Inequity in Transition from primary to secondary education in sub-Saharan Africa: Example from Kenya

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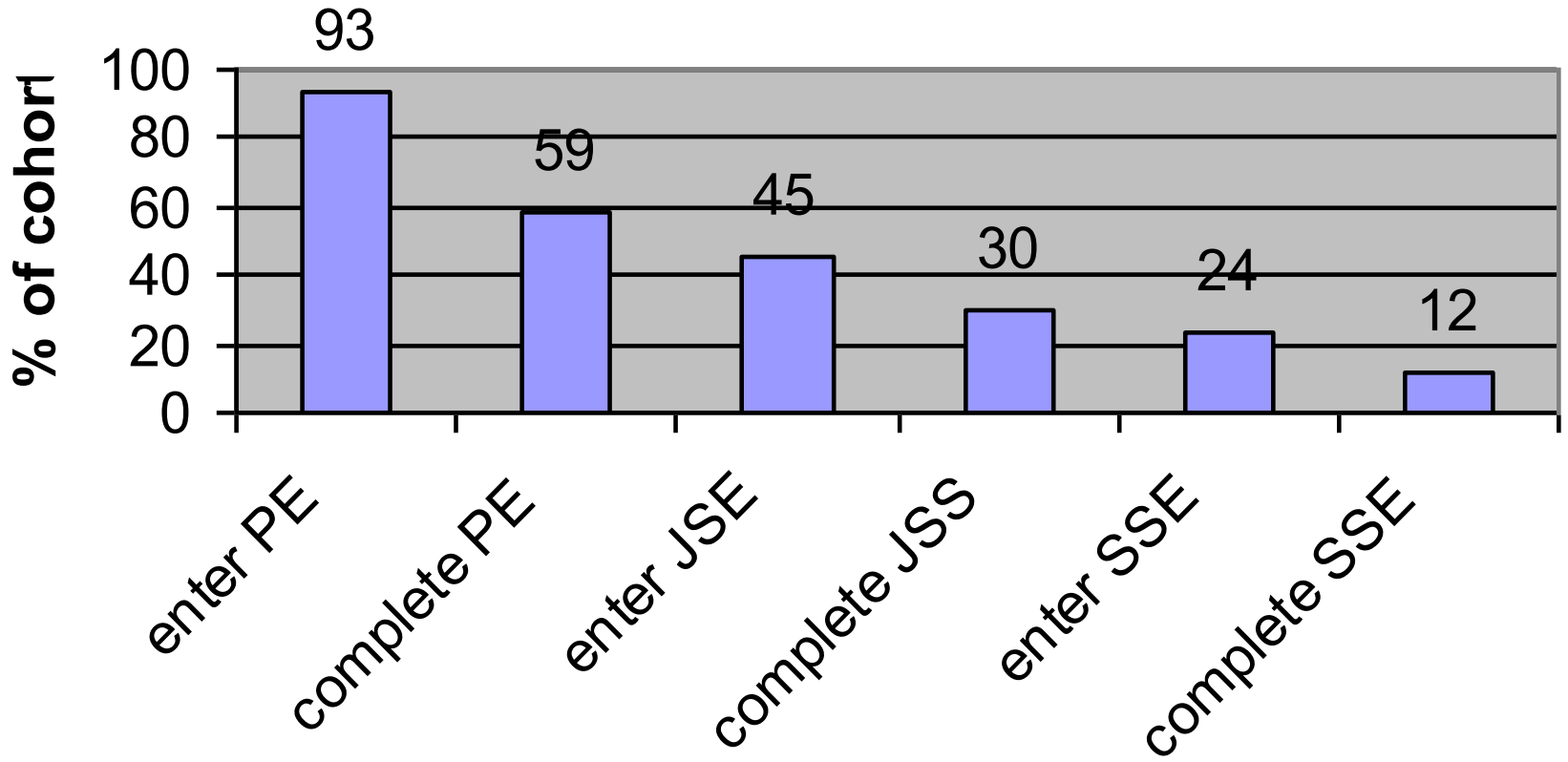
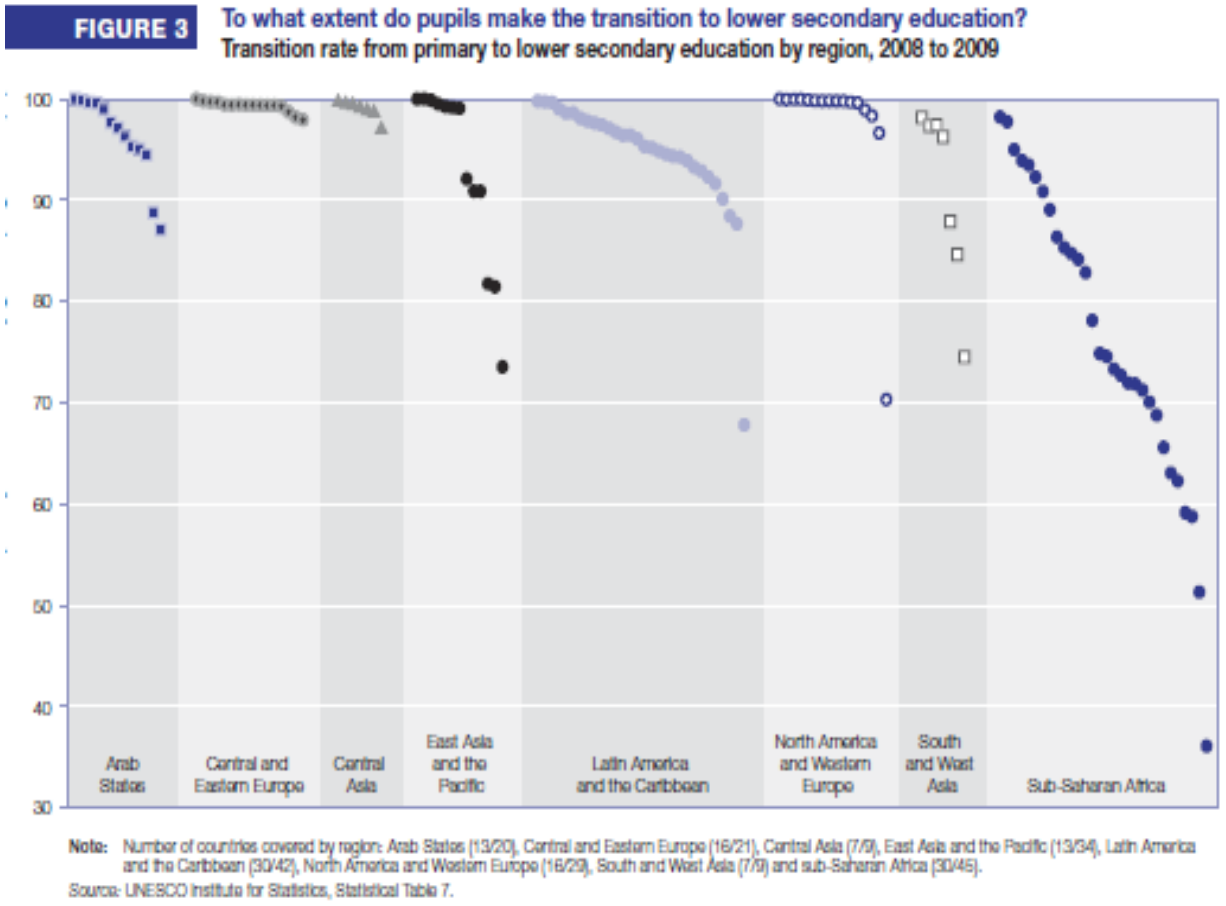
Figure 1: Survival (%) of a Cohort of Students in Primary and Secondary Education in SSA, 2003



UIS data story-line (UIS report 2011)

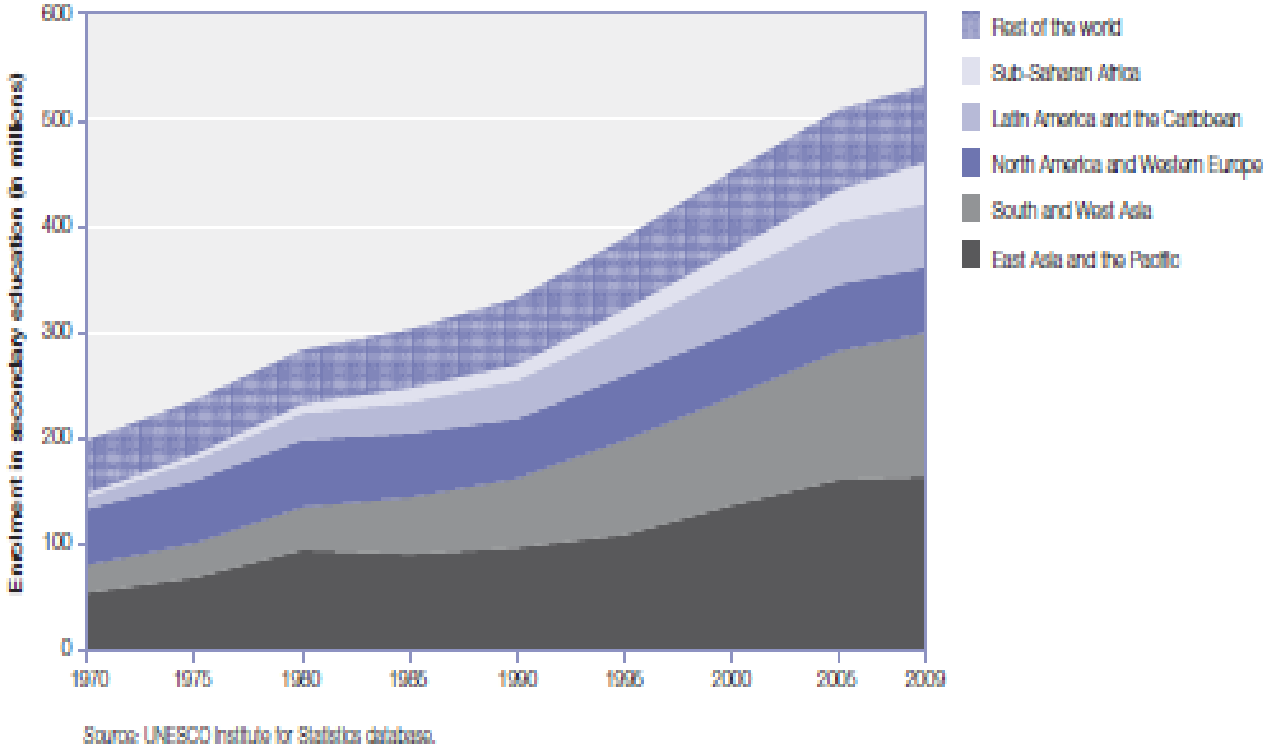


Huge Variation in Transition in SSA (UIS 2011 Report)

- In SSA among 30 countries, UIS report indicates huge variation.
  Example:
  98% Seychelles, 36% Tanzania.
- In 27 countries, including Ethiopia, South Africa an d Uganda, transition rate ranges between 51% and 95%

UIS data story-line

FIGURE 4 To what extent has secondary enrolment increased over time?
Enrolment in secondary education by region



Source: UNESCO Institute for Statistics database.

UIS data

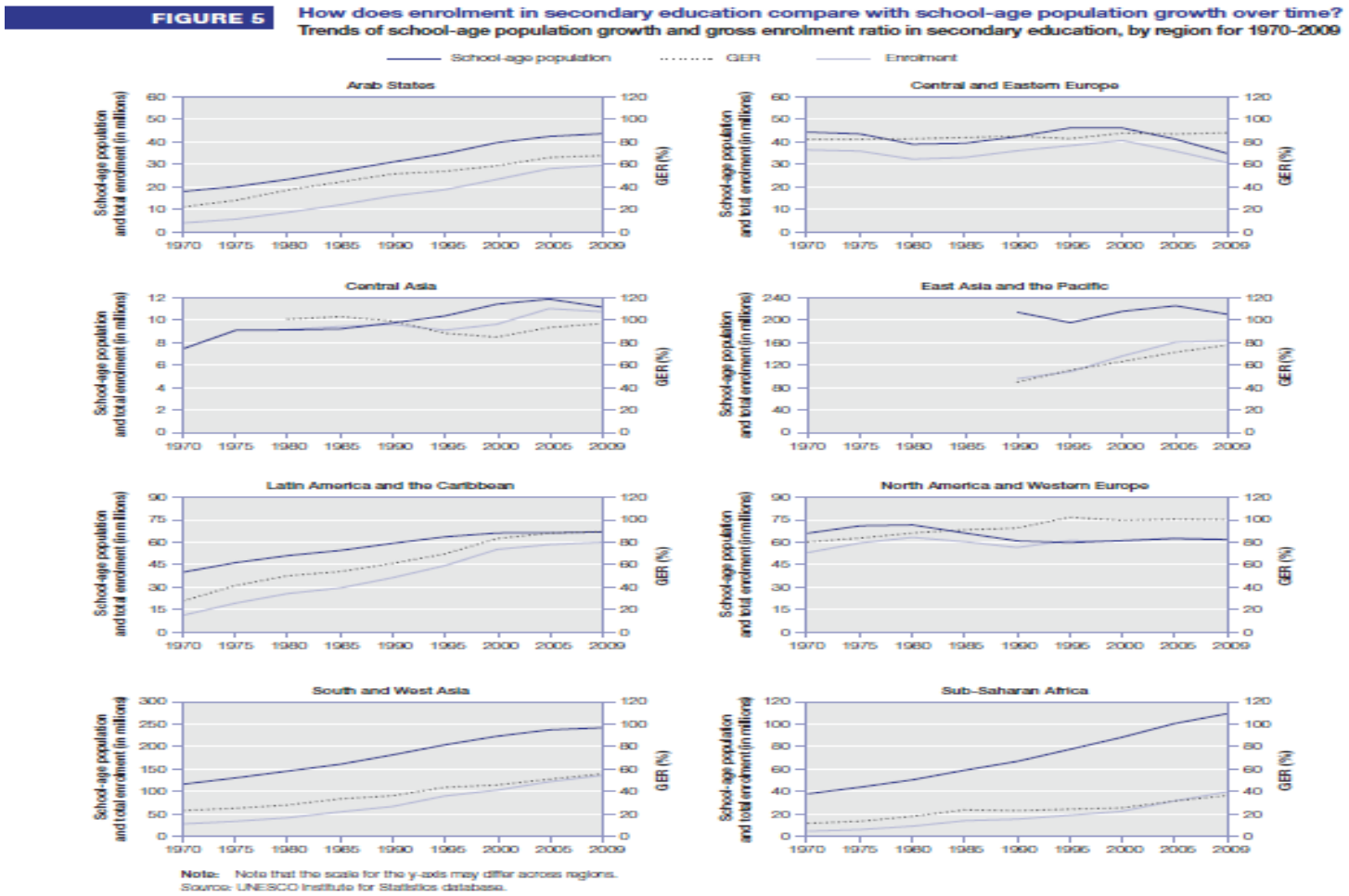
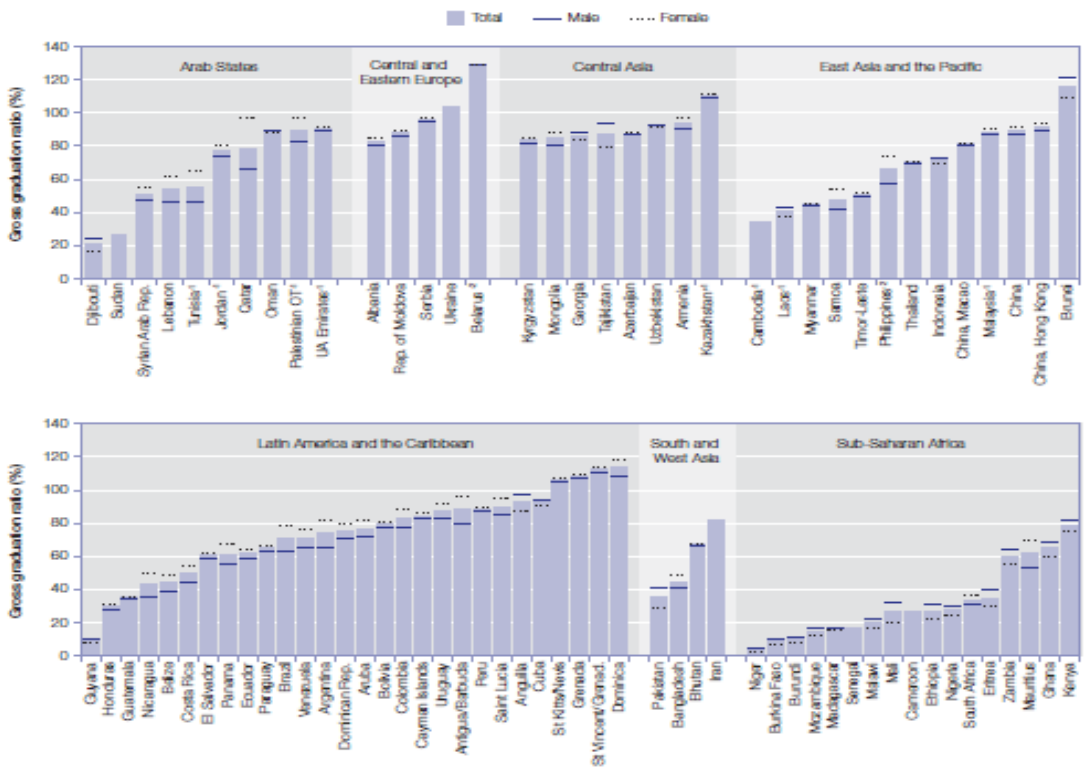


FIGURE 5
How does enrolment in secondary education compare with school-age population growth over time?
Trends of school-age population growth and gross enrolment ratio in secondary education, by region for 1970-2009
School-age population
GER
Enrolment
Arab States
Central and Eastern Europe
Central Asia
East Asia and the Pacific
Latin America and the Caribbean
North America and Western Europe
South and West Asia
Sub-Saharan Africa
School-age population and total enrolment (in millions)
GER (%)
1970 1975 1980 1985 1990 1995 2000 2005 2009
Note: Note that the scale for the y-axis may differ across regions.
Source: UNESCO Institute for Statistics database.

UIS data

FIGURE 9 **What proportion of students complete lower secondary education?**
Gross graduation ratio for lower secondary education, all programmes, 2009



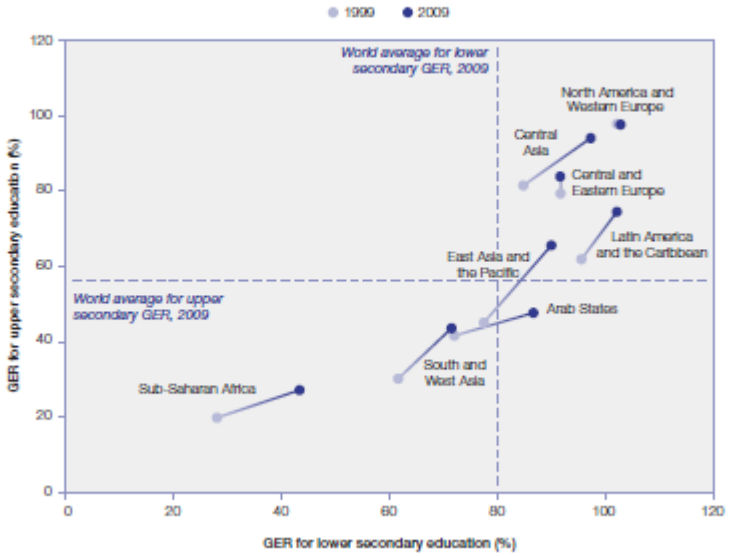
Notes: [1] Data refer to 2008; [2] Data refer to 2007; [3] Data refer to 2010.
Data on graduates at the lower secondary level are not collected in the UNESCO/OECD/Eurostat (UOE) data collection. Therefore, no data are presented for North America and Western Europe and some countries in Central and Eastern Europe.

Source: UNESCO Institute for Statistics, Statistical Table 7.

UIS data

FIGURE 11 How has the gap between lower and upper secondary participation rates changed between 1999 and 2009?

Gross enrolment ratios for lower and upper secondary education by region, 1999 and 2009



Source: UNESCO Institute for Statistics database and Statistical Table 6.

Kenya Example: School Fee Abolition and Transition to Secondary Education:

Evidence from slum & Non-slum areas in Nairobi City

Background

- In an effort to achieve UPE by 2015, Kenya introduced FPE in 2003

- The FPE resulted in rapid increase in primary school enrollment *(GER increased from 88% in 2002 to 107% in 2006)*

- Excessive demand induced by FPE led to overcrowding of public schools & negatively affected the quality of education

- APHRC/ERP study indicates 60% of children in two slum areas attended low-quality fee charging private schools

Background (cont.)

- Secondary school enrollment rate remains low (GER 37% in 2007)
- In 2005, only 47% of primary graduates proceed to secondary schools
- The KESSP set a target of achieving 70% primary to secondary transition rate by 2008
- School fee is believed to be the major obstacle for poor children to gain access to secondary education

Background (cont.)

- In 2008, school fee abolition was extended to secondary education
- Increasing number of young people completed primary school under FPE seek admission to secondary schools
- Public secondary schools have limited places, and are controlled through KCPE results
- The bottleneck may lead to increased inequality in access to post-primary education

Objectives

- Specific Objectives:
  - To what extent does secondary school fee abolition increase primary to secondary transition?

  - Does the effect vary for slum and non-slum areas, by gender and household SES background?

Data & Methods

- Longitudinal data on schooling collected by ERP/ APHRC in 6 rounds from 2005-2010 in two slum areas (Korogocho& Viwandani) and two non-slum sites (Harambe & Jericho).

- Unique household-level follow-up data on schooling pattern for 3 years before and 3 after the FSE program was initiated in January 2008.

- Collected data on demographic characteristics, HH SES backgrounds, and primary school type and location.

Data & Methods (Cont…)

- The study uses a cohort 3997 primary school children in 2005 (Round 1) , to assess primary completion and transition to secondary in 2010 (Round 6).
- In the final round, 2878 (72%) of the original cohort were interviewed in 2010 (That is, an attrition rate of 28%).
- We examine association between Household SES measured in 2005, and educational transition assessed in 2010.

Data & Methods (Cont…)

I. **Sequential logit models:**

- estimate the effects of family background on the likelihood of continuing through the sequence of school levels.

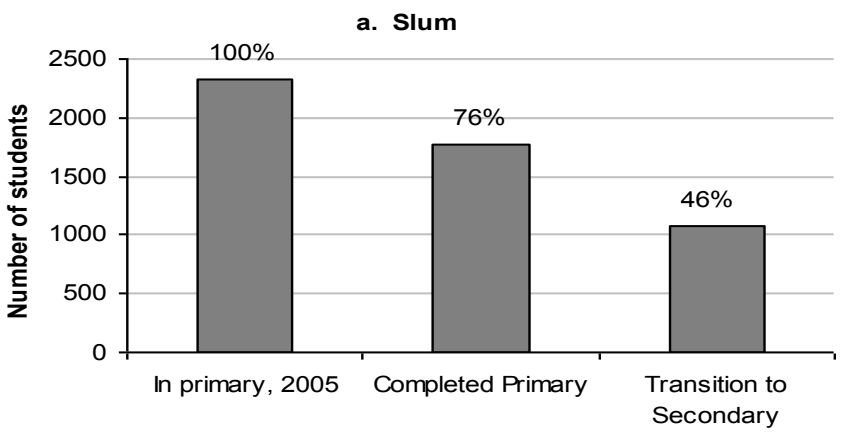
- Help to discern the transition points where social background effect the largest

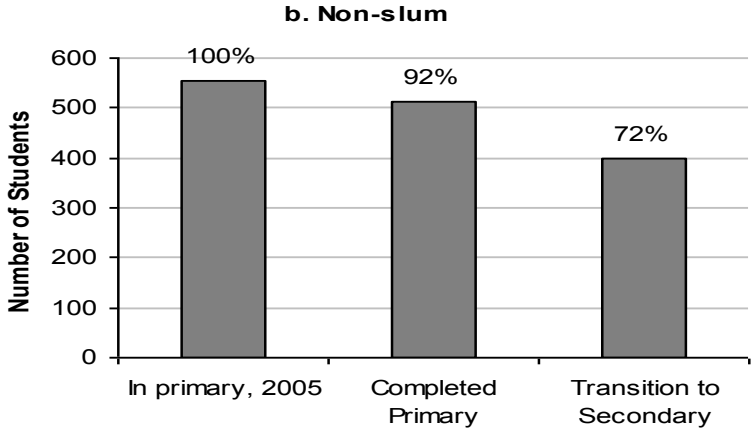
-two school continuation decisions are estimated with in a single model:

Decision 1: finish primary school or not

Decision 2: those completed primary either proceed to secondary or not

Proportion of primary completion and transition to secondary school

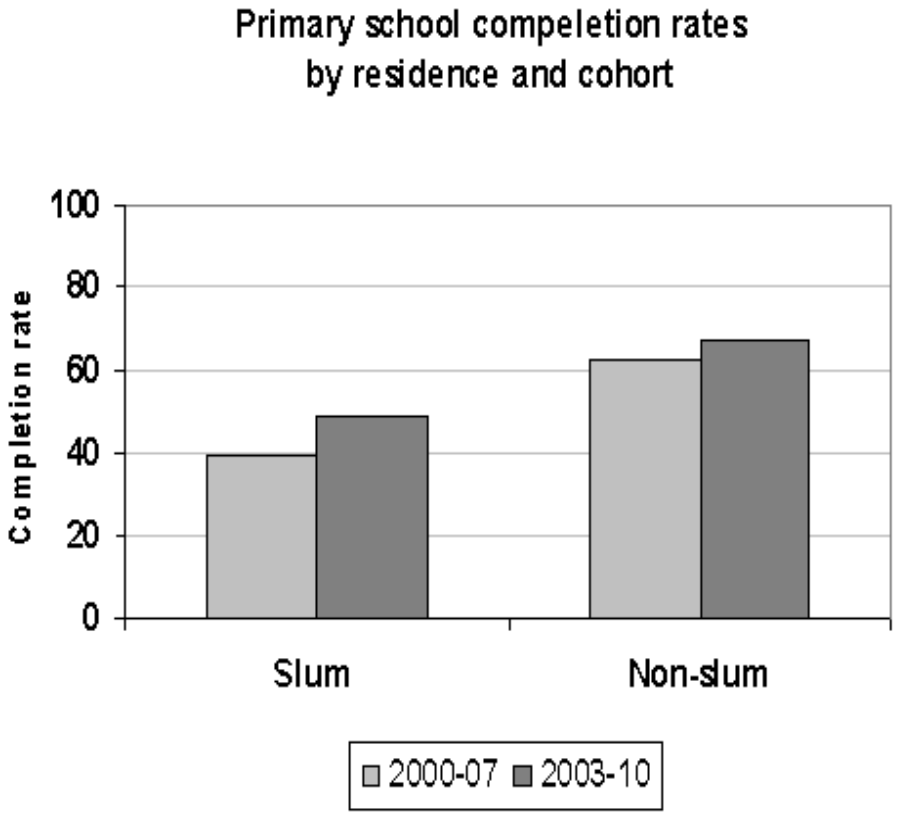




- **In the slum areas, out of the 2322 primary students in 2005, 76% completed primary education and only 46% made transition to secondary by 2010.**

- **While 92% completed primary and 72% proceeded to secondary education in the non-slum areas.**

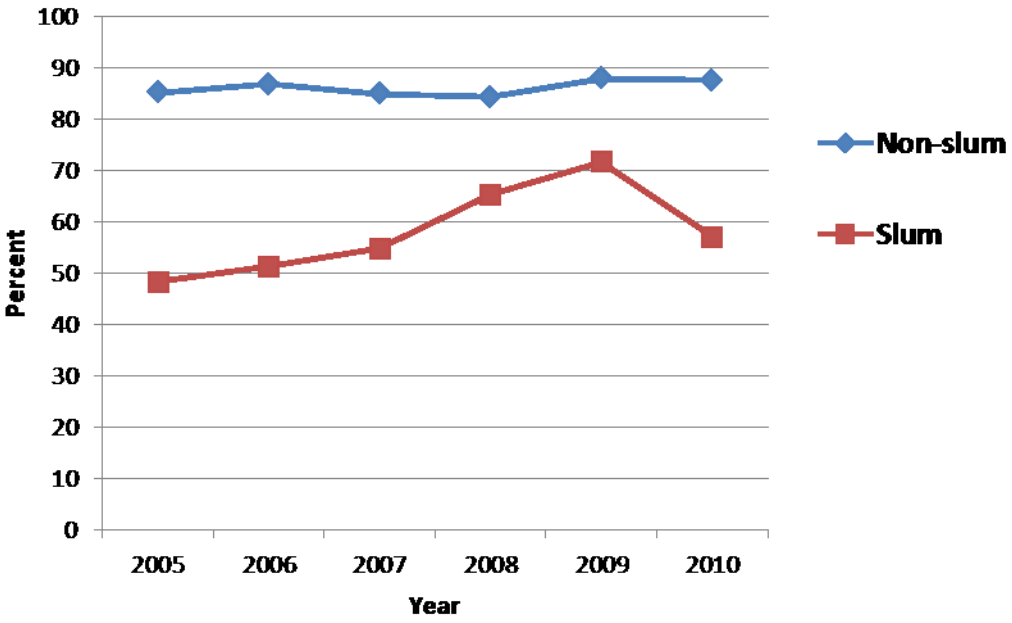
Primary completion rate by school entry cohort



- **In slum areas primary completion increased by 10 percentage points between 2000 & 2003 school entry cohorts**
- **In non-slum areas the corresponding increase is about 5 percentage points**

Trends in transition to secondary school:

Slum &Non-slum areas



- In slum areas, the transition rate increased from about 48 % in 2005 to 72% in 2009, but declined to 57% in 2010.
- Whereas the transition rate in the non-slum areas barely changed over the study time, slightly fluctuate around 85%

Primary completion & transition to secondary: Sequential logit Odds-ratios

Independent Variables	Slum areas		Non-Slum areas	
	Primary complete	Transition to secondary	Primary complete	Transition to secondary
Sex of child (Boy)	0.82*	1.05	1.38	1.39
Age	1.40**	1.23**	2.49**	1.62**
Female headed HH	0.76*	0.94	1.29	1.29
HH Wealth Status (top 20%)				
Bottom 40%	0.64**	0.46**	0.95	0.95
Middle 40%	0.78*	0.98	1.16	1.18
HH head's Education (No)				
Primary	1.07	1.18	1.24	0.82
Secondary	1.42*	1.22**	1.28	1.26
Non-state primary sch.	0.67**	0.92	0.67	1.27*
Repeated in primary	0.47**	0.36**	0.56**	0.49**
Number of Cases (n)	2322		556	
LR Chi-Square	412.61		391.67	

** significant at 1%, * significant at 5%

- few cases

Correlates of educational transition

- **Household poverty remains an important factor in decreasing the probability of completing primary education as well as transition to secondary school.**

- **Parents/guardians education level is also found to be a key determinant of educational transition.**

- **Children attended low-cost private primary schools in slum areas have lower chance of completing primary education than children attended government schools.**

- **However, in non-slum areas children attended private primary school have higher chance of transition than their counterparts who attended government schools.**

- **Students repeated primary grades are less likely to make transition to secondary school than their counterparts who did not repeat grades.**

Acknowledgement

- This presentation is based on a paper in which Moses Oketch is co-author with Kassahun Adimassu et al., based at APHRC, Nairobi.