

Social Mobility in Five African Countries

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Motivation and method

Provide a measure of the level of intergenerational occupational mobility in Africa, which fills the gap in comparative literature (Erikson and Goldthorpe, etc.)

Select the five countries where large sample representative surveys with parental questions are available:

Cote d'Ivoire (3 surveys; 1986-1990)

Ghana (5 surveys; 1987-2006)

Guinea (1 survey; 1994)

Madagascar (1 survey; 1993)

Uganda (1 survey; 1992)

Use the comparative approach to identify the determinants of social mobility by analysing the *differences* in social mobility between countries

Outline of the paper

1. Measure the levels of intergenerational reproduction of occupations (farm vs non-farm sector) in five countries
2. Distinguish between structural mobility resulting from structural change, and net mobility
3. Argue that the creation of highly paid wage jobs accounts for the level of structural mobility
4. Show that spatial dualism accounts for the levels of net mobility
5. Provides a small theoretical framework to interpret the results

1.1- Levels of intergenerational mobility

	Farm/non-farm odds-ratio
Uganda 1992	4.1
Ghana 1987-2005	5.2
South Africa 2008	7.8
Brazil 1996	8.0
China 1996	8.6
Côte d'Ivoire 1985-88	10.0
Guinea 1994	10.1
Madagascar 1993	16.9

Take the men between 20 and 69 years old, compute Odds-Ratios

Check the robustness of the measure to the level of intragenerational mobility

Three groups: Uganda/Ghana, Cote d'Ivoire/Guinea, and Madagascar

1.2- Education does not account for those differences

Educational mobility is not very different across countries, with the exception of Madagascar (controlling for it puts Madagascar at a level of intergenerational rigidity similar to Cote d'Ivoire and Guinea)

Education plays a role in the intergenerational transition to non-farm activities, but differences across countries largely persist after controlling for it

So there is something more...

2.1- Differences in structural change

Birth cohort	1930-39	1940-49	1950-59	1960-69
% in agriculture (among employed)				
Côte d'Ivoire	72.2	53.3	42.2	51.2
Ghana	67.4	55.6	54.3	54.4
Guinea	79.1	65.5	54.3	57.0
Madagascar	85.0	71.5	70.7	75.6
Uganda	81.3	70.0	66.9	64.2
% in wage non-farm				
Côte d'Ivoire	16.7	32.8	44.5	32.8
Ghana	22.8	31.9	30.1	26.4
Guinea	6	14	21.8	9.6
Madagascar	10.2	19	20.6	11.6
Uganda	13.3	20.7	21.5	22.7

Rapid decline of agriculture in Cote d'Ivoire and Guinea

The share of non-farm wage jobs tripled in those two countries

Youngest cohort: less non-farm but more unemployment (23% in Cote d'Ivoire, 12% in Guinea, as opp. to <6% in other countries. Is it a queuing effect?

2.2- Structural vs. net mobility

Birth cohort	1930-39	1940-49	1950-59	1960-69	1930-39	1940-49	1950-59	1960-69
	Conditional probability (%): Farmers' sons become non-farmers				Conditional probability (%): Non-farmers sons stay non-farmers			
	Share of movers (%)				"Net mobility": Share - Minimum share (%)			
Côte d'Ivoire	25	41	51	36	70	88	89	93
Ghana	25	34	36	31	63	70	72	73
Guinea	17	28	35	30	44	77	82	89
Madagascar	9	18	19	13	68	81	83	69
Uganda	16	23	26	28	33	59	60	61
Côte d'Ivoire	25	37	44	30	4	3	4	3
Ghana	27	34	34	30	14	12	15	19
Guinea	22	27	31	25	14	6	8	4
Madagascar	11	18	18	16	7	6	5	13
Uganda	23	27	29	31	18	16	16	19

Cote d'Ivoire and Guinea: large increase in the share of farmer's sons becoming non-farmers. Sons of non-farmers stay non-farmers.

Ghana and Uganda: more sons of non-farmers become farmers

Madagascar: very little movements either way

Total share of "movers" similar (except in Madagascar), but big difference in net mobility

3.1- Wage dualism

	(A) GNI per working age adult 1990 (US\$)	(B) Median annual real wage (1990 US\$ and prices)	Ratio (B)/(A)
Côte d'Ivoire	1,389	3,326	2.4
Ghana	729	770	1.0
Guinea	785	1,541	2.2
Madagascar	503	1,587	3.1
Uganda	484	306	0.6

Cote d'Ivoire and Guinea: massive creation of well-paid wage jobs in the non-farm sector. Corresponds to government jobs (rationed) and private jobs in companies, often foreign-owned with "equal job equal pay", therefore not market-clearing

Madagascar: high wage dualism even without structural change

Ghana and Uganda: no observable wage dualism

3.2- Inactivity and queuing effect

	Farm		Inactive		Non-farm	
	Odds-ratio	s.e.	Odds-ratio	s.e.	Odds-ratio	s.e.
Father farmer						
Côte d'Ivoire	9.0	2.0	(0.8)	0.1	Ref.	-
Ghana	5.0	0.3	(0.8)	0.1	Ref.	-
Guinea	8.9	1.5	0.7	0.1	Ref.	-
Madagascar	18.3	2.5	(0.9)	0.2	Ref.	-
Uganda	4.0	0.4	1.5	0.3	Ref.	-
N				31,327		
Log. Likelihood				-23,184		
Pseudo-R²				0.11		

In all countries, it is equivalent (from an intergenerational perspective) for a son to become inactive/unemployed or to access the non-farm sector.

Inactivity/unemployment is concentrated on the young cohorts, and on the sons of non-farmers.

Structural change seems to have created a mechanism similar to Harris and Todaro (1970) where income differentials (due to partly administered wages in the urban sector) cause rural-urban migration and a high level of unemployment.

4.1- Differences in spatial dualism

	Share of the population living in rural areas	% of non-farmers among workers in rural areas	Share of public jobs located in rural areas	% of non-farmers with a secondary occupation in agriculture (all areas)
Côte d'Ivoire	53.7	12.0	12.7	10.9
Ghana	64.2	24.5	40.5	29.8
Guinea	62.9	9.6	15.1	11.8
Madagascar	80.2	13.8	49.7	35.9
Uganda	85.2	21.7	71.4	36.6

Côte d'Ivoire and Guinea : greater spatial dualism (less non-farm activities in rural areas, much lower share of public jobs in rural areas, fewer non-farmers with a secondary occupation in the farm sector).

The creation of a large non-farm sector in cities in Côte d'Ivoire and Guinea may have caused this strong spatial dualism. But that doesn't explain Madagascar.

Differences in spatial distribution of activities might also originate in the different colonial legacies, with more administrative centralization and less transport infrastructure in French colonies.

4.2- Impact of spatial dualism on social mobility

	Lives in rural areas		Farm (réf.=non-farm)		Inactive (réf.=non-farm)	
	Odds-ratio	s.e.	Odds-ratio	s.e.	Odds-ratio	s.e.
Father farmer						
Côte d'Ivoire	7.9	1.5	3.8	0.8	(0.7)	0.1
Ghana	4.1	0.3	3.4	0.2	(0.9)	0.1
Guinea	8.1	1.4	4.1	0.8	0.7	0.1
Madagascar	8.9	1.6	11.9	1.9	(0.9)	0.2
Uganda	3.7	0.4	3.1	0.3	(1.3)	0.3
Lives in rural area						
Côte d'Ivoire			56.5	13.4	(1.5)	0.4
Ghana			9.2	0.8	(0.9)	0.1
Guinea			86.3	23.7	1.7	0.4
Madagascar			13.1	3.1	(1.1)	0.3
Uganda			31.4	4.7	2.9	0.6
N	31,327			31,327		
Log. Likelihood	-16,838			-18,646		
Pseudo-R ²	0.13			0.28		

Conditional to the place of living, differences in intergenerational mobility are cancelled (except in Madagascar, probably due to the education factor).

Differences in net mobility are mostly due to differential rural-urban migration costs for sons of farmers vs. non-farmers.

Conclusion

The levels of intergenerational mobility between the farm and non-farm sectors vary a great deal across countries.

The levels of structural mobility appear to be determined by the pace of creation of a non-farm sector where high wages are paid. This also determines urban unemployment.

Spatial dualism, resulting both from the structural change and by historical legacies, accounts for the level of net intergenerational mobility. The rural-urban dualism and related migration costs provide an advantage for sons of non-farmers on the non-farm job market.