Electoral Incentives and Education Systems

Evidence from Tanzania Democratic Transition

Habyarimana, Opalo and Schipper
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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
While school enrollment rates have increased historically, the quality of education has declined. 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.
Case Study: Big Results Now (BRNed)

• A growth inspired set of reforms
  – Modeled on Malaysia’s Big Fast Results
• Six sectors
• 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
This report is based on team work of 34 members from 31 organizations over 6 weeks—6,800 collective hours.

**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.


**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

- **O-Level**
- **A-Level**

The graph shows the total number of enrolled students from 1995 to 2015, with a significant increase in the early 2000s reaching 1.8M in 2015, and A-Level students remaining relatively low, reaching 75,522.
Exceeded government and donor expectations

Form 1 Enrollment

Primary Secondary Transition

Proportion of Class VII Leavers Joining Form I
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
Is school construction targeted?

Likelihood of New School by 2005 support

- 33-58
- 58-70
- 70-81
- 81+
Diff-in-Diff results

Change in CCM Vote Share

<table>
<thead>
<tr>
<th></th>
<th>No school construction</th>
<th>At least 1 new school</th>
</tr>
</thead>
<tbody>
<tr>
<td>No schools</td>
<td>-10</td>
<td>-10</td>
</tr>
<tr>
<td>One school</td>
<td>-5</td>
<td>-5</td>
</tr>
<tr>
<td>&gt; 1 Schools</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
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Graphs by d_newschool
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

![CSEE Pass Rates - Actual and Reform Targets](image-url)
Vote Share vs Test Score Improvement

All Wards

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

Single School Wards

kernel = epanechnikov, degree = 0, bandwidth = .22, pwidth = .33
### Regression Results – Cross Section

<table>
<thead>
<tr>
<th></th>
<th>All Wards</th>
<th>Single School Wards</th>
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<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
</tr>
<tr>
<td><strong>100 Most Improved 2013-14</strong></td>
<td>1.99</td>
<td>0.15</td>
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<tr>
<td></td>
<td>(1.44)</td>
<td>(1.48)</td>
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<tr>
<td><strong>Average score of school in 2011 and 2012 in the ward</strong></td>
<td>8.77***</td>
<td>8.11***</td>
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<tr>
<td></td>
<td>(1.01)</td>
<td>(1.09)</td>
</tr>
<tr>
<td><strong>100 Most Improved 2012-13</strong></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>Constant</strong></td>
<td>56.3***</td>
<td>16.4***</td>
</tr>
<tr>
<td></td>
<td>(0.28)</td>
<td>(4.62)</td>
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<tr>
<td><strong>Observations</strong></td>
<td>2770</td>
<td>2691</td>
</tr>
<tr>
<td><strong>R-squared</strong></td>
<td>0.001</td>
<td>0.027</td>
</tr>
<tr>
<td><strong>CCM Vote Share in Wards without top improver</strong></td>
<td>56.3</td>
<td>56.3</td>
</tr>
</tbody>
</table>
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
Number of Secondary Schools in Tanzania, by ownership

- **Govt**
- **Private**
Demographic Pressure