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CHILD LABOR AND THE PERSISTENCE OF INEQUALITY: EVIDENCE FROM THE WORLD'S LEAST MOBILE COUNTRY

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Abstract

This paper presents comprehensive evidence on intergenerational mobility in Mozambique—the country with the lowest documented level of mobility worldwide—and investigates its relationship with child labor. Using survey data that includes a module on non co-resident adult children, we document a strong link between children's educational attainment and parental education and household wealth. Interestingly, our findings suggest that child labor perpetuates intergenerational inequality, not merely as a response to income shocks, but mainly due to labor market structures—particularly the complementarity between parental and child labor and the substantial opportunity costs associated with schooling. These findings underscore the need for targeted policies that decouple children's labor market prospects from those of their parents and enhance awareness of the long-term returns to education.

Keywords: Social Mobility; Child Labor; Education; Mozambique.

JEL Classification: D63, I24, J62, O15

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1 Introduction

Intergenerational mobility, defined as the degree to which economic and social outcomes are transmitted from parents to children, is a key indicator of equality of opportunity in a society (Black and Devereux, 2011; Hertz et al., 2008; Heckman and Mosso, 2014; Brunori et al., 2024; Van der Weide et al., 2024, e.g.). Recent studies have, further, demonstrated that inequality of opportunity and low levels of intergenerational mobility can also hinder long-term economic growth and development (Marrero and Rodríguez, 2013; Hsieh et al., 2019; Neidhöfer et al., 2024). Particularly in low-income countries, where poverty and inequality are high and persistent, understanding the extent of intergenerational mobility, and the barriers that constrain it, is essential for promoting both equity and development.

Another distinctive feature of low-income countries is the widespread prevalence of child labor. Notably, global progress in reducing child labor has been interrupted over the past decade, with Sub-Saharan African countries reporting that approximately 24% of children are engaged in some form of labor (Unicef et al., 2021). Moreover, several studies have found that minimum working age legislations often have limited or no impact on reducing child labor—see, for instance, Bargain and Boutin (2021)—and in some cases may even increase it. This counterintuitive effect has been documented in contexts like India (Bharadwaj et al., 2020), where households facing subsistence constraints may be more likely to rely on child labor as legal bans raise the cost of employing children under the minimum age, as discussed in (Basu and Van, 1998; Basu, 2005). Despite its relevance, the role of child labor as a potential barrier to upward mobility remains understudied and empirical evidence on the mechanisms through which early labor force participation hinders long-term socioeconomic advancement remains scarce.¹

In this paper, we contribute to the growing literature on inequality and sustainable development in low-income countries by providing new evidence on intergenerational mobility and child labor for Mozambique, one of the poorest and unequal countries worldwide (Salvucci and Tarp,

¹Recent contributions have shown that child labor plays an important role for intergenerational mobility in developing countries (Koenings and Schwab, 2025).

2021; Barletta et al., 2022). Previous studies have documented that Mozambique is the country with the lowest intergenerational mobility in Africa (Alesina et al., 2021, e.g.), the world’s region with the lowest levels of mobility (Van der Weide et al., 2024). Drawing on nationally representative household survey data from the *Inquérito sobre Orçamento Familiar* (IOF) conducted in 2019–2020, we estimate intergenerational mobility by linking the educational attainment of both co-resident and non co-resident children with their parents’ socio-economic status, measured by their level of education, and indicators for household assets and living conditions.² Our findings confirm that intergenerational mobility in Mozambique is very low: children’s educational opportunities are strongly related to their parents’ background, especially for daughters and household living in rural areas. When exploring how intergenerational mobility has evolved over time—from cohorts born in the early 1970s to those born in the early 2000s—we find that these patterns have not improved and remained rather stagnant.

Hence, we investigate one mechanism potentially behind this persistently low levels of mobility, namely child labor. First, we assess whether in Mozambique children’s labor force participation acts as a substitute for parental labor—in line with the so called added worker effect, showing that child labor increases in response to household income losses (Duryea et al., 2007; Cardona-Sosa et al., 2018; Cerutti et al., 2019; Di Maio and Nisticò, 2019; GC Britto et al., 2021; Ciaschi and Neidhöfer, 2024, e.g.)—or whether their roles are complementary, implying that children are more likely to work when employment opportunities are generally available. Our findings reveal a strong positive relationship between parental and child employment, suggesting complementarity in their labor force participation, which is largely driven by the prevalence of children working as unpaid family workers. In many cases, children work alongside their parents, particularly in agriculture or informal activities, facing high opportunity costs of schooling and limited chances for learning different skills compared to their parents.³ Interestingly, as noted by previous contributions, this dynamic is not confined to poor households: in contexts where local labor market opportunities are scarce, even wealthier households may expand land

²A subset of the descriptive statistics on intergenerational mobility and child labor in Mozambique presented in this paper were originally prepared and included in the World Bank’s Mozambique Poverty Assessment 2023.

³Even when they do not drop out from school, the evidence suggest poorer educational outcomes among working children (Emerson et al., 2017; Keane et al., 2022).

ownership and rely on their children's labor to work it (Basu et al., 2010; Oryioe et al., 2017).

Then, we analyze the role of child labor as a barrier to upward mobility. In particular, we estimate whether in families where one child experienced some form of upward educational mobility, the other children are less likely to engage in child labor activities. Our results indicate that upward mobility of elder children is consistently higher among households where the other children aged 5 to 17 do not engage in labor, suggesting positive spillover effects from older to younger siblings. These effects may stem from unobserved household characteristics, such as values and social norms, from within-household learning dynamics, where younger children are influenced by the roles and expectations shaped by older siblings, or could also be related to income shocks.

To test whether these patterns are merely an income-related phenomenon, we exploit information included in the survey on transfers received by the household from adult, non-coresident children.⁴ Our findings reveal a nuanced relationship between cash transfers and child labor. While a simple binary indicator of whether a household receives a transfer shows no significant association with child labor, the analysis at the intensive margin suggests otherwise. Among recipient households, higher transfer amounts are associated with a lower likelihood of child labor providing some support for the income effect hypothesis. However, the overall results reflect the structural complementarity between parental and child employment which entails a high opportunity cost of attending education.

Our findings underscore the need for policies that break this intergenerational trap. Improving mobility in Mozambique will require targeted interventions that expand access to education, provide reliable information on the returns to schooling, and decouple children's labor market opportunities from those of their parents.

The remainder of the paper is organized as follows: Section 2 describes the data. Section 3 provides a comprehensive analysis of intergenerational mobility in education in Mozambique. Section 4 evaluates how child labor is related to parental employment and intergenerational

⁴Previous contributions analyzing the role of transfers in child labor yielded mixed results (Edmonds and Schady, 2012; De Hoop et al., 2020), mostly depending on parental education (Santos and Portela, 2025).

mobility. Finally, Section 5 concludes.

2 Data

2.1 The IOF household survey

Our analysis relies on data from the 2019–2020 Inquérito sobre Orçamento Familiar (IOF), a nationally representative household survey conducted in Mozambique. The survey was designed to provide representativeness at both the national and provincial levels, as well as for urban and rural areas. It collects detailed information on a wide range of socioeconomic characteristics, including employment, marital status, household structure, wealth, education, gender, and area of residence of all household members. The survey was partially conducted in 2020, during months affected by the COVID-19 pandemic. However, as shown below, the pandemic does not appear to have altered households’ production functions in terms of child labor. Moreover, social mobility estimates should remain unchanged, as they compare human capital accumulation between generations.

A key advantage of the IOF data for our study is its ability to capture intergenerational linkages. In particular, the 2019–2020 wave includes a transfers module in which household heads report information about children living in other households, particularly whether they receive monetary transfers from these children, as well as their age, education, and occupation. This dataset represents a unique opportunity as it allows us to construct a sample that includes both co-resident children and non-co-resident children. While most household surveys and census data limit analyses to co-resident individuals which represent a source of distortion in intergenerational mobility estimates due to co-residency selection (Emran et al., 2018; Emran and Shilpi, 2021), our analysis provides more consistent estimates by incorporating non-co-resident children as well. However, co-resident children still represent an important share of our sample. Rather than excluding them, we integrate both groups while controlling for co-residency in our estimations. This approach distinguishes our study from previous work in African contexts that has mostly relied on co-resident samples (Alesina et al., 2021; Cardona and Jones, 2021; Ouedraogo and Syrichas, 2021; Razzu and Wambile, 2022). Our final sample includes 9,131

individuals born between 1970 and 2001. We use survey population weights in all analyses, assigning to non co-resident children the weights corresponding to their fathers.

Furthermore, we are able to use two different features to measure parental socio-economic background. Our first measure is the level of education of the parent with the highest education in the children's household (of origin). Our second measure is a measure for "wealth quintiles" computed by the Mozambican National Statics Institute (INE) using principal component analysis and based on several characteristics of household assets and living conditions: Education of the household head, main source of drinking water, toilet characteristics, main source of energy, floor, roofing, and wall material, household size.

Table 1 summarizes the descriptive statistics of our sample. As expected, children's educational attainment increases steadily with parental education and wealth quintile (column 1). The dispersion in years of education slightly decreases with parental education, while remaining more stable across wealth levels (column 2). Columns 3 and 4 show that our sample is balanced in terms of children's age and gender distribution across parental education and wealth categories. Finally, column 6 reveals that co-residency rates are higher among children from more educated and wealthier households, consistent with patterns of delayed household formation or extended family support structures.

Table 1 DESCRIPTIVES STATISTICS

	Mean: years of educ.	SD: years of educ.	Age	% Women	% Urban	% Coresidency
Parental Education						
No Education	5.44	3.52	26.69	0.44	0.29	0.58
Incompleted Primary	6.93	3.59	25.22	0.47	0.36	0.56
Completed Primary	8.66	3.44	24.39	0.45	0.63	0.69
Incompleted Secondary	9.62	3.27	23.97	0.47	0.66	0.70
Completed Secondary or beyond	11.86	2.74	24.03	0.52	0.90	0.69
Wealth Quintile						
1	4.45	2.97	24.45	0.45	0.07	0.53
2	5.14	3.15	24.32	0.40	0.11	0.53
3	5.89	3.34	24.24	0.48	0.16	0.57
4	7.55	3.32	25.32	0.46	0.44	0.61
5	10.17	3.26	26.39	0.49	0.86	0.67

Notes: Simple average across birth cohorts.

Source: Own elaboration based on IOF 2019-2020.

3 Intergenerational mobility in Mozambique

In this section, we present our estimates of intergenerational mobility in education in Mozambique. We begin our empirical analysis by presenting educational transition matrices to provide a broad overview of intergenerational mobility of education in Mozambique. Then, we explore how mobility has evolved over time for children born between 1970 and 2001. Lastly, we examine the role of household wealth in shaping educational inequality and intergenerational mobility in Mozambique.⁵

3.1 Educational mobility patterns and trends

Table 2 displays the transition matrix, where rows correspond to the highest level of education attained by parents, and columns show the percentage of children reaching each level of education. Each cell therefore represents the share of children, by parental education level, who attain a given educational outcome. The diagonal elements indicate educational immobility, i.e.

⁵This part of the paper complements a recent report using a smaller but more recent survey in Mozambique (UNU-WIDER, 2025).

cases where children attain the same level of education as their parents, while values above the diagonal reflect upward mobility, and those below the diagonal, downward mobility. These matrices are computed as the average across all cohorts in our sample.

The results reveal that while some upward mobility exists, particularly among children of parents with incomplete or complete primary education, children are most likely to match their parents' educational attainment or move just one level above. For instance, among children of parents with no education, over 51% reach the incomplete primary level, and only 37% attain higher levels of education, highlighting significant barriers to upward mobility from the bottom of the distribution. On the other hand, as parental education increases, so do children's chances of reaching higher levels of education. For example, over 73% of children whose parents completed secondary school or beyond also attain similar levels. This strong persistence at the top, coupled with limited upward mobility, reflects a highly stratified system and high inequality of educational opportunities.

Table 2 EDUCATIONAL TRANSITION MATRIX

Parental Education	Children Education				
	No Education	Incomp. Primary	Comp. Primary	Incomp. Secondary	Comp. Secondary or beyond
No Education	11.16	51.58	12.61	17	7.64
Incomp. Primary	4.31	40.73	12.33	27.3	15.32
Comp. Primary	2.57	24.71	12.95	30.71	29.06
Incomp. Secondary	2.66	14.44	5.02	36.97	40.91
Comp. Secondary or beyond	0.16	4.73	2.81	18.98	73.32

Notes: Numbers show percentages. Simple average across all birth cohorts.

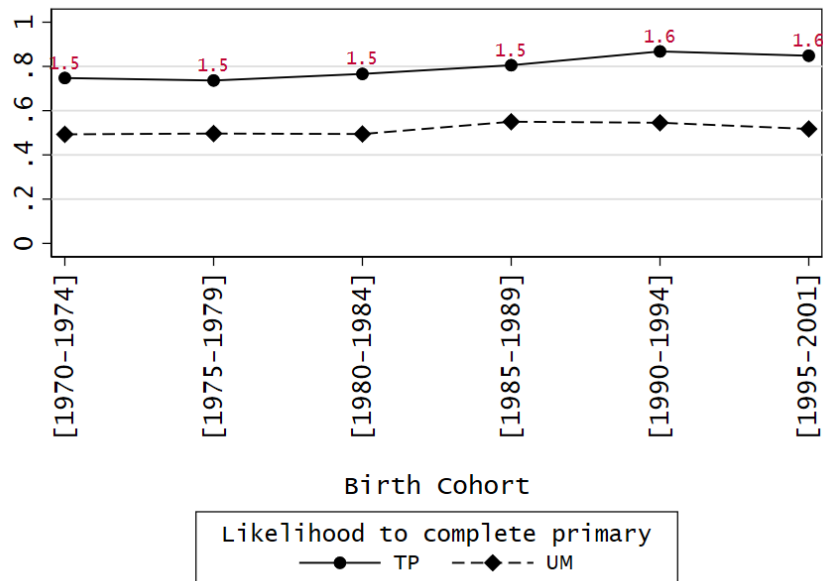
Source: Own elaboration based on IOF 2019-2020.

In Figure 1 we analyze how intergenerational educational mobility has evolved over time. Specifically, we examine cohort trends spanning three decades from children born in the early 1970s to those born in the early 2000s. The two panels in Figure 1 focus on the likelihood of completing primary education and secondary education, comparing children from more advantaged and disadvantaged backgrounds based on parental education: "top persistence" (TP) reflects the probability that children whose parents completed at least primary education will

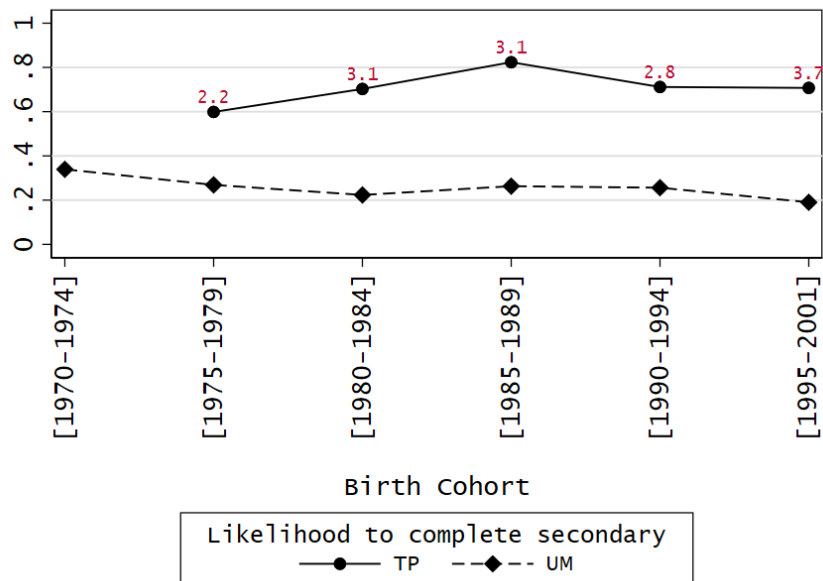
also complete it, while "upward mobility" (UM) captures the probability of completing that level for children whose parents did not.⁶ The completed primary education threshold represents a relevant division as also shown by the patterns in Tables 1 and 2, and is therefore frequently used in mobility studies for Africa (Alesina et al., 2021, e.g.).

We observe a slight rise in the likelihood of completing primary education among children from both high and low educated parents across cohorts. However, for children from disadvantaged backgrounds the probability of completing secondary education has declined in more recent cohorts. This downward trend may partly reflect compositional changes over time, as the share of parents who have completed at least primary education has increased, shifting more children into the TP category. As a consequence, the results show a persistent and, in some cases, widening educational gap. The ratio of top persistence to upward mobility by parental education remains around 1.5–1.6 for primary education, but rises significantly for secondary education; from approximately 2.2 for older cohorts to nearly 3.7 among the youngest. These findings suggest that socioeconomic background plays a significant role in shaping educational outcomes in Mozambique.

⁶The TP estimate for the 1970–74 cohort in secondary education is omitted due to small sample size.



(a) PRIMARY EDUCATION



(b) SECONDARY EDUCATION

Figure 1 INTERGENERATIONAL MOBILITY TRENDS

Source: TP indicates the likelihood to complete primary/secondary of individuals whose parents have a completed primary education degree. UM indicates the likelihood of individuals whose parents did not complete primary education. Numbers in graph indicate the ratio of the likelihoods for the two groups. Own elaboration based on IOF 2019-2020.

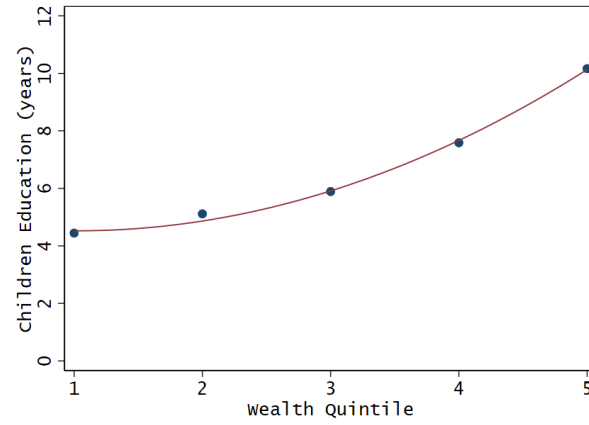
3.2 Mobility curves and educational inequality

Figure 2 presents a set of mobility curves illustrating children's average years of schooling, as well as the likelihood of completing primary and secondary education, according to their household's position in the wealth distribution. The patterns reveal a steep socioeconomic gradient and a high degree of educational inequality. Children from wealthier families consistently outperform their peers from less advantaged backgrounds. Furthermore, it is worth noting that the first three quintiles of the wealth distribution are disproportionately composed of families where parents have very low or no formal education as shown in Table 1, suggesting a strong overlap between low wealth and low parental education. Indeed, average educational outcomes are particularly high in the highest quintile of the distribution and very low in the first three quintiles.

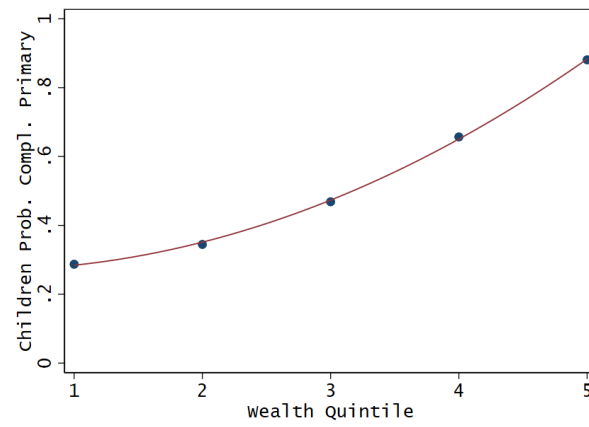
On average, children born into the top quintile of the wealth distribution attain over ten years of schooling, while those in the bottom quintile average fewer than five. The disparity is even more evident when looking at completion rates. While completing primary education is nearly universal among children from the wealthiest families, fewer than four in ten children in the first two quintiles complete primary school. Gaps widen further when considering secondary education: children in the top wealth quintile are roughly five times more likely to complete secondary school than those in the bottom three quintiles. These gaps are presumably even larger when accounting for potential differences in the quality of education accessed by children across wealth quintiles, which may further disadvantage those at the lower end of the distribution.

To better understand how these patterns vary across population groups, in Figures 3 and 4 we disaggregate the results by gender and by urban versus rural residence. Our results show that in the lower half of the wealth distribution, girls are significantly less likely than boys to complete primary education and attain fewer years of schooling. However, this gender gap disappears among wealthier households, while no significant gender differences are observed in secondary school completion across all wealth quintiles. In addition, the analysis by area of residence reveals that children from urban areas generally have better educational outcomes,

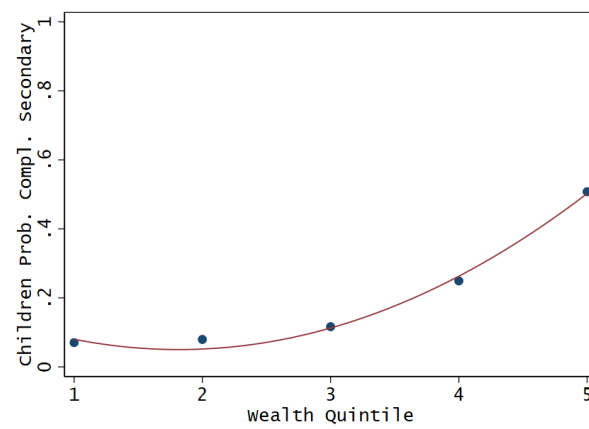
especially at the bottom and top ends of the parental wealth distribution. At lower levels of wealth, primary school completion is more likely among urban children. In terms of secondary education, the gap is particularly pronounced among wealthier households, where children in urban areas are much more likely to complete secondary school than their rural counterparts.



(a) YEARS OF EDUCATION



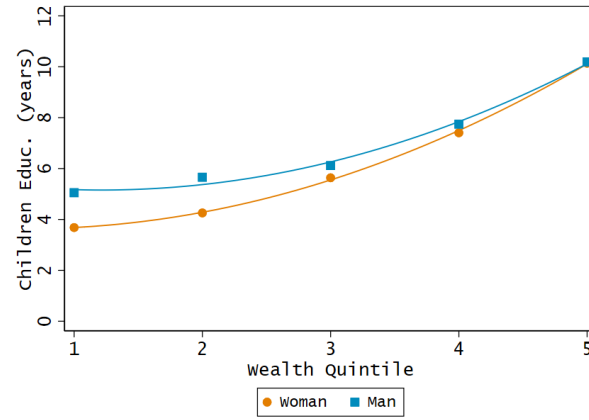
(b) PRIMARY EDUCATION



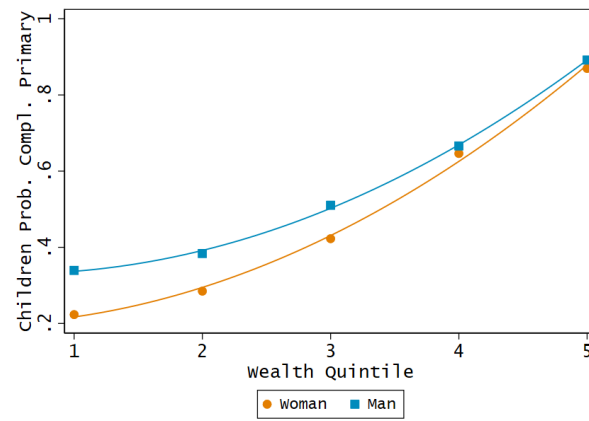
(c) SECONDARY EDUCATION

Figure 2 INTERGENERATIONAL MOBILITY AND PARENTAL WEALTH

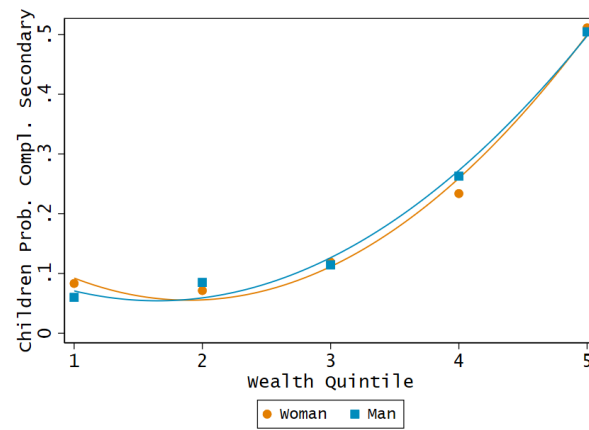
Source: Own elaboration based on IOF 2019-2020.



(a) YEARS OF EDUCATION



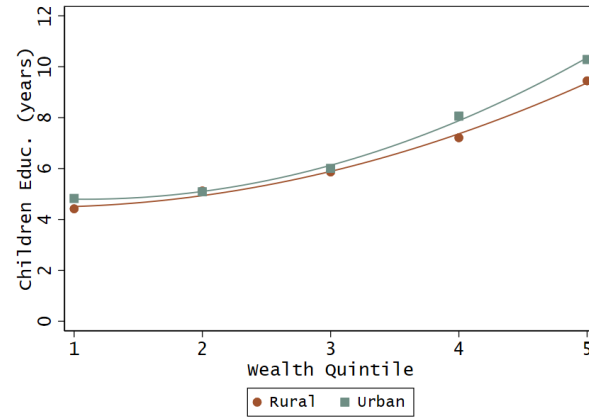
(b) PRIMARY EDUCATION



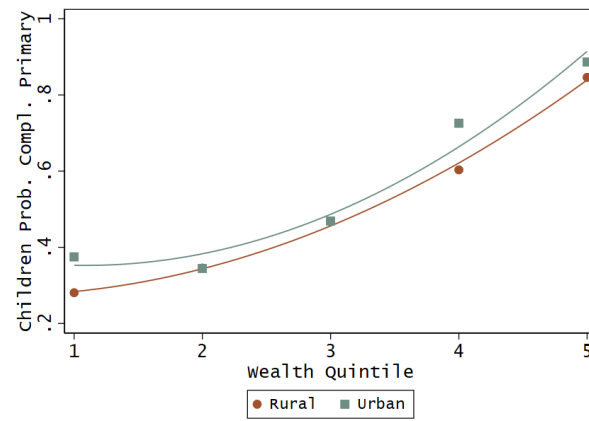
(c) SECONDARY EDUCATION

Figure 3 INTERGENERATIONAL MOBILITY AND PARENTAL WEALTH BY GENDER

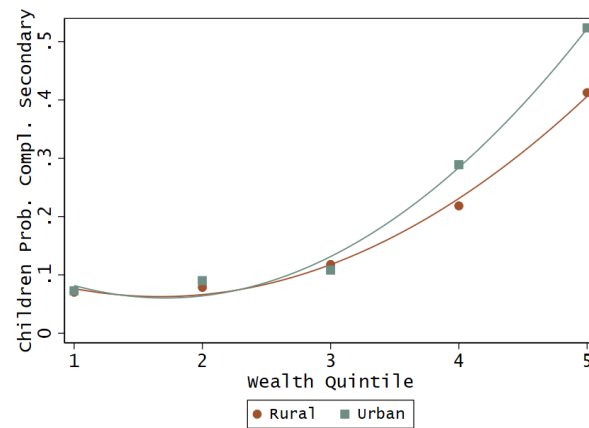
Source: Own elaboration based on IOF 2019-2020.



(a) YEARS OF EDUCATION



(b) PRIMARY EDUCATION



(c) SECONDARY EDUCATION

Figure 4 INTERGENERATIONAL MOBILITY AND PARENTAL WEALTH BY URBAN VS. RURAL

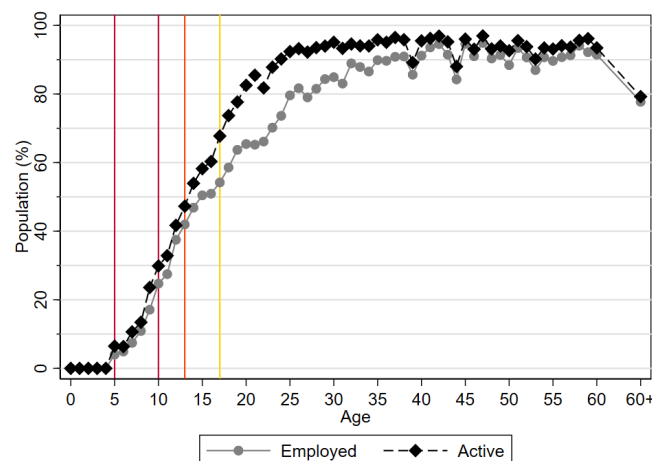
Source: Own elaboration based on IOF 2019-2020.

4 Child labor and intergenerational mobility

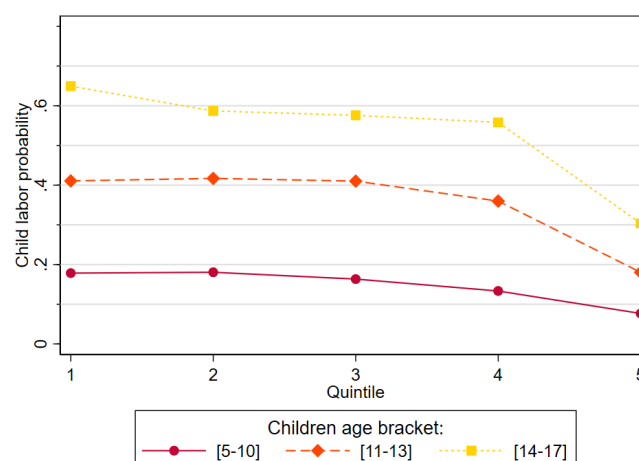
4.1 Child labor patterns by age, wealth quintile and area of residence

Child labor remains widespread in Mozambique, despite the country having ratified international conventions prohibiting it. In practice, the data show that regulations are not having a significant effect, particularly in the informal sector, which constitutes a large share of the Mozambican economy. Figure 5 shows the child labor patterns by age and parental wealth quintile. Generally, there is a significant presence of child labor at all ages: on average, 38% of children aged 5 to 17 are engaged in labor activities, a figure considerably above the Sub-Saharan African average of approximately 24% (Unicef et al., 2021). Panel (a) shows that labor force participation increases with age, ranging from 10% to 20% among children aged 5–10, rising to 30–50% for those aged 11–13, and reaching 50–70% among adolescents aged 14–17. Figure A.1 in the Online Appendix replicates Figure A.1 using only households surveyed before the COVID-19 outbreak, suggesting that the pandemic does not appear to have affected child labor incidence.

Importantly, child labor is highly unevenly distributed across the population and substantially more prevalent among poorer households. Panel (b) presents the likelihood that a household with children has at least one working child in a given age group, conditional on the position of the household in the wealth distribution. In the two lowest wealth quintiles, nearly 20% of households have at least one working child aged 5–10, while among children aged 11–13 and 14–17, the corresponding probabilities rise to about 40% and more than 60%, respectively. Moreover, child labor is relevant even among the wealthiest households, with approximately 30% of children aged 14–17 in the top quintile reported to be working. On average across all quintiles, the likelihood of child labor exceeds 10% for children of primary school age, 30% for those aged 11–13, and 50% for adolescents aged 14–17.



(a) EMPLOYMENT AND LABOR PARTICIPATION BY AGE



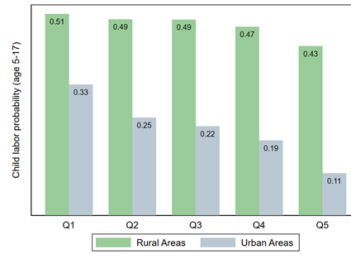
(b) SHARE OF HOUSEHOLDS WITH AT LEAST ONE WORKING CHILD BY PARENTAL WEALTH QUINTILE

Figure 5 CHILD LABOR PATTERNS

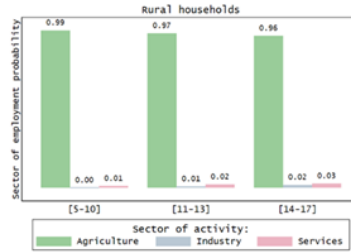
Source: Own elaboration based on IOF 2019-2020.

Figure 6 provides a brief characterization of the working children. Child labor is particularly relevant in rural areas, where agricultural work dominates, and where around half of all children aged 5-17 in the first four quintiles of the distribution are working. However, the issue is not limited to rural settings. In urban areas, one-third of children aged 5–17 from the poorest wealth quintile, and between 19% and 25% in the next three quintiles, are also engaged in labor. Also in urban areas, the main sector of employment is agriculture, while also a significant share between 20% and 29%, depending on age, work in the tertiary sector. The vast majority

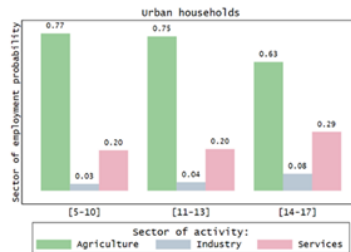
of working children are involved in unpaid labor, particularly within the family. Figure A.2 in the Online Appendix replicates Figure 6 for households surveyed before the pandemic. It suggests that households' production functions were not affected by the onset of COVID-19, particularly in rural areas, which already relied heavily on child labor and where the spread of the pandemic was more limited.



(a) CHILD LABOR IN RURAL AND URBAN AREAS



(b) SECTOR OF EMPLOYMENT AMONG RURAL WORKING CHILDREN



(c) SECTOR OF EMPLOYMENT AMONG URBAN WORKING CHILDREN



(d) FAMILY WORKER PROBABILITY

Figure 6 CHILD LABOR INCIDENCE AND FAMILY WORKERS

Source: Own elaboration based on IOF 2019-2020.

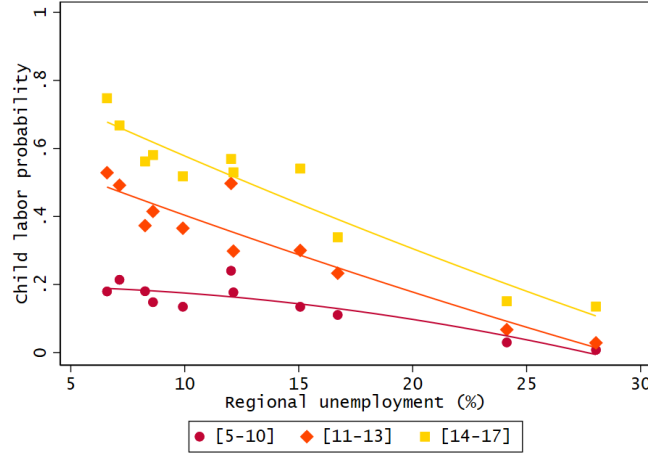
These patterns suggest that child labor is not merely a temporary coping strategy in response to adverse shocks, but rather a structural feature of household labor arrangements. Taken together with the significant inequalities in educational attainment by parental education and

wealth shown above, the findings suggest that child labor may constitute a key mechanism in the intergenerational transmission of disadvantages. Therefore, in the next sections, we first examine the relationship between child labor and adult unemployment within the household: whether children work as a response to cope with income shocks or if their employment is complementary to their parents' employment situation. Then, we evaluate how child labor practices and intergenerational mobility patterns are related.

4.2 Child labor and parental unemployment

In this subsection, we examine the relationship between child labor and adult unemployment. If children act as secondary workers, entering the labor market when household income falls due to parental job loss, we would expect a positive correlation between adult unemployment and child labor.

Figure 7 shows the relationship between unemployment rates and the percentages of child labor at the provincial level, which is the most granular geographic level of disaggregation permitted by the survey. Although purely descriptive, it reveals a clear negative correlation between unemployment and child labor, suggesting that children are less likely to work in areas with higher adult unemployment. This pattern does not confirm the hypothesis that child labor is driven by an income effect following job loss. Rather, it suggests that children share the labor opportunities with their parents, in line with the previously mentioned high share of family workers. When the labor market is depressed, children are less likely to work even though their household may have experienced adverse job or income shocks. In this sense, the opportunity cost of education appears to be a key determinant: when employment opportunities are readily available, households may find it more beneficial to allocate children's time to work rather than to school. In the Online Appendix (Figure A.3), we exclude observations from the pandemic period. The figure shows that the unconditional relationship between child labor and parental unemployment closely mirrors that in Figure 7.



(a) CHILD LABOR AND PARENTAL UNEMPLOYMENT. PROVINCIAL LEVEL

Figure 7 CHILD LABOR AND PARENTAL UNEMPLOYMENT

Source: Own elaboration based on IOF 2019-2020.

To explore these results more formally, we estimate a set of regression models at the individual level, separately for the 5-10, 11-13, and 14-17 age groups:

$$Y_{ihpm} = \alpha + \beta U_{hpm} + \tau NS_{ipm} + \phi EF_{hpm} + \rho X_{hpm} + \theta Z_{ipm} + \gamma_p + \delta_m + \gamma_p * \delta_m + \epsilon_{ihpm}. \quad (1)$$

The dependent variable Y_{ihpm} denotes whether child i living in household h in month m and province p is working. The main explanatory variable is U_{hpm} , which identifies whether one of the child's parents is employed or not. NS_{ipm} is a dummy variable identifying whether the child is not attending school. EF_{hpm} is a dummy for whether another household member (the head's partner or adult children) is currently working.⁷ X_{hpm} is a vector of household characteristics, including household wealth quintile and parental education, the age and gender of the household head, number of children, age of the youngest child, and a dummy for urban residence. Z_{ipm} denotes child-level characteristics, such as gender and age. All specifications

⁷Additional specifications also include the interaction of EF_{hpm} with UP_{hpm} .

include province (γ_p), month (δ_m), and province-by-month fixed effects ($\gamma_p * \delta_m$), with robust standard errors (ϵ_{ihpm}).

Results in Tables 3, 4, and 5 confirm the descriptive patterns shown in Figure 7.⁸ The relationship between parental unemployment and child labor is consistently negative and statistically significant across all specifications, with the magnitude of the coefficient increasing with the child's age bracket.

Additionally, when we interact parental unemployment with the educational attainment of the household head, results reveal an interesting pattern: in low-education households, parental and child labor appear to be complementary, while in high-education households, the association is weaker and there is some (weak) evidence of substitution. This result helps to explain the persistence of child labor and its close connection to intergenerational disadvantage. On top of this, results also show that, as expected, children out of school are more likely to work. Lastly, the results provide insights about labor market participation of other household members, including the spouse of the household head and siblings. The estimates show that their employment status is generally positively associated with child labor, reinforcing the idea of within-household labor complementarity rather than substitution.

Hence, in summary, these findings do not support the hypothesis that child labor is mainly a reaction to household income shocks. Children in households in which the head is unemployed are less likely to be working, suggesting that child labor is not primarily a response to parental unemployment but rather complements adult labor supply within the household. These patterns are consistent with the previously noted high incidence of family work among children mostly related to agricultural activities which employs roughly 72% of the population (Jones and Tarp, 2015).

From a policy perspective, this interpretation has important implications. If child labor and adult labor supply are complementary, simply transferring income to households may not be sufficient to reduce child labor. Rather, more effective interventions may involve policies that

⁸Robustness checks using alternative measures of parental unemployment such as being either unemployed or out of the labor market, or being unemployed or willing to work more hours yield similar results.

expand labor market opportunities for adults independent of their children, or that shift the perceived returns to education. Informing parents about the long-term benefits of schooling—an approach that has shown promise in various experimental settings—could help shift household decisions away from early labor participation and toward investment in education. In the absence of such shifts, children are likely to inherit not only their parents’ jobs but also their limited prospects for upward mobility.

Table 3 CHILD LABOR [5-10] AND PARENTAL UNEMPLOYMENT

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
	Child labor [5-10]	Child labor [5-10]	Child labor [5-10]	Child labor [5-10]	Child labor [5-10]	Child labor [5-10]
lightgray Head unemployment	-0.063	-0.099	-0.061	-0.054	-0.071	-0.038
lightgray	[0.017]***	[0.046]**	[0.019]***	[0.024]**	[0.040]*	[0.012]***
Head educ. level = 1, Incomplete Primary		0.011				
		[0.012]				
Head educ. level = 2, Complete Primary		-0.020				
		[0.016]				
Head educ. level = 3, Incomplete Secondary		-0.034				
		[0.015]**				
Head educ. level = 4, Complete Secondary or beyond		-0.055				
		[0.014]***				
Head unemployment x Education lev.= 1		-0.014				
		[0.050]				
Head unemployment x Education lev.= 2		0.085				
		[0.061]				
Head unemployment x Education lev.= 3		0.060				
		[0.051]				
Head unemployment x Education lev.= 4		0.136				
		[0.058]**				
Out of school			0.085			
			[0.041]**			
Head unemployment x Out of school			-0.235			
			[0.051]***			
Working Head's Partner				0.075		
				[0.009]***		
Head unemployment x Working Head Partner				-0.001		
				[0.043]		
Working Sibling +18					0.105	
					[0.016]***	
Head unemployment x Working Sibling +18					-0.073	
					[0.064]	
Working Sibling -18						0.354
						[0.013]***
Head unemployment x Working Sibling -18						0.168
						[0.158]
Constant	-0.290	-0.274	-0.302	-0.346	-0.254	-0.137
	[0.030]***	[0.033]***	[0.046]***	[0.033]***	[0.074]***	[0.032]***
Observations	9,080	9,019	6,469	7,205	1,890	9,080
R-squared	0.118	0.121	0.139	0.119	0.203	0.286
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Province FE	Yes	Yes	Yes	Yes	Yes	Yes
Month FE	Yes	Yes	Yes	Yes	Yes	Yes
Province x Month FE	Yes	Yes	Yes	Yes	Yes	Yes
Outcome Mean	.111	.112	.13	.108	.11	.111

Notes: parental wealth quintile, age and gender household head and whether she is a woman, number of children in the household, age of the youngest child, a dummy indicating urban areas and child's gender and age controls are included.

Robust standard errors in parenthesis. * denotes statistical significance at 10%, ** at 5%, *** at 1%.

Source: Own elaboration based on IOF 2019-2020.

Table 4 CHILD LABOR [11-13] AND PARENTAL UNEMPLOYMENT

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
	Child labor [11-13]	Child labor [11-13]	Child labor [11-13]	Child labor [11-13]	Child labor [11-13]	Child labor [11-13]
lightgray Head unemployment	-0.124	-0.305	-0.117	-0.131	0.011	-0.095
lightgray	[0.042]***	[0.079]***	[0.044]***	[0.072]*	[0.088]	[0.022]***
Head educ. level = 1, Incomplete Primary		0.051				
		[0.029]*				
Head educ. level = 2, Complete Primary		-0.026				
		[0.038]				
Head educ. level = 3, Incomplete Secondary		-0.077				
		[0.037]**				
Head educ. level = 4, Complete Secondary or beyond		-0.139				
		[0.036]***				
Head unemployment x Education lev.= 1		0.184				
		[0.110]*				
Head unemployment x Education lev.= 2		0.324				
		[0.130]**				
Head unemployment x Education lev.= 3		0.207				
		[0.095]**				
Head unemployment x Education lev.= 4		0.273				
		[0.117]**				
Out of school			0.121			
			[0.042]***			
Head unemployment x Out of school			-0.025			
			[0.113]			
Working Head's Partner				0.151		
				[0.026]***		
Head unemployment x Working Head Partner				0.080		
				[0.101]		
Working Sibling +18					0.230	
					[0.031]***	
Head unemployment x Working Sibling +18					0.083	
					[0.169]	
Working Sibling -18						0.667
						[0.018]***
Head unemployment x Working Sibling -18						0.354
						[0.065]***
Constant	-0.594	-0.575	-0.492	-0.755	-1.030	-0.163
	[0.178]***	[0.180]***	[0.184]***	[0.193]***	[0.266]***	[0.143]
Observations	3,634	3,607	3,438	2,726	1,198	3,634
R-squared	0.238	0.249	0.263	0.257	0.329	0.547
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Province FE	Yes	Yes	Yes	Yes	Yes	Yes
Month FE	Yes	Yes	Yes	Yes	Yes	Yes
Province x Month FE	Yes	Yes	Yes	Yes	Yes	Yes
Outcome Mean	.376	.376	.368	.374	.324	.376

Notes: parental wealth quintile, age and gender household head and whether she is a woman, number of children in the household, age of the youngest child, a dummy indicating urban areas and child's gender and age controls are included.

Robust standard errors in parenthesis. * denotes statistical significance at 10%, ** at 5%, *** at 1%.

Source: Own elaboration based on IOF 2019-2020.

Table 5 CHILD LABOR [14-17] AND PARENTAL UNEMPLOYMENT

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
	Child labor [14-17]	Child labor [14-17]	Child labor [14-17]	Child labor [14-17]	Child labor [14-17]	Child labor [14-17]
lightgray Head unemployment	-0.188	-0.349	-0.119	-0.138	-0.062	-0.087
lightgray	[0.057]***	[0.118]***	[0.059]**	[0.065]**	[0.070]	[0.048]*
Head educ. level = 1, Incomplete Primary		0.018				
		[0.026]				
Head educ. level = 2, Complete Primary		-0.079				
		[0.035]**				
Head educ. level = 3, Incomplete Secondary		-0.110				
		[0.036]***				
Head educ. level = 4, Complete Secondary or beyond		-0.254				
		[0.035]***				
Head unemployment x Education lev.= 1		0.111				
		[0.144]				
Head unemployment x Education lev. = 2		0.311				
		[0.183]*				
Head unemployment x Education lev. = 3		0.314				
		[0.169]*				
Head unemployment x Education lev. = 4		0.363				
		[0.129]***				
Out of school			0.151			
			[0.024]***			
Head unemployment x Out of school			-0.273			
			[0.171]			
Working Head's Partner				0.296		
				[0.026]***		
Head unemployment x Working Head Partner				-0.067		
				[0.110]		
Working Sibling +18					0.335	
					[0.027]***	
Head unemployment x Working Sibling +18					-0.156	
					[0.125]	
Working Sibling -18						0.580
						[0.019]***
Head unemployment x Working Sibling -18						0.078
						[0.146]
Constant	-0.181	-0.121	-0.096	-0.440	-0.388	-0.104
	[0.168]	[0.164]	[0.170]	[0.183]**	[0.278]	[0.149]
Observations	3,797	3,778	3,624	2,681	1,684	3,797
R-squared	0.304	0.326	0.345	0.345	0.411	0.526
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Province FE	Yes	Yes	Yes	Yes	Yes	Yes
Month FE	Yes	Yes	Yes	Yes	Yes	Yes
Province x Month FE	Yes	Yes	Yes	Yes	Yes	Yes
Outcome Mean	.512	.512	.506	.516	.439	.512

Notes: parental wealth quintile, age and gender household head and whether she is a woman, number of children in the household, age of the youngest child, a dummy indicating urban areas and child's gender and age controls are included.

Robust standard errors in parenthesis. * denotes statistical significance at 10%, ** at 5%, *** at 1%.

Source: Own elaboration based on IOF 2019-2020.

4.3 Child labor and intergenerational mobility

In the previous subsection, we showed that child labor in Mozambique often reflects a structural arrangement within households, where children's work complements that of other family members. Building on this finding, we now explore whether such labor arrangements constitute a barrier to intergenerational upward mobility. Specifically, in this subsection we evaluate whether households with adult children who have experienced higher degrees of upward mobility also show a lower probability to have younger children engaged in labor activities, rather than in education. In order to explore this, we use information on both co-resident and non co-resident adult children and define mobility as the relative educational improvement of adult children compared to their parents. For non-co-resident children, we leverage retrospective data from the IOF transfer module, allowing us to construct consistent mobility measures.

The analysis is carried out estimating the following model:

$$Y_{hcpm} = \alpha + \beta M_{hpm} + \tau UP_{hpm} + \phi Tr_{hpm} + \rho X_{hpm} + \rho Z_{hpm} + \eta_c + \gamma_p + \delta_m + \gamma_p * \delta_m + \epsilon_{hcpm}. \quad (2)$$

The dependent variable (Y_{hcpm}) indicates whether the household h with an adult child from cohort c surveyed in month m in province p has at least one working child aged 5-17. M_{hpm} represents the individual degree of educational mobility of the adult child, our main regressor of interest, computed as the absolute improvement (in years of schooling) with respect to their parents. UP_{hpm} is a dummy indicating whether the household head is unemployed; Tr_{hpm} whether the household receives transfers from non co-resident adult children (or the amount received). Some specifications also include the interaction of these variables with M . X_{hpm} is a vector of household characteristics such as the education, gender and age of the household head, and wealth quintile. Z_{hpm} includes characteristics of the adult child such as gender, age, and whether they are co-resident. All specifications also include adult children's cohort (η_c) province (γ_p), month (δ_m) and province by month ($\gamma_p * \delta_m$) and robust standard errors (ϵ_{hcpm}).

Results in Tables 6, 7 and 8 show a strong and negative association between the upward mobility of adult children and their younger siblings' likelihood to work. We use three different

measures for mobility. The first, M2, captures the average directional change in years of schooling between adult children and the household head. The second and the third are binary indicators indicating whether the adult child have completed at least primary and secondary education, respectively.⁹ In all cases, households which exhibit higher levels of educational mobility are less likely to have children engaged in labor, suggesting potential spillover effects of mobility on younger siblings. Thus early work decisions seem not to be isolated choices, but part of broader household trajectories. Spillovers may arise from several unobservable mechanisms such as parental aspirations or learning of the value of education but also from transfers received by the household from the upwardly mobile adult child.

Interestingly, despite the strong negative relationship between child labor and parental wealth documented above, Tables 6, 7 and 8 show that mobility is particularly effective in reducing the incidence of child labor among households from lower wealth quintiles despite having the opposite relationship in the lower end of the wealth distribution. This result further supports the idea of positive spillovers from older to younger siblings. On the contrary, we do not find a statistically significant differential relationship between mobility and child labor by parental education. Figure 8 furthermore shows that the relationship between mobility and child labor is not significantly different among sons and daughters, while it is statistically relevant for children living in urban households only.

In order to analyze the role of income effects, Tables 6, 7 and 8 include the interaction between educational mobility and parental unemployment, as well as monetary transfers from non co-resident adult children as further control variable. The results show that the interaction between mobility, particularly measured by the indicator of whether the child completed either primary or secondary education, and parental unemployment shows a significant and positive coefficient, suggesting that mobility may help decouple children's opportunities from their parents' labor market outcomes.

⁹Results are robust to alternative definitions of intergenerational mobility, such as M1 (simple average difference between parental and children education, regardless of the direction) and relative to children education M1 and M2 measures. Further results evaluating child labor probability at different age brackets show an increasing relationship between mobility and child labor with age.

In columns (5) and (6) from Tables 6, 7 and 8 we examine the role of monetary transfers to the household. If financial support from upwardly mobile children would play a significant role, we would expect a negative association between these transfers and child labor. Our results show a more nuanced picture. While a binary indicator for whether the household receives transfers is not significantly associated with child labor, the intensive margin tells a different story: among those that receive a transfer, the amount of the transfer is negatively associated with the likelihood of child labor. Hence, we find some support for the income effect hypothesis as well, at least at the intensive margin. However, the generally limited role of transfers is striking, considering that non co-resident children are more likely to come from less educated and poorer families, as shown in Table 1, thus providing further evidence suggesting that child labor is highly related to labor complementarities between children and parents rather than to income-related reasons. This evidence, however, suggests that social transfers could be useful in breaking low-mobility and poverty traps. Moreover, when comparing these adult children's transfers with World Bank reports (The World Bank, 2021) on social transfers, particularly the main program, the Basic Social Assistance (PSSB), it comes up that the PSSB has a relatively low coverage. While transfers from children in our survey reach around 524,000 households, the PSSB covers nearly 442,000. In addition, the PSSB provides an individual benefit of approximately 1,000 Meticaís, while the median transfer from older children's households nearly doubles this amount. Following our results, a broader and more generous social transfer system could help break the cycle of low mobility and poverty

Table 6 INTERGENERATIONAL MOBILITY (M2) AND CHILD LABOR [5-17]

VARIABLES	(1) Child labor [5-17]	(2) Child labor [5-17]	(3) Child labor [5-17]	(4) Child labor [5-17]	(5) Child labor [5-17]	(6) Child labor [5-17]
lightgray Mobility (M2)	-0.010*** (0.003)	-0.014*** (0.005)	-0.004 (0.007)	-0.012*** (0.003)	-0.019*** (0.003)	-0.024*** (0.005)
lightgray Parental Educ. = Incomp. Primary	0.032 (0.024)	-0.002 (0.024)	0.028 (0.024)	0.046* (0.025)	0.050* (0.028)	0.012 (0.045)
Parental Educ. = Comp. Primary	-0.032 (0.034)	-0.042 (0.048)	-0.039 (0.034)	-0.033 (0.036)	0.024 (0.044)	-0.083 (0.083)
Parental Educ. = Incomp. Secondary	-0.144*** (0.035)	-0.165*** (0.045)	-0.147*** (0.034)	-0.147*** (0.036)	-0.172*** (0.045)	-0.101 (0.080)
Parental Educ. = Comp. Secondary or more	-0.178*** (0.039)	-0.199*** (0.046)	-0.170*** (0.039)	-0.190*** (0.041)	-0.117*** (0.049)	-0.108 (0.089)
Parental Educ. = Incomp. Primary × Mobility (M2)		0.008 (0.006)				
Parental Educ. = Comp. Primary × Mobility (M2)		-0.004 (0.009)				
Parental Educ. = Incomp. Secondary × Mobility (M2)		-0.003 (0.008)				
Parental Educ. = Comp. Secondary or more × Mobility (M2)		0.005 (0.008)				
Quintil 2	-0.037 (0.032)	-0.035 (0.032)	0.009 (0.040)	-0.069** (0.033)	0.078* (0.044)	0.160** (0.070)
Quintil 3	-0.030 (0.031)	-0.029 (0.031)	-0.013 (0.040)	-0.048 (0.032)	0.019 (0.046)	0.079 (0.076)
Quintil 4	-0.062*** (0.031)	-0.060* (0.031)	-0.044 (0.040)	-0.082*** (0.032)	0.107*** (0.043)	0.147*** (0.069)
Quintil 5	-0.082** (0.032)	-0.078** (0.032)	-0.081** (0.041)	-0.105*** (0.034)	-0.010 (0.043)	-0.011 (0.074)
Quintil 2 × Mobility (M2)			-0.017** (0.008)			
Quintil 3 × Mobility (M2)			-0.006 (0.008)			
Quintil 4 × Mobility (M2)			-0.007 (0.008)			
Quintil 5 × Mobility (M2)			-0.001 (0.008)			
Unemployed Head=1				-0.138*** (0.049)		
Unemployed Head=1 × Mobility (M2)				0.005 (0.010)		
Transfer from older children=1					-0.024 (0.022)	
Transfer amount (log.)						-0.030** (0.013)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Cohort FE	Yes	Yes	Yes	Yes	Yes	Yes
Month FE	Yes	Yes	Yes	Yes	Yes	Yes
Province FE	Yes	Yes	Yes	Yes	Yes	Yes
Month x Province FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	7175	7175	7175	6565	2975	1081
Average	.375	.375	.375	.397	.446	.402

Notes: head's education, gender and age, household wealth quintile as well adult child's gender, age, and co-resident status controls are included. Robust standard errors in parenthesis. * denotes statistical significance at 10%, ** at 5%, *** at 1%.

Source: Own elaboration based on IOF 2019-2020.

Table 7 INTERGENERATIONAL MOBILITY (COMPLETED PRIMARY) AND CHILD LABOR [5-17]

VARIABLES	(1) Child labor [5-17]	(2) Child labor [5-17]	(3) Child labor [5-17]	(4) Child labor [5-17]	(5) Child labor [5-17]	(6) Child labor [5-17]
lightgray At least compl. primary	-0.080*** (0.021)	-0.097*** (0.037)	0.080 (0.052)	-0.078*** (0.022)	-0.134*** (0.023)	-0.127*** (0.039)
lightgray Parental Educ. = Incomp. Primary	0.066*** (0.023)	0.054 (0.034)	0.058** (0.023)	0.080*** (0.025)	0.110*** (0.027)	0.090** (0.043)
Parental Educ. = Comp. Primary	0.029 (0.033)	0.006 (0.058)	0.026 (0.033)	0.033 (0.034)	0.144*** (0.042)	0.070 (0.081)
Parental Educ. = Incomp. Secondary	-0.063** (0.030)	-0.035 (0.065)	-0.066** (0.030)	-0.062* (0.032)	-0.024 (0.041)	0.081 (0.075)
Parental Educ. = Comp. Secondary or more	-0.051* (0.031)	-0.056 (0.068)	-0.050 (0.031)	-0.051 (0.033)	0.083** (0.040)	0.130* (0.075)
Parental Educ. = Incomp. Primary × At least compl. primary		0.026 (0.045)				
Parental Educ. = Comp. Primary × At least compl. primary		0.039 (0.070)				
Parental Educ. = Incomp. Secondary × At least compl. primary		-0.025 (0.073)				
Parental Educ. = Comp. Secondary or more × At least compl. primary		0.015 (0.074)				
Quintil 2	-0.032 (0.032)	-0.031 (0.032)	0.092** (0.044)	-0.065* (0.034)	0.087* (0.045)	0.168** (0.071)
Quintil 3	-0.018 (0.032)	-0.017 (0.032)	0.068 (0.046)	-0.040 (0.033)	0.029 (0.046)	0.079 (0.076)
Quintil 4	-0.052* (0.031)	-0.051* (0.031)	0.021 (0.045)	-0.075** (0.032)	0.117*** (0.043)	0.148** (0.070)
Quintil 5	-0.083** (0.032)	-0.082** (0.032)	0.019 (0.056)	-0.112*** (0.034)	-0.007 (0.044)	-0.030 (0.075)
Quintil 2 × At least compl. primary			-0.280*** (0.064)			
Quintil 3 × At least compl. primary			-0.194*** (0.064)			
Quintil 4 × At least compl. primary			-0.172*** (0.061)			
Quintil 5 × At least compl. primary			-0.206*** (0.068)			
Unemployed Head=1				-0.315*** (0.099)		
Unemployed Head=1 × At least compl. primary				0.239** (0.106)		
Transfer from older children=1					-0.028 (0.022)	
Transfer amount (log.)						-0.036*** (0.013)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Cohort FE	Yes	Yes	Yes	Yes	Yes	Yes
Month FE	Yes	Yes	Yes	Yes	Yes	Yes
Province FE	Yes	Yes	Yes	Yes	Yes	Yes
Month x Province FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	6895	6895	6895	6310	2975	1081
Average	.385	.385	.385	.408	.446	.402

Notes: head's education, gender and age, household wealth quintile as well adult child's gender, age, and co-resident status controls are included.

Robust standard errors in parenthesis. * denotes statistical significance at 10%, ** at 5%, *** at 1%.

Source: Own elaboration based on IOF 2019-2020.

Table 8 INTERGENERATIONAL MOBILITY (COMPLETED SECONDARY) AND CHILD LABOR [5-17]

VARIABLES	(1) Child labor [5-17]	(2) Child labor [5-17]	(3) Child labor [5-17]	(4) Child labor [5-17]	(5) Child labor [5-17]	(6) Child labor [5-17]
lightgray At least compl. secondary	-0.088*** (0.021)	-0.179*** (0.049)	0.191** (0.083)	-0.097*** (0.023)	-0.148*** (0.025)	-0.155*** (0.040)
lightgray Parental Educ. = Incomp. Primary	0.059*** (0.023)	0.051** (0.024)	0.057** (0.023)	0.077*** (0.024)	0.100*** (0.027)	0.083* (0.043)
Parental Educ. = Comp. Primary	0.023 (0.032)	0.032 (0.038)	0.021 (0.032)	0.031 (0.034)	0.133*** (0.042)	0.062 (0.081)
Parental Educ. = Incomp. Secondary	-0.066** (0.030)	-0.062* (0.035)	-0.069** (0.030)	-0.059* (0.032)	-0.025 (0.041)	0.090 (0.075)
Parental Educ. = Comp. Secondary or more	-0.038 (0.032)	-0.102** (0.043)	-0.040 (0.031)	-0.033 (0.033)	0.107** (0.042)	0.164** (0.076)
Parental Educ. = Incomp. Primary × At least compl. secondary		0.113* (0.059)				
Parental Educ. = Comp. Primary × At least compl. secondary		0.035 (0.065)				
Parental Educ. = Incomp. Secondary × At least compl. secondary		0.064 (0.061)				
Parental Educ. = Comp. Secondary or more × At least compl. secondary		0.177*** (0.064)				
Quintil 2	-0.034 (0.032)	-0.034 (0.032)	0.000 (0.034)	-0.067* (0.034)	0.085* (0.045)	0.182*** (0.070)
Quintil 3	-0.023 (0.032)	-0.023 (0.031)	0.009 (0.033)	-0.045 (0.033)	0.024 (0.046)	0.088 (0.075)
Quintil 4	-0.056* (0.031)	-0.054* (0.031)	-0.040 (0.033)	-0.078** (0.032)	0.110** (0.043)	0.155** (0.070)
Quintil 5	-0.081** (0.033)	-0.082** (0.033)	-0.068* (0.036)	-0.110*** (0.035)	-0.009 (0.044)	-0.011 (0.076)
Quintil 2 × At least compl. secondary		-0.426*** (0.096)				
Quintil 3 × At least compl. secondary		-0.377*** (0.094)				
Quintil 4 × At least compl. secondary		-0.270*** (0.090)				
Quintil 5 × At least compl. secondary		-0.271*** (0.087)				
Unemployed Head=1				-0.179*** (0.054)	-0.034 (0.022)	
Unemployed Head=1 × At least compl. secondary				0.125** (0.059)		
Transfer from older children=1						
Transfer amount (log.)						-0.035*** (0.013)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Cohort FE	Yes	Yes	Yes	Yes	Yes	Yes
Month FE	Yes	Yes	Yes	Yes	Yes	Yes
Province FE	Yes	Yes	Yes	Yes	Yes	Yes
Month x Province FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	6895	6895	6895	6310	2975	1081
Average	.385	.385	.385	.408	.446	.402

Notes: head's education, gender and age, household wealth quintile as well adult child's gender, age, and co-resident status controls are included.

Robust standard errors in parenthesis. * denotes statistical significance at 10%, ** at 5%, *** at 1%.

Source: Own elaboration based on IOF 2019-2020.

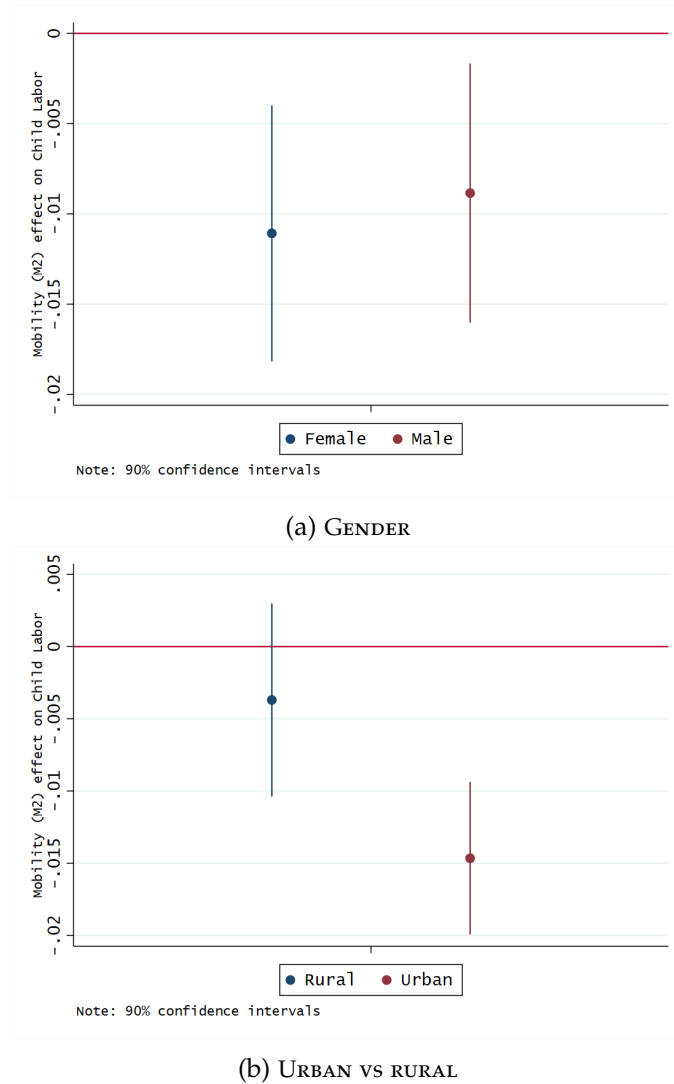


Figure 8 INTERGENERATIONAL MOBILITY (M2) AND CHILD LABOR [5-17] BY GENDER AND URBAN VS. RURAL

Source: Own elaboration based on IOF 2019-2020.

5 Concluding Remarks

This paper provides new evidence on the dynamics of intergenerational mobility in Mozambique and highlights the role of child labor as a structural barrier to upward mobility. We show that children's work often complements that of their parents, especially as family workers, limiting educational investments and the potential for improving their socio-economic situation.

Our results also show that upward mobility among older children is associated with a reduced likelihood of child labor within the same household, pointing to important spillover effects among siblings. These patterns are not fully explained by income transfers, reinforcing the idea that early labor decisions are embedded in broader household trajectories rather than short-term financial needs.

Overall, our findings underscore the importance of tailored policies that decouple children's opportunities from their parents' by expanding access to quality education, increasing the information about the value of schooling, and disrupting the intergenerational link between child labor and poverty.

References

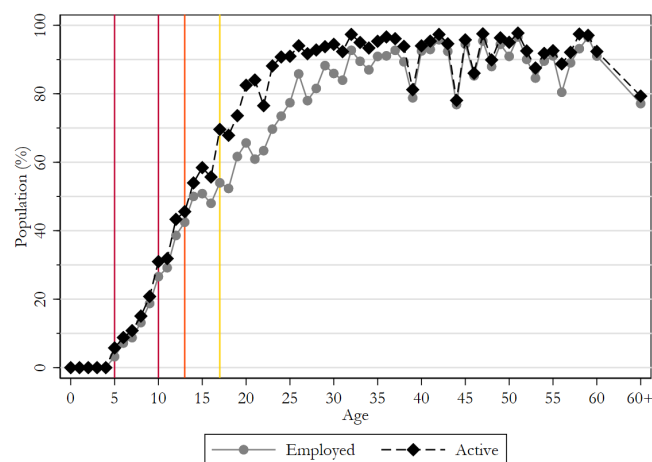
- Alesina, A., Hohmann, S., Michalopoulos, S., and Papaioannou, E. (2021). Intergenerational mobility in africa. *Econometrica*, 89(1):1–35.
- Bargain, O. and Boutin, D. (2021). Minimum age regulation and child labor: New evidence from brazil. *The World Bank Economic Review*, 35(1):234–260.
- Barletta, G., Ibraimo, M., Salvucci, V., Sarmento, E., and Tarp, F. (2022). The evolution of inequality in mozambique. Technical report, WIDER Working paper 2022/151.
- Basu, K. (2005). Child labor and the law: Notes on possible pathologies. *Economics Letters*, 87(2):169–174.
- Basu, K., Das, S., and Dutta, B. (2010). Child labor and household wealth: Theory and empirical evidence of an inverted-u. *Journal of development economics*, 91(1):8–14.
- Basu, K. and Van, P. H. (1998). The economics of child labor. *American economic review*, pages 412–427.
- Bharadwaj, P., Lakdawala, L. K., and Li, N. (2020). Perverse consequences of well intentioned regulation: Evidence from india's child labor ban. *Journal of the European Economic Association*, 18(3):1158–1195.

- Black, S. E. and Devereux, P. J. (2011). Recent developments in intergenerational mobility. *Handbook of labor economics*, 4:1487–1541.
- Brunori, P., Ferreira, F., and Neidhöfer, G. (2024). Inequality of opportunity and intergenerational persistence in latin america. *Oxford Open Economics*.
- Cardona, M. and Jones, S. (2021). How far does the apple really fall from the tree? practical guidance on measuring intergenerational mobility from a simulation framework. Technical report, WIDER Working Paper.
- Cardona-Sosa, L., Flórez, L. A., Morales, L. F., and de la República, B. (2018). How does the household labour supply respond to the unemployment of the household head? *Labour*, 32(4):174–212.
- Cerutti, P., Crivellaro, E., Reyes, G., and Sousa, L. D. (2019). Hit and run? income shocks and school dropouts in latin america. *Labour*, 33(4):533–566.
- Ciaschi, M. and Neidhöfer, G. (2024). Job loss and household labor supply adjustments in developing countries: Evidence from argentina. *The World Bank Economic Review*, 38(3):558–579.
- De Hoop, J., Groppo, V., and Handa, S. (2020). Cash transfers, microentrepreneurial activity, and child work: evidence from malawi and zambia. *The World Bank Economic Review*, 34(3):670–697.
- Di Maio, M. and Nisticò, R. (2019). The effect of parental job loss on child school dropout: Evidence from the occupied palestinian territories. *Journal of Development Economics*, 141:102375.
- Duryea, S., Lam, D., and Levison, D. (2007). Effects of economic shocks on children’s employment and schooling in brazil. *Journal of development economics*, 84(1):188–214.
- Edmonds, E. V. and Schady, N. (2012). Poverty alleviation and child labor. *American Economic Journal: Economic Policy*, 4(4):100–124.
- Emerson, P. M., Ponczek, V., and Souza, A. P. (2017). Child labor and learning. *Economic Development and Cultural Change*, 65(2):265–296.

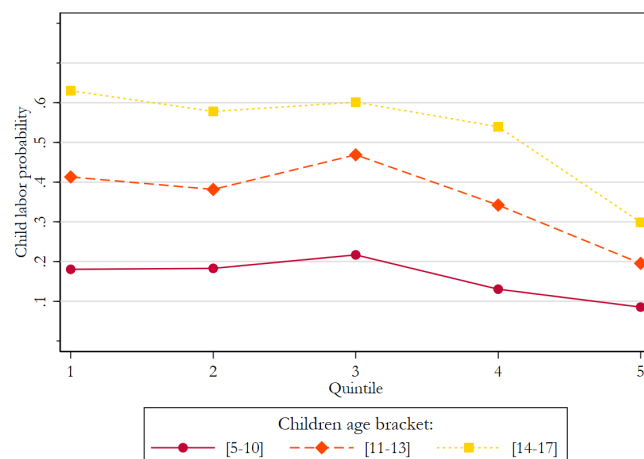
- Emran, M. S., Greene, W., and Shilpi, F. (2018). When measure matters: Coresidency, truncation bias, and intergenerational mobility in developing countries. *Journal of Human Resources*, 53(3):589–607.
- Emran, M. S. and Shilpi, F. (2021). Economic approach to intergenerational mobility: Measures, methods, and challenges in developing countries. In *Social mobility in developing countries*, pages 197–220. Oxford University Press.
- GC Britto, D., Melo, C., and Sampaio, B. (2021). The kids aren’t alright: Parental job loss and children’s education in brazil. *Caíque and Sampaio, Breno, The Kids Aren’t Alright: Parental Job Loss and Children’s Education in Brazil (November 24, 2021)*.
- Heckman, J. J. and Mosso, S. (2014). The economics of human development and social mobility. *Annu. Rev. Econ.*, 6(1):689–733.
- Hertz, T., Jayasundera, T., Piraino, P., Selcuk, S., Smith, N., and Verashchagina, A. (2008). The inheritance of educational inequality: International comparisons and fifty-year trends. *The BE Journal of Economic Analysis & Policy*, 7(2).
- Hsieh, C.-T., Hurst, E., Jones, C. I., and Klenow, P. J. (2019). The allocation of talent and us economic growth. *Econometrica*, 87(5):1439–1474.
- Jones, S. and Tarp, F. (2015). Understanding mozambique’s growth experience through an employment lens. Technical report, WIDER Working Paper.
- Keane, M., Krutikova, S., and Neal, T. (2022). Child work and cognitive development: Results from four low to middle income countries. *Quantitative Economics*, 13(2):425–465.
- Koenings, F. and Schwab, J. (2025). Accounting for intergenerational educational immobility in low-and middle-income countries. *Journal of Human Resources*.
- Marrero, G. A. and Rodríguez, J. G. (2013). Inequality of opportunity and growth. *Journal of development Economics*, 104:107–122.
- Neidhöfer, G., Ciaschi, M., Gasparini, L., and Serrano, J. (2024). Social mobility and economic development. *Journal of Economic Growth*, 29(2):327–359.

- Oryioe, A. R., Alwang, J., and Tideman, N. (2017). Child labor and household land holding: Theory and empirical evidence from zimbabwe. *World Development*, 100:45–58.
- Ouedraogo, R. and Syrichas, N. (2021). *Intergenerational social mobility in Africa since 1920*. International Monetary Fund.
- Razzu, G. and Wambile, A. (2022). Four decades of intergenerational educational mobility in sub-saharan africa. *The Journal of Development Studies*, 58(5):931–950.
- Salvucci, V. and Tarp, F. (2021). Estimating poverty transitions in mozambique using synthetic panels. Technical report, WIDER Working Paper 2021/26. Helsinki: UNU-WIDER.
- Santos, A. and Portela, A. (2025). Child labor and intergenerational mobility of income: Evidence from brazil. *Mimeo*.
- The World Bank (2021). Mozambique - social protection for economic resilience project.
- Unicef et al. (2021). *Child labour: Global estimates 2020, trends and the road forward*. International Labour Organization (ILO).
- UNU-WIDER (2025). Intergenerational social mobility in mozambique: Insights from the vulnerable lives survey 2024. *Helsinki: UNU-WIDER*.
- Van der Weide, R., Lakner, C., Mahler, D. G., Narayan, A., and Gupta, R. (2024). Intergenerational mobility around the world: A new database. *Journal of Development Economics*, 166:103167.

A Online appendix



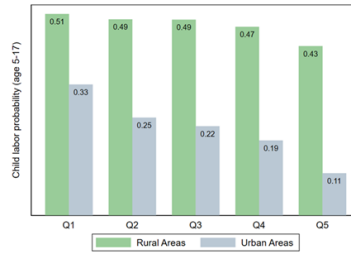
(a) EMPLOYMENT AND LABOR PARTICIPATION BY AGE



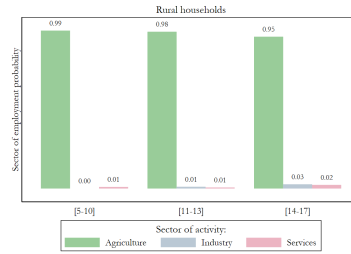
(b) SHARE OF HOUSEHOLDS WITH AT LEAST ONE WORKING CHILD BY PARENTAL WEALTH QUINTILE

Figure A.1 CHILD LABOR PATTERNS

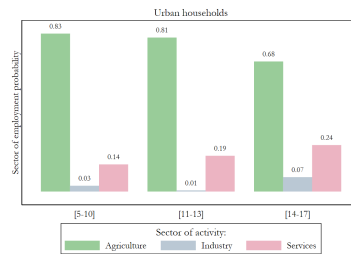
Source: Own elaboration based on IOF 2019-2020. Only households surveyed in March 2020 or before were considered.



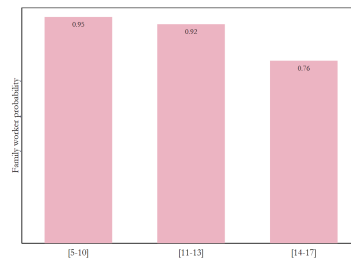
(a) CHILD LABOR IN RURAL AND URBAN AREAS



(b) SECTOR OF EMPLOYMENT AMONG RURAL WORKING CHILDREN



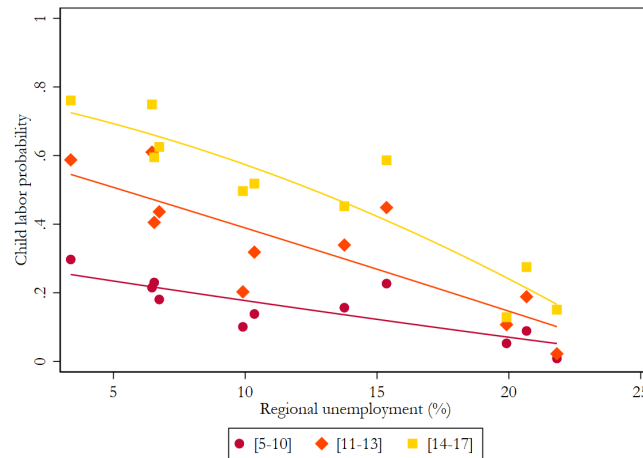
(c) SECTOR OF EMPLOYMENT AMONG URBAN WORKING CHILDREN



(d) FAMILY WORKER PROBABILITY

Figure A.2 CHILD LABOR INCIDENCE AND FAMILY WORKERS

Source: Own elaboration based on IOF 2019-2020. Only households surveyed in March 2020 or before were considered.



(a) CHILD LABOR AND PARENTAL UNEMPLOYMENT. PROVINCIAL LEVEL

Figure A.3 CHILD LABOR AND PARENTAL UNEMPLOYMENT

Source: Own elaboration based on IOF 2019-2020. Only households surveyed in March 2020 or before were considered.