

# Paternal migration and schooling choices. A study on children left behind in Ecuador

## PROBLEM

- Migration can positively affect development through remittances, but its impact on children—especially those left behind—is still debated and unclear.
- Children left behind by migrant parents often face disrupted family structures, with limited data on their exact numbers or conditions.
- While remittances can enhance educational investment, parental absence may offset these benefits, especially depending on which parent migrates.
- There is limited and contradictory evidence on how paternal migration affects children’s education in Latin America.

## GENERAL OBJECTIVE

- Estimate the causal effect of paternal migration on schooling choices among children left behind in Ecuador.
- Examine how remittances from migrant fathers influence educational investment, particularly in low-income households.

## DATA

- Household-level data from the 2006 Life Conditions Survey (ECV), organized by the National Institute of Statistics and Census (INEC) of Ecuador.
- Life conditions five to six years after a period of massive migration in Ecuador (around the year 2000).

## METHODS

- Potential outcome framework used to estimate the Average Treatment effect on the Treated (ATT) as an iterative averaging procedure written as:

$$\tau_{treat}$$
$$= \mathbb{E}[\mathbb{E}(Y_i(1)|, e(X_i), W_i = 1) - \mathbb{E}(Y_i(0)|, e(X_i), W_i = 0)|, W_i = 1]$$

Where  $e(X_i) = \mathbb{E}(W_i|X_i = x)$   
 $= Pr(W_i = 1|X_i = x)$

- $\tau_{treat}$  : is the effect of having migrant parent in those children whose parented migrated.
- $e(X_i)$  : is the propensity score.
- $W_i = 1$ : if a child has a migrant father.
- Identification relies on unconfoundedness and common support assumptions.
- Trimming applied to ensure overlap and improve internal validity.
- ATT estimated on trimmed sample using bias-adjusted matching and blocking estimators.

## RESULTS

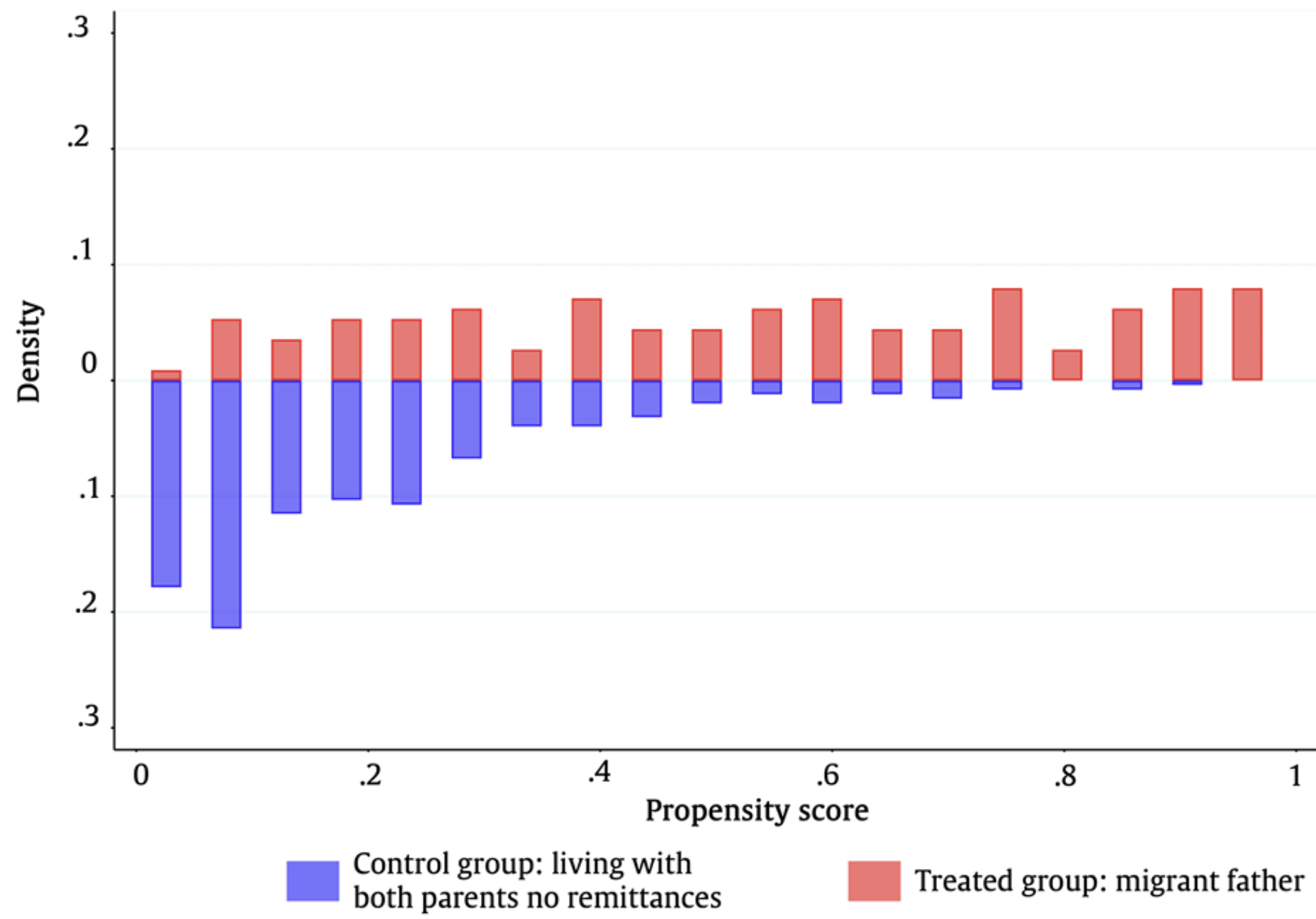


Figure 1. Distribution of the Propensity Score form Specification (1) between the treated and control group in the trimmed sample.

Table 1. Estimations of ATT for Paternal Migration and Receiving Remittances.

Treatment	Private School (Matching)	Private School (Blocking)	Monthly Tuition (Matching)	Monthly Tuition (Blocking)
Migrant father	0.194*** (0.045)	0.159** (0.076)	6.26*** (1.19)	4.52** (2.26)
Remittances (relatives)	0.103** (0.047)	0.108** (0.047)	0.62 (4.53)	3.69 (3.45)
Father absence due to migration	-0.009 (0.046)	0.059 (0.12)	0.49 (2.26)	5.97* (3.21)

Table 2. Estimation of ATT Subsample Children Living in Household of the Two Highest Quintiles

Outcome / Estimator	Migrant Father	Remittances (Relatives)
Private School (Matching)	0.194*** (0.045)	0.056 (0.052)
Private School (Blocking)	0.159** (0.076)	0.021 (0.061)
Monthly Tuition (Matching)	6.26*** (1.19)	1.18 (4.86)
Monthly Tuition (Blocking)	4.52** (2.26)	-0.98 (3.87)

## CONCLUSIONS

- The effect of the remittance send by the father on the children’s probability to attend to a private school and the amount spend in school tuition is positive and significant.
- The father migration impacts school investment particularly among children living in low-income households.
- The absence of the father due to migration does not have a negative impact on years of schooling or on the age-for-grade variable.
- The results confirms the relevance of the father as the remittance sender, particularly, among children of low-income households.