01)	-0.01 (0.01)	0.02 (0.02)	-0.01 (0.00)*	0.02 (0.02)	-0.09 (0.02)***	5.62 (0.85)***	0.03 (0.03)
age_	-0.00 (0.00)	0.01 (0.00)+	-0.00 (0.00)	0.01 (0.00)**	0.00 (0.00)	0.00 (0.00)*	0.02 (0.00)***	1.40 (0.16)***	-0.00 (0.01)
mere_pere_died_0611_	0.05 (0.10)	0.24 (0.12)**	0.02 (0.10)	0.13 (0.13)	-0.03 (0.02)+	-0.07 (0.05)	-0.05 (0.07)	3.67 (1.78)**	0.06 (0.04)
T*dept_06*milieu_06 FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	2,554	2,556	2,552	2,548	2,552	2,548	2,493	2,557	2,522

Note: The table controls for time varying characteristics: sex and education of the household head, sex and education of the cell head, hh size, cell size, season of interview (dry=1), place of residence (rural=1)  
Standard errors are in parentheses and significance levels are denoted as follows: \* p<0.10, \*\* p<0.05, \*\*\* p<0.01.

## Heterogeneity across gender (triple difference estimation)

Table: OLS with household fixed effects and interaction term

	household level		cell level		share alim	share non alim	work	domestic hours	scol
	A	NA	A	NA					
Fostered-out*female	-0.15 (0.15)	-0.09 (0.19)	-0.12 (0.15)	0.17 (0.21)	0.03 (0.03)	0.19 (0.10)*	-0.09 (0.10)	-1.53 (2.59)	0.10 (0.10)
female*T	0.00 (0.04)	-0.07 (0.05)	0.01 (0.04)	-0.01 (0.06)	0.00 (0.01)	-0.00 (0.03)	-0.11 (0.02)***	4.70 (0.79)***	-0.02 (0.03)
Ever fostered-out*female	0.03 (0.05)	0.09 (0.08)	0.03 (0.05)	-0.12 (0.12)	-0.01 (0.01)	-0.17 (0.07)**	-0.01 (0.05)	0.11 (2.32)	-0.09 (0.08)
Fostered-out	0.14 (0.12)	0.02 (0.13)	0.12 (0.12)	0.04 (0.15)	-0.02 (0.02)	0.05 (0.08)	0.06 (0.09)	-1.14 (1.51)	-0.09 (0.07)
female	-0.01 (0.02)	0.03 (0.02)	-0.02 (0.02)	0.01 (0.04)	-0.01 (0.01)	-0.00 (0.03)	-0.02 (0.02)+	2.41 (0.68)***	0.05 (0.03)*
age_	0.00 (0.00)	0.01 (0.00)**	0.00 (0.00)	0.01 (0.00)***	0.00 (0.00)	0.01 (0.00)**	0.02 (0.00)***	1.20 (0.13)***	-0.01 (0.00)
mere_pere_died_0611_	-0.01 (0.07)	0.16 (0.10)+	-0.00 (0.07)	0.12 (0.11)	-0.01 (0.01)	-0.03 (0.05)	-0.07 (0.05)	1.99 (1.48)	0.01 (0.04)
T*dept_06*milieu_06 FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	3,468	3,471	3,463	3,460	3,463	3,460	3,371	3,473	3,415

Note: The table controls for time varying characteristics: sex and education of the household head, sex and education of the cell head, hh size, cell size, season of interview (dry=1), place of residence (rural=1). Standard errors are in parentheses and significance levels are denoted as follows: \* p<0.10, \*\* p<0.05, \*\*\* p<0.01.

Table: OLS with household fixed effects and interaction term

	household level		cell level		share alim	share non alim	work	domestic hours	scol
	A	NA	A	NA					
Fostered-out*female	-0.27 (0.22)	-0.16 (0.26)	-0.25 (0.22)	0.19 (0.30)	-0.00 (0.03)	0.27 (0.14)*	-0.10 (0.12)	-2.90 (3.36)	0.01 (0.12)
female*T	0.01 (0.04)	-0.02 (0.05)	0.01 (0.04)	-0.04 (0.06)	0.01 (0.01)	-0.04 (0.03)*	-0.13 (0.03)***	5.20 (0.95)***	-0.02 (0.03)
Ever fostered-out*female	-0.01 (0.07)	0.15 (0.12)	-0.05 (0.08)	-0.02 (0.15)	-0.04 (0.02)**	-0.13 (0.09)+	-0.03 (0.07)	0.17 (3.70)	-0.05 (0.11)
Fostered-out	0.22 (0.16)	0.01 (0.18)	0.22 (0.16)	0.01 (0.22)	0.01 (0.03)	-0.03 (0.09)	0.13 (0.11)	1.99 (2.21)	0.06 (0.10)
female	0.00 (0.02)	0.01 (0.03)	-0.00 (0.02)	0.04 (0.04)	-0.01 (0.00)*	0.04 (0.03)+	-0.02 (0.02)	3.09 (0.88)***	0.05 (0.03)+
age_	-0.00 (0.00)	0.01 (0.00)*	-0.00 (0.00)	0.01 (0.00)**	0.00 (0.00)	0.00 (0.00)*	0.02 (0.00)***	1.40 (0.16)***	-0.01 (0.01)
mere_pere_died_0611_	0.05 (0.10)	0.25 (0.12)**	0.01 (0.10)	0.14 (0.13)	-0.03 (0.02)*	-0.07 (0.05)	-0.05 (0.07)	3.45 (1.79)*	0.05 (0.04)
T*dept_06*milieu_06 FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	2,554	2,556	2,552	2,548	2,552	2,548	2,493	2,557	2,522

Note: The table controls for time varying characteristics: sex and education of the household head, sex and education of the cell head, hh size, cell size, season of interview (dry=1), place of residence (rural=1). Standard errors are in parentheses and significance levels are denoted as follows: \* p<0.10, \*\* p<0.05, \*\*\* p<0.01.

## Heterogeneity across distance (triple difference estimation)

Table: OLS with household fixed effects and interaction term

	household level		cell level		share alim	share non alim	work	domestic hours	scol
	A	NA	A	NA					
Fostered-out*dist (per 10km) fixed	-0.01 (0.01)	-0.01 (0.02)	-0.01 (0.01)	-0.01 (0.01)	-0.00 (0.00)	0.01 (0.01)	0.01 (0.01)*	-0.08 (0.15)	-0.02 (0.01)**
dist (per 10 km) fixed *T	0.01 (0.01)*	-0.00 (0.01)	0.01 (0.01)*	0.00 (0.01)	0.00 (0.00)	0.00 (0.00)*	-0.00 (0.00)	-0.17 (0.10)*	0.01 (0.00)***
Ever fostered-out*dist (per 10km) fixed	-0.00 (0.01)	0.01 (0.01)	-0.00 (0.01)	0.01 (0.01)	-0.00 (0.00)	0.00 (0.01)	-0.00 (0.00)	-0.06 (0.14)	0.01 (0.01)
distance (per 10km) fixed	-0.00 (0.00)	-0.00 (0.01)	-0.00 (0.01)	-0.01 (0.01)	0.00 (0.00)	-0.01 (0.01)+	-0.00 (0.00)	0.04 (0.07)	-0.01 (0.00)*
Fostered-out	0.05 (0.09)	0.05 (0.11)	0.04 (0.09)	0.12 (0.13)	-0.00 (0.02)	0.05 (0.09)	-0.05 (0.06)	-0.38 (1.44)	-0.03 (0.06)
female	-0.01 (0.01)	-0.00 (0.01)	-0.01 (0.01)	-0.00 (0.02)	-0.01 (0.01)	-0.01 (0.02)	-0.08 (0.01)***	4.73 (0.63)***	0.03 (0.02)+
age_	0.00 (0.00)	0.01 (0.00)**	0.00 (0.00)	0.01 (0.00)***	0.00 (0.00)	0.01 (0.00)**	0.02 (0.00)***	1.20 (0.13)***	-0.01 (0.00)
mere_pere_died_0611_	-0.01 (0.08)	0.15 (0.10)+	-0.00 (0.07)	0.12 (0.11)	-0.02 (0.01)	-0.02 (0.05)	-0.06 (0.05)	1.73 (1.50)	-0.00 (0.04)
T*dept_06*milieu_06 FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	3,468	3,471	3,463	3,460	3,463	3,460	3,371	3,473	3,415

Note: The table controls for time varying characteristics: sex and education of the household head, sex and education of the cell head, hh size, cell size, season of interview (dry=1), place of residence (rural=1)  
Standard errors are in parentheses and significance levels are denoted as follows: \* p<0.10, \*\* p<0.05, \*\*\* p<0.01.

Table: OLS with household fixed effects and interaction term

	household level		cell level		share alim	share non alim	work	domestic hours	scol
	A	NA	A	NA					
Fostered-out*dist (per 10km) fixed	-0.00 (0.01)	-0.02 (0.02)	-0.01 (0.01)	-0.01 (0.02)	-0.00 (0.00)	0.02 (0.01)+	0.00 (0.01)	0.18 (0.24)	-0.01 (0.01)+
dist (per 10 km) fixed *T	0.01 (0.01)	-0.01 (0.01)	0.01 (0.01)	-0.01 (0.01)	0.00 (0.00)	-0.00 (0.00)	-0.00 (0.01)	-0.37 (0.17)**	0.01 (0.01)+
Ever fostered-out*dist (per 10km) fixed	-0.01 (0.01)*	0.01 (0.01)	-0.01 (0.01)**	0.02 (0.01)*	-0.00 (0.00)**	0.02 (0.01)**	0.00 (0.00)	-0.13 (0.18)	-0.01 (0.01)+
distance (per 10km) fixed	0.00 (0.00)	-0.01 (0.01)	0.01 (0.00)+	-0.02 (0.01)*	0.00 (0.00)***	-0.02 (0.01)***	-0.00 (0.00)	0.04 (0.10)	0.00 (0.00)
Fostered-out	0.06 (0.12)	0.12 (0.14)	0.07 (0.12)	0.17 (0.19)	0.01 (0.02)	-0.02 (0.11)	0.01 (0.07)	1.89 (2.14)	0.11 (0.07)+
female	-0.00 (0.01)	0.00 (0.01)	-0.01 (0.01)	0.02 (0.02)	-0.01 (0.00)+	0.01 (0.02)	-0.09 (0.02)***	5.59 (0.86)***	0.03 (0.03)
age_	-0.00 (0.00)	0.01 (0.00)+	-0.00 (0.00)	0.01 (0.00)**	0.00 (0.00)	0.01 (0.00)*	0.02 (0.00)***	1.39 (0.16)***	-0.01 (0.01)
mere_pere_died_0611_	0.05 (0.10)	0.21 (0.12)*	0.02 (0.10)	0.12 (0.13)	-0.03 (0.02)+	-0.06 (0.05)	-0.05 (0.07)	3.56 (1.76)**	0.04 (0.04)
T*dept_06*milieu_06 FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	2,554	2,556	2,552	2,548	2,552	2,548	2,493	2,557	2,522

Note: The table controls for time varying characteristics: sex and education of the household head, sex and education of the cell head, hh size, cell size, season of interview (dry=1), place of residence (rural=1)  
Standard errors are in parentheses and significance levels are denoted as follows: \* p<0.10, \*\* p<0.05, \*\*\* p<0.01.