

# An analysis of school dropout in Mozambique, 2014-15

Felix Mambo (UNU-WIDER), Vincenzo Salvucci (University of Copenhagen) and Ricardo Santos (UNU-WIDER)



# Context and motivation



- High economic growth rates experienced until 2015 (~7%)
- High poverty rates (~46%)
- Literature shows high correlation between poverty and education status
- School participation improved a lot (but kids out of school stagnating at ~12%)
- Dropout rates still pretty high (~550,000 PS pupils abandoned school in 2017)
- Important to study and inform policy

# Context and motivation



- Surge in primary and secondary school enrolments (for primary ~97%)
  - Abolition of school fees in 2003/04
  - Direct support to schools and free textbooks
  - Investments in classroom construction and teachers recruitment
- But most children are still not completing primary education
  - Primary completion rates stagnating at ~46% over the past years
  - Persistent high rates of primary school dropout and repetition

# Context and motivation



- Mozambique's Minister of Education and Human Development, Conceição Sortane:
  - *"From 2007 to 2016, students who complete seven years of schooling annually represent only 45.6% on average. And only 30% of the students who enter 1<sup>st</sup> grade annually complete the 7<sup>th</sup> grade in seven years".*
  - *"Only last year about 550,000 primary school pupils stopped going to school as failure rates were also at alarming levels. In the 10th class, for example, the failure rates in the last five years were 46 percent on average".*

(April 28, 2018 – APA News-Maputo)

# Context and motivation

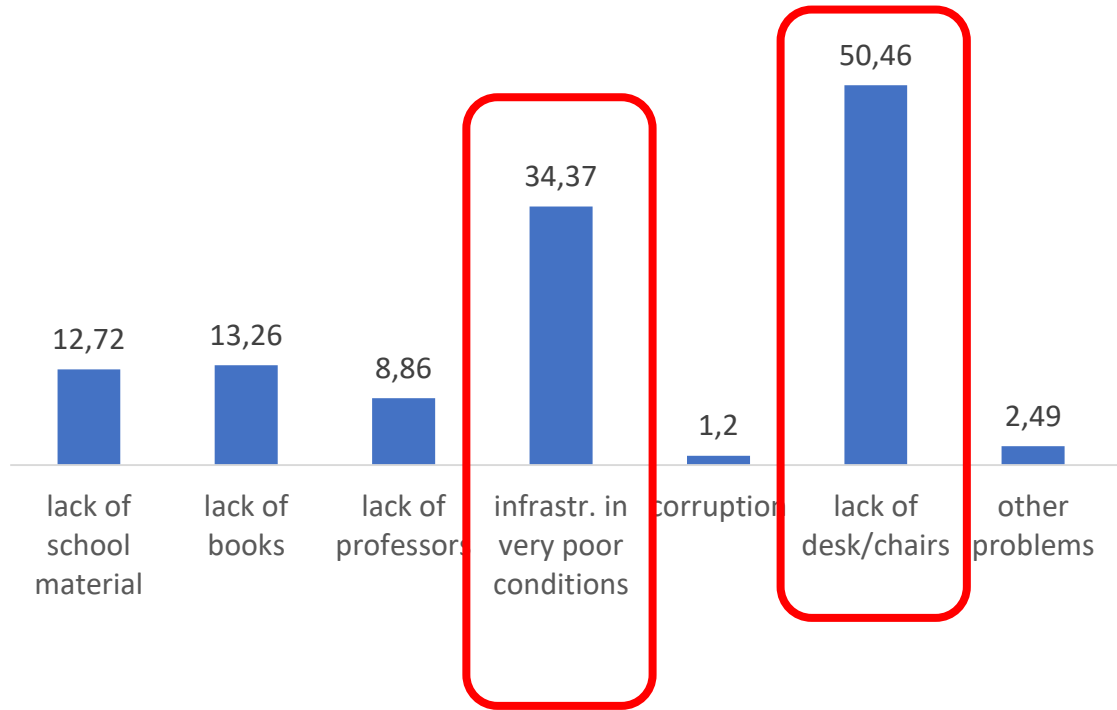


- Infrastructures/teachers concerns
  - Large-scale construction of classrooms, but 45% of primary school classrooms are still in precarious conditions
  - Government contracted thousands of new teachers annually, but the ratio of teacher to student in the early grades of primary schools are ~1:63
  - Almost half (45%) of teachers were not in school during an unannounced visit
- Quality of teaching among the concerns
  - On average fewer than 1:10 children in grade 3 have basic reading competencies
  - Only 65% of math teachers could perform the calculation '86 – 55' correctly
  - Teacher absenteeism, low capacity, school management, the use of Portuguese, etc.

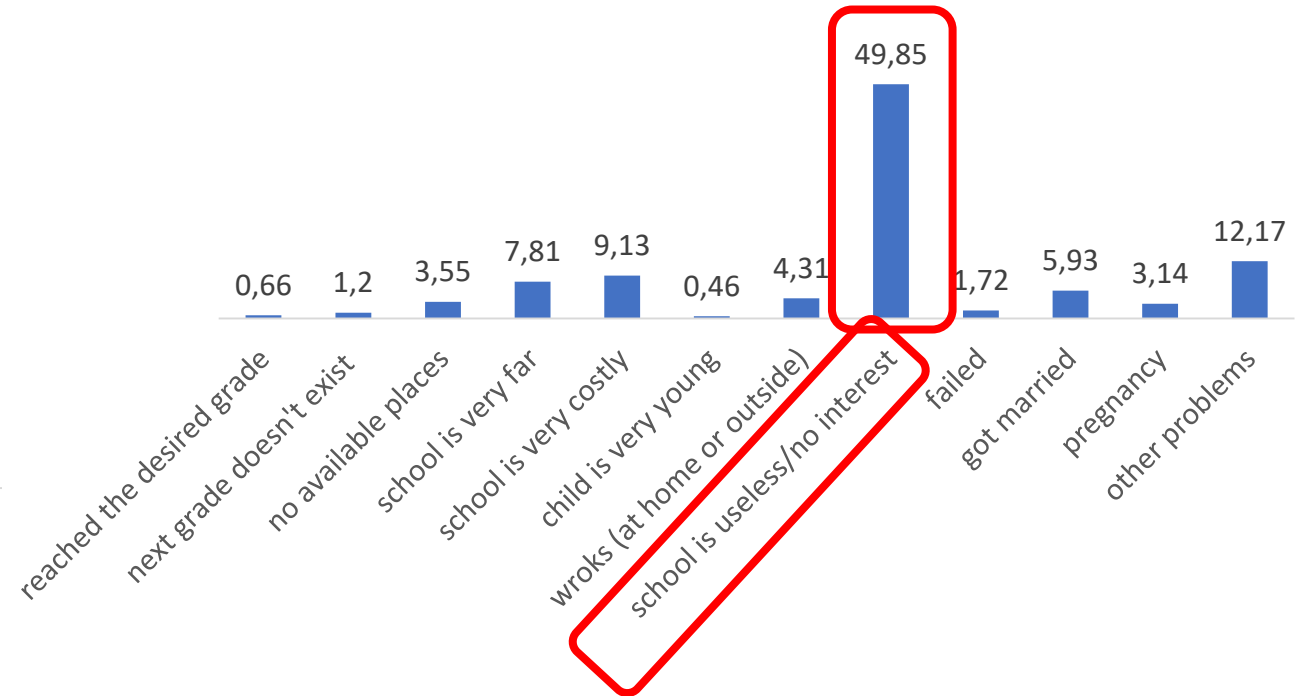
# Context and motivation



Does your school have any of these problems?



Why aren't you at school?



Both supply- and demand-side issues

# This paper



- Analysis of correlates of dropout
- Using 2014/15 household budget survey (repeated interviews)
  - We know whether a child has ever been at school and is not at school now (dropout at any point in time)
  - We know whether a child is at school during August-November 2014 (last school quarter in the Mozambican school system) and not at school in the first and third quarter of the subsequent school year (corresponding to the second and fourth survey quarters) (dropout 2014/15)
- Pooled and fe reg
  - Pooled (dropout at any point in time)
  - Fe (dropout 2014/15)
- Psm using rural community survey module with info on infrastructures/facilities and social protection

# Main results



- Age, child labour, household head's gender and education, access to services and durable goods, distance to school seem to be associated with the probability of dropout
- If a girl gets married or pregnant → higher probability of dropout
- For rural communities, building/renovating a school, a water facility, or setting up a social protection programme can have an effect on reducing the probability of dropping out



# Methodology



- About 19,000 kids in 3 quarters
- Pooled reg
  - Dep var is dropout at any point in time
- FE panel reg
  - Dep var is dropout in 2014/15
- PSM
  - Only rural communities, ATT, school built/renovated, water/electricity/road/health facility built/renovated, or social protection programme in place

# Results

- Pooled reg
  - Dep var: dropout at any point in time
- FE panel reg
  - Dep var: dropout in 2014/15

	Dropout	Dropout 14/15
Age	+	
Birth order	-	
Orphan		+ (2%)
Mother/father not in HH	+	+ (5%)
Child works	+	+ (2%)
Late	+	+ (6%)
Marriage	+	+ (4%)
Pregnancy	+	+ (23%)
HH Female	-	
HH educ	-	
Sanitation	-	
Electricity	-	
Distance to school	+	

# Results



ATT	Dropout	Dropout 14/15
School built/renovated	-0.02***	-0.00
Water facility built/renovated	-0.03***	0.01
Electricity facility built/renovated	-0.01*	-0.01*
Social protection programme	-0.03***	-0.02***
Road facility built/renovated	-0.00	-0.00
Health facility built/renovated	-0.01	-0.01***

- PSM
  - Only rural communities

# Conclusions



- Child age, child labour, household head's gender and education, access to services and distance to school seem to be particularly associated with the probability of dropout
- Early marriage and especially teen pregnancy greatly linked with higher probability of dropout
  - Teen pregnancy ~20pp
- Building a new school or renovating an existing one, building or improving a water facility, or setting up a social protection programme can have an effect on reducing the probability of dropping out

# Policy recommendations



- Some evidence that building/renovating some facilities/infrastructures (school/water) has more effect than building others
- Social protection programmes: improve, expand?
- Early marriage, teen pregnancy: a lot has been done, but slow progress in both in recent years
- Supply side: improving quality of education is key at this point