



Out-of-School Children (OOSC): Global Costs and Investment Trends

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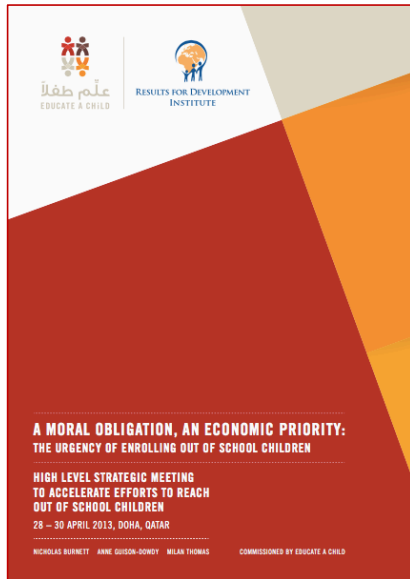
March 8, 2017

Outline

1. Global Trends
2. Estimating the Costs
3. Resource Needs
4. Trends in Investment
5. Potential for Action

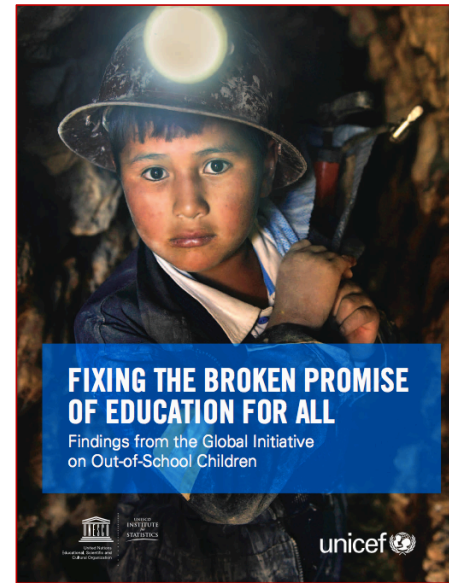


R4D-EAC & Related Publications



*A Moral Obligation,
An Economic Priority
(2013)*

*The Economic Cost of
Out-of-School Children
in Southeast Asia (2015)*



*Fixing the Broken
Promise of Education
for All (2015)*



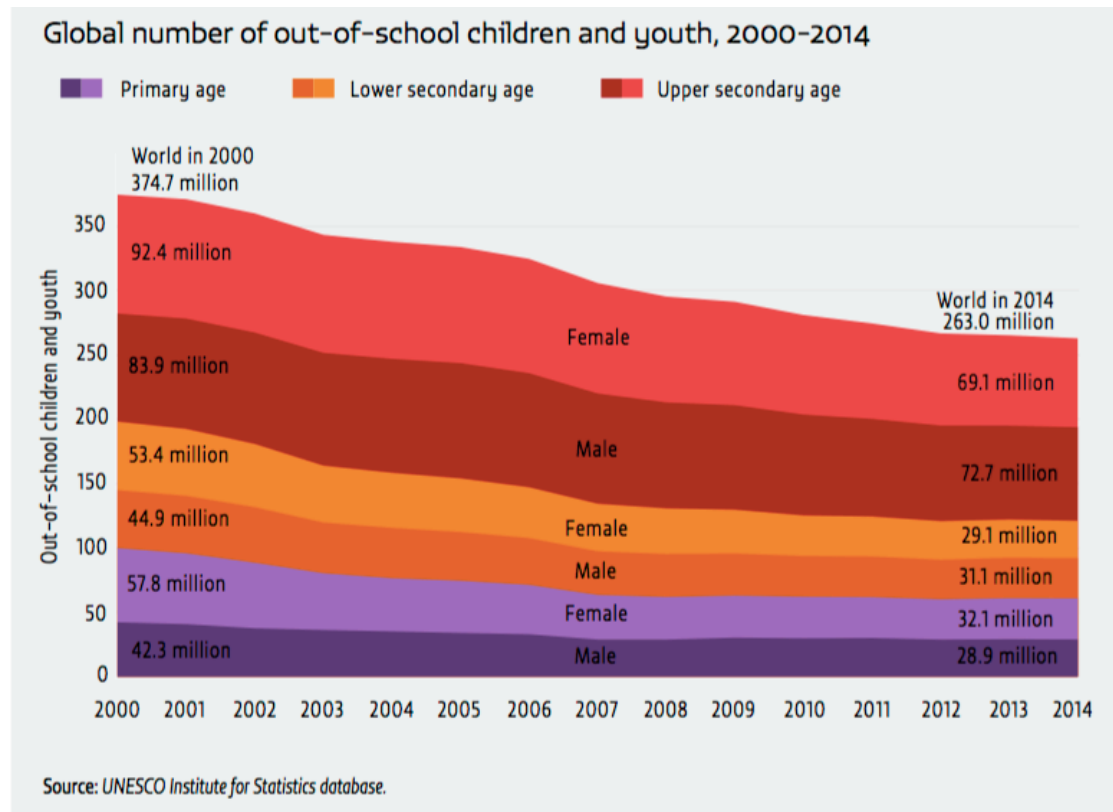
Exclusion from Education (2013)



The Price of Exclusion (2015)

Global Trends in OOSC Populations

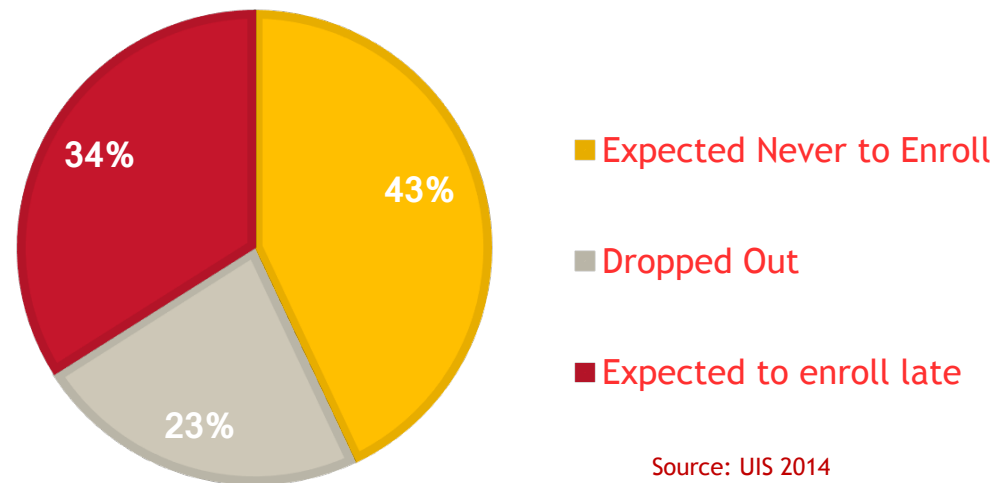
- The global number of children and young adolescents not enrolled in school has stagnated for nearly a decade.



Characteristics of OOSC

- 61 million children of primary school age are out of school (UIS 2016). 43% of those children are expected never to enroll in school.
- 30 million of those OOSC are in Sub-Saharan Africa (8.7 million in Nigeria alone).
- Characteristics vary by region: while in East Asia, most OOSC have dropped out of school (retention problem), in West Africa many have never been enrolled (access problem).

Breakdown of the World's OOSC



Source: UIS 2014

Global Profiles of OOSC

Globally, OOSC are more likely to be:

- Children from low-income families
- Children affected by conflict and/or natural disasters
- Girls
- Children with disabilities
- Children from rural areas
- Working children
- Children from minority ethnic, religious, or language groups



The 263 million OOSC can only be reached with **targeted interventions** that address the range of barriers faced by marginalized youth.

Costs of OOSC



Economic

**Health and
Social**

Political

Direct Income Loss Estimation

Income Loss of Out-of-School Youth

= B - A (see graph)

=

Income Loss of OOSC as a % of GDP

+

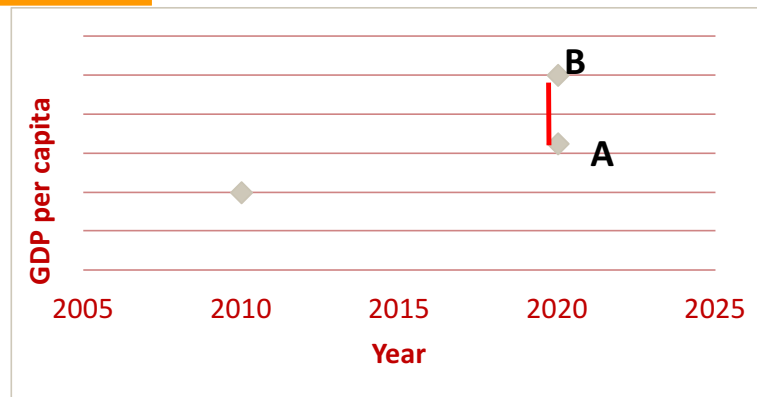
Income Loss of OOSA as a % of GDP

=

[% non-completing OOSC] x [(1 + Wage premium to primary education) x (1 + Wage premium to secondary education) - 1]

=

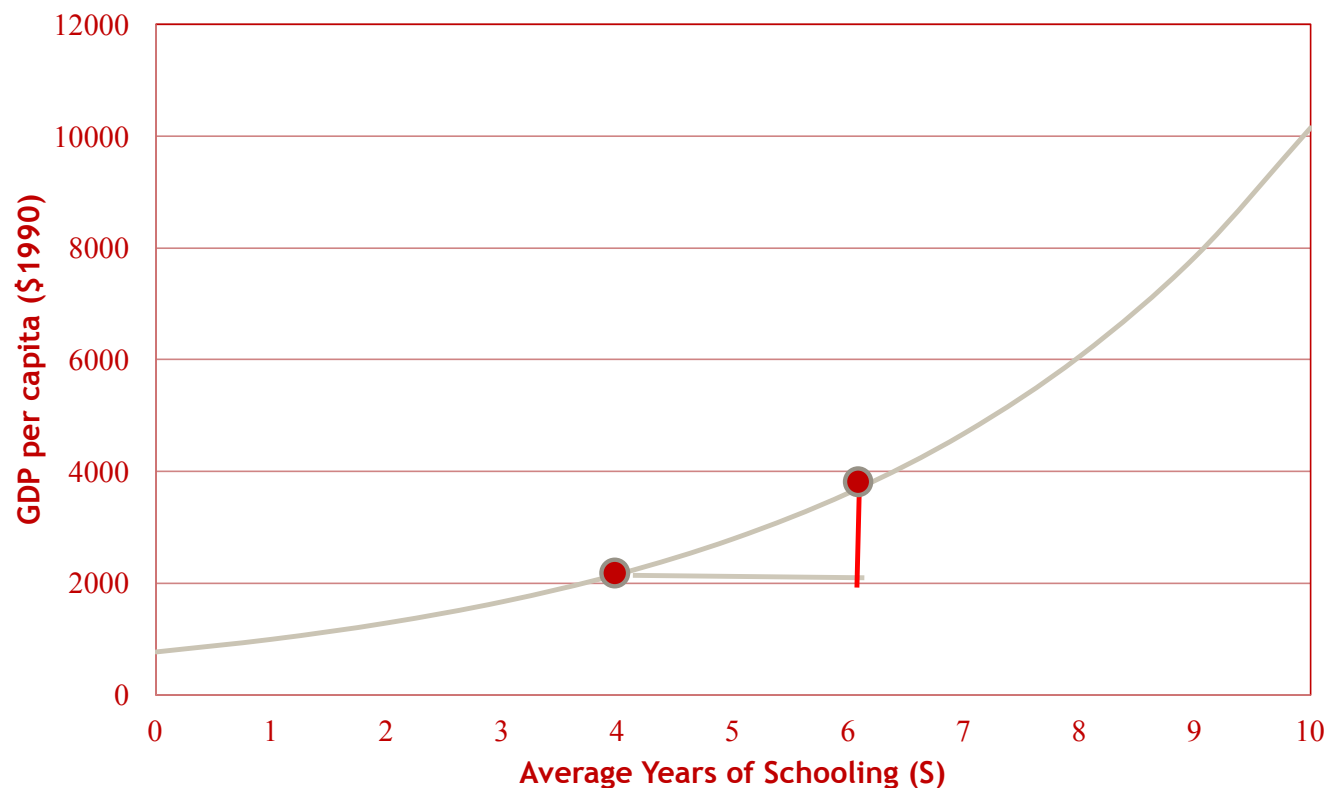
[% OOSA] x [Wage premium to secondary education]



Direct Income Loss Estimation Results

- Wage premium for primary school completion in Thailand: 3.5%,
Wage premium for lower secondary school completion: 13.4%
(Colclough et al. 2009).
- This implies that the **annual direct income loss associated for out of school youth will be 1.79% of Thailand's GDP** if out of school trends persist.
- That is equivalent to **US\$7.07 billion per year**.
- However, **this direct income method captures only expected labor market earnings losses** of out of school youth. It also implicitly assumes no labor market competition between graduates. We employ a second method to capture the other (non-wage) lost benefits of basic education.

Indirect Loss Estimation



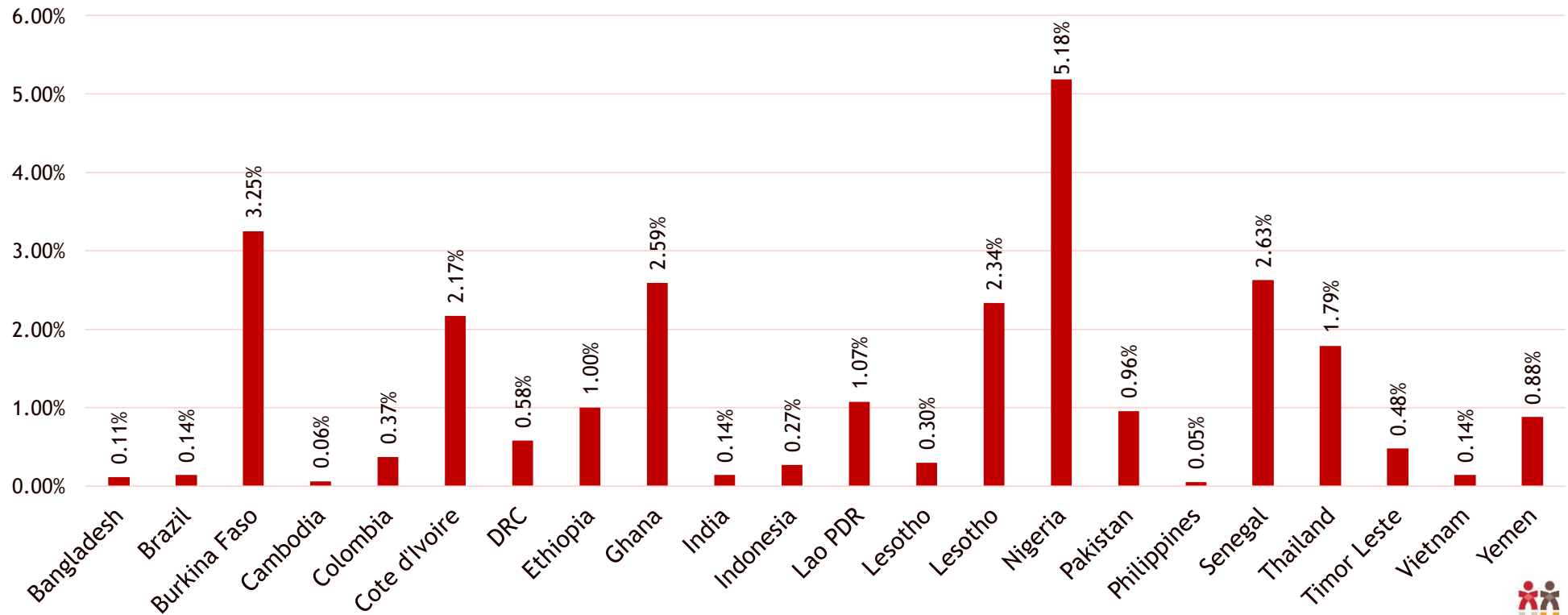
- Relationship between income and schooling estimated by Barro and Lee.
- We estimate how S would change in Thailand if all OOSC and OOSA completed basic education (8 years), and the impact of this shift on GDP per capita.

Indirect Estimation Results

- The indirect method captures both wage and non-wage economic benefits of basic education, such as fiscal savings from lower crime and better health.
- For Thailand, enrollment of out-of-school youth raises average years of schooling (S) from 12.3 years to 12.5 years (the average for UMIC).
- The expected increase in annual GDP associated with that shift in S is 2.79% of GDP - nearly equal in value to a year of average economic growth in Thailand (3.07% per year, 2000-2010).
- In absolute terms, the estimated loss due to out-of-school youth will be US\$10.2 billion per year - roughly equivalent to half of Thailand's total public expenditure on education in 2011 (World Bank).

Economic Loss

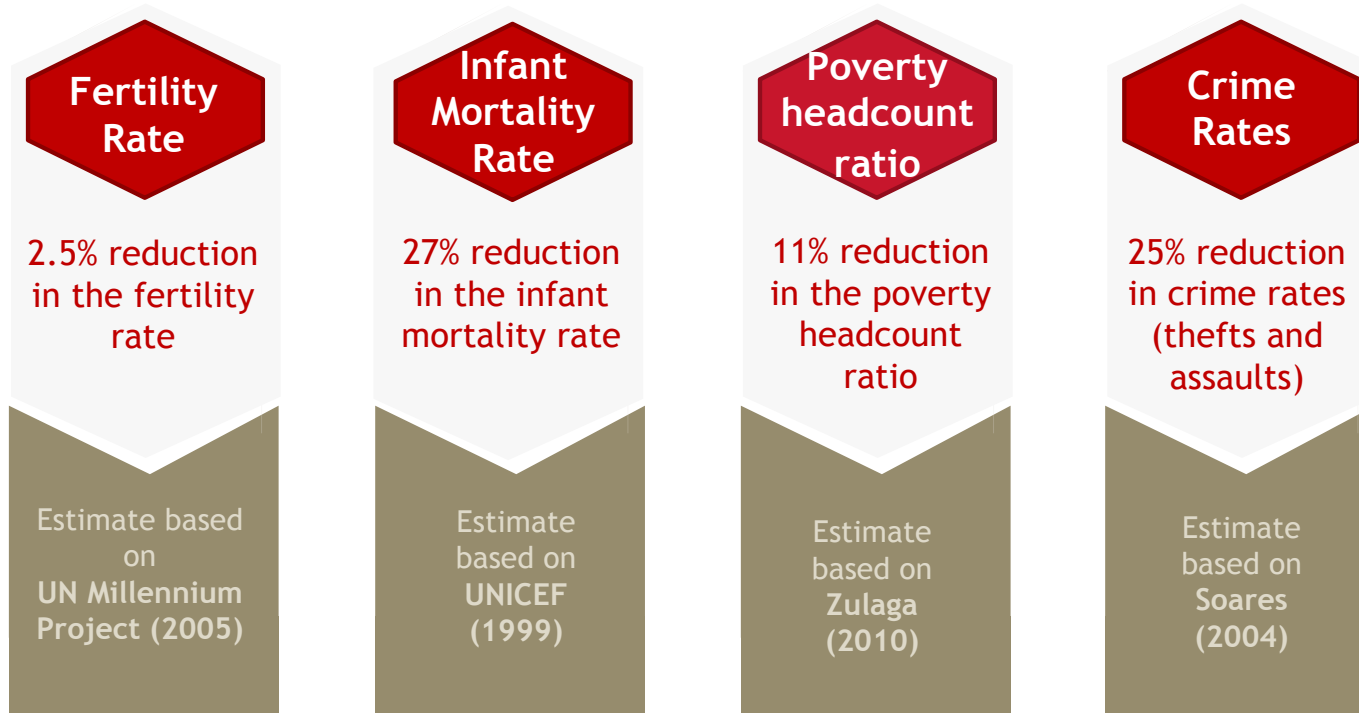
Estimating the Economic Costs Of OOSC as % of GDP, selected Countries
(Direct Income Loss Estimates)



Source: Thomas, UIS 2017 data

Health & Social Costs of OOSC

A case study of Colombia:



Source: Thomas and Burnett (2015)

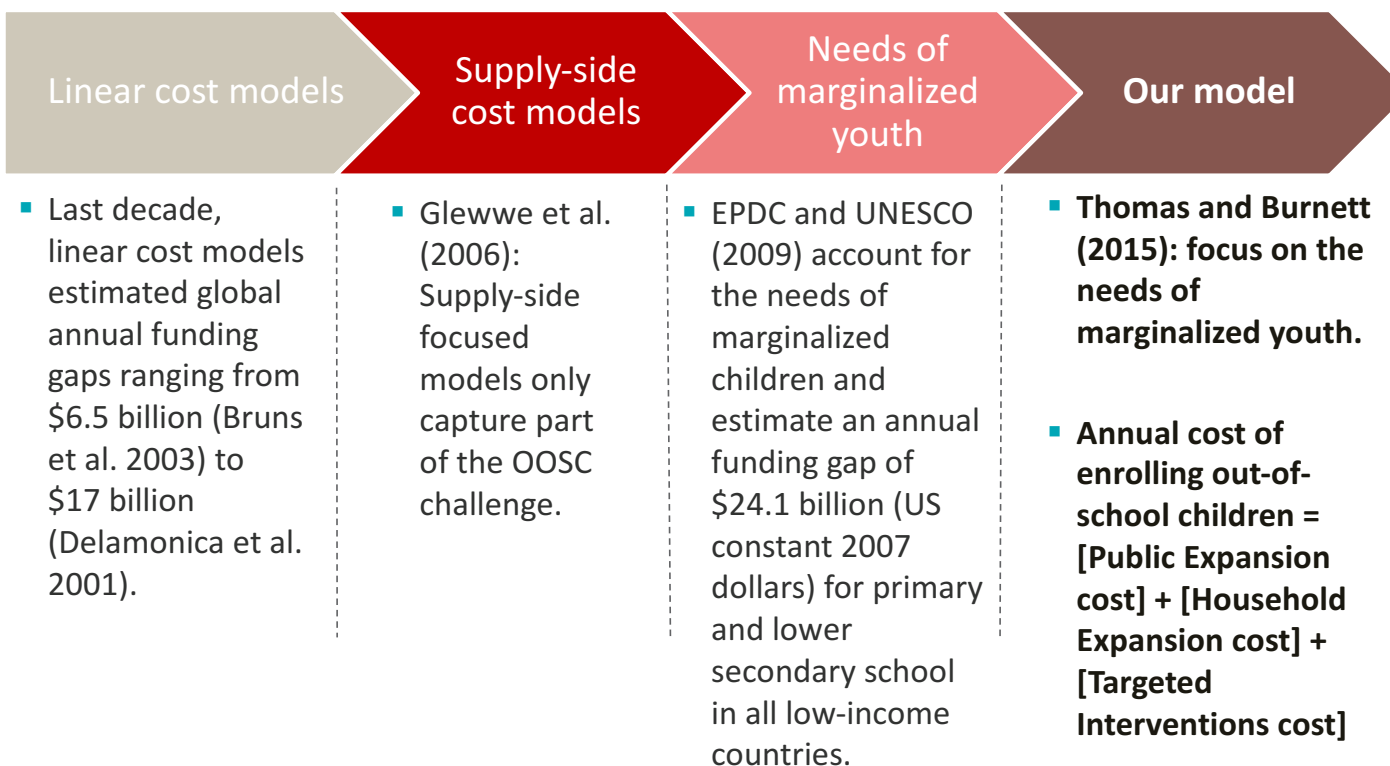
Political & Long-term Costs of OOSC



- Individuals who have completed primary education are **1.5 times more likely to vote** (UNESCO 2005).
- Primary education has **positive effects on post-conflict reconstruction and peace-building**.
- Recent research establishes the **link between education and reduced vulnerability to climate shocks**.

Resource Needs for the Elimination of OOSC

Evolution of Costing Models...

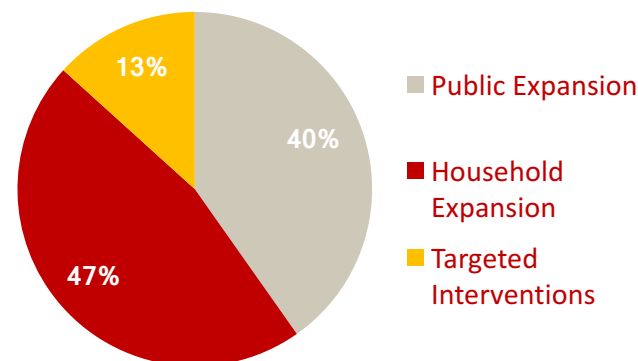


Resource Needs for the Elimination of OOSC

Application: Estimated total cost of enrolling OOSC in DRC

Expense Type	Cost (m)	Current source
Expansion	\$44.5	Public
Expansion	\$51.4	Household
Targeted Interventions	\$14.7	n/a
TOTAL	\$110.6	

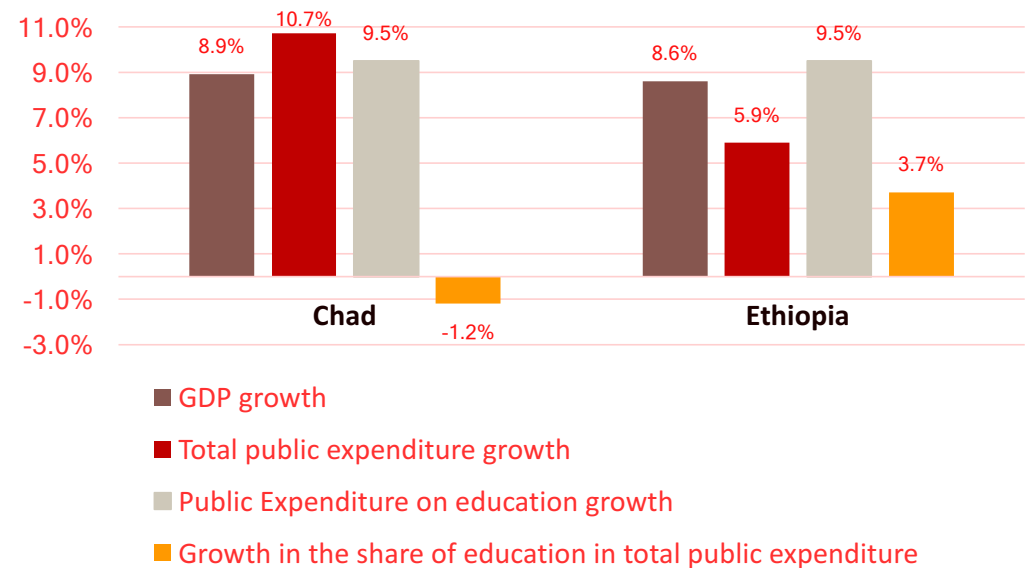
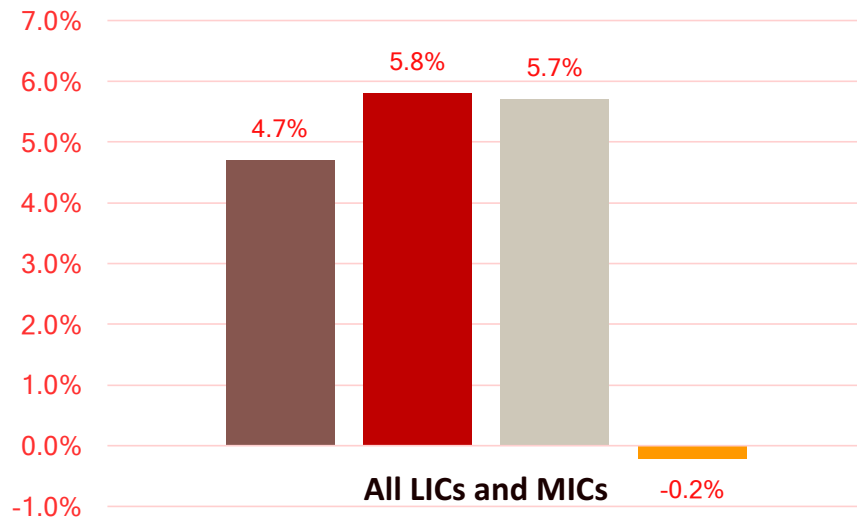
Source: Thomas and Burnett (2015)



- The estimated total cost of achieving UPE is \$82 per OOSC per year, compared to \$47 per child per year currently spent.
- \$111 million is equivalent to one-quarter of DRC's total education budget in 2011.
- After the bulk of OOSC pass through basic education, the annual per pupil cost would fall, because capital expansion spending would no longer be required.

Trends in Government Spending

Annual growth in public expenditure on education, 2000-2014

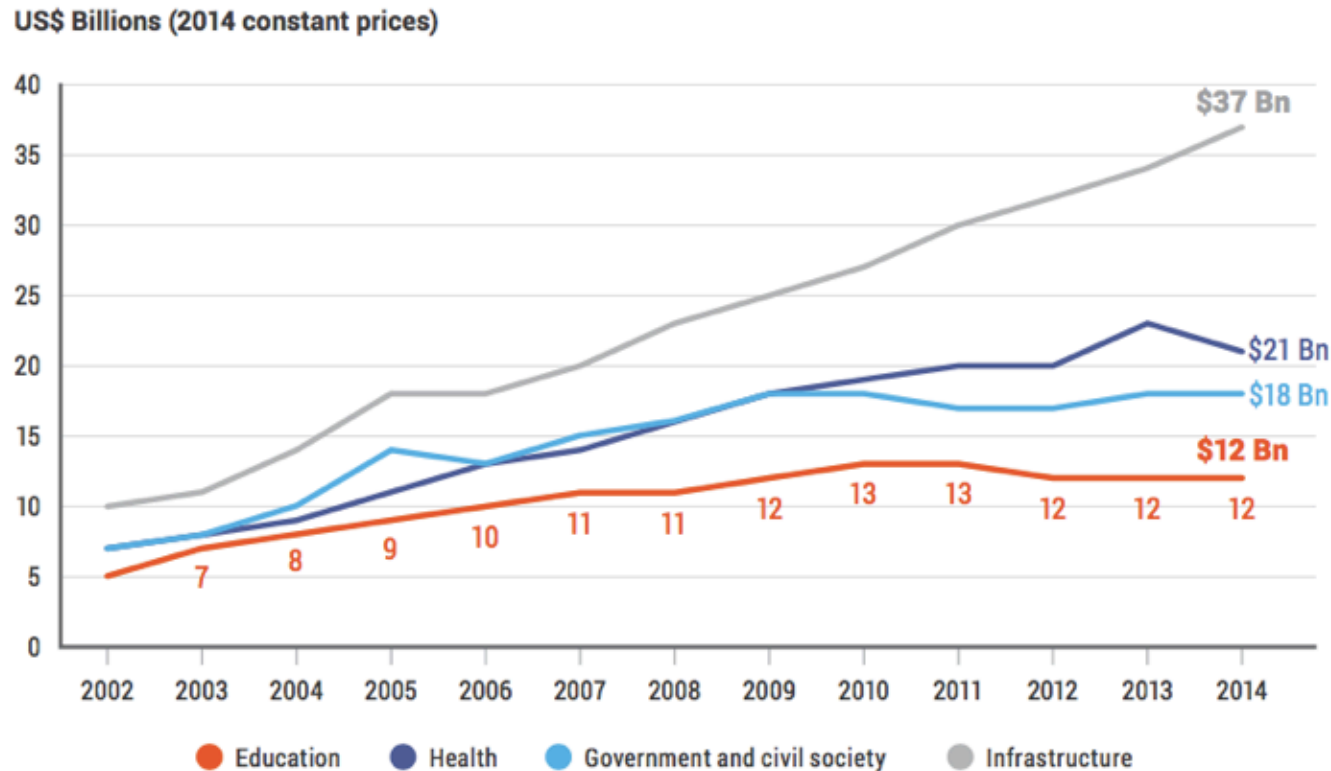


Source: adapted from *The Learning Generation* report, Education Commission, 2016

- The share of public expenditure on education has declined over the last 15 years in over half of the countries with available data.
- Significant variation exists across countries.

Trends in Foreign Aid: Sectoral

Sectoral ODA Trends, 2002-2014

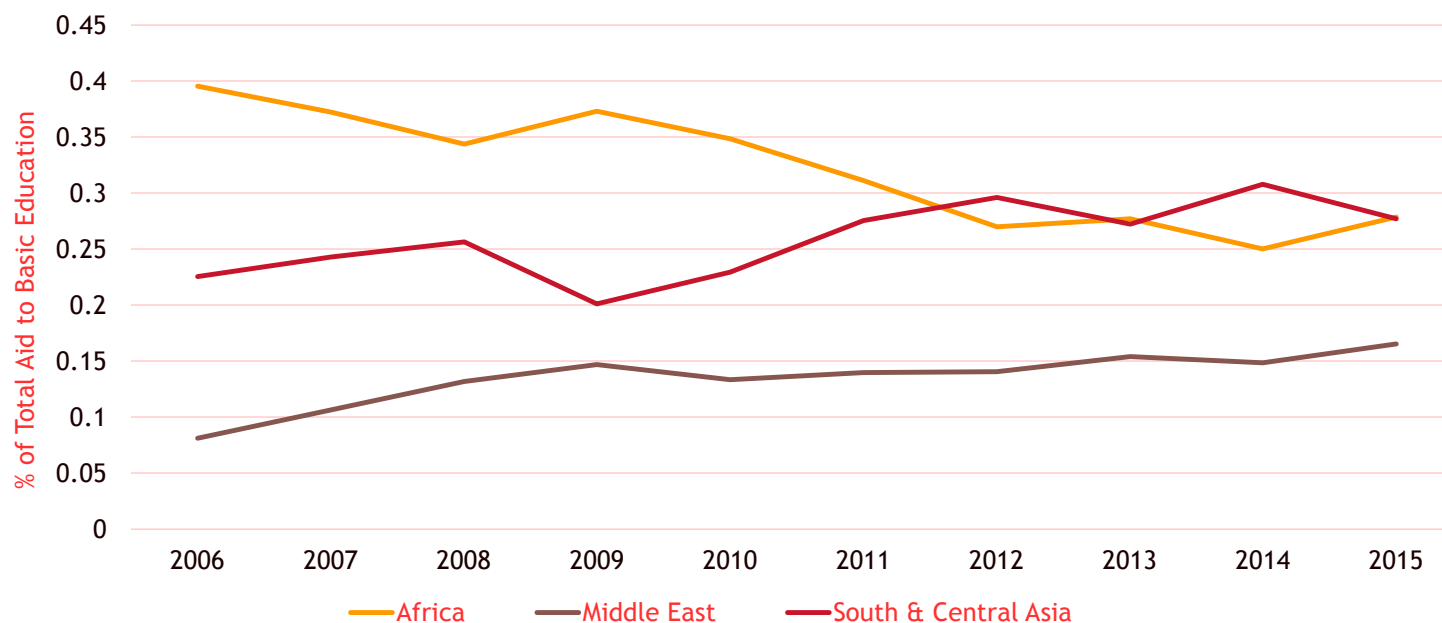


- Overall, aid to education continues to decrease relative to other sectors.
- Within the sector, aid to basic education (pre-primary education, primary education, and basic life skills) has decreased by 5% since 2013 (UNESCO 2016).

Trends in Foreign Aid: Regional

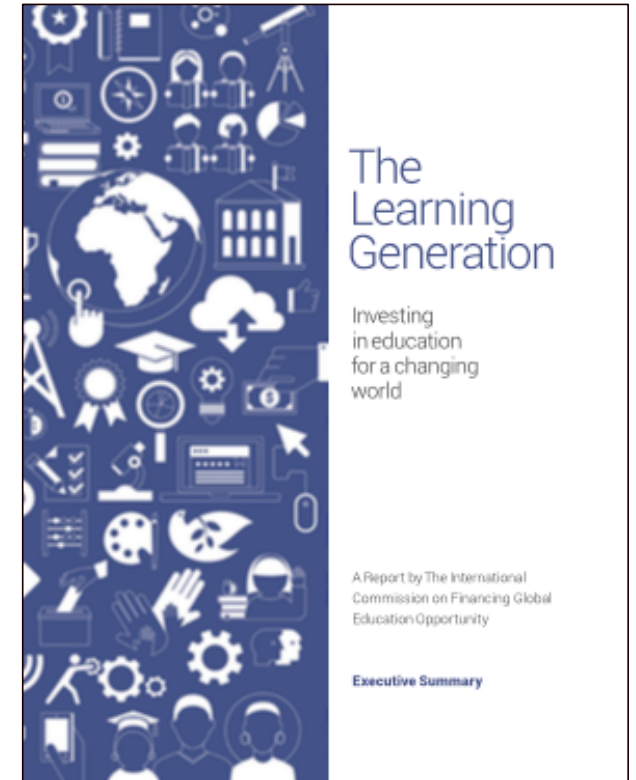
The share of total aid to basic education received by sub-Saharan Africa is decreasing, even though the region accounts for over half of all out-of-school children.

% of Total aid to basic education received, selected regions



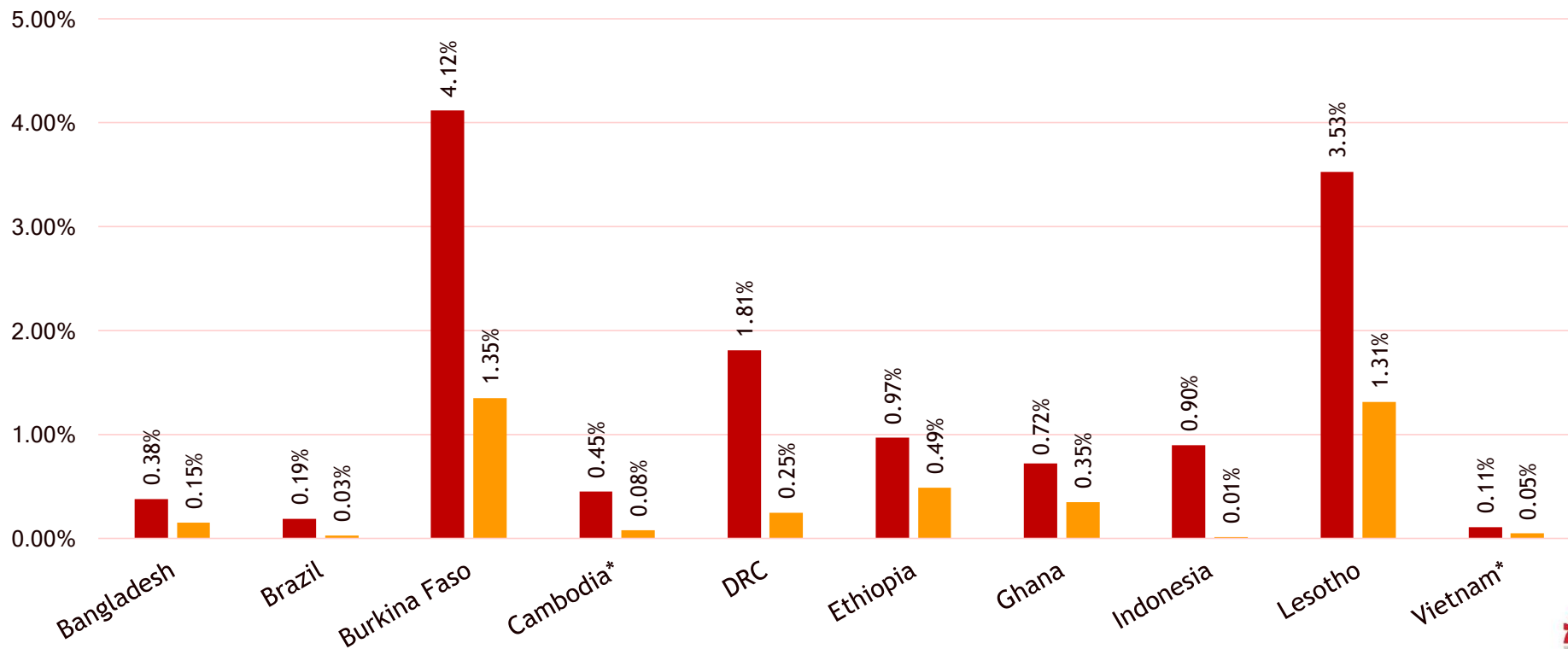
What's Needed?

- To build a “Learning Generation” by 2030, the Education Commission estimates that **if action starts immediately**, low and lower-middle income countries must:
 - Increase total spending on education by 7% each year
 - Get 3% more children into secondary school each year
 - Get 3% more children on track to hit learning benchmarks each year.
- **International financing will remain critical for low-income countries**, covering nearly half of their education costs.
- **Total international finance for education must increase** from today’s \$16 billion per year to \$89 billion per year by 2030.



Costs of OOSC vs Investments Required

Benchmarking the Economic Costs of OOSC (Thomas and Burnett 2013)



■ Economic Cost of OOSC as % of GDP (Direct Loss)

■ Required incremental spending on primary education as a % of GDP

Thank you for your attention.

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