

Electoral Incentives and Education Systems

Evidence from Tanzania Democratic Transition

Habyarimana, Opalo and Schipper

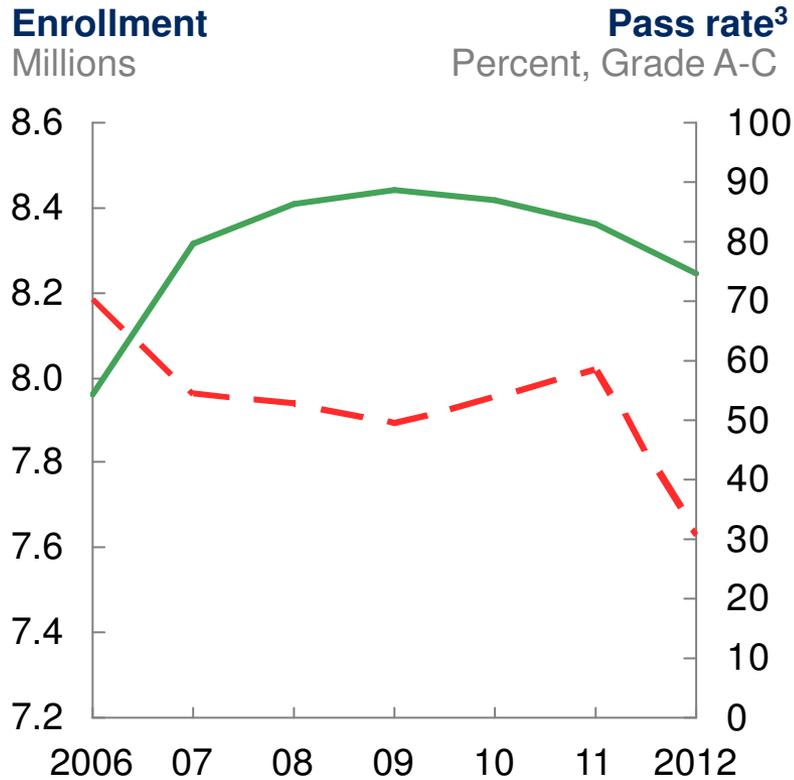
June 15, 2017

Motivation

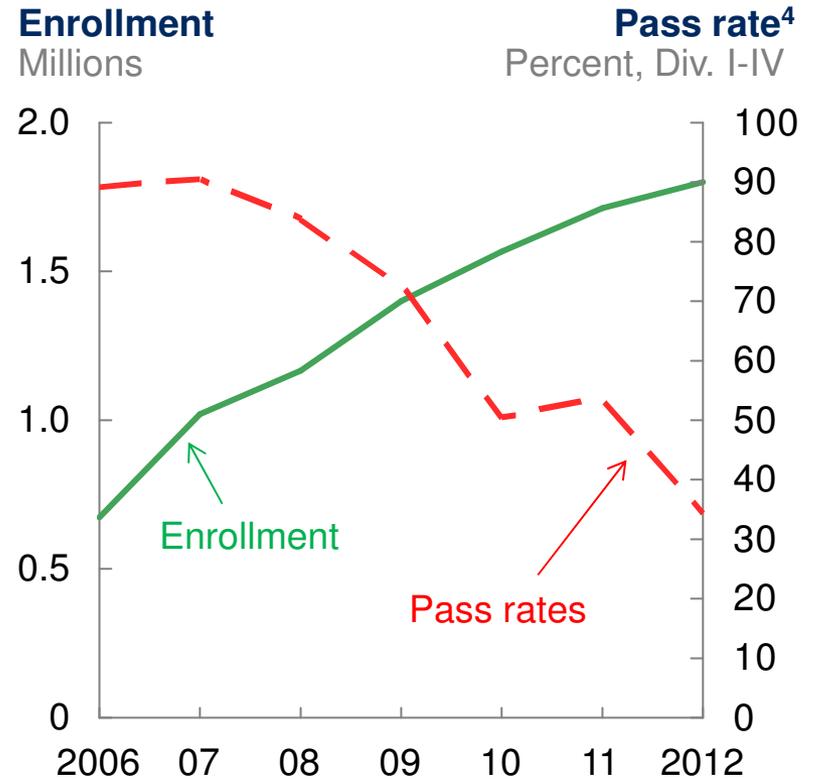
- Deep reforms are politically costly and vulnerable to reversal/collapse
- Stream of research that examines how political markets and electoral incentives shape the education system in Tanzania
 - Depth and durability of reforms
- Two papers:
 - A case study of the BRNed reforms
 - Electoral returns to input vs output based reforms
 - Traditional inputs/access reforms
 - Learning focused reforms

Education Context in Tanzania

Primary level, PSLE¹



Secondary ordinary level, CSEE²

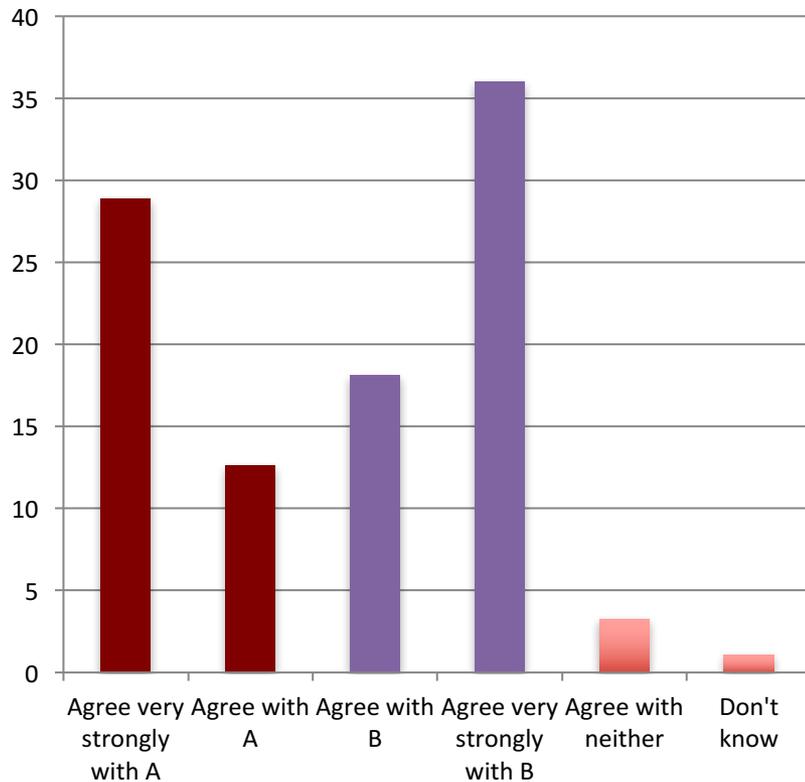


Although pass rate is not the only indicator for quality of education, currently it is the most reliable one in Tanzania

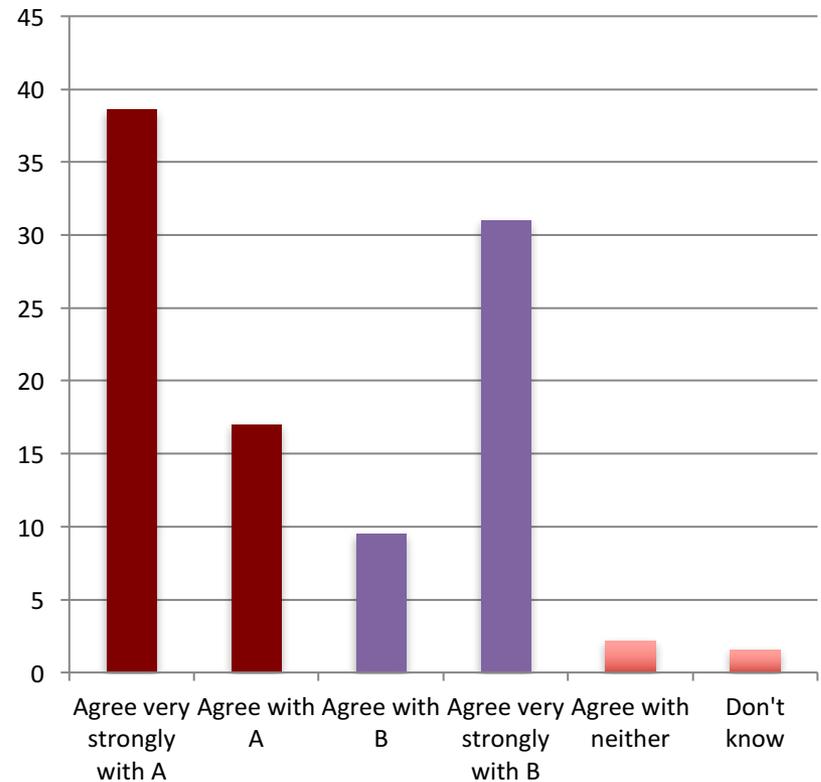
A: It is better to have free schooling for our children, even if the quality of education is low.

B: It is better to raise educational standards, even if we have to pay school fees.

AfroBarometer 2002/3



AfroBarometer 2005/6



Case Study: Big Results Now (BRNed)

- A growth inspired set of reforms
 - Modeled on Malaysia's Big Fast Results
- Six sectors
 - **Education**, Infrastructure, Water, Agriculture, Energy, Resource Mobilization
- Identify and address constraints for high impact
- *Qualitative Data*: Delineate the process of generating and sustaining consensus among stakeholders
 - With a focus on the dynamics w.r.t to regime transition

Education Lab: Wide consultation



Step change in the quality of basic education

PSLE and CSEE pass rates of **60% (2013), 70% (2014) and >80% (2015)**

Transparency

1 Rank **100% of all schools** in the annual official **school ranking**, starting with the 2012 PSLE and CSEE results

4 Conduct the first **national 3R assessment** (reading, writing and arithmetic) in Standard II in October 2013

Incentives

2 Reward **4000 most improved schools** every year with monetary & non-monetary incentives and recognize **top 200 performers**, starting with 2013 results

Support

3 Distribute **School Improvement Toolkit** and train **19,000** school heads

5 Train **12,300** Standard I and II teachers in **3R** teaching skills

6 Train **17,000** primary and **8,000** secondary teachers to **support low performing students** ("STEP")

7 Ensure **100% timely delivery of books and materials** to all students

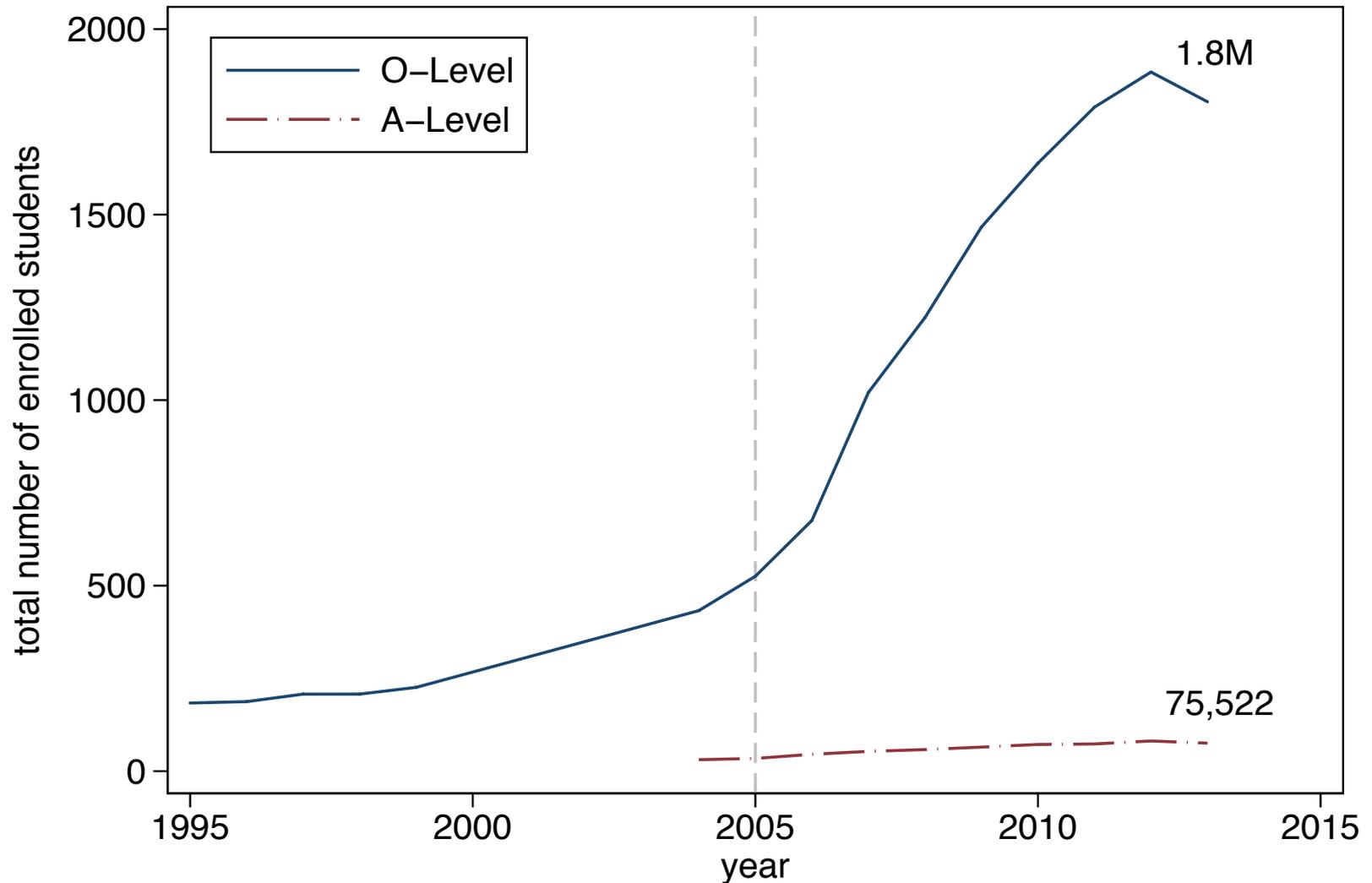
8 Construct **basic facilities** in **1,200** secondary schools

Teacher conditions

9 Recognize teachers through non-monetary incentives, ensure **0 outstanding claims** by and of June 2013, and **0 unresolved claims >3 months** moving forward

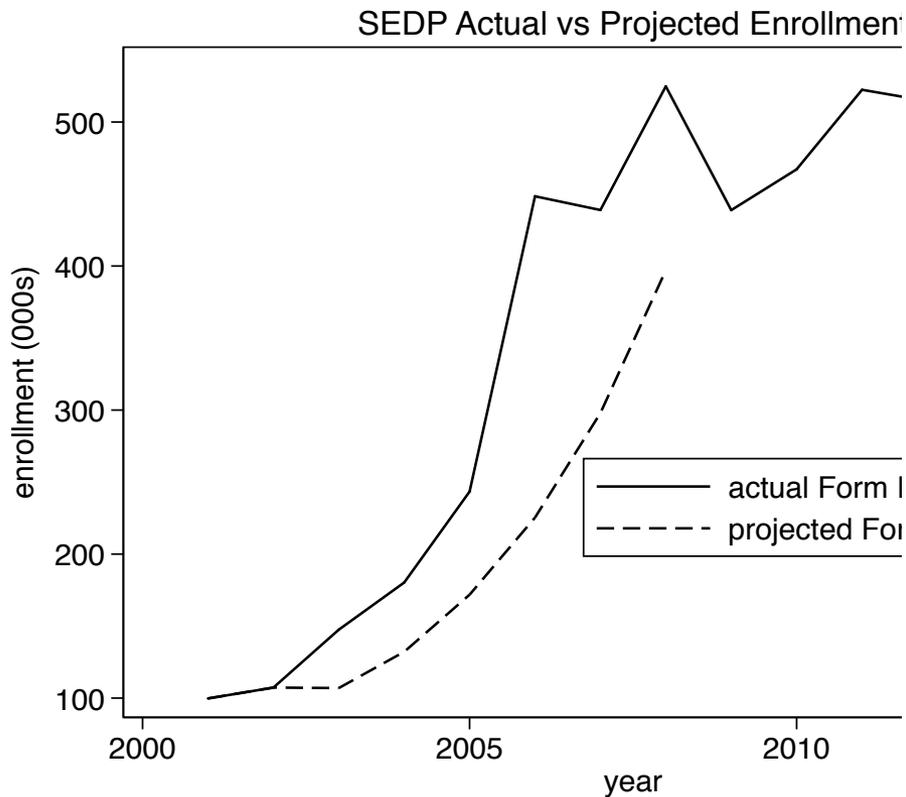
A Rapid Secondary School Expansion

Trends in Secondary School Enrollment

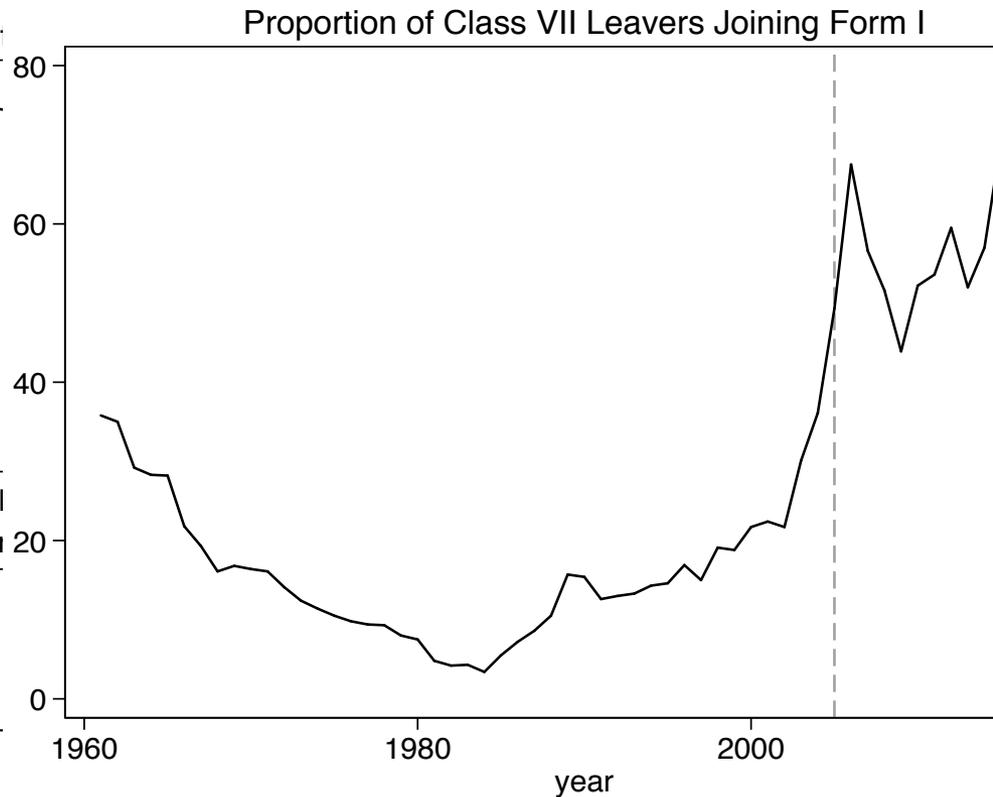


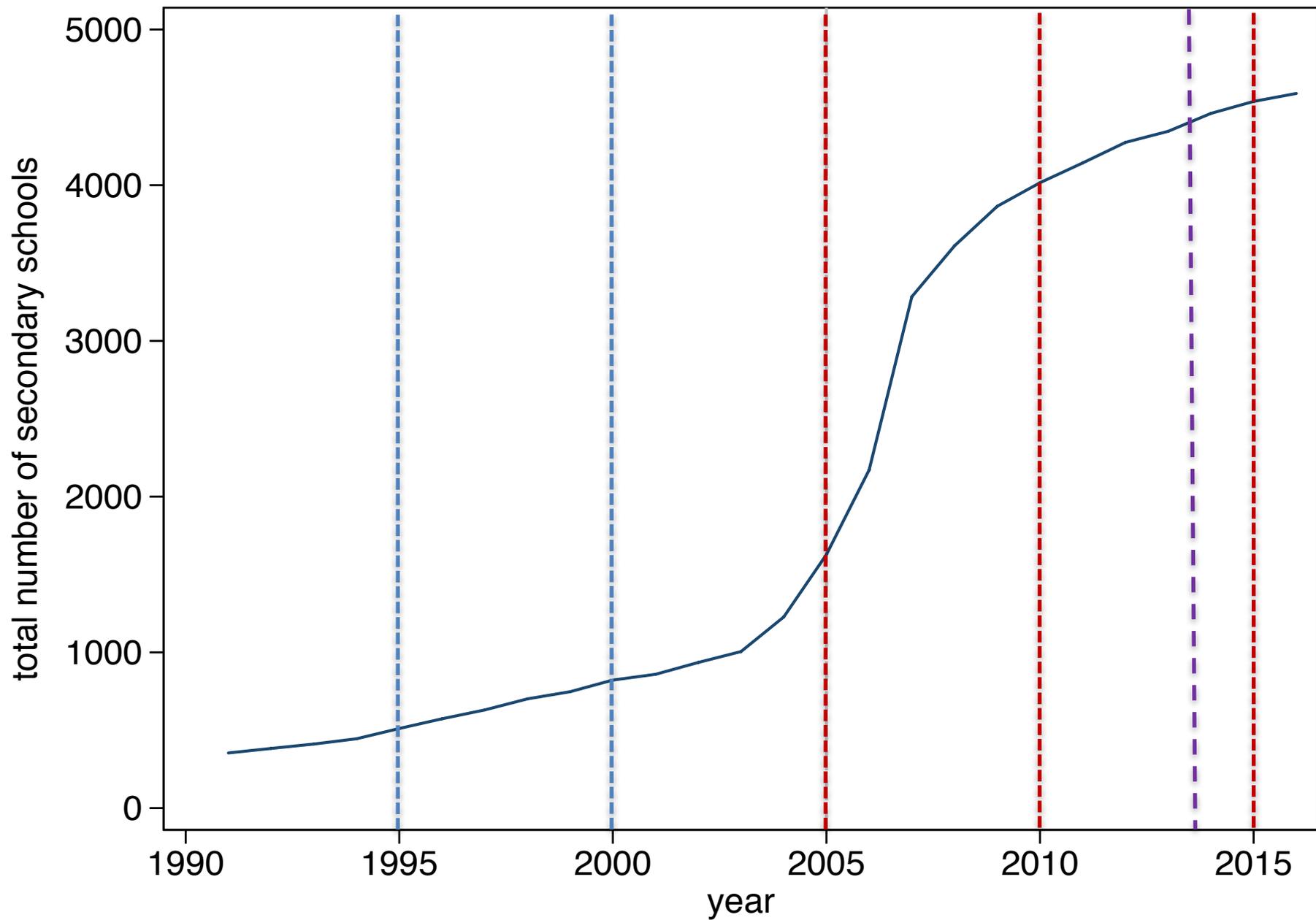
Exceeded government and donor expectations

Form 1 Enrollment



Primary Secondary Transition





Electoral Incentives and Public Goods Provision

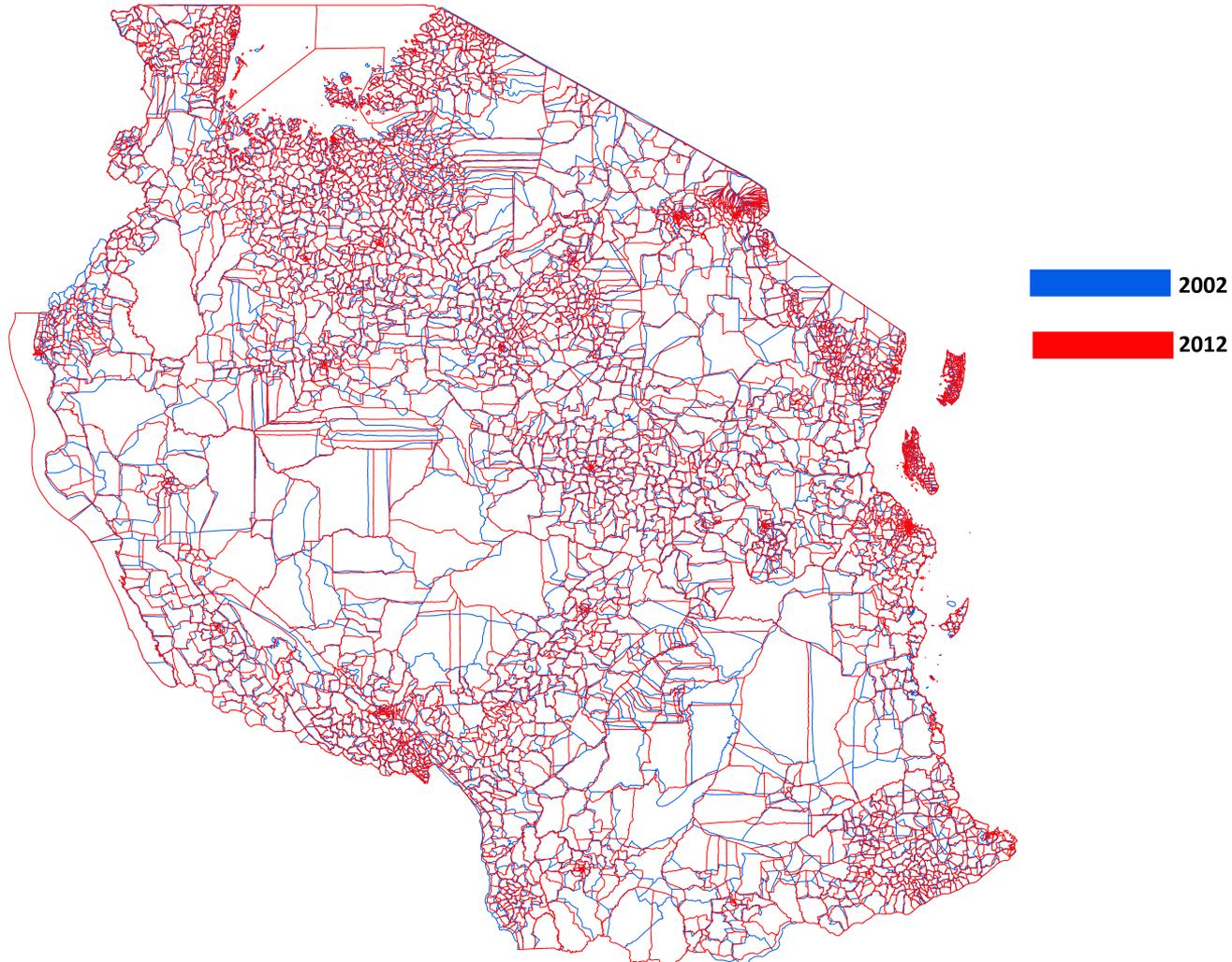
- 2005 CCM Election Manifesto
 - A school in every ward!
- A growing literature on electoral motivations for policy
 - Public Goods
 - Kjaer and Therkildsen (2013); Bates and Block (2013); Burgess et al (2015) and Harding and Stasavage (2014)
 - Administrative unit proliferation
 - Grossman and Lewis (2014); Hassan (2014)

How do you build schools with no \$?

- School construction delegated to communities (Languille 2014)
- Government committed to provide:
 - Roofing
 - Operational assistance
- What is the impact of this mobilization on political support for incumbent?

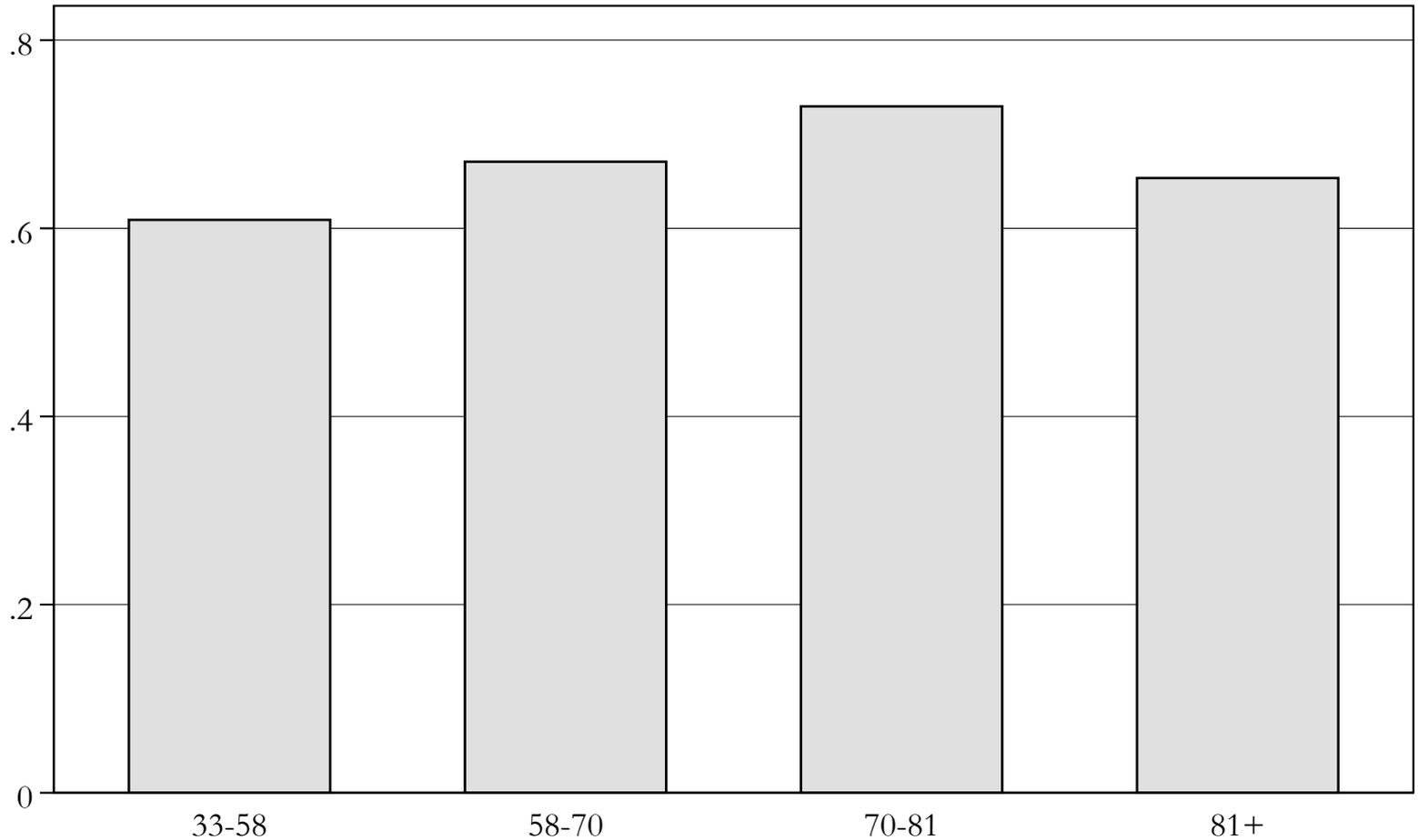
Use Linked electoral and schooling data

Tanzania Ward Boundaries



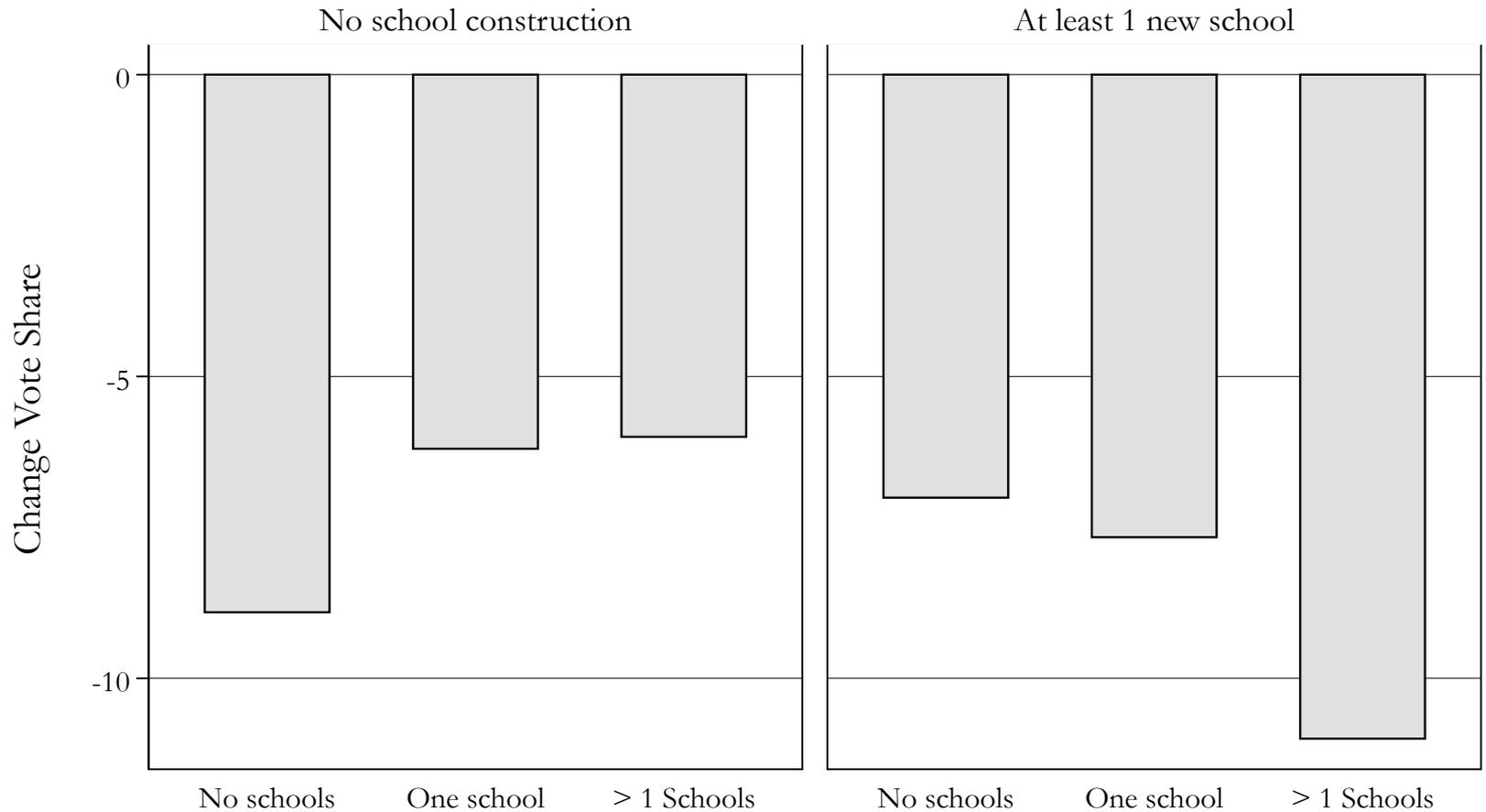
Is school construction targeted?

Likelihood of New School by 2005 support



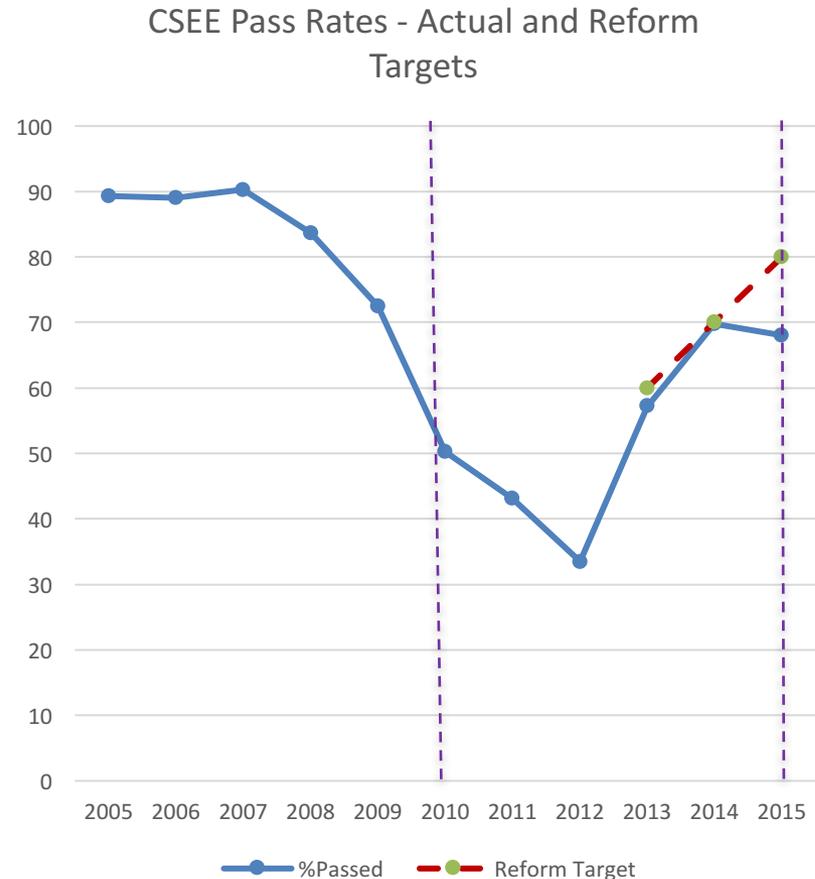
Diff-in-Diff results

Change in CCM Vote Share

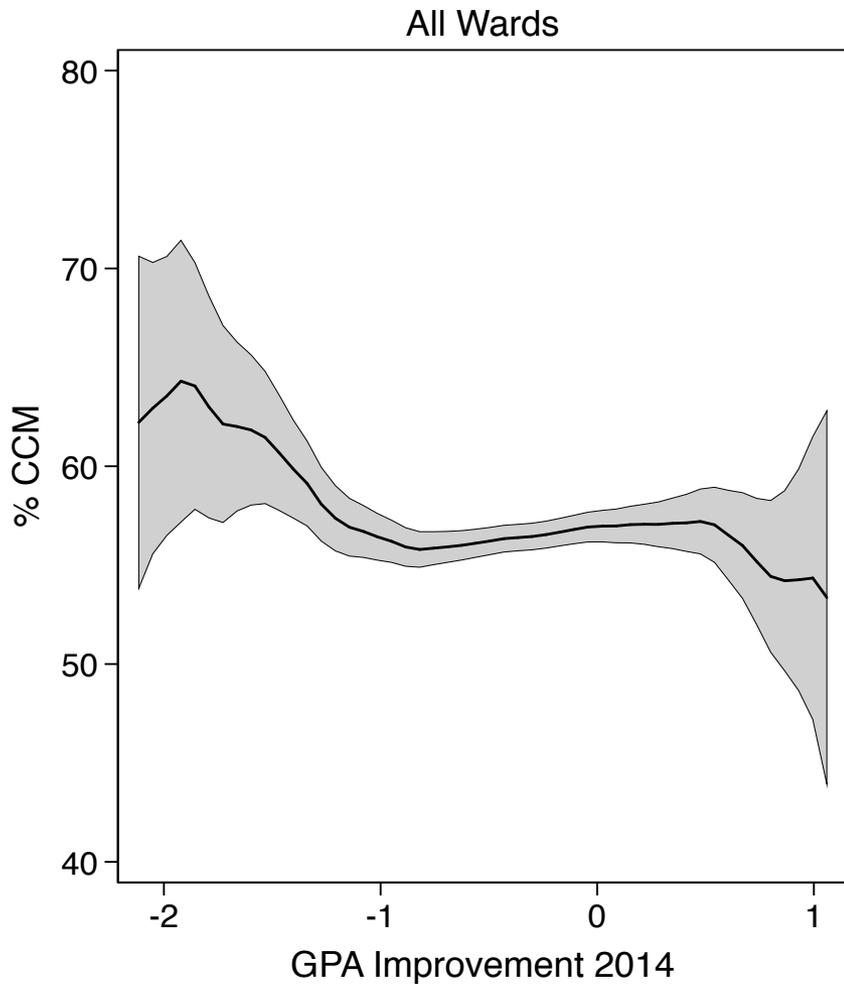


Do Signals of School Quality affect Vote Share

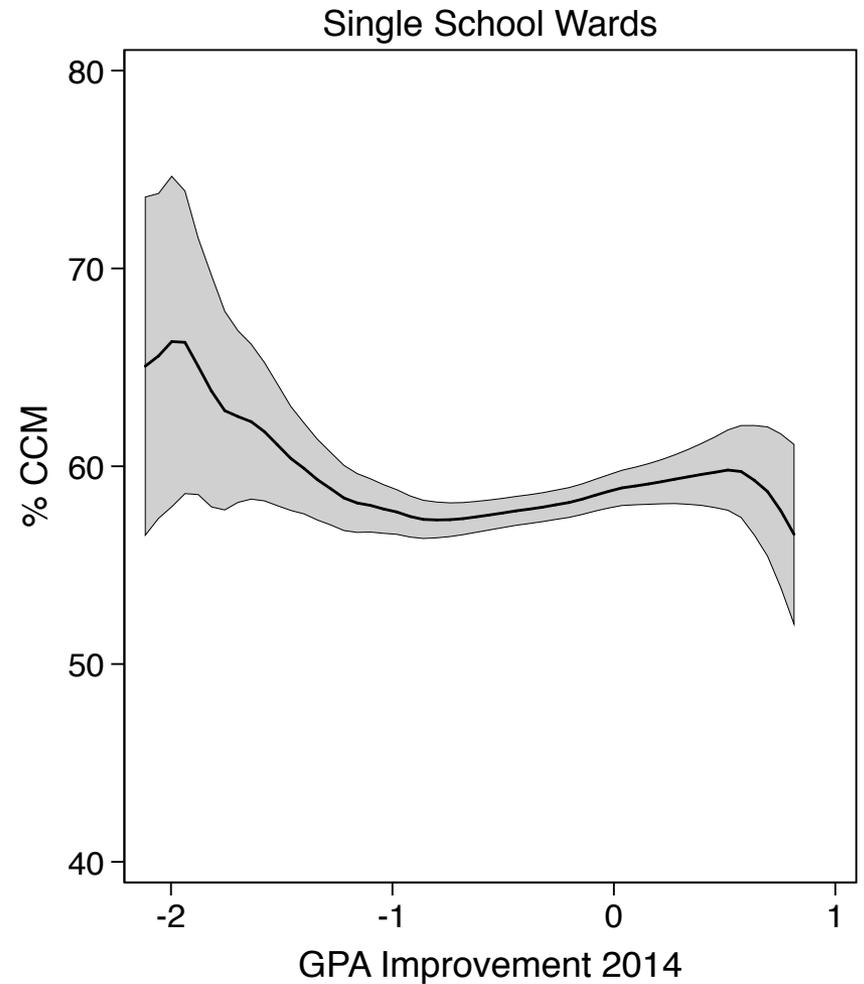
- Exploit BRN Reforms
 - Recognize (and reward) *most improved* schools by performance
 - Many of these signals reflect recovery from shocks
 - A search for convincing instruments
 - Don't observe voter information sets



Vote Share vs Test Score Improvement



kernel = epanechnikov, degree = 0, bandwidth = .2, pwidth = .31



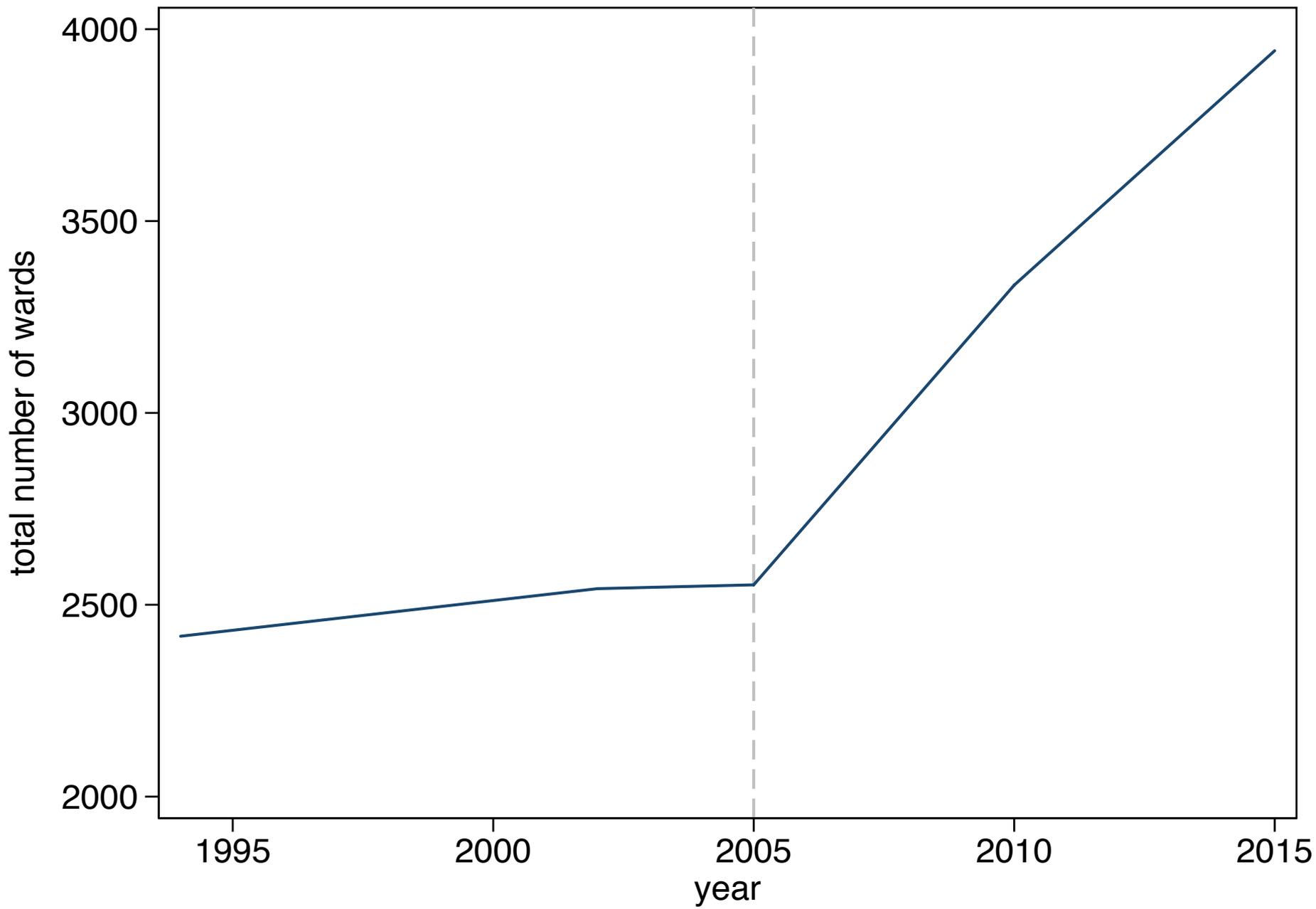
kernel = epanechnikov, degree = 0, bandwidth = .22, pwidth = .33

Regression Results – Cross Section

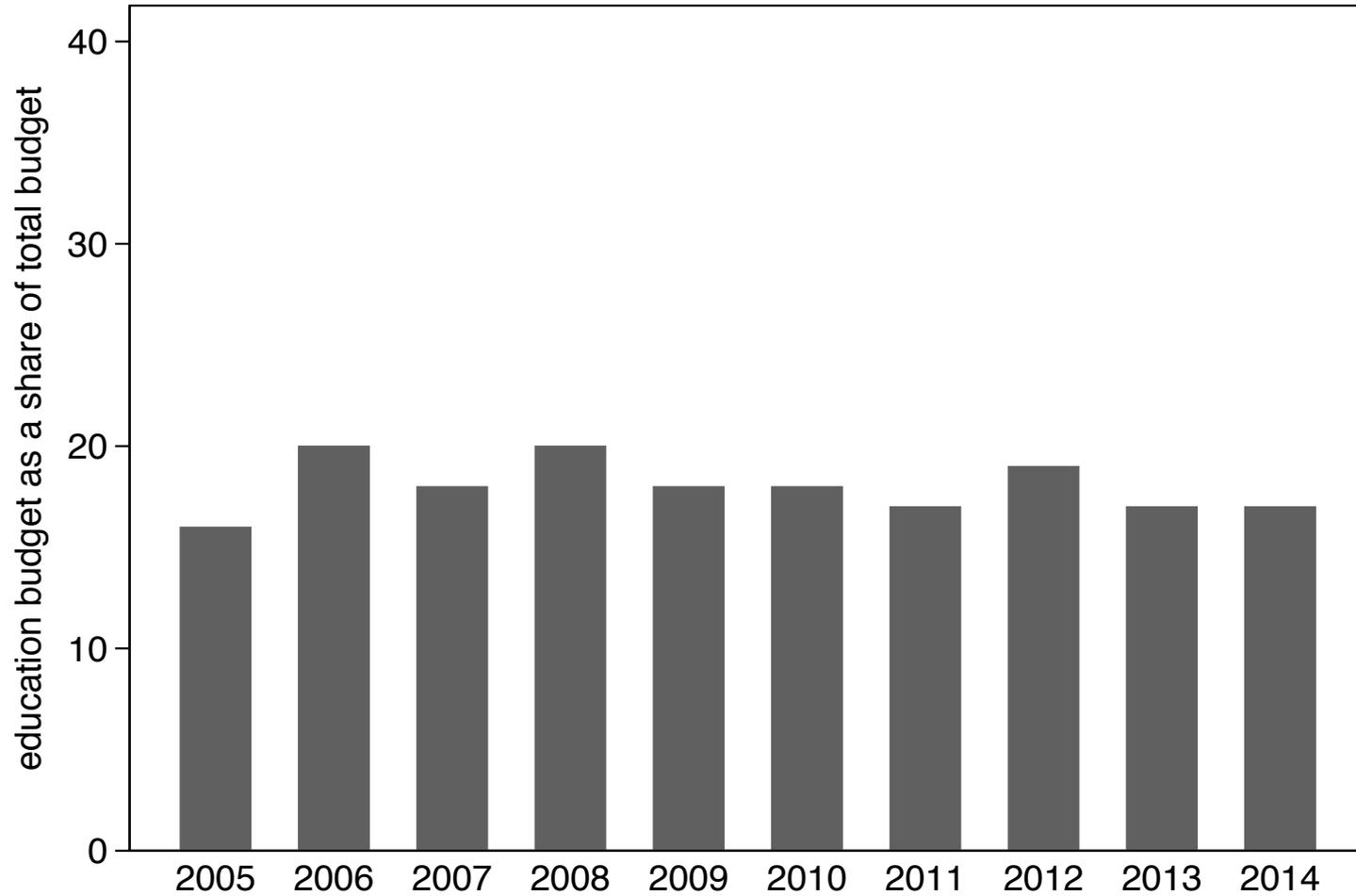
	All Wards			Single School Wards		
	(1)	(2)	(3)	(4)	(5)	(6)
100 Most Improved 2013-14	1.99	0.15	0.24	2.77*	1.21	1.17
	(1.44)	(1.48)	(1.47)	(1.60)	(1.70)	(1.70)
Average score of school in 2011 and 2012 in the ward		8.77***	8.11***		5.56***	5.91***
		(1.01)	(1.09)		(1.42)	(1.49)
100 Most Improved 2012-13			-3.09*			3.04
			(1.60)			(3.67)
Constant	56.3***	16.4***	19.5***	58.1***	32.4***	30.7***
	(0.28)	(4.62)	(5.00)	(0.32)	(6.57)	(6.90)
Observations	2770	2691	2691	1999	1926	1926
R-squared	0.001	0.027	0.028	0.001	0.007	0.008
CCM Vote Share in Wards without top improver	56.3	56.3	56.3	58.1	58.1	58.1

Next Steps

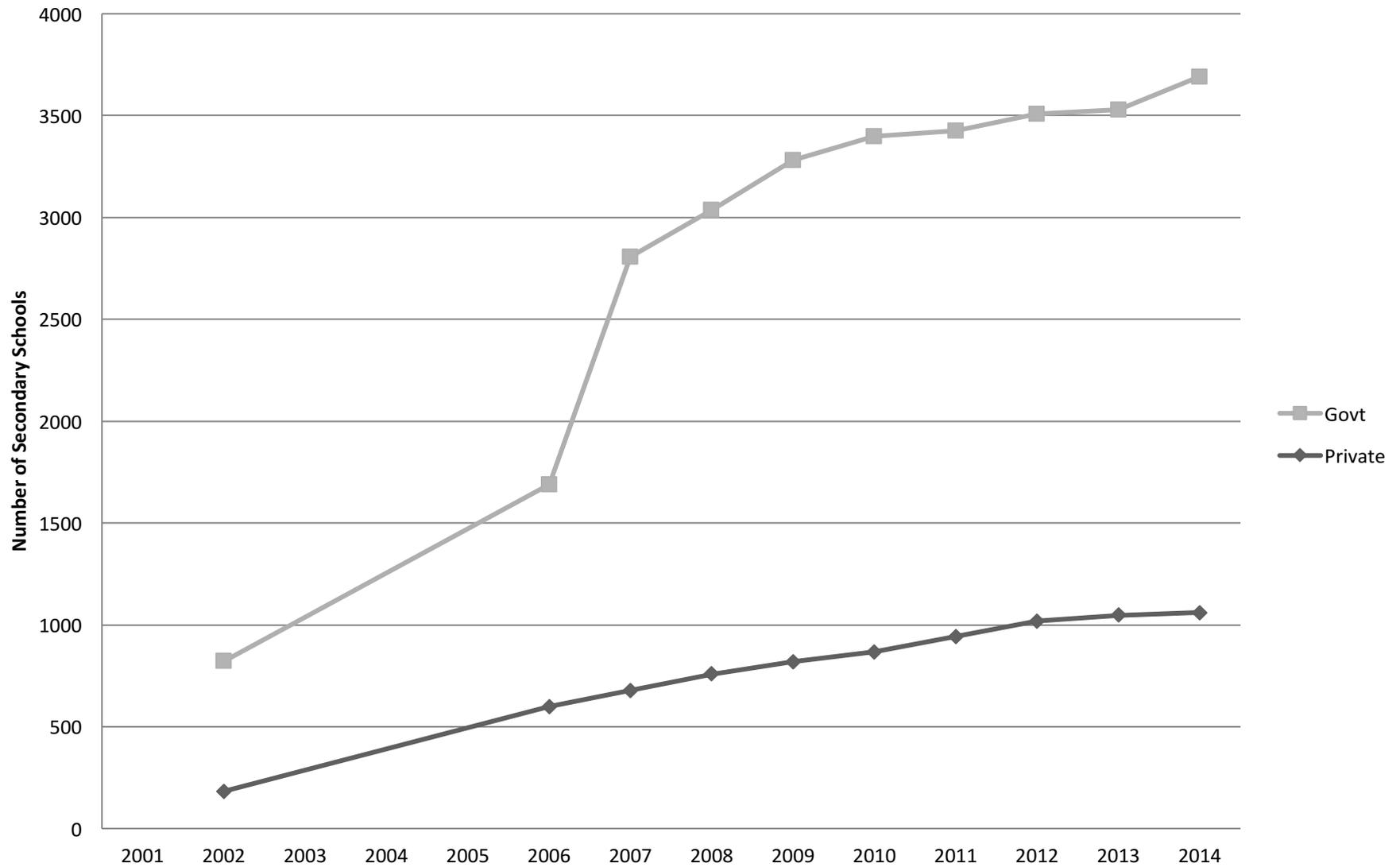
- Case study (and Todd and Attfield 2017) – top down reform has planted roots
 - Donors, bureaucrats but not voters
 - Programming back to traditional delivery modalities
- Don't find evidence (first cut) that very visible school inputs generate large electoral gains
 - Continue to exert pressure on budgets
 - Examine effects on 2015 election
 - Architect of school expansion leader of opposition groups



National-Level Education Expenditures



Number of Secondary Schools in Tanzania, by ownership



Demographic Pressure

