

EDUCATION SECTOR

Challenges and policy reforms

Education

- From an Individual perspective, education and health are main determinants of employment prospects and the quality of life
- From a nation perspective, they are the crucial drivers of economic growth and inclusive development
- In India, they are also large blots on country's performance – both health and education indicators remain grossly unsatisfactory
- Despite large presence of private providers, it is taken for granted that state should deliver education and healthcare
- Solving India's education and healthcare problems would require a much bigger role for the market and private sector

Agenda

- Education and growth , Human capital and signaling
- Overview of Indian Education
- School education: Status, issues, policy alternatives
 - Enrolments, learning outcomes
 - Public vs. private schools
 - Expenditures vs. transfers
 - Right to Education Act
 - Improving school education – some alternative policies
- Higher Education : Status, issues & policy alternatives
 - Brilliant graduates and a dysfunctional system – a paradox
 - Policy reform : decentralization, competition, financial autonomy
 - World university rankings

Three views on Education and growth

1. Educated and uneducated workers are substitutes to each other, but educated workers are more productive and earn more
 - Education linearly increases productivity but is not indispensable
 - 2 high school graduates are equal to 1 college graduate
 - Increase in education leads to increase in output / worker, wages and living standards
2. Educated and uneducated workers are not substitutes to each other but educated workers are necessary for advanced production
 - Example of constructing a suspension bridge
 - 30 primary school educated workers can't replace 1 civil engineer
 - Thus, lack of educated workers can critically hinder growth
3. Educated workers are critical for developing and absorbing new technologies through spill overs on other's productivity
 - Education is a "force multiplier" for all other inputs (like labour and capital) and has large spill over that are not captured in individual decisions about education

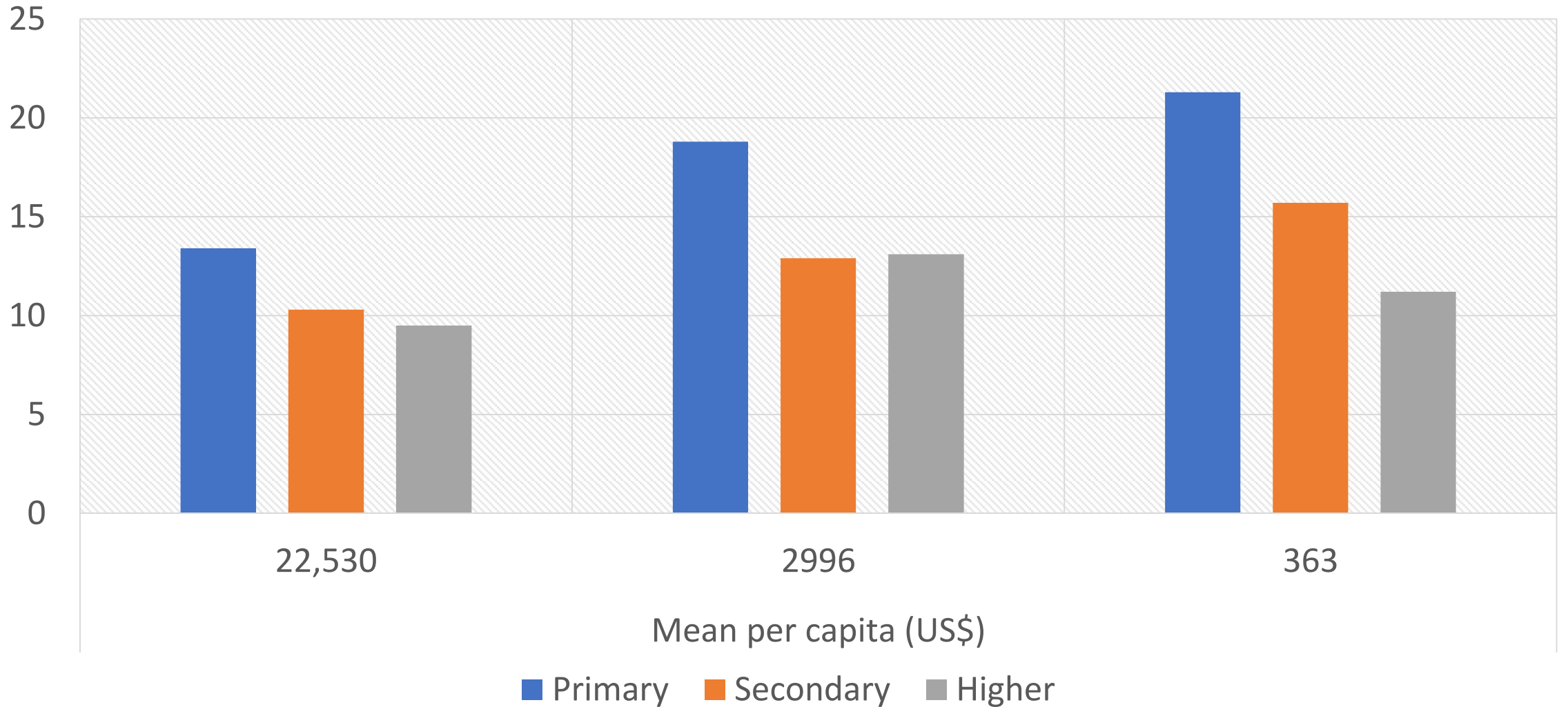
Evidence on Education and growth

- Variation in education levels can also explain a large amount of the variation in the levels of per-capita income across countries – growth accounting framework
- Robust positive relationship between the average education level in a country and its growth rates – cross country regressions
- Both the quantity and quality of education matter
- Investing in better education is one of the most important investments that can promote “inclusive growth”

Education as Human Capital

- Education / training has an upfront cost of time and resources but increases productivity (earning potential) of individuals in the future
- Education can be thought of as an investment that builds an asset (called human capital) that pays a return in the form of higher income in the future
- Individual decisions on how much education to obtain are based on doing a cost benefit analysis that trades off the time / money cost of obtaining an education against returns to education in the form of increased income but also some consumption increase in the future

Social Returns to investments in Education



Source : George Psacharopoulos and Harry Anthony Patrinos, Univeristy of Athens

Returns to education

- Highest for primary education, then for secondary and finally for tertiary education
- Highest at all levels for developing countries, then for middle income countries and then for developed countries
- Implications for developing countries such as India
 - Focus on primary education first and then tertiary
 - But they did the opposite, unlike east Asia

Human capital vs. signalling

- Human capital theory assumes that education adds value to productive capacity
 - More educated people earn more because they have more skills
- Other possibility – employers have imperfect information on the ability of prospective employees
 - Employers would like to offer high wages to higher ability people and low wages to people with lower ability
 - However, the employers can't figure out easily who is of high ability and who is of low ability
- The employers do know that higher ability individuals have a lower cost of acquiring formal education
 - hence, people choosing to acquire more education are more likely to be of higher ability and would command higher wages
 - Education is now acting as a signal to the employer

Signalling view of education

- In this world view, employees are signalling their higher ability by acquiring more education and employers are screening for high ability by using education as screening device
 - Spence (1973)
- Think about cultures that place a very high value on rote memorization of texts of limited direct relevance
 - Makes sense if you do not care so much about value addition as you do about identifying those with highest ability
 - This is highly relevant in understanding the Indian education system
- Also relevant for thinking about returns to attending elite institutions of learning
 - How much of the high earnings of graduates are because of these institutions add more value as opposed to because employers recognise that these institutions select the best

Human capital

- More educated individuals receive higher wages – observationally equivalent
- But, dramatically different implications for policy!
- Human capital theory – education actually adds real skills and productivity to the economy – hence may be worth being funded by the government
- Signalling theory – education itself adds no value beyond being able to separate ability
- Empirical evidence on teasing out relative importance is quite limited
- Signalling is less likely to operate for early years of schooling but may be a bigger factor for higher levels of education
- Policy implications such as Education for all

Overview of education

- Elementary education
 - Rising enrolment ratios but continuing poor learning outcomes
 - Increased policy priority in the last 15 years (SSA, RTE)
 - Weak correlation between spending and outcomes
 - Binding constraints – pedagogy and governance
- Higher Education
 - A highly centralised system
 - Large number of graduates in absolute numbers , though not as % of population
 - Paradox of brilliant graduates and a dysfunctional system
 - Challenges : teacher and student quality, equity vs. excellence, regulation vs. autonomy ; federal vs. state control

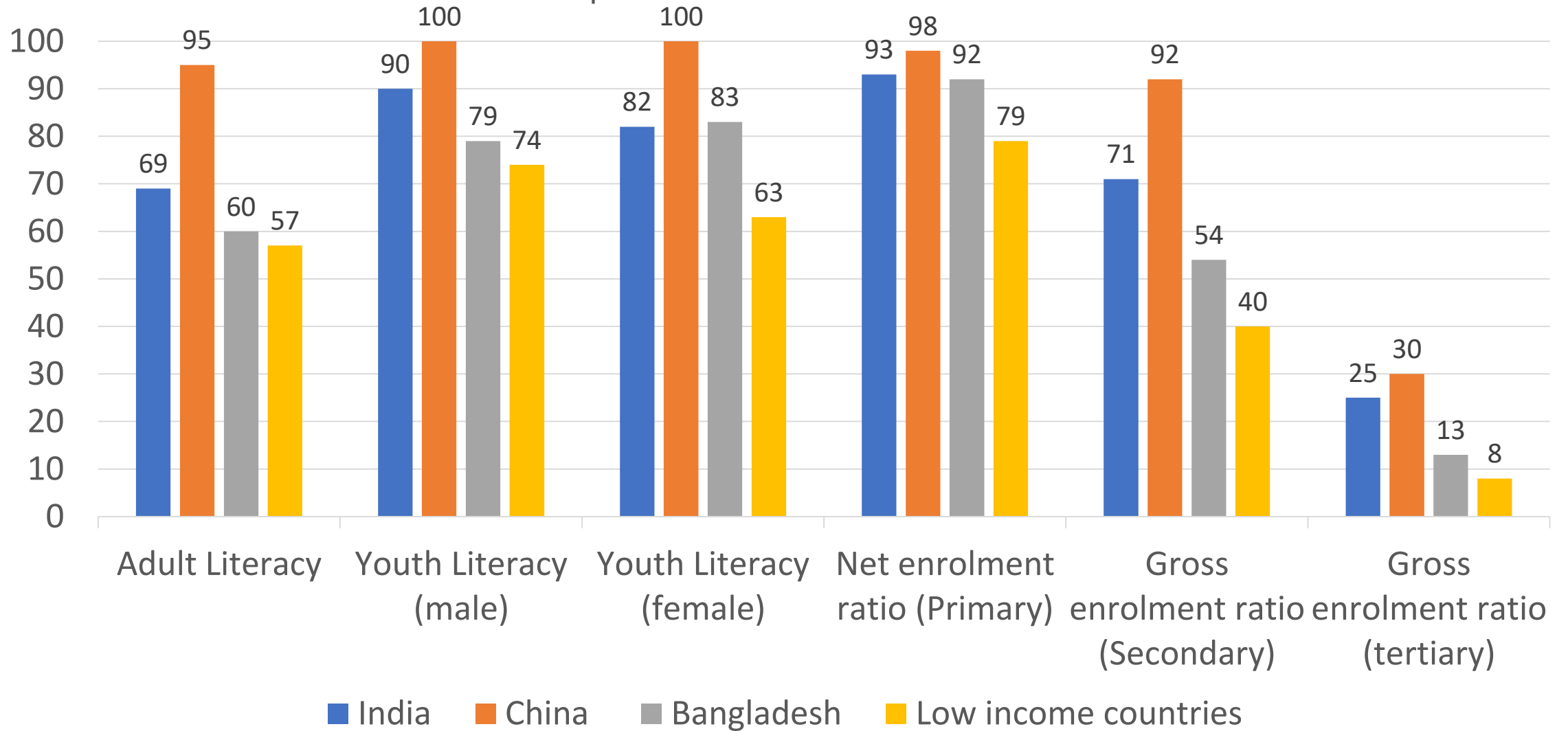
Education

- Illiteracy has reduced in India – in 1960s, 67% of adult population was illiterate now its it is 33%
- Overall literacy is a slow moving number but literacy rate amongst younger people is better – (15 to 24 age group) it is 86% in 2014
- School enrolments have improved – 96.5% of children in 6-14 years age group are enrolled in primary schools
- Only 67% of the children attend the school on any given day
- Dropout rates are high – a third of the children leave the primary school before they reach the final grade
- Gross enrolment went up from 43% in 1999 to 71% in 2012
- The performance is not impressive when compared to other countries such as China

Education

Indicator	India	China	Bangladesh	Low income countries
Adult Literacy	69	95	60	57
Youth Literacy (male)	90	100	79	74
Youth Literacy (female)	82	100	83	63
Net enrolment ratio (Primary)	93	98	92	79
Gross enrolment ratio (Secondary)	71	92	54	40
Gross enrolment ratio (tertiary)	25	30	13	8
Mean years of schooling	4.4	7.5	4.8	
Public expenditure on education	3.9		1.9	3.8

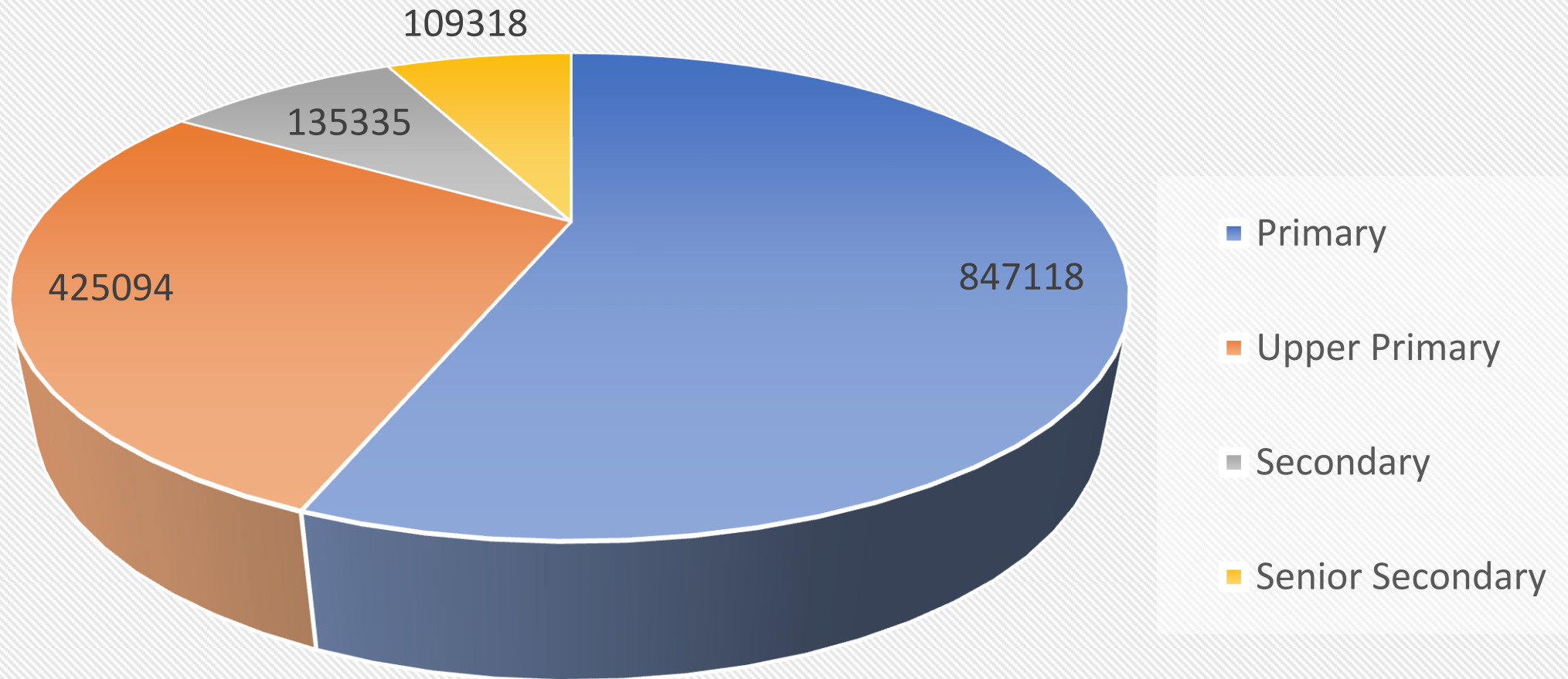
Comparative Educational indicators



Number of Institutions by Type 2014-15 (source : MHRD)

School Education*	Type	Number
	Primary	8,47,118
	Upper Primary	4,25,094
	Secondary	1,35,335
	Senior Secondary	1,09,318
	Total	15,16,865

Number of schools- 15,16,865



Higher Education	University	Central University	43
		State Public University	316
		Deemed University	122
		State Private University	181
		Central Open University	1
		State Open University	13
		Institution of National Importance	75
		State Private Open University	1
		Institutions under State Legislature Act	5
		Others	3
		Total	760
	College		38,498
	Stand Alone Institution	Diploma Level Technical	3,845
		PGDM	431
		Diploma Level Nursing	3,114
		Diploma Level Teacher Training	4,730
		Institute under Ministries	156
		Total	12,276

F: Expenditure (Revenue) on Education by Education and Other Departments by Sector - Budget Estimate -2013-14

Sector	Expenditure on Education (Rs. Crore)			Expenditure as % of GDP		
	States/ UTs	Centre	Total	State/ UTs	Centre	Total
Elementary Education	156165.65	51262.97	207428.62	1.39	0.45	1.84
Secondary Education	102328.99	13340.27	115669.26	0.91	0.12	1.03
University & Higher Education	45571.69	25567.34	71139.03	0.40	0.23	0.63
Adult Education	637.42	686.65	1324.07	0.01	0.01	0.01
Technical Education	36320.90	33260.92	69581.82	0.32	0.30	0.62
Total (Education)	341024.65	124118.15	465142.80	3.03	1.10	4.13

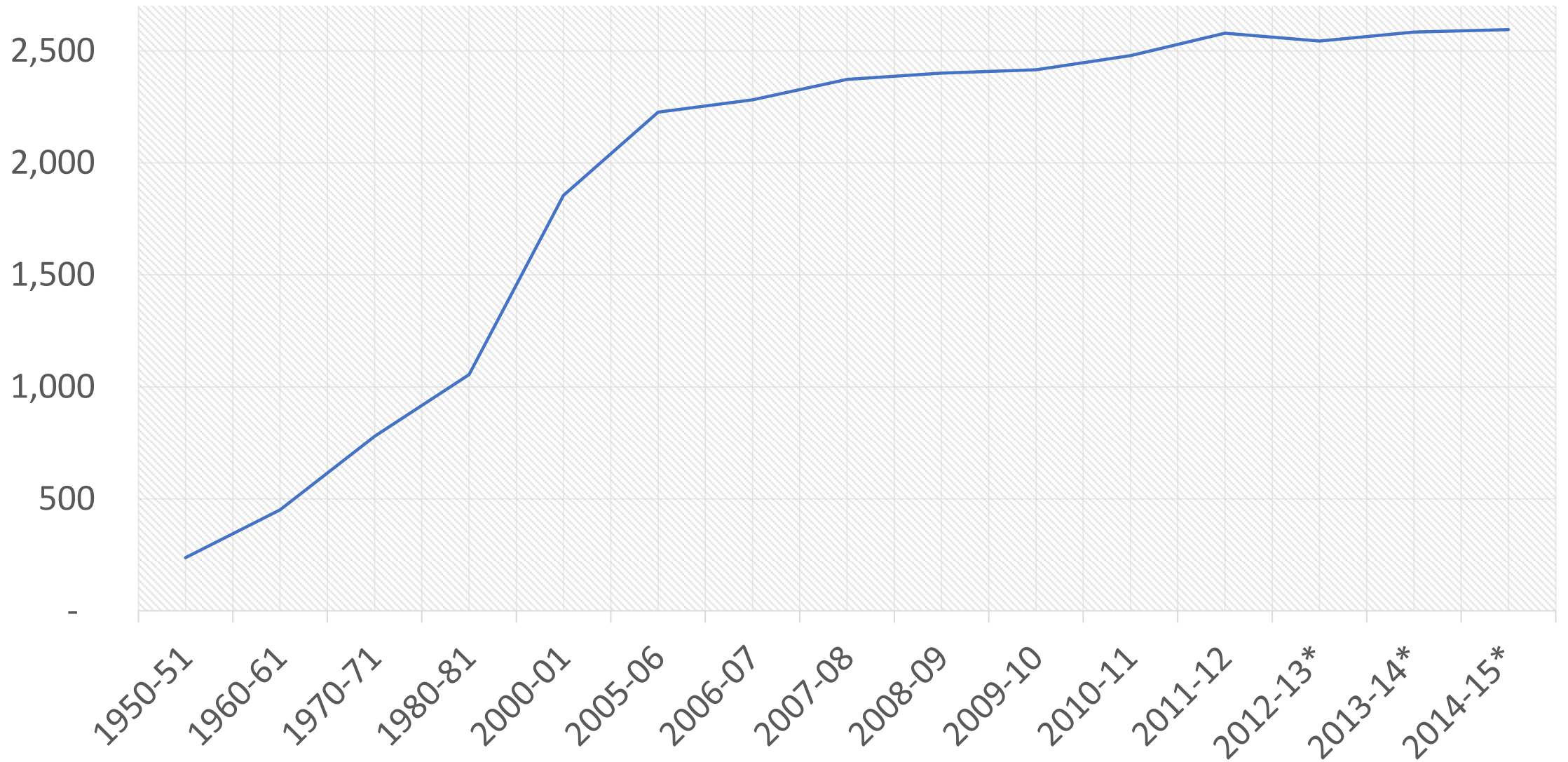
Table-20: Level-wise Enrolment

A: All Categories of Students

									(In lakh)
Level/ Year	Primary (I-V)			Upper Primary (VI-VIII)			Secondary (IX-X)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1950-51	138	54	192	26	5	31	NA	NA	NA
1960-61	236	114	350	51	16	67	NA	NA	NA
1970-71	357	213	570	94	39	133	NA	NA	NA
1980-81	453	285	738	139	68	207	NA	NA	NA
2000-01	640	498	1138	253	175	428	116	74	190
2005-06	705	616	1321	289	233	522	145	105	250
2006-07	711	626	1337	299	246	545	149	110	259
2007-08	711	644	1355	311	262	573	159	123	282
2008-09	706	647	1353	314	270	584	165	130	295
2009-10	697	639	1336	317	278	595	169	138	307
2010-11	701	646	1347	327	292	619	175	143	318
2011-12	726	672	1398	331	299	630	186	155	341
2012-13*	696	652	1348	333	317	650	183	163	346
2013-14*	686	638	1324	341	323	664	197	176	373
2014-15*	676	629	1305	345	327	672	201	182	383

	Table-20: Level-wise Enrolment					
	A: All Categories of Students					
						(In lakh)
Level/ Year	Senior Secondary (XI-XII)			Higher Education		
	Male	Female	Total	Male	Female	Total
1950-51	13	2	15	4	0	4
1960-61	27	7	34	8	2	10
1970-71	57	19	76	26	7	33
1980-81	76	34	110	35	13	48
2000-01	61	38	99	54	32	86
2005-06	78	56	134	88	55	143
2006-07	81	60	141	96	60	156
2007-08	93	70	163	106	66	172
2008-09	95	74	169	112	73	185
2009-10	99	79	178	124	83	207
2010-11	109	86	195	155	120	275
2011-12	116	94	210	162	130	292
2012-13*	107	93	200	166	135	301
2013-14*	118	105	223	175	148	323
2014-15*	124	111	235	185	157	342

Total Enrolment in Schools (in Lakhs)



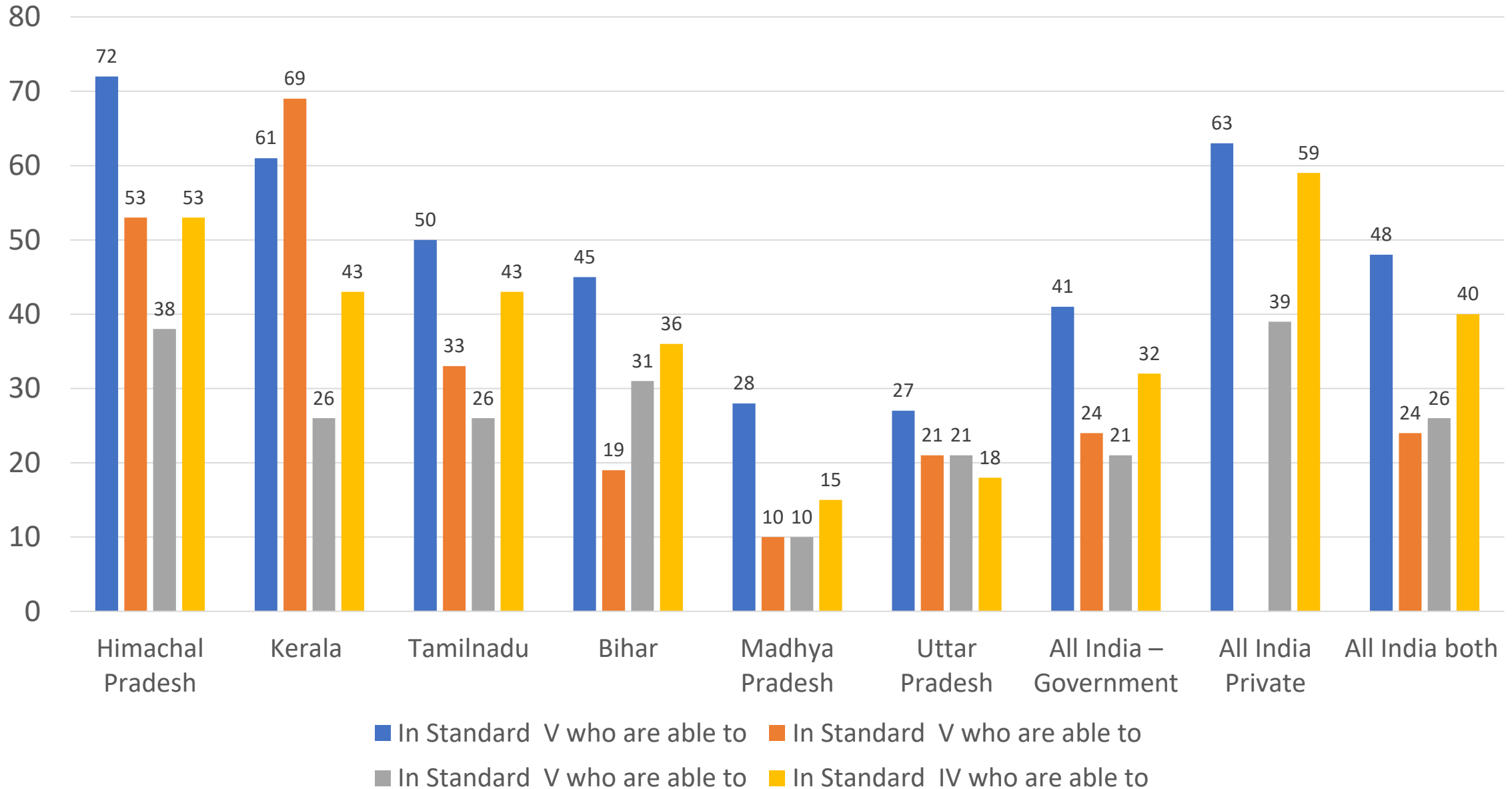
Primary and secondary education

- If we measure progress by educational inputs – school buildings, textbooks, trained teacher and amenities such as drinking water India has made big progress – there has been a definite improvement in quantity of physical and financial inputs into schools
- Measured by actual learning outcomes, the progress is utterly dismal, indeed shameful
- As per PRATHAM's Annual Survey of Education in Rural (ASER) survey:
 - 52% of children in grade V were three grades behind in reading ability
 - 74% of children in grade V could not do a simple division
 - Worrying fact is that the learning outcomes were deteriorating over the years

Pupil Education Achievements in Rural India, 2014

	% of children in Government and Private Schools			
	In Standard V who are able to			In Standard IV who are able to
	Read in local language	Read English	Divide	Subtract
Himachal Pradesh	72	53	38	53
Kerala	61	69	26	43
Tamilnadu	50	33	26	43
Bihar	45	19	31	36
Madhya Pradesh	28	10	10	15
Uttar Pradesh	27	21	21	18
All India – Government	41	24	21	32
All India Private	63		39	59
All India both	48	24	26	40

% of children in Government and Private Schools





Public vs. private schools

Why have the expansion in education inputs have not translated into better educational outcomes?

- Poor educational outcomes are the product of inappropriate incentives
- Teaching in Indian schools is curriculum driven – the overriding objective is to finish the syllabus irrespective of whether the children learn or not – only children at the top of the distribution keep pace with the curriculum and rest become progressively less able to cope and lose interest
- More critical is the lack of teacher effort – as manifested in teacher absenteeism, around 25% and even when teachers are present many of them are whiling away their time doing other things
- If you hire more teachers, the absenteeism increases!
- Main reason for teacher absenteeism is lack of accountability – teachers have completely secure jobs and are unionised with political clout and its impossible to fire a teacher whatever is the degree of delinquency

Why have the expansion in education inputs have not translated into better educational outcomes?

- Teachers are generously paid irrespective of performance – in China, the average teacher's salary is about the same as per capita GDP while in India it is three times per capita GDP
- Modestly trained “contract teachers” who have lower pay and less job security than regular teachers are less likely to be absent and produce better results
- The sharper incentives faced by contract teachers make up for the lack of training
- Can the control of schools be given to village level parent's committees? Evidence is that that does not improve accountability

Private schools

- There is a rapid growth of private schools in India – In primary education, they have a share of 31% in rural areas and 50% in urban areas – in secondary education, their share is 21% in rural areas and 56% in urban areas
- The rapid expansion of private schools is indicative of their relative quality as assessed by parents
- Results of various studies
 1. Private schools do produce better learning outcomes
 2. The teacher effort is more in private schools
 3. The private schools are also cost efficient – produce better results at a lower cost

Education – expenditure or transfers?

- Education is a concurrent subject under the constitution of India
- Under the directive principles of state policy, the Constitution set the goal of free compulsory education for all children aged 14 or less by 1960 – but India yet to achieve this goal after 70 years
- In higher education, India did better than most of the countries – a key objective in the early years was to build the entire spectrum of Industries, including heavy industry, planners recognised the need for well trained personnel, especially engineers – some of the best engineering and management schools are now in India

Education – expenditure or transfers?

- Government has created an extensive system of public education but it is highly ineffective
- Teacher absenteeism is endemic, and achievement levels based on test scores are worse than even those in the low end private schools
- Unless the Government can give the local administrative units, where the teachers serve, the power to fire them for incompetence and repeated absences, it is unlikely that absenteeism will be brought under control
- Given the enormous power of teacher's unions, this is highly unlikely
- The best strategy is to give private schools greater play
- **Bottom 30% of population should be given vouchers with the choice of school left to parents**



Fighting Truancy Among India's Teachers, With a Pistol and a Stick – NY times (Feb, 06, 2016)

DEORIA, India — The young man, having skipped school, was there to plead his case, but Manoj Mishra was having none of it. When the truant offered a letter from a relative of a government minister pleading for leniency, Mr. Mishra grabbed it and, with a frown, tore it in half and dropped it to the floor.

Similar scenes played out repeatedly in Mr. Mishra's fluorescent-lit office recently, as one truant after another appeared before him, trying to explain an absence from school.

But these were not students who had been pulled in for truancy. They were teachers.

Mr. Mishra, a district education officer in India's most populous state, Uttar Pradesh, is fighting one of the biggest obstacles to improving the largest primary school system in the world: absent teachers. His tough punishments and refusal to back down, chronicled in the local newspapers, have turned him into a folk hero. As he walks along the dusty streets of the wheat-farming villages a couple of hours' drive from Nepal, older people touch his feet in a sign of respect. Young women pull out their phones and take selfies by his side.

Government vs. private schools

- Enrolment – 95.3% children aged 7 to 10 years and 91.1% of children aged 11 to 14 are enrolled in school in rural areas in 2006
- 18.6% of the above are in private schools
- Pratham ASER survey
- Only 6.6% of students in first grade are able to read level one text
- Only 8.3% of students in second grade are able to read level two text
- Of all fifth grade students, 53% are able to read level 2 text and additional 28.1% can read level 1 text
- The low achievement level is intimately linked to teacher absenteeism which is rampant in rural government schools at 25% in 2006 compared to 16% in Bangladesh

Government vs. private schools – Muralidharan and Kremer study

- In 2006, the study found that 28% of rural children in India have access to fee charging private primary schools where they live
- Children in private schools have higher attendance rates and test scores than those in government schools even after controlling for family and school characteristics
- Key distinguishing factor of private schools is lower teacher absence rate
- Private school teachers are 2% -8% less likely to be absent and 6% -9% more likely to be teaching than government school teachers – they are significantly younger and are more likely to come from same areas as the location of the school – more likely to hold a college degree even though they may not be formally certified as teachers

Government vs. private schools – Muralidharan and Kremer study

- Private school teachers receive salaries which are typically $1/5^{\text{th}}$ of government school teachers
- Why absenteeism is low in private schools is that the ability of head teacher to discipline the teachers under him – out of 3000 government schools only one teacher was dismissed for absenteeism and in private sector they found 35 cases in 600 schools
- Private schools are more likely to be established in villages where teacher absenteeism is higher in government schools rather than in richer areas – in richer areas where government schools function properly, private schools are not there
- The dysfunctional nature of government schools rather than increase in income of parents that provides impetus to progressive privatisation of elementary education in India

Policy reform – enhance the role of private sector- education vouchers

- Official view – lack of funding is the key problem for elementary education in India and see increased expenditure as the key to the problem – this is completely misguided
- State government pays the salaries to teachers and administration at village, block and district level has no supervisory authority over them
- The solution – transfer the power to hire, supervise and fire teachers to the jurisdiction in which they serve – is not acceptable for political economy reasons
- Alternatively, open the door to wider to the private sector and subject the public sector to competition
- Education vouchers – Rs 2000 per child to children in 5 -14 years age group and whose parents are in the bottom 30% of distribution – this voucher would suffice to cover one year tuition and expense – parents who want can send their child to a more expensive school by adding some more to this amount

Policy reform – enhance the role of private sector- education vouchers

- Expenses involved : in 2007, out of 242 million children in 5-14 age, if vouchers are given to bottom 30% , it would amount to Rs 14,520 Cr which is 0.4% of GDP in 2005-06 and is certainly affordable
- Its clearly a pro poor measure. Poor have no choice to send their children to a government school, with vouchers they would have the means to send them to a private schools – partially reverse the sorting of children by income levels
- Vouchers would increase the pressure for performance on government schools through competition – public schools which do not shape up will loose students and face the prospect of being closed down
- Do vouchers lead to corruption? – have a transparent system of allocation of vouchers – involve civil society
- Why not cash transfer? – some families may choose to use the money for other uses – but conditional cash transfers is an option

Educational vouchers

- Even though private schools are cheaper than public schools from national standpoint, for the parent standpoint they are not - whose child has to pay fees in a private schools but can study freely in a government school
- All parents or poor in particular the option and the means to choose private or public schools for their children by giving them “education vouchers”
- Both public and private schools would charge fees but students would “carry their school fees with them “ in the form of vouchers that are paid out of general taxation
- A voucher scheme would match the equity objective of free education but would additionally enable competition between public and private schools
- Reform within the school system alone would not lead to greater teacher effort and learning outcomes - parents need a voice along with a vote to exit

Educational vouchers

- Vouchers in India are due to a pragmatic necessity – competition and the threat of exit are necessary conditions for the public education to improve
- Counterarguments – with vouchers, the children of parents in vocal elite groups would leave Government schools which would further deteriorate the quality as there is no pressure to reform – already this horse has bolted and there is no point in locking the stable now – already all the elite, including rural rich, panchayat leaders and teachers in Government schools already send their children to private schools
- Poor parents can't make sensible decisions about schooling – Government should stop treating consumers of public goods as idiots who have to be saved from themselves – is it really better to give poor parents no choice but to send their kids to poor quality government schools?

Right to Education Act

- The act mandates “free and compulsory education” at the primary level – as a corollary it requires the expansion of public schools to cover every neighbourhood
- Norms regarding school infrastructure and pupil – teacher ratio which schools have to comply
- All private schools have to be recognised by the government to be allowed to practice and for this they have to follow the norms
- Private schools are also required by the Act to reserve 25% of places for children from economically weaker sections of society – the cost of doing so would be reimbursed by the government at the average unit cost per child in government schools as a whole or unit cost per child in that private school, whichever is lower
- Pedagogically , board examinations are prohibited and children automatically advance to higher grades though there is supposed to be continuous evaluation of the student

Right to Education Act - are reforms on right track?

- In the context of abysmally low and declining standards, automatic progression is a bad idea and needs to be revisited
- Presently curriculum moves faster than the actual learning leading to large underclass of students who are completely at sea in higher grades – at the every least there should be a certificate that students have cleared a minimum hurdle of core skills in reading, writing and arithmetic
- Act stipulates to bring down the pupil – student ratio from 40:1 to 30:1 – evidence shows that employing more government teachers very expensive and does not improve learning outcomes

Right to Education Act - are reforms on right track?

- Contract teachers, hired cheaply and with only modest amount of training, to provide supplementary instruction (at the level of learning of the child rather than as dictated by curriculum) are very effective in improving the learning outcomes
- Resistance comes from the existing teachers who feel that having a large number of para teachers would de-professionalise teaching as a vocation
- Solution is to place contract teachers in a career progression plan to become regular teachers, subject to satisfactory performance as well as training and experience over several years as “teaching assistants”
- The funds that would be spent on hiring regular teachers could be spent instead on contract teachers to bring down the pupil – teacher ratio to 30:1 and also improve learning outcomes

Right to Education Act - are reforms on right track?

- The act has nothing to offer on measures to improve accountability of regular teachers in government schools
- Pay for performance can be introduced in schools
- Devolving appointment, retention and bonus payments to local governments who may be able to monitor teacher effort – of course these measures would be opposed by the teachers unions – precisely this is where competition with private schools would help- but RTE has little on that
- The act's treatment of private schools is counterproductive – most of the private schools are cheap “budget schools” which operate with lean infrastructure – if strict norms for teachers and size of playground are introduced , many schools would close shop – what matters is the quality of output and not the compliance of inflexible norms

Right to Education Act - are reforms on right track?

- The extension of over generous salary structure of government teachers to private sector – it would be disastrous and would increase the cost to the nation of expanding primary education
- The benefits of opening up of private schools to disadvantaged children funded by the state would be greatly diluted if schools were able to cherry pick them – all these children should be chosen by lottery
- RTE Act does not address the underlying reasons for low quality education – high pupil-teacher ratio and lack of physical facilities are not the main issue – some of the features of a voucher system such as funding public schools on a per-student basis rather than block grant

Improving Education in India

1. School Access
2. Teacher Absence
3. Teacher Incentives
4. Better Teaching
5. Technology enabled education – Mindspark (Education Initiatives)

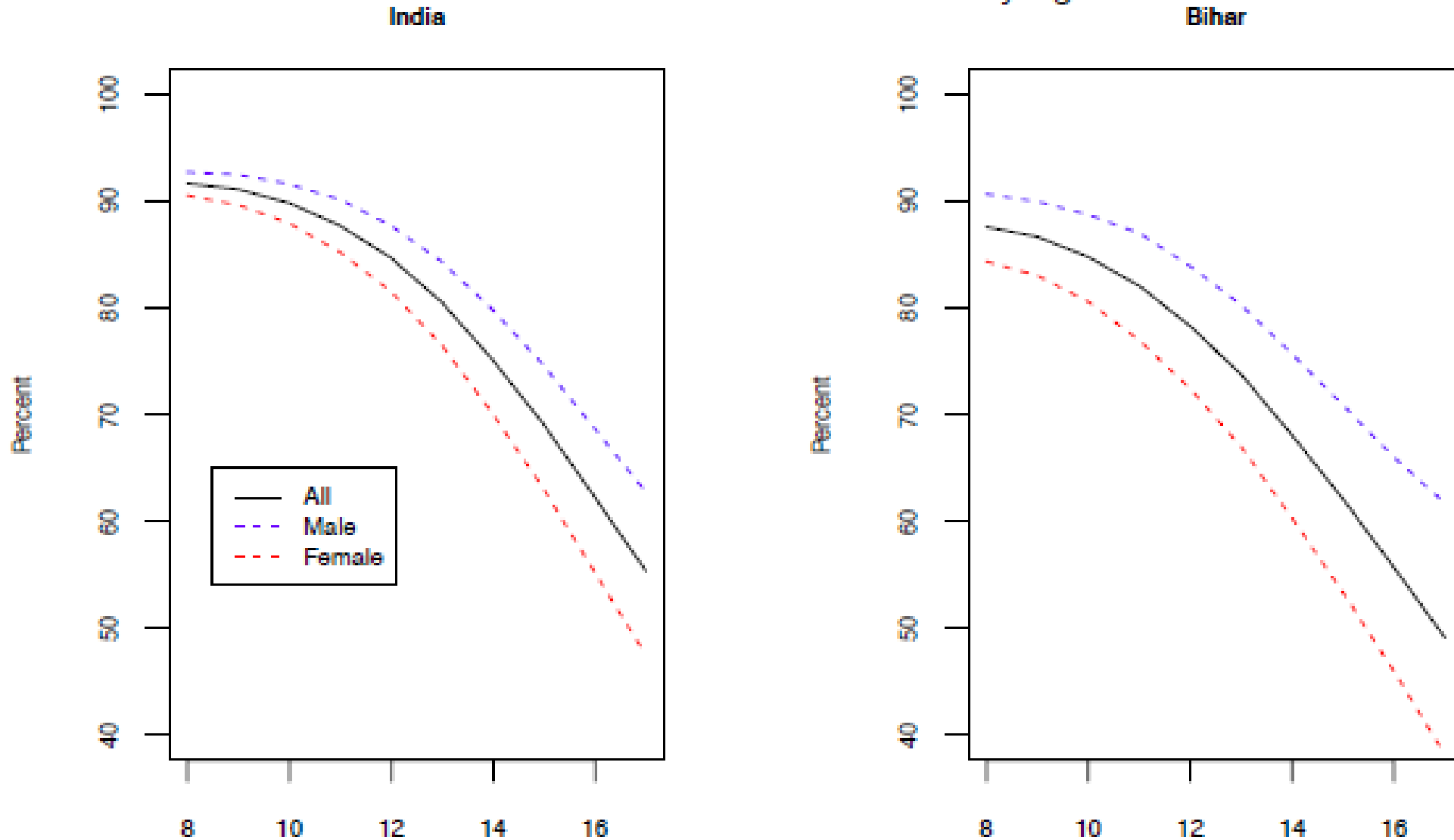
<https://youtu.be/jZVukGi-aM>

Background/Motivation

- Increasing female school attainment is one of the MDG's
- Improving female education directly contributes to the 'inclusive growth' agenda of the Government
 - Growth – by increasing human capital of the labor force
 - Inclusive – by allowing more people to participate in the growth process
- Large gender gaps in India (and especially in Bihar) in school attendance (grows with age)
- Primary schools now exist within 1km of most villages
- But distance is still an important barrier to secondary school attendance (again, more so for girls)

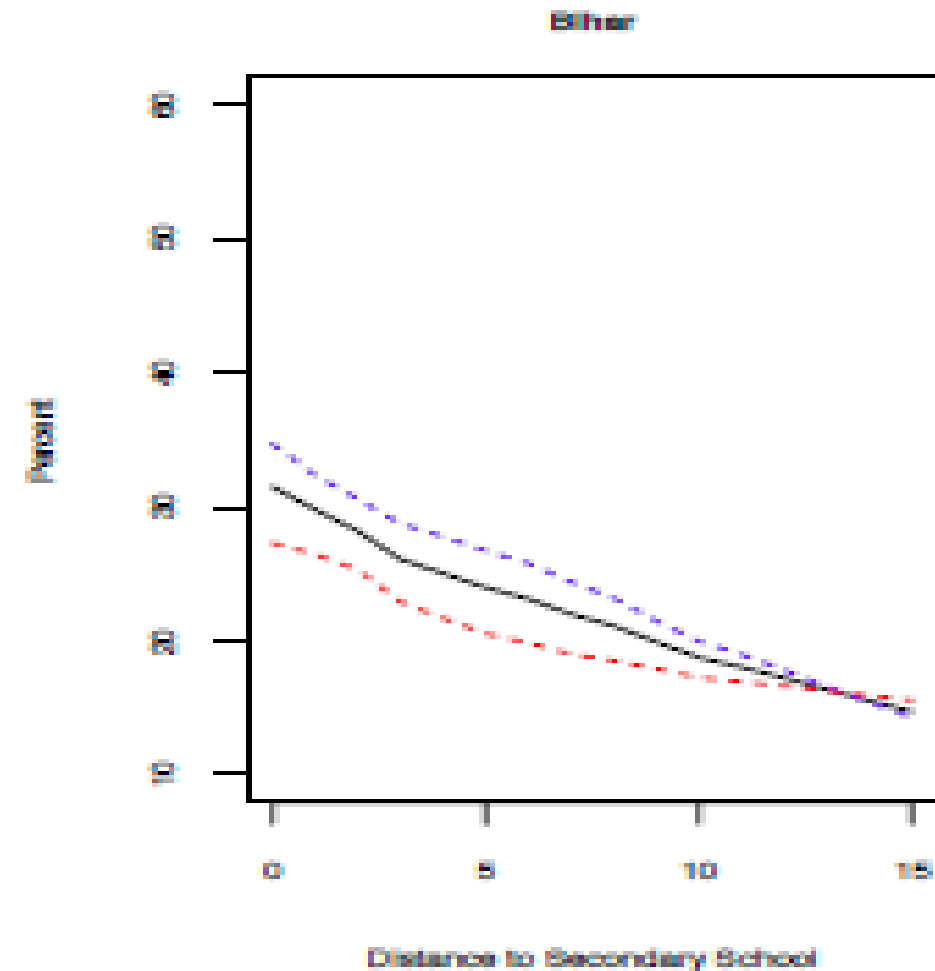
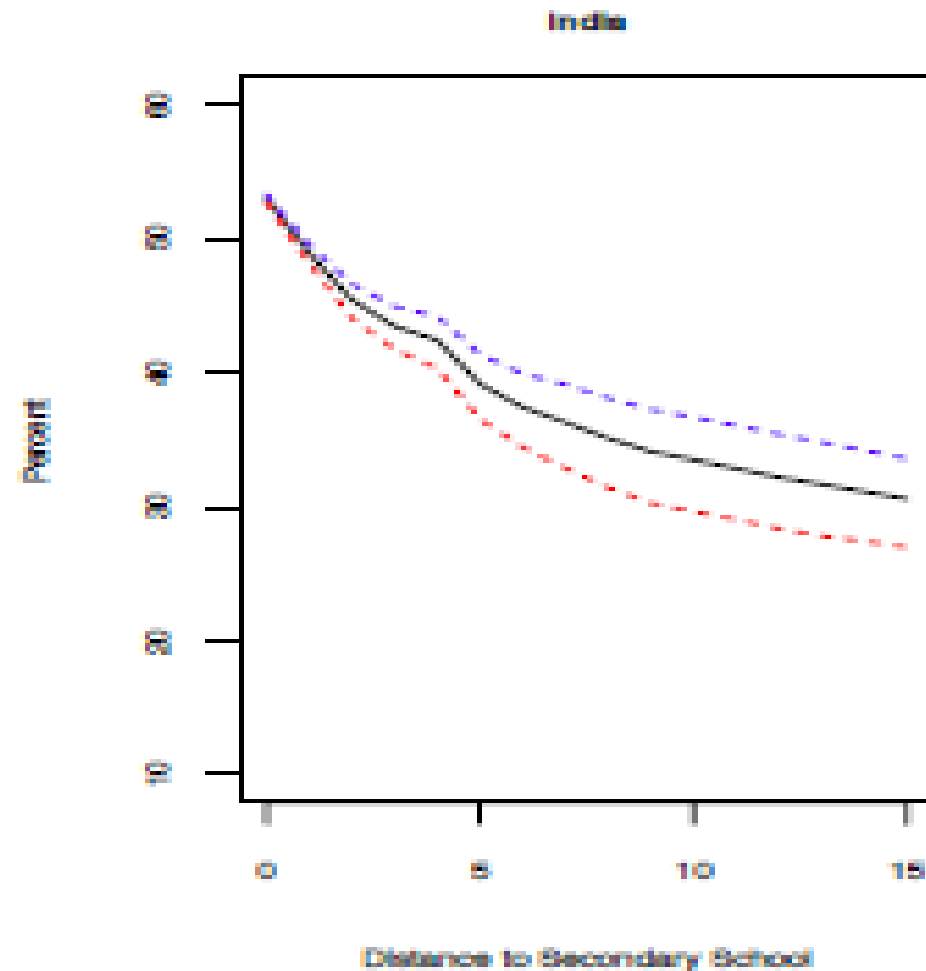
School Enrollment by Age & Gender

Panel A: Enrollment in School by Age



Enrollment of 14-15 year olds in Secondary School by Distance & Gender

Panel B: Enrollment in Secondary School of 14 and 15 Year Olds by Distance



Policy Intervention

- In 2006, Bihar initiated a program to provide bicycles to all girls studying in classes 9 and 10
 - Personal initiative of the Chief Minister
 - Program was called the “Mukhyamantri Balika Cycle Yojana (MBCY)”
- An allocation of Rs. 2000/student was made (now Rs. 2500)
- No direct provision of bicycles – cash was made available to eligible students through the schools, and receipts for purchase of cycles were collected
- This was effectively a CCT (or CKT) program and was India’s first scaled up CT program for girl’s secondary education
 - High-profile program, politically very visible (and also copied)
 - Concerns include fake enrolments, and leakage of funds
 - What was the impact of the program?



https://youtu.be/6nG63ISt_Ek

Picture Credits: Abhinav Nayar

Conclusions and Policy Implications

- Estimates of the impact of the MBCY suggest that it increased girls enrollment in secondary schools by 5 percentage points
 - ▣ On a base of ~25%, this is a 20% increase in enrollment
 - ▣ The policy also reduced the gender gap in enrollment by ~25%
- We find that the program had a greater impact for girls who lived further away from a secondary school, suggesting that a key mechanism for program impact was the reduction in the 'distance cost' of school attendance for girls due to the cycle
- Program was at least as cost effective as other comparable ones
- Implications for cash vs. kind transfers – kind may work well when:
 - ▣ There is a direct reduction in the marginal cost of schooling
 - ▣ The in-kind item is NOT infra-marginal to household spending

Better Pedagogy: teaching at the right level

- Pedagogy optimised for a time with fewer learners may not be appropriate now
- Fundamental challenge- how do you handle variation in ability levels in classroom?
- Even “good teachers” mostly focus on completing the textbook
 - But these textbooks are way ahead of where the students are
 - Problem is magnified by automatic promotion across classes
- Studies have shown that supplemental instruction programs targeted at the level of child can have a large positive impact on learning outcomes
- These programs are delivered through young volunteers (often women) with very limited training and very modest stipends but focused on helping children bridge learning gaps at an early age



HIGHER EDUCATION

Higher Education

- In 2011, total enrolment in higher education was about 22 million – including distance learning it goes up to 26 million – GER is 18%
- There are 660 universities and degree awarding institutions of which 30% are private – 33,000 colleges of which 60% are private and 12,750 diploma institutions of which 75% are private – in short a large private sector at all levels of higher education
- As with school education, the problem is not one of quantity but of quality
- Even though there are a few excellent centres of learning such as IITs and IIMs (which are also not world class), the average university produces unemployable students with inadequate skills and knowledge

Higher Education

- Problem – poor governance structures
- Statist mentality and politicization is rife
- Higher education is one of the most regulated sectors of the economy
- Main regulators are: University Grants Commission (UGC), All India Council for Technical Education (AICTE), Medical Council of India and Bar council for specialised professions
- Entry requires many clearances from regulators
- All universities suffer from : heavily centralised regulations, micro management by regulators of admissions, faculty recruitment and promotions, course curricula, student fees and staff salaries – in short every aspect of functioning of university is heavily regulated
- In public universities, salaries are determined by UGC and seniority is the criterion for promotion

The “Trilemma” of Indian Higher Education- choose any two third is fixed



Higher Education – licence raj

- Extensive bureaucratic controls and lack of competition have killed creativity, teaching and course innovations and quality improvement
- System has deteriorated so much this is still one of the few sectors where regulators themselves indulge in rent seeking – large scale corruption has become the norm – politicians now run large number of colleges
- Some universities are selling doctorate degrees to defray their operational expenditures

Higher Education – reforms

- Regulatory revolution – remove the heavy hand of state and replace it by decentralisation and autonomy
- State should confine itself to broad policy making and certifying some basic norms are met
- Real autonomy should be given to universities to internal governance in personnel selection, salaries of staff; tuition fees need to be deregulated
- Private returns to education justify economic user charges
- Problem of access should be handled by loans and scholarships
- More competition should be encouraged to raise standards
- Irony – authoritarian China has given more autonomy to universities than India and the top universities of China are ranked amongst the top universities of the world

Vocational and technical education and training

- Need for skills is so huge that meeting it without private sector participation is unrealistic
- There is no workable p-p-p model now
- State should fund poor students to acquire the skills required which is provided competitively by public and private training institutes
- Apprenticeship schemes that offer on the job training are very critical
 - a case of subsidy to training financed by a small payroll tax on all companies

Higher Education

- University Grants Commission was established in 1952 through an act of parliament
- UGC controls the entire higher education sector like no other body does in India
- Degrees can be awarded only by universities established by an act of parliament or state assembly or an institution deemed to be an university or an institution empowered to grant degrees specially by parliament – even prestigious institutions such as IIMs can't grant degrees they can offer diplomas (PGDBM)
- All colleges who wish to grant degrees must be affiliated to an university which controls standards
- Initially, the state control was justified as there was little scope of private universities taking interest in higher education

Higher Education

- The network of higher education institutions has dramatically expanded and has become unwieldy for a single institution such as UGC to control
- Rapid technological progress and globalisation make it mandatory that new courses of study and research have to dynamically emerge
- UGC has not changed with times and this has led to rapidly deteriorating quality of higher education in India
- On any given day, students must guess whether the professor will show up and the professor guess how many students are going to turn up – the equilibrium result is that either no lecture or a lecture with only a small proportion of students present
- On demand side also dramatic changes have happened –students now fully appreciate value of higher education and have access to information to judge which universities offer good education and which courses have value in market place
- Currently more than 150,000 Indian students study abroad spending close to \$ 2 billion compared to what states and centre spend on higher education in India - \$ 3.7 billion

Brilliant graduates and a dysfunctional system: a paradox ?

- A dysfunctional system is able to produce students who are able to compete with the best in the world and succeed – How?
- India has a large and young population and a tradition which places highest value on intellectual pursuits
- Large number of excellent private schools in urban areas and well functioning secondary school system students are well prepared for higher education
- Despite their inability to impart quality education, the universities normally do a good job of quality control – conduct of examinations
- Good performance in the exams has a signalling value in the market place – knowledge of this provides incentive for bright students to study hard and spend large amounts of money on coaching institutes

Brilliant graduates and a dysfunctional system: a paradox ?

- Continued outflow of excellent students from the universities is thus consistent with low value added inside the classrooms at the universities and colleges
- Another outcome is that market ignores the vast majority of graduates except the top decile or quartile – human capital vs. signalling theory
- Employers know that these students learned very little inside the class and have not learnt much on their own initiative outside
- So many graduates find that the degrees are of no help even when there is an unprecedented shortage of skills- also the reason why private rural schools are able to find teachers with college degrees
- No cutting edge research is done at Indian universities – even the top institutes such as IITs and IIMs don't do world class research – stark fact – no instance of Indian scholars at these institutes being wooed by top US universities for a tenured faculty position

Policy Reform – Decentralisation

- UGC functions are – coordination, determination and maintenance of standards of the universities
- UGC lays down criterion for – admissions, disciplines and curriculum at all levels, qualifications of teachers, degrees to be awarded and exercises power over the universities directly and on colleges through the affiliated universities
- Whatever is the logic of such a centralised system in 50s and 60s it makes little sense in today's complex world
- A system consisting of 760 universities and 39,000 colleges is beyond the capacity of a single body to administer –similarly, each university has more than 50 affiliated colleges which is beyond the capacity of the university to administer

Policy Reform – Decentralisation

- Centralisation also destroys the incentives to compete- given the strict salary guidelines colleges and universities can't compete to hire the best faculty which makes it difficult to attract good students
- Effectively, the quality of the institution is determined by geography and history - Homogenisation of curriculum takes away the incentive to innovate and compete
- Universities have to be given far more autonomy than what they have now and should be free from UGC interference and meddling – they should be able to offer merit based salaries – mechanisms should be introduced to recognise and reward excellence, the culture of absenteeism will continue and professors will continue to earn in outside coaching institutes
- College level autonomy also needed from the universities
- Formation of unitary universities that give both undergraduate and graduate education on the same campus
- Every university and college which is given autonomy may not succeed but that's OK as long as majority do well

Policy Reform- unshackling private colleges and universities

- Rapid emergence of private colleges and non degree post secondary institutions is a positive development
- In 2005-06, the proportion of students in private sector higher education institutions is 64% as against 36% in public institutions
- The share of private sector seats engineering went up from 15% in 1960 to 86% in 2003 and medical colleges went up from 7% to 41% during the same period
- In curriculum, examinations and degrees these private institutions are also tightly regulated through affiliating universities by UGC- states where these colleges are located decide the terms of admissions- litigation has been very common, with judiciary actively framing rules on admissions, fees, profits based on the principle of equity which is harming the cause of efficiency and excellence

Policy Reform- unshackling private colleges and universities

- Private sector should be given freedom to compete
- Such competition will produce not only great private universities but also improve public universities – as in USA, where top private universities set the standard and public universities compete with them
- Entry of private sector universities is to be simplified
- Just as no licence is required to enter the industry today, no approval from an agency such as UGC should be needed
- Private institutions should either be allowed to make profit and pay taxes so that they can set the fees on market conditions and they should not be given any freebies by the state – the current system of allocating land at thruway prices attracts different kind of entrepreneurs who are only interested in the real estate play
- A system which offers world class education in India, keeps the talented students at home, and offers opportunity to all through loans is more equitable than the present dysfunctional system

Policy Reform- financial autonomy

- Income sources: public funds, charitable contributions, research grants, sale of publications, rents from giving out facilities on campus – funding from all the sources is declining in real terms , infrastructure is falling apart and the number of students is increasing
- Tuition fee as a proration of operating expenditure has to be brought back to 1950 levels of 15% , which is now at 3%
- Higher education brings in large private gains to its recipients and they should bear the cost of it at least once they start earning
- Universities should become relevant to industry in order to attract resources from it – this is only possible if they are granted autonomy
- As any increase in public expenditure appears unlikely, the only alternative available is to shift students increasingly to private sector in higher education

Higher and Higher Education (Economist, May 2018)

- University rankings by various agencies such as US News & World Report, Times Higher Education and QS - are making universities favour research over teaching and hard sciences over humanities
- Rankings which are a source of national pride - yet they foster global cooperation
- Rankings are an important source of consumer intelligence about a good on which people spend huge amounts of time and money
- Universities are engines of knowledge economy and future prosperity
- The highest rankings are dominated by America and Western Europe – China's rise has been dramatic
- As the metric used is highly cited research, the attention of star professors has shifted to research and away from teaching
- India has no institution ranked in the Top 500 – a very sorry state of research in our reputed universities

No of universities in top 500 rankings

