

# Delivering Education

How the Rise of Private Schooling Changes Everything

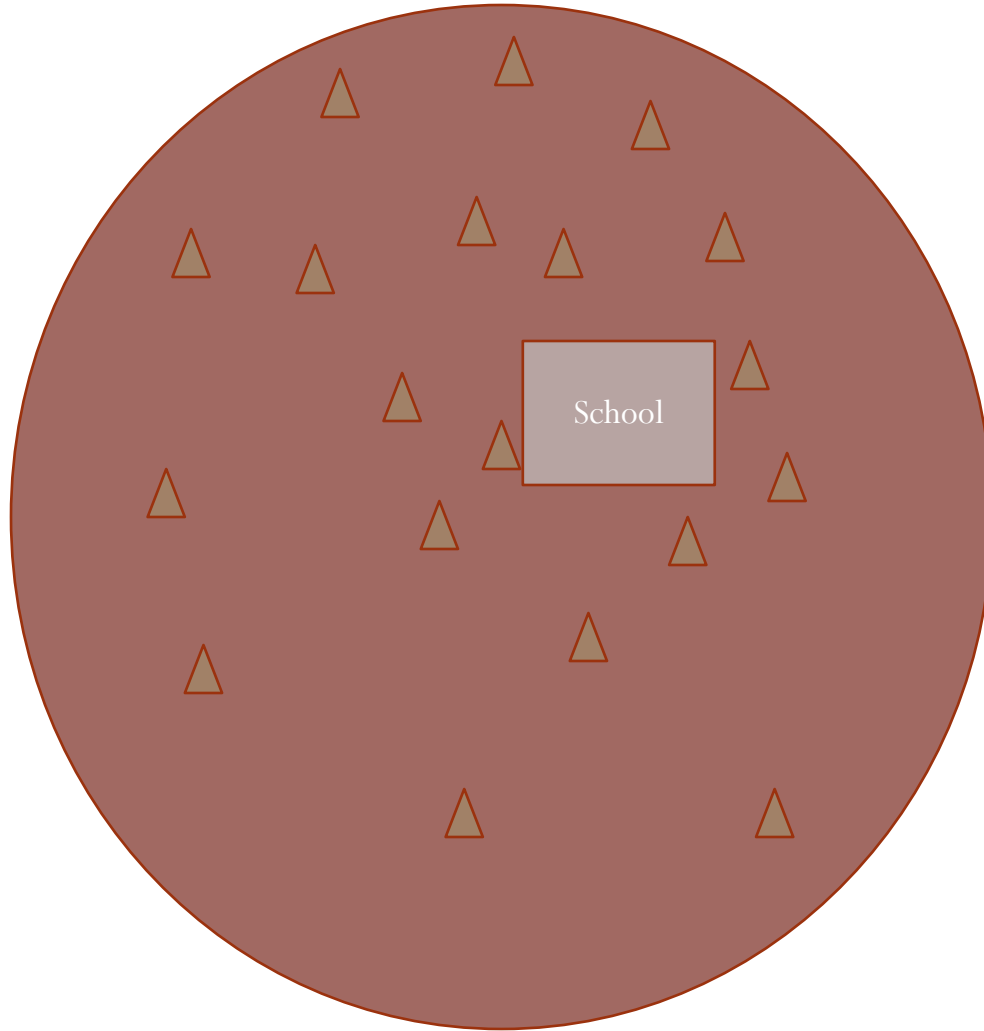
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(DECRG)

May 16, 2013

Based on the Learning and Educational Achievement in Punjab Schools (LEAPS) project with Tahir Andrabi (Pomona College) and Asim Khwaja (Harvard). The original team included Tara Vishwanath (MENAPR) and Tristan Zajonc (Harvard).

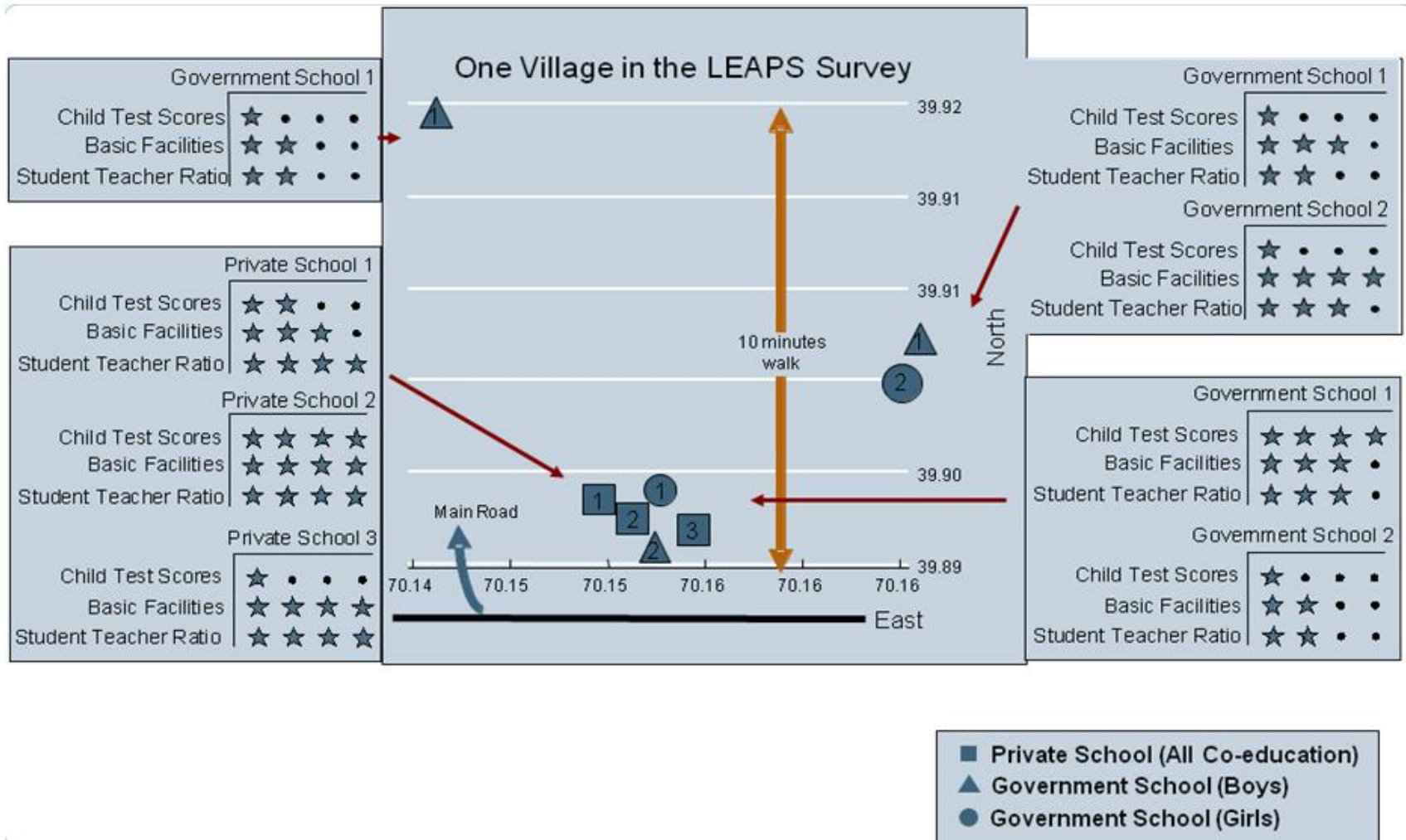
# The way it used to be



# The way it is now

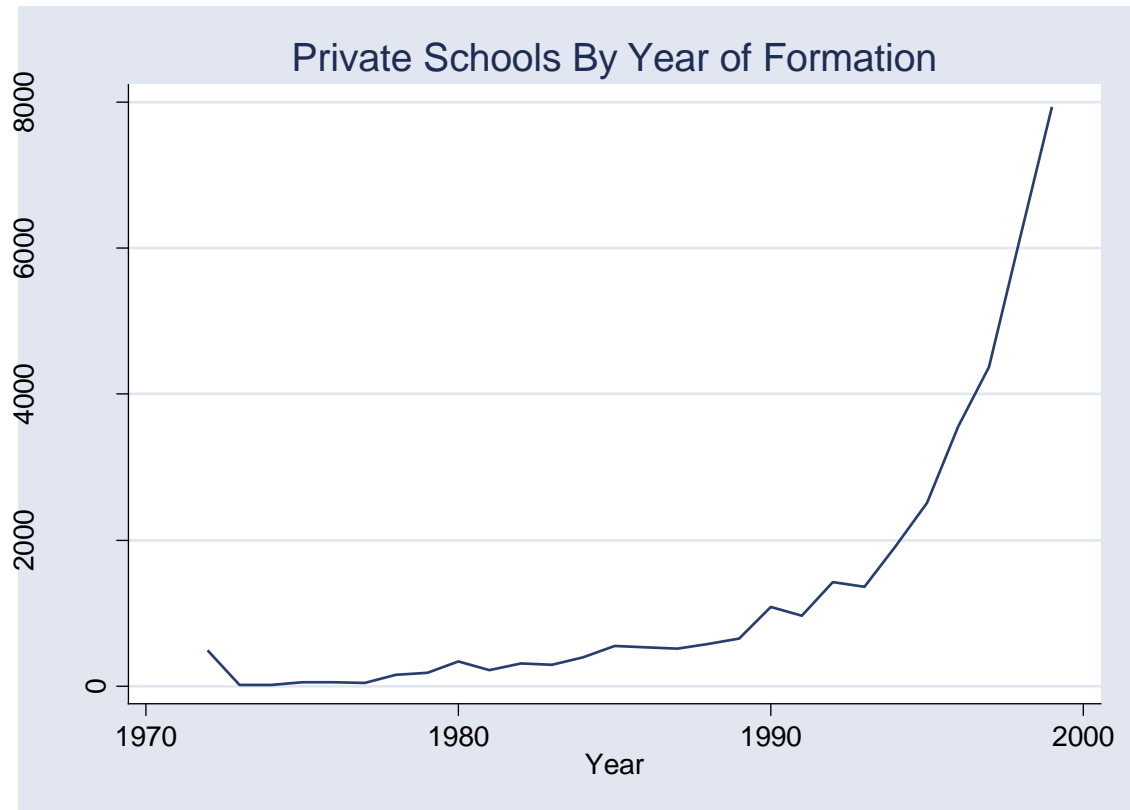


# The way it is now



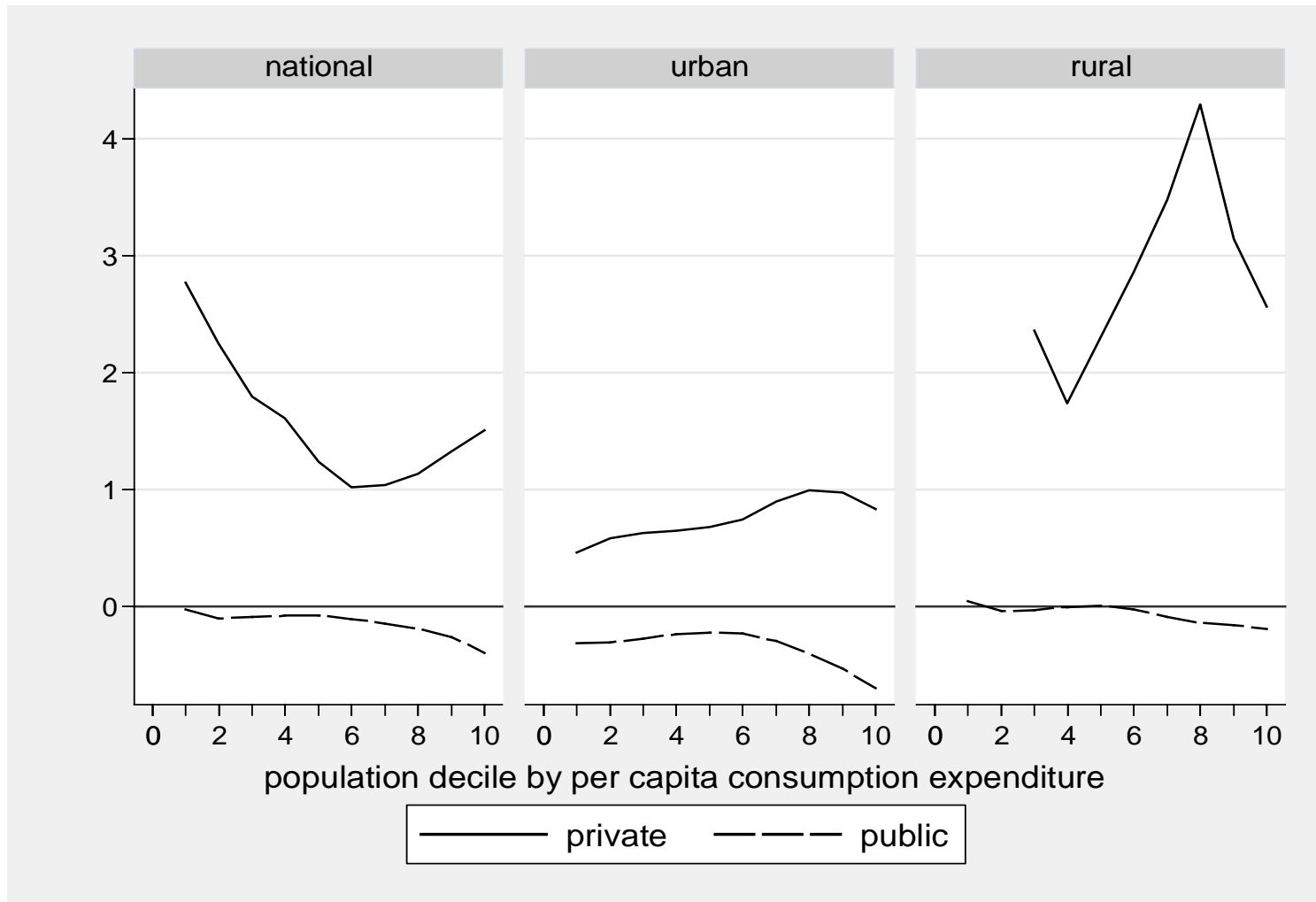
# Not a selected village

- Punjab, Pakistan:  
60% live in villages  
like this
- India and Pakistan: 30  
percent of primary  
schooling in private  
schools
- Estimated 40-50  
million children



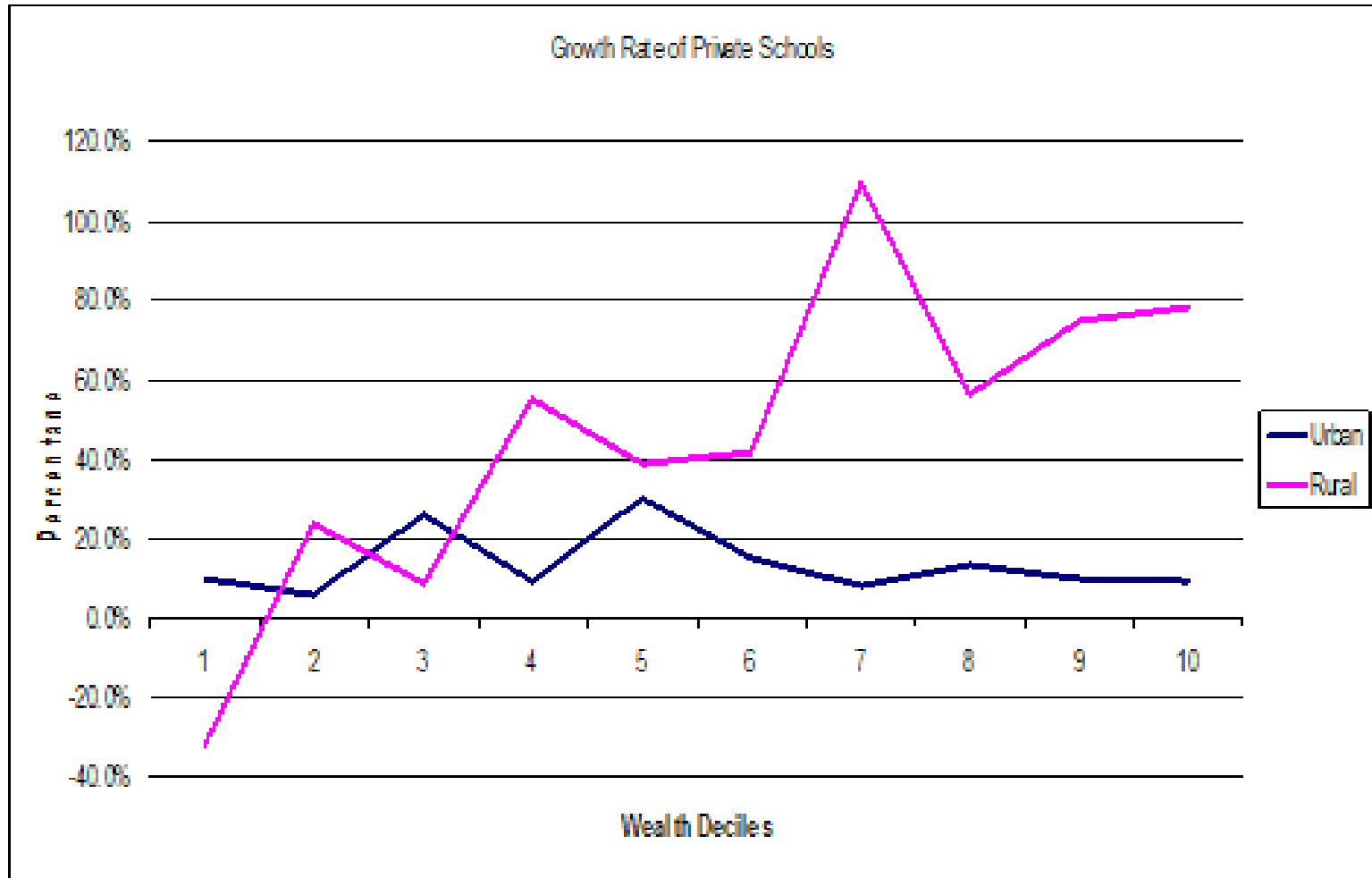
From less than 3500 in 1985 to 32,000 in 2000 to 47,000 in 2005

# Growing fast



Source: Andrabi, Das and Khwaja, A Dime a day

# India



# Cheap

**TABLE 3**  
**ANNUAL FEES (in Rs.) FOR SELF-OWNED (FOR-PROFIT) PRIMARY SCHOOLS**

<b>Province</b>	<b>Region</b>	<b>Median</b>	<b>Mean</b>	<b>Inter-quartile range</b>	<b>Number of Schools</b>
<b>NWFP</b>	Urban	1232	1439 (1360)	844	547
	Rural	1152	1249 (1276)	600	1167
<b>Punjab</b>	Urban	828	1176 (3112)	622	4290
	Rural	600	723 (943)	403	3897
<b>Sindh</b>	Urban	1208	1947 (3079)	1126	1325
	Rural	1080	979 (541)	720	77
<b>Balochistan</b>	Urban	1757	1833 (948)	1200	61
	Rural	1265	1293 (734)	669	42
<b>All Pakistan</b>	Urban	960	1426 (3492)	866	6397
	Rural	751	892 (1000)	638	6001

Source: PEIP 2000.  
Standard error of the mean in parenthesis.

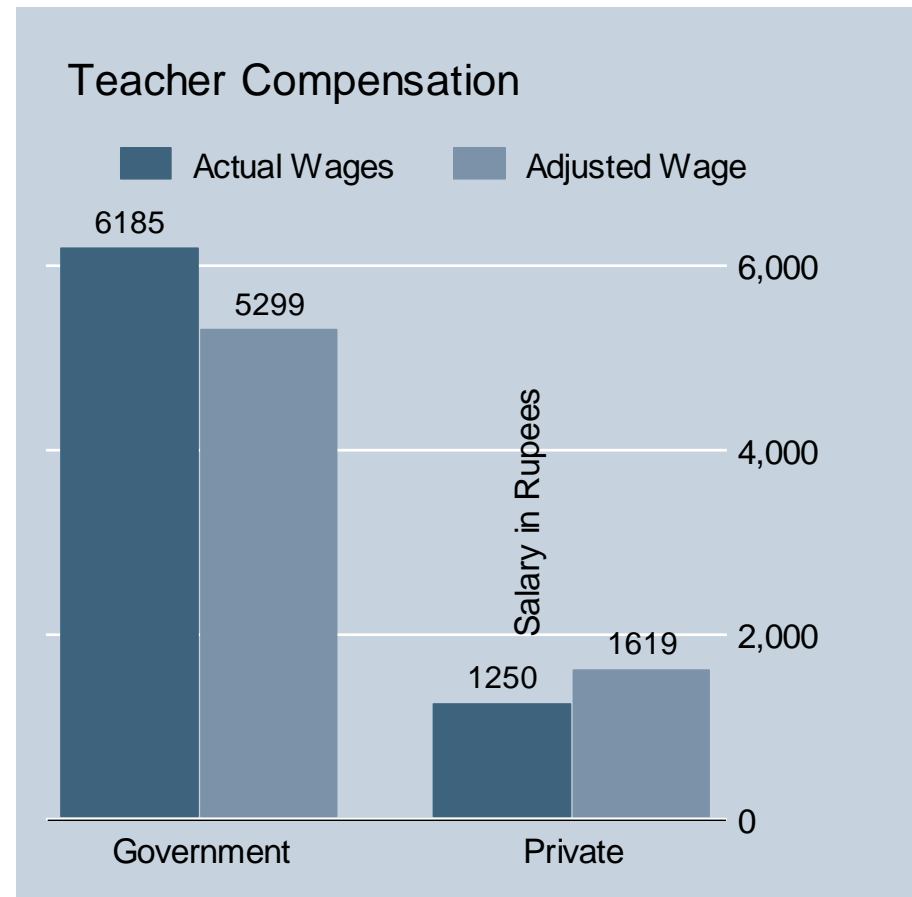
Note: In 2000, \$1 was approximately 60 Pakistani Rupees.



# Business Model

- Hire Single, Young, Local, Secondary School educated women with no teacher training

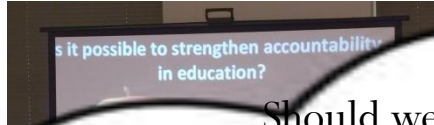
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Source: Andrabi, Das and Khwaja, A Dime a day

Pay them very little

# Questions, Questions, Questions



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L  
L  
PRIVATE

Should we advocate for a private schooling driven model of education?

Should we give vouchers for education

Should we work on improving public schooling?

If so, how? Teacher incentives? School management councils? Better infrastructure?

How can we bring more children into school, keep them longer and make them learn more?



What should be the central source of accountability be in schooling systems?

Parents?



Education  
Administration?

**Two** Fundamental  
Questions



What should we do about inequities in the acquisition of human capital?



The schooling debate (very) often confuses the two, and the case for public action often uses equity as a rationale to bring in administrative accountability

# An ancient debate

What should be the central source of accountability be in schooling systems?

“In too many instances the parents are unfit guardians of their own children...the children must be gathered up and forced into school”  
(Massachusetts Teacher, circa 1850)

”It is to you, my lords to take this task (education) in hand, for if we leave it to the parents, we will die a hundred times over before the thing could be done” (Martin Luther, 1520)

“The child should be taught to consider his instruction, in many respects, superior to the parent in point of authority...The vulgar impression that parents have a legal right to dictate to teachers is entirely erroneous”  
(California State Superintendent of Public Instruction, 1864)

“Our young people, most of whom have no aptitude for Latin and are growing up to be artisans, are better served by a German teacher than a Latin master, for they need to learn writing and reading, which of great help to them in their work and livelihood”  
(Heidenheim, Germany)

Source: Andrew Coulson, Market Education

# Macaulay's minute 1835

“We have to educate a people who cannot at present be educated by means of their mother-tongue.

I am quite ready to take the oriental learning at the valuation of the orientalists themselves. I have never found one among them who could deny that a single shelf of a good European library was worth the whole native literature of India and Arabia. The intrinsic superiority of the Western literature is indeed fully admitted by those members of the committee who support the oriental plan of education.

In one point I fully agree with the gentlemen to whose general views I am opposed. I feel with them that it is impossible for us, with our limited means, to attempt to educate the body of the people. We must at present do our best to form a class who may be interpreters between us and the millions whom we govern, --a class of persons Indian in blood and colour, but English in tastes, in opinions, in morals and in intellect. ”

# Today's language

Left to their own devices parents will

- Choose radical religious education
- Be exploited: “Fly by night operators”, illiterate parents, easily fooled
- For the benefit of: The unscrupulous private sector
- Will not receive: Civic Education, so critical for nation building
  - *“The possession of a vote by a person ignorant of the privileges and responsibilities of citizenship... is responsible for endless corruption and political instability. Our education must ...[teach] the fundamental maxim of democracy, that the price of liberty is eternal vigilance and it must aim at cultivating the civil virtues of discipline, integrity, and unselfish public service.(Ministry of Interior (Education Division) 1947, p.8)*

# And where it took us

- Schooling attainment *now* about to reach full enrollment at primary
- High drop-outs primary to secondary
- Very low learning
- One of the largest learning inequalities in the world
  - 95<sup>th</sup>-5<sup>th</sup> percentile spread in Orissa and Rajasthan (two Indian states) next only to South Africa



# How Private Schools Change Everything

- Private schools in Asia (and many parts of the world) dominant prior to 1850
- State schooling starts to enter 1850
- Becomes dominant source over time, and accelerates after 1947 (very little data!)
- Pakistan nationalizes private schools in 1972
- De-nationalizes 1979
- Tremendous growth since then

# This time is different

Large and growing private sector that is (virtually) unregulated and unsubsidized (Pakistan: <4% schools run by NGOs)

Phenomenal increase in our ability to bring evidence to bear on policy

Many developments in our understanding of schooling and our empirical methods since 1850

We can now look at and answer fundamental questions regarding the functioning of the private sector without subsidies and minimal regulation, albeit with a state sector alongside. The last time this happened was before 1850!

# The LEAPS study

3 Districts in Punjab, Pakistan  
(A province with 80 million  
people)



112 Villages: Random selection  
from villages with at least one  
private school



All schools in every village  
(800 or so)



5000 teachers (sparse), 800  
teachers (details), 800 head-  
teachers, 12-24,000 children,  
1800 households



2003, 2004, 2005, 2006, 2010

Methods

Anthropological Economics

+

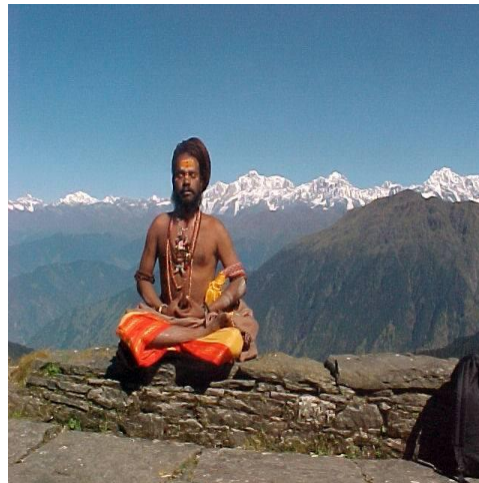
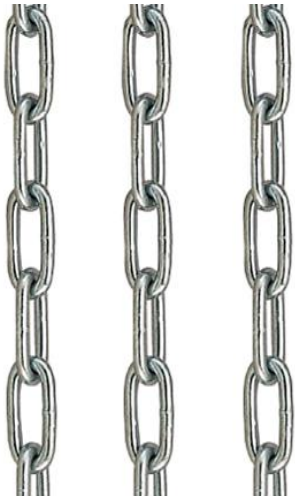
Methodological Anarchy

What should be the central source of accountability be in schooling systems?

Parents?

Education  
Administration?

Find evidence that parental accountability is a very good first pass, especially in places where the quality of administration is poor



This does not mean that private markets can't be improved: We can do things to make the market function better (Information, Finance)

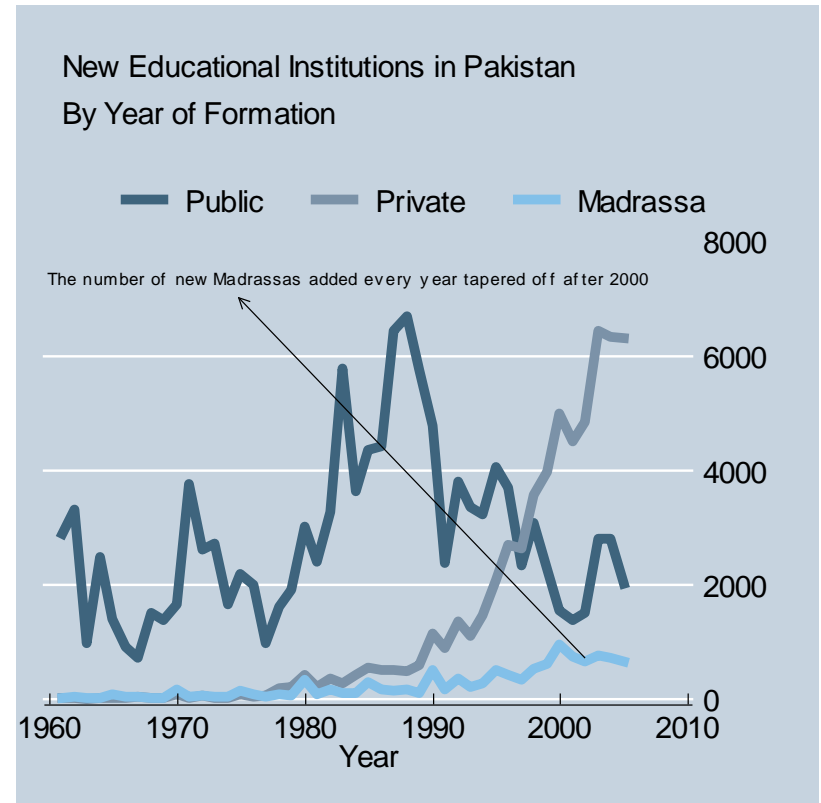
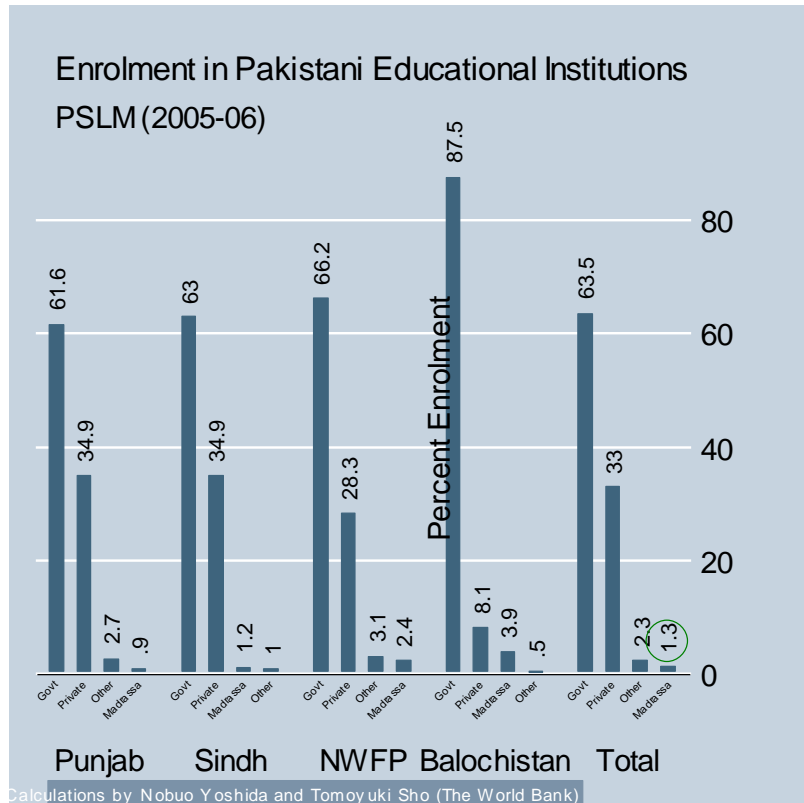
What should we do about inequities in the acquisition of human capital?

Worry about it

Private markets are efficient, but inequitable. We *do not* have good models for enhancing equity in private schooling markets: This is the frontier

What can we say about parental versus administrative accountability?

# The facts: Religious Education



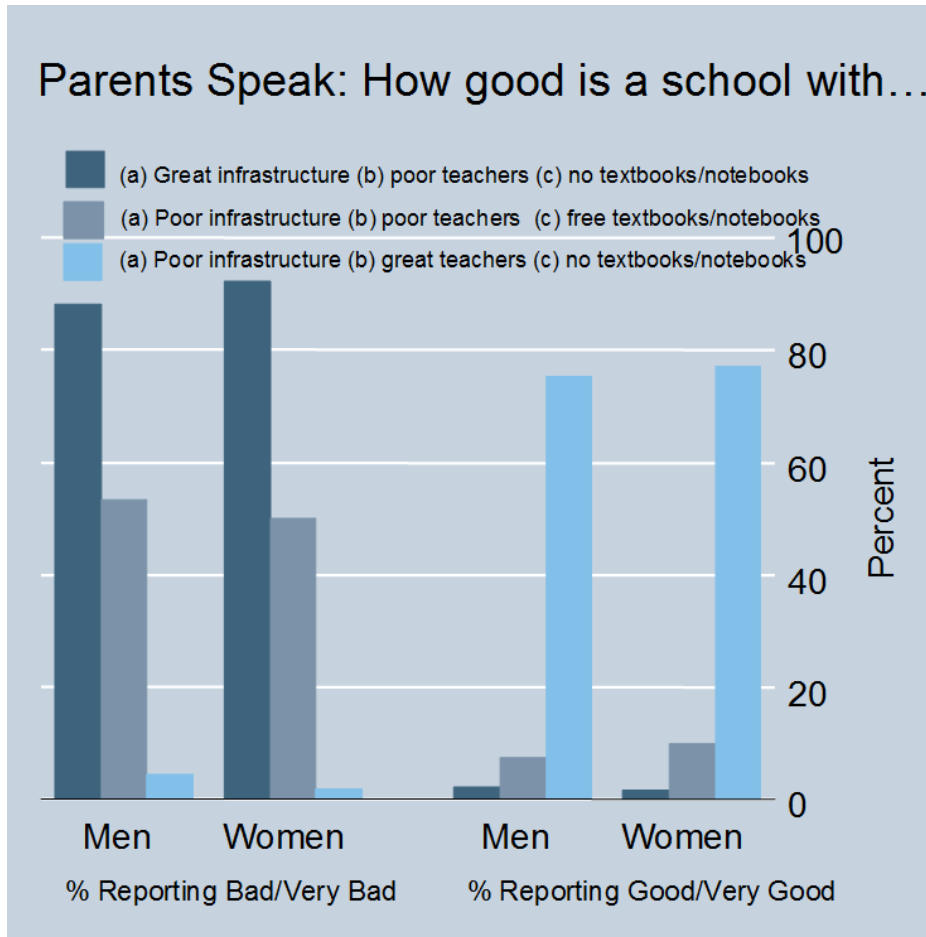
Fewer kids in religious schools (madrassas) in Pakistan (1%), than in the U.S.

Not growing since 2000

75% of parents with one child in madrassa has a second kid in secular

Source: Andrabi, Das, Khwaja and Zajonc, Religious Schooling in Pakistan plus others

# The facts: What do parents think?



Anthropological Economics

*"I tell poems from my childhood and make my child write them down and read them back. If she reads them back correctly, I know that she wrote it well"*

Source: Andrabi, Das, Khwaja and Vishwanath, The LEAPS report

# The facts: Test Scores

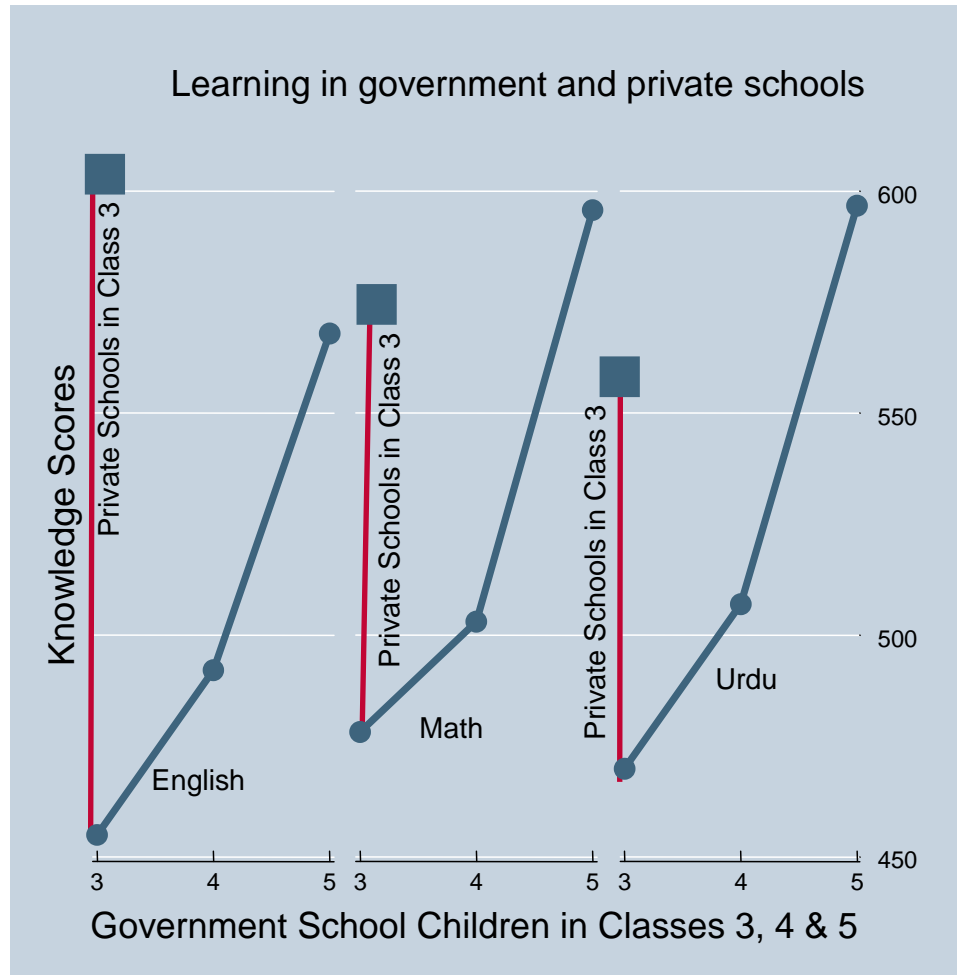
## Test Scores

	Private	Public	Difference
Math Score	0.436	-0.134	0.570***
Adding and Subtracting Question	0.797	0.743	0.055*
Multiplying and Dividing Question	0.539	0.280	0.259***
Urdu Score	0.436	-0.134	0.570***
Make a Sentence With a Given Word	0.478	0.261	0.217***
Urdu Reading Comprehension Question	0.569	0.409	0.160***
English Score	0.619	-0.190	0.808***
Alphabet Order Question	0.772	0.679	0.092***
Identify Picture With English Word	0.569	0.299	0.269***
TIMSS Adjusted Math Score	517.463	465.518	51.944***

Source: Andrabi, Bau, Das and Khwaja: “Bad Public Schools are Public Bads”



# The facts: Test Scores



Source: Andrabi, Das, Khwaja and Vishwanath, The LEAPS report

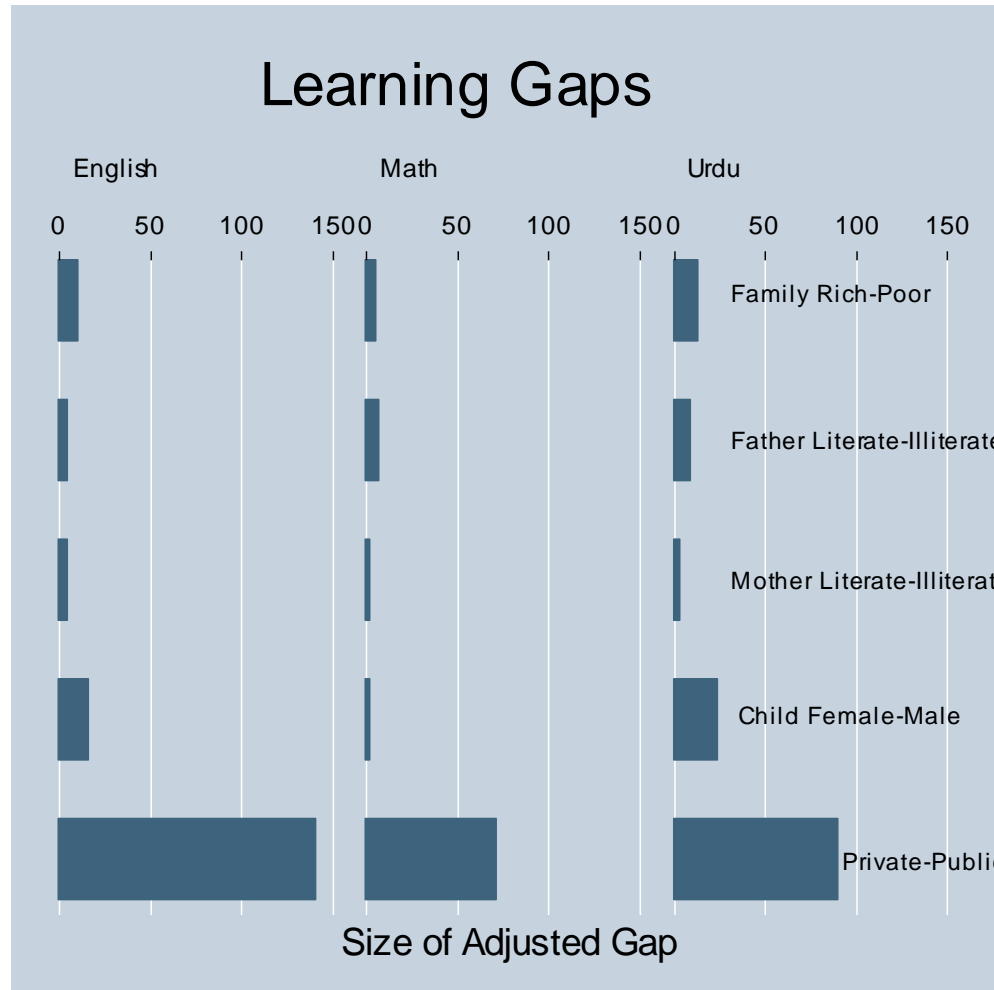
# The facts: Civic Values

## Civic Values

	Private	Public	Difference
All Ideology Questions	0.196	-0.040	0.236***
Civic Disposition	0.151	-0.030	0.181**
Can Finish Poem	0.545	0.441	0.104**
Can Finish Pop Song	0.814	0.714	0.099***
Can Finish Slogan	0.330	0.298	0.031
Give Money to Gov During Crisis	0.255	0.299	-0.044
Vote to Choose Lunch	0.179	0.131	0.048*
Civic Knowledge	0.210	-0.046	0.256***
Can Name Neighboring Country	0.507	0.442	0.065*
Can Name Founder of Pakistan	0.963	0.968	-0.005
Can Name Prime Minister	0.670	0.573	0.097**
Male Bias	-0.079	0.027	-0.105
Thinks Boys Monitor Better	0.201	0.210	-0.009
Thinks Boys Are Better Students	0.099	0.147	-0.049*

Source: Andrabi, Bau, Das and Khwaja: “Bad Public Schools are Public Bads”

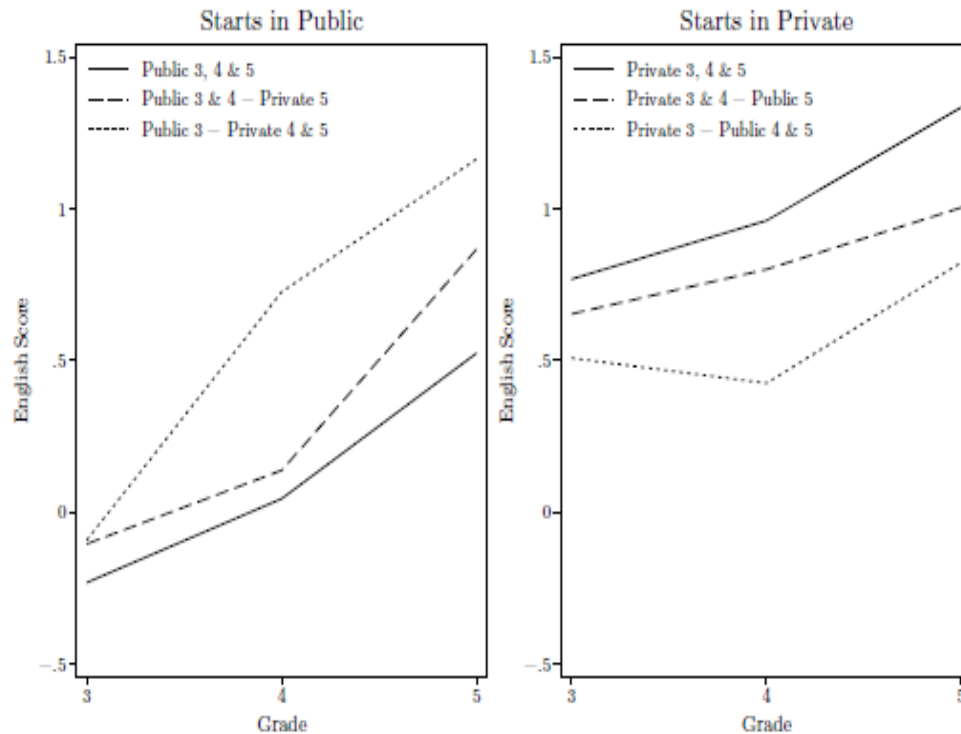
# The facts: What about Selection?



Source: Andrabi, Bau, Das and Khwaja: "Bad Public Schools are Public Bads"

# The facts: What about Selection?

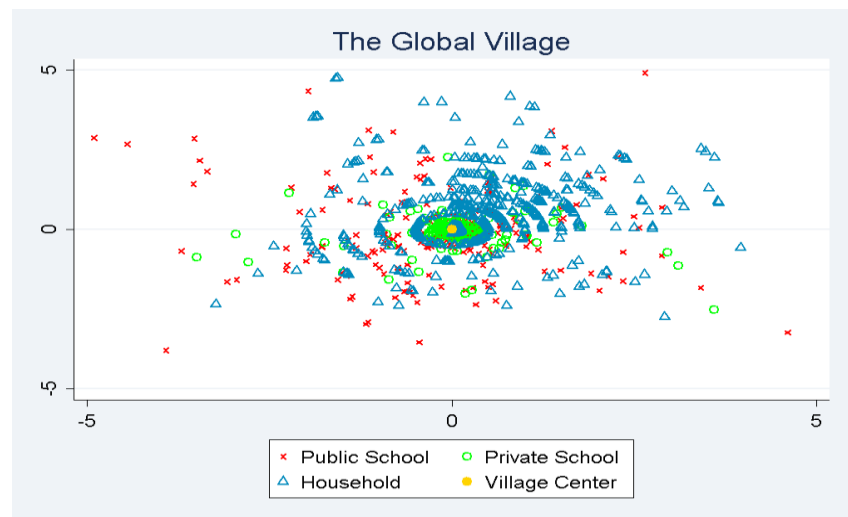
FIGURE 2. ACHIEVEMENT OVER TIME FOR CHILDREN WHO SWITCHED SCHOOL TYPES



Source: Andrabi, Das, Khwaja and Zajonc: "Do Value-Added Measures Add value"

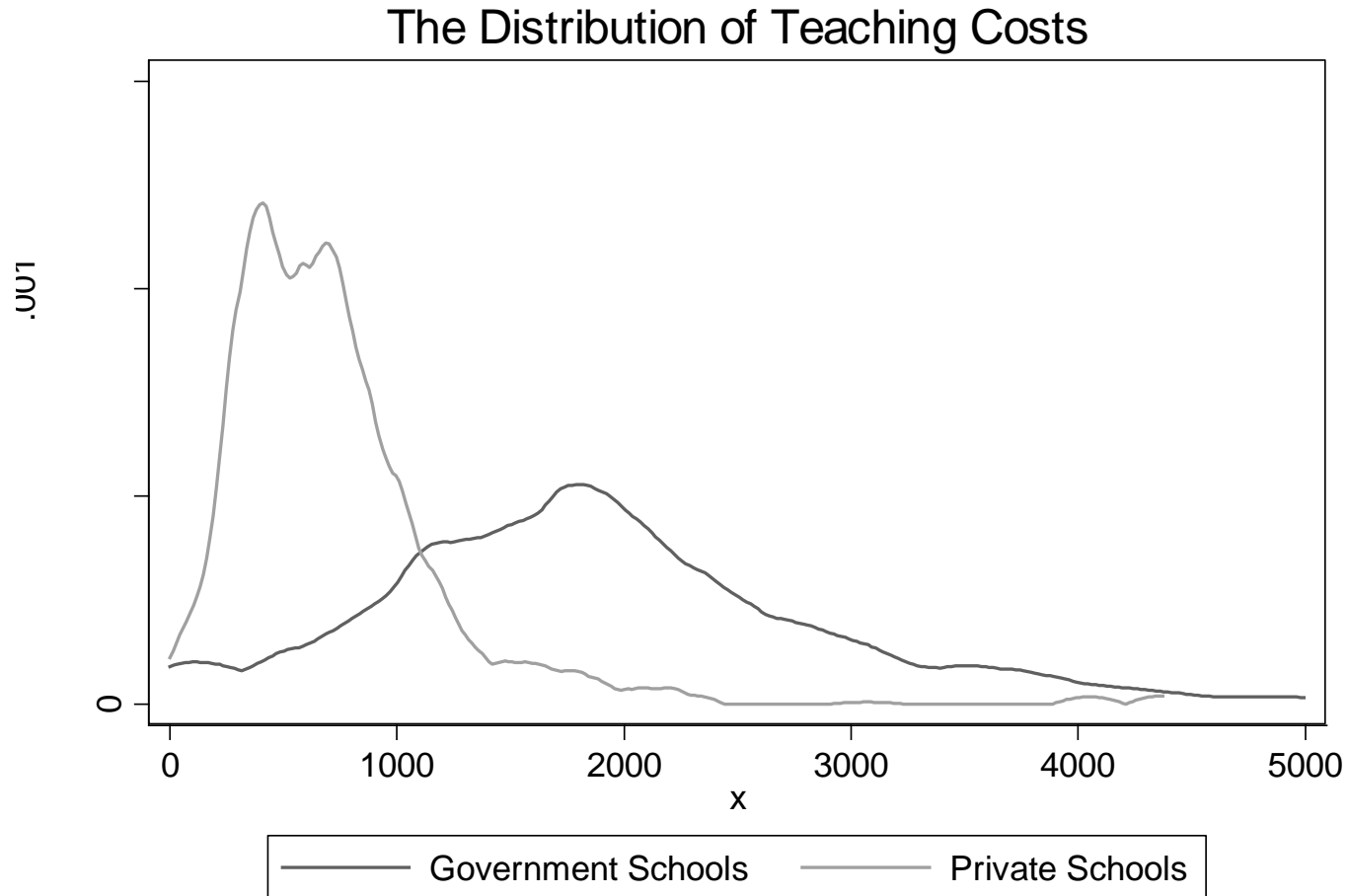
# What about selection

- Instrumental variables, using settlement patterns in canal colonies set up by the British
  - Verify similar patterns, strongest for English



Source: Andrabi, Bau, Das and Khwaja: "Bad Public Schools are Public Bads"

# The facts: Costs



Source: Andrabi, Bau, Das and Khwaja: "Bad Public Schools are Public Bads"

# The facts: Parental Choices

- Estimate structural choice model
  - Parents value infrastructure, test-scores
  - Parental costs are prices and distance
    - The latter is particularly high
  - Price and quality elasticity higher for the poorer and for girls

# But markets can be improved

**Learning and Educational Achievement in Punjab Schools**  
**رپورٹ کارڈ برائے تعلیمی کارکردگی**

نام: \_\_\_\_\_ سکول کا نام: \_\_\_\_\_

والد کا نام: \_\_\_\_\_ جماعت: \_\_\_\_\_

ریاضی	انگریزی	اردو	<b>درجہ بندی</b> پہلا درجہ: بہت اچھا دوسرا درجہ: اچھا تیسرا درجہ: تسلی بخش چوتھا درجہ: محنت کی ضرورت پانچواں درجہ: بہت محنت کی ضرورت
درجہ حاصل کردہ نمبر (کل نمبر 100)	درجہ حاصل کردہ نمبر (کل نمبر 100)	درجہ حاصل کردہ نمبر (کل نمبر 100)	
			<b>بچے کی کارکردگی</b>
			<b>آپ کے سکول کے بچوں کی اوسط کارکردگی</b>
			<b>موضوع کے تمام سکولوں کے بچوں کی اوسط کارکردگی</b>

*Jahni Andrabati*  
 پروفیسر ڈاکٹر طاہر اندرابی  
 پراجیکٹ ڈائریکٹر

ستاروں سے آگے جہاں اور بھی ہیں

مہینہ \_\_\_\_\_  
 17 اگست 2004

Market Level Information Intervention (Experimental)

Source: Andrabati, Das and Khwaja: Report Cards



# But markets can be improved

## Providing information in markets

- Reduces private school prices (more so for the initially better ones)
- Increases village-level test-scores by 0.11 s.d
- Effect driven by initial low performers among private schools (0.33 s.d.)
- And increases in public school test-scores by 0.1 s.d.
- Consistent with theory of pricing and quality choice under asymmetric information

# Thus far

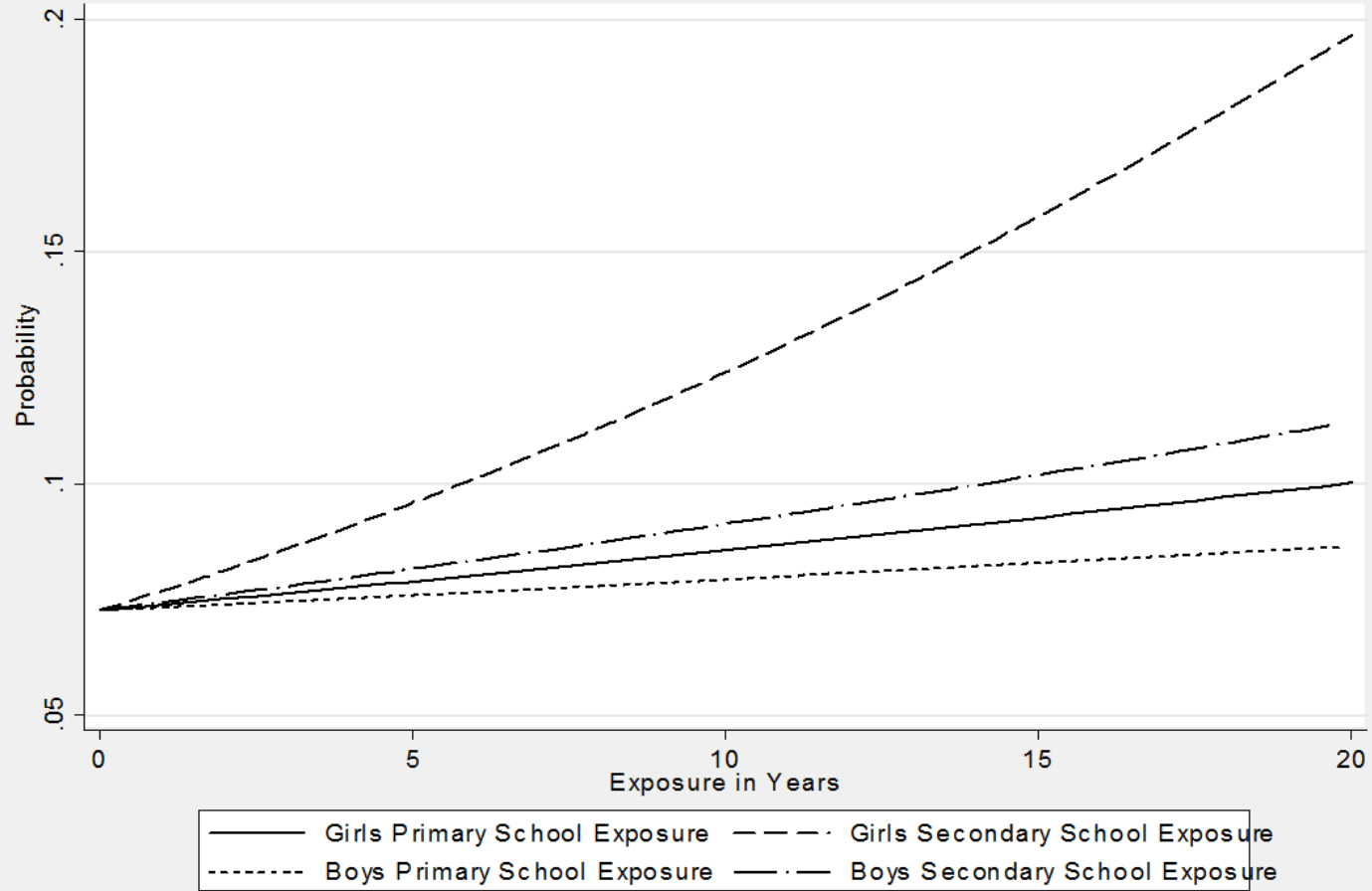
- We find little evidence that parents are systematically making “wrong choices”
  - Importance of religious schooling overblown
  - Test-scores in private schools are higher
  - Civic values are no worse, and possibly better
  - Overall costs (to parents and society) is lower
  - Choice models show parents value test-scores, infrastructure, closeness and low prices
- We also find evidence that specific interventions can improve market functioning: Information

What about equity?

# Inequities in Access

- Public primary schools in Pakistan equitably distributed
  - No correlation with village-level socioeconomic status
  - Within village, typically closer to *poorer* households (LEAPS)
- Private schools have come up in a particular type of village
  - More so in Punjab, KP, much less in Balochistan, Sindh
  - New private schools between 2001 and 2005 in villages that already had a private school, not in villages where there were none to begin with
  - Village size, village wealth are obvious stories
  - Is there more to it?

Figure II. Probability of Private School w/ Exposure to Government Schools:



Source: Andrabi, Das and Khwaja: Students today, teachers tomorrow

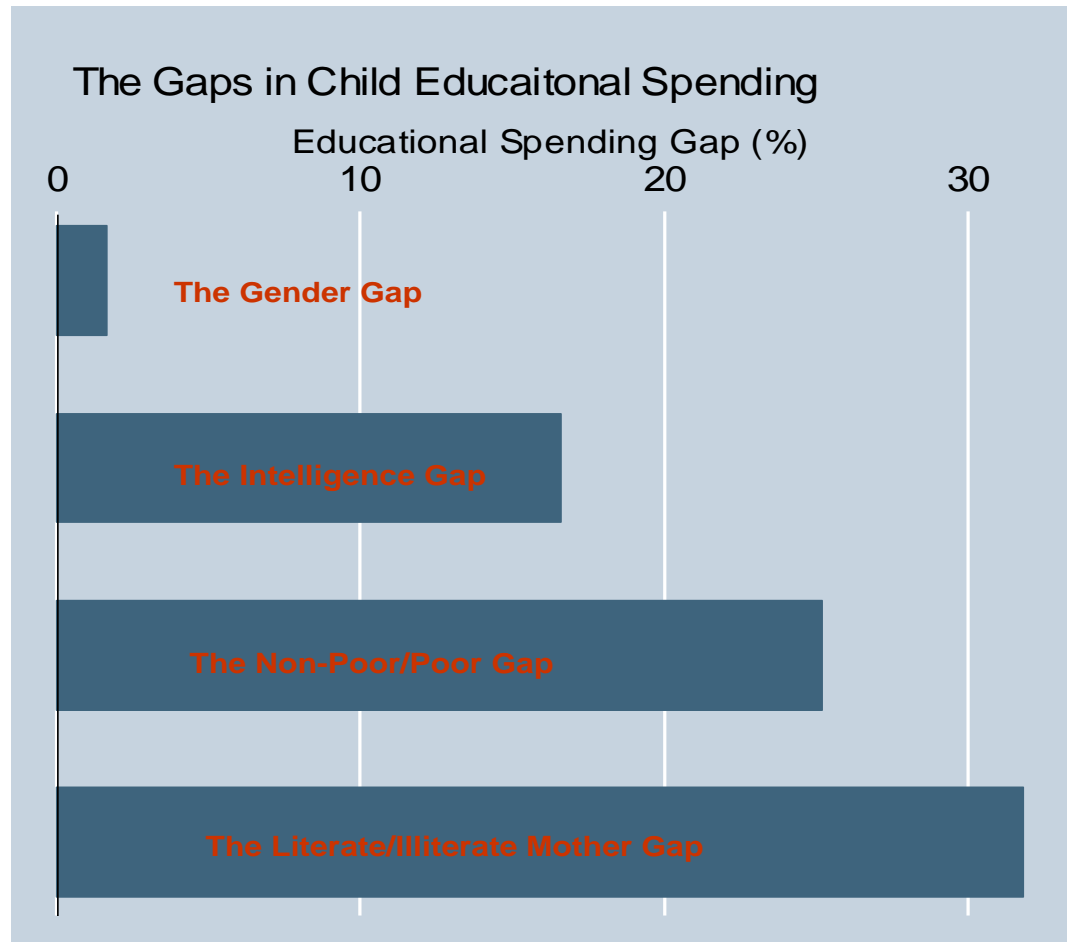
# Causal

- Instrumental variables based on school construction guidelines during SAP 1980s
- Find that private schools are 300 percent more likely to arise in villages with a girls' secondary school
- Find that wages of private school teachers are *lower* in these villages
- Why? Shortage of teachers is a major constraint for private education. The students today become the teachers tomorrow

# Inequities in choices

- Private schools charge fees!
  - Parents more likely go are richer, more educated and those who live closer to a private school
- Equally, differences among children in the same household
  - Girls less likely to be enrolled, but similar likelihood of private schooling
  - Most surprising is children who are “less intelligent” as described by parents

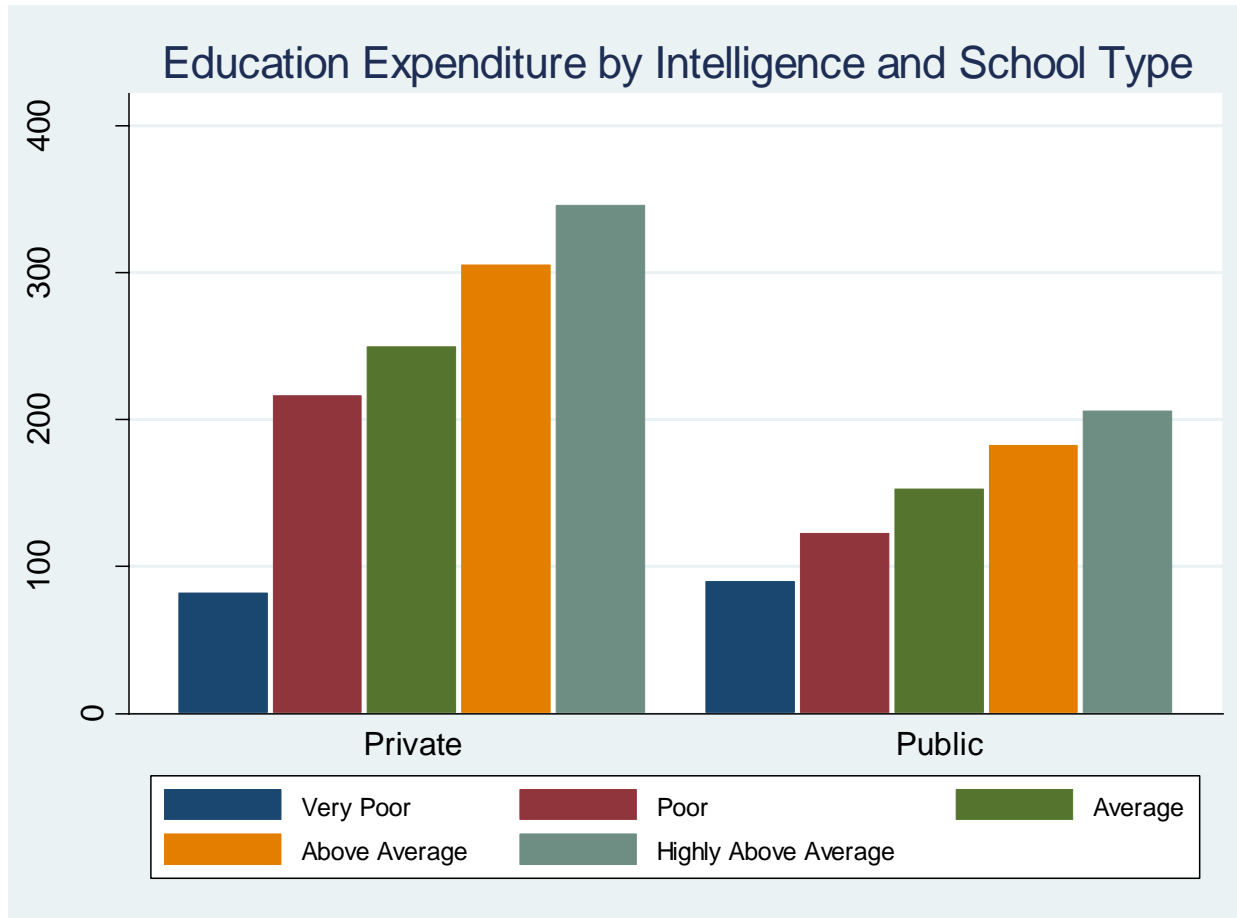
# The intelligence gap



Source: Andrabi, Das, Khwaja and Vishwanath: The LEAPS report



# The intelligence gap



Source: Andrabi, Das, Khwaja and Vishwanath: The LEAPS report

# Public Action

- School building *across* and *within* villages
- This has worked but at a cost
  - Poor learning
  - High costs relative to the private sector

# So can we do better?

## The facts that

- Private schools have better test-scores and civic values
- AND
- They are cheaper
- Has often led to a call for separating financing from provision
- The problem is this:
  - Hard to bring in public money without bringing in administrative accountability.
  - Once you bring in administrative accountability, schools will cater to the administration.
  - Eventually, there is danger that we end up killing the fundamental feature of the private system that made it work—accountability to the customer

# Example

- 1862: “revised code” for education in England, commonly called “Payment for Results”
- Inspectors would pay bonuses to schools depending on things they found during inspection
- Matthew Arnold: *“I find in English schools.....a deadness, a slackness and a discouragement....This change is certainly to be attributed to the ‘Payment by Results’ school legislation of 1862”*
- Recent voucher experiments: Very different results in different countries and contexts on test-scores, Design Matters!

# The way forward: Specific Policy

Shift the focus from fixing the pipes to fixing the institutions

- “What makes private schools better?” is NOT a relevant question. No single *input*, but flexibility and ability to respond to the specific needs of specific populations
- What may work for one school may not work with others
- What are the fundamental changes we need to make to the institutional structure to alleviate market frictions and improve equality

# The way forward: Specific Policy

- What are we doing now that we should not be doing?
  - Worrying about whether parents are being fooled by private schools with lots of attention to regulation
- What are more things that could be done?
  - Create an enabling environment where the markets already exist
    - Information, Financial Access
  - Create pre-conditions to alleviate key constraints
    - Secondary schools, colleges
  - Use financial instruments to households to help with equity

# The way forward: Debate

- Contribute to an evidence-based debate
- Since we started LEAPS
  - Focus no longer on religious schooling
  - Innovative ways to engage and work with the private sector being tried out
  - Big emphasis on learning
- Spurring more evidence on schooling
  - 900 downloads of the data
  - 20 papers outside our group