

Private Schools for the Poor

Development, Provision, and Choice in India

A Report for Gray Matters Capital
Ross Baird
May 2009

Summary

Across the world, millions of poor families are sending their children to schools with fees as low as \$1/month. In the city of Hyderabad, 73% of families in slum areas send their children to private school. This report examines private enrollment throughout India to explain why private schools for the poor exist and in which cases they are most likely to have the largest effect on enrollment. Covering every state and region of India, the study utilizes a macro-level analysis of various independent factors such as government spending on education, political opinion, economic data, and cultural variables to determine their relationship to private schools in the developing world. In addition, case studies in Hyderabad and Mumbai trace the history of school development.

Key findings include the following:

1. Private schooling in India is demand-driven. Parents choose private education because they believe they provide better education and future opportunities for their children than the government schools. Supply-side factors have little statistical relationship to private schools; private schools exist because parents demand them.
2. There is no statistical relationship between a particular region's wealth and private enrollment. Private schools in India are as likely to exist in poor areas as rich ones.
3. Political factors play a serious role in private education choice. Government spending on education has an inverse relationship with private enrollment: the more governments spend on education in a given state, the lower private enrollment is. In addition, public opinion of a local government matters—the lower opinion of the government is related to higher private enrollment. Finally, there is a major statistical link between teacher absence in government schools and private enrollment.
4. Certain cultural factors affect private enrollment. Hyderabad illustrates how English-language instruction drives private schooling; Mumbai shows how in slum areas, private schools may be the poor's *only* choice, and the macro-level analysis shows a strong link between Muslim population and private enrollment.
5. Political and regulatory differences between states affect the size of the private sector. For example, the requirement in Maharashtra to be a registered society or trust makes establishing a private school more cumbersome.
6. Suggested related reading is included as part of GMC's Enterprising Schools project.

The popularity of private schooling as a choice for low-income parents suggests that private education is likely to be prevalent throughout the developing world, not just in India. However, existing literature and this report do little to explore private school *quality*—the most pressing future research need is measuring school quality and communicating it to parents. On a larger scale, these findings reinforce the larger notion that market-based approaches which focus on consumer demand should drive development strategies.

Table of Contents

Private Schools for the Poor: An Introduction	4
Education in India: An Overview of Literature and Arguments	9
The Theory Behind Private Education Development in India	15
Research Methods, Data Operationalization, and Analysis	26
The Case of Hyderabad	45
The Case of Mumbai	60
Conclusion: The Private Sector and the Poor	67
Suggested Future Readings	72
Works Referenced	78

1

Private Schools for the Poor: An Introduction

“The State shall provide free and compulsory education to all citizens of age six to fourteen in such manner as the State may, by law, determine.”¹

--Constitution of India, Article 21-A

“India is a land of diversity -- of different castes, peoples, communities, languages, religions and culture. Although these people enjoy complete political freedom, a vast part of the multitude is illiterate and lives below the poverty line. The single most powerful tool for the upliftment and progress of such diverse communities is education. The state, with its limited resources and slow-moving machinery, is unable to fully develop the genius of the Indian people...”

(Private institutions’) grievance is that the necessary and unproductive load on their back in the form of governmental control, by way of rules and regulations, has thwarted the progress of quality education...

It is no secret that the examination results at all levels of unaided private schools, notwithstanding the stringent regulations of the governmental authorities, are far superior to the results of the government-maintained schools.”²

--Supreme Court Ruling, Unni Krishnan of India, 31 October 2002

Governments across the world assume the obligation of education as a universal, publicly provided good. Every country in the world but two has ratified the UN Convention on the Rights of the Child, declaring, “States’ Parties recognize the right of the child to education...they shall, in particular (a) make primary education compulsory and free to all...”³ In surveyed cities across the developing world, however, as many as 75 per cent of students attend private schools, paying fees of less than US\$10 a month.⁴ Given that countries across the world have declared an ambition to provide free and universal education, as a publicly provided good, why do low-income citizens in developing areas choose to pay a significant proportion of their income on schooling? Through examining the Republic of India, this study seeks to explain why low-income parents are likely to choose

¹ Constitution of India, Article 21, Section A.

² Unni Krishnan (Supreme Court of India), T.M.A. Pai Foundation and Ors. vs. State of Karnataka and Ors., 31 October 2002, available at <http://indiankanoon.org/doc/512761/>.

³ “United Nations Children’s Fund. “UN Convention on the Rights of the Child.” 1989. 21 December 2008, <www.unicef.org/crc>; The only two countries which are not signatories are the US and Somalia.

⁴ James Tooley and Pauline Dixon, “Private Education for Low-Income Families,” in P. Srivastava & G Walford (Eds) *Private Schooling in Less Economically Developed Countries: Asian and African Perspectives* (Oxford: Symposium Books, 2007), p. 15-37.

private schools for their children. Both political and cultural factors explain this salient, and surprisingly large, sector in the developing world.

Context: The Low-Cost Private School

Private schools are currently educating a large percentage of the world's poor. Signatories to the United Nations Millennium Development Goals 2000 stated a commitment to educate all children under Goal Two: Education For All.⁵ According to many metrics, governments are not on track towards achieving these goals. However, as this thesis will illustrate, when private schools are included, more students are enrolled in school than governments in developing countries report. Census surveys of selected cities have shown how when low-cost private schools are included (many of which are not government-recognized), education enrollment goals and benchmarks *are* being met.⁶ One study of Hyderabad, Andhra Pradesh proved that when all private schools are included in enrollment counts, the percentage of out-of-school children in the city is reduced from the official report of fifteen per cent to, in practice, less than six per cent.⁷

James Tooley and Pauline Dixon call the phenomenon of the low-cost private school in very poor areas of the developing world “de facto privatization.”⁸ Because of government failure—actual or perceived—to educate students in very poor areas, private schools that charge low-fees are educating students that would otherwise attend government schools—or not be in school at all. For the purposes of this study, “private” schools are schools that are independently operated and do not receive government aid. “Low-fee” schools in India charge as little as 80 rupees/month (roughly \$1.50 USD), tend to be mostly located in low-income or urban slum areas, and are accessible to the poor. This study seeks to explain in which cases “de facto privatization” is likely to occur.

Methodology: The cases of India, Hyderabad, and Mumbai

Data collection in this field is often difficult. From what we *can* quantify, however, private school enrollment varies substantially across states and countries in the developing world. The Republic of India is an ideal model for exploring the multiple socioeconomic and political conditions that shape private enrollment. The Constitution of India enshrines education as one of its Fundamental Rights—stating that every child, through the age of 14, is entitled to “free, compulsory education”. Yet the Supreme Court of India observed in 2002 that “the state, with its limited resources and slow-moving machinery, is unable to fully develop the genius of the Indian people...”

In some countries, private schools are banned or heavily controlled. According to federal law, the development of private schools is legal within all of India's constituent

⁵United Nations, “Resolution Adopted by the General Assembly: United Nations Millennium Declaration,” 2000. United Nations, 3 April 2009, <www.un.org/millennium/declaration/ares552e.pdf>

⁶James Tooley, Pauline Dixon, and SV Gomathi, “Private schools and the millennium development goal of universal primary education: a census and comparative study in Hyderabad, India”. *Oxford Review of Education*, 33:5, 539-560, 2007.

⁷Ibid, p. 443.462.

⁸James Tooley and Pauline Dixon, “‘De facto’ privatization and education of the poor,” *Compare: A Journal of Comparative Education*, Volume 36, no., 3, 2006, p. 444.

states. The Government of India exercises very little regulatory authority over most functions of its constituent states, especially with respect to education policy. As a result, there is tremendous socioeconomic, cultural, and political variation within the country. India has 35 states and territories with 22 official recognized languages, and a population of over 100 million people in each of the Christian, Muslim, and Hindu faiths. The state of Jammu and Kashmir, for example, is majority Muslim, and the population of the territory of Sikkim more closely represents the mean demographics of China than the Southern state of Tamil Nadu. With a population of over one billion people, India is a sample of one sixth of the world. Understanding variation in private enrollment in such a diverse and large country can provide a blueprint for more generalizable results than most countries would.

In order to explain variation in private school enrollment state-by-state, I incorporate a large-N multiple regression analysis of the 35 constituent states and territories of India, segmented into rural and urban areas. The large-N study uses as a dependent variable private school enrollment through Level Ten (known as all schools catering for ages 3-16: Nursery to Class Ten) as a percentage of total school enrollment.

The large-N study analyzes several types of independent variables. I hypothesize that several factors in the India model will help clarify the question, “Why do low-income parents choose to spend a significant portion of their income on schooling, a sector that governments declare should be a free, universal, publicly provided good?” First of all, there are cases in which the government does not provide (or is perceived not to provide) quality schooling. These may be urban areas with high population growth, but have not built schools to meet demand, or areas in which the government is perceived as unable to provide quality educational services. Second, there are cases in which the quality of the private sector is considered to be higher. In these situations, private schools may provide services that correspond with parental wishes—for example, English-medium instruction rather than local language tuition. Finally, cultural factors may cause parents to choose private schools over available government schools—for example, Muslim, Urdu-speaking parents could be more likely to pay for schools that teach in Urdu-medium or have rooms set aside for children to pray.

I also incorporate two nested case studies. These are meant to explore causal mechanisms in two specific scenarios: first, in scenario (A), there are sufficient and available government schools, but there is a perceived (or actual) quality difference between the government sector and the private sector. In this case, parents actively choose to send their students to private schools. To analyze this situation, I will investigate Hyderabad, Andhra Pradesh, which has the largest concentration of private schools in India.⁹ In Hyderabad, I have examined the effects of factors such as such as the prevalence of English-medium schools (in a fast-growing city that demands English-language education) and an urban Muslim population of 40 per cent, one of the highest in India, influence private enrollment.¹⁰

And second, in scenario (B), there is not sufficient government school provision, and private schools arise more out of necessity than choice. In this case, even if parents would prefer government schools, they send their children to private schools because there is no government option. An analysis of over 20 schools in the northern slums of Mumbai,

⁹Pratham Foundation. *Annual Status of Education Report 2008*. (New Delhi: Pratham Foundation, 2008).

¹⁰“Census of India.” 2009. <www.censusindia.gov.in>.

where there has been rapid growth, high poverty, and low government provision of schools, analyzes how and why schools develop in this scenario. By analyzing India through a large-N study, and through two critical cases, this research will examine variation across the states.

Overview of Argument and Thesis

This study outlines what happens “in principle” vs. “in practice.” In principle, particularly in less economically developed areas, governments provide free and universal education for children as poor citizens’ greatest avenue for social mobility. In practice, the government schools I visited in India have 100 students to a 15’ by 15’ classroom, and the girls go home to use the toilet because the school has no women’s restrooms—if they go to school at all. In “principle”, at least in the Western world, private schools are typically only for the elite and privileged—only available to the middle and upper classes who can afford them. In practice, privately operated schools across India are educating the poor—students whose families make fewer than \$2 USD/day.

I do not set out to cast judgment on whether private education for poor families as a public policy should be endorsed or not. Instead, this report is meant to explain a puzzle: a case where a government does not meet a mandate to education, which it declares a fundamental right. Whether the failure is actual or perceived, private organizations are educating the masses where there is government failure.

This study examines (a) why a large percentage of the world’s poor attend do not attend free government schools, but low-fee private schools, and (b) how the low-fee private school sector is fulfilling parents’ demands in cases where government schooling does not. Political scientists, policy-makers, and government officials need to recognize the influence and salience of the private sector when discussing global education.

This report builds on and contributes to the existing literature on the education sector in the developing world by seeking to resolve what determines variation in private school enrollments in different states. Scholars including Srivastava, Dixon, Tooley, Kingdon, Mehta, and Rose have conducted valuable and enlightening small-N case studies to describe school enrollment in Indian cities,¹¹ and scholars such as Mehrotra, Bangay and James have attempted to explore cross-national or cross-state variation.¹² I also expand on the existing case study literature by testing observed factors in a large-N, generalizable

¹¹Prachi Srivastava, “Private Schooling and Mental Models about Girls’ Schooling in India,” *Compare*, 36(4), 2005, pp. 497-514; James Tooley and Pauline Dixon. “Private Education for Low-Income Families,” in Prachi Srivastava and Geoffrey Walford (Eds.), *Private Schooling in Less Economically Developed Countries*, (Oxford: Symposium Books, 2007); G.G. Kingdon, “Private Schooling in India: size, nature, and equity effects.,” London School of Economics, DEP no. 72, 1996; Arun Mehta, *Elementary Education in Unrecognized Schools in India: A Study of Punjab based on DISE data*, (NIEPA, New Delhi, 2005); Pauline Rose, “Privatisation and Decentralisation of Schooling in Malawi: default or design?” *Compare*, 35(2), 2005, 153-165.

¹²Colin Bangay, “Private education: relevant or redundant? Private education, decentralisation and national provision in Indonesia.” *Compare*, Volume 35, Number 2, June 2005, pp. 167-179(13); Santosh Mehrotra and P. R. Panchamukhi, “Universalising Elementary Education in India: is the Private School the Answer?” in P. Srivastava & G Walford (Eds) *Private Schooling in Less Economically Developed Countries: Asian and African Perspectives*, (Oxford: Symposium Books, 2007); Estelle James, “Why do different countries choose a different public-private mix of educational services?” *Journal of Human Resources*, 28:3, 1993.

model, and expands on previous large-N studies by taking an explanatory, rather than descriptive, approach.

In the second chapter, I review the current literature, highlighting where this study fills existing gaps. In the third chapter, I will outline the theory behind the argument in this study. The fourth chapter will test the theory through a large-N, multiple regression model. The fifth and sixth chapters will outline the cases of Hyderabad and Mumbai, respectively, and the final chapter will draw conclusions from the study about the low-fee private school and education in the developing world more broadly.

2

Education in India: An Overview of Literature and Arguments

Increasingly, parents in developing countries are turning to private schools to meet educational needs. In parts of the world that are more economically developed, though, private schools are typically not thought to serve the poor. Yet in the recent decades, a number of studies have emerged that examine private schools in low-income areas in developing countries.

In the late 1990s, studies such as Kingdon¹³ and the all-India PROBE study¹⁴ argued against this Western stereotype of private schools being reserved for the elite by illustrating, in concentrated case studies, that private schools were more widespread in poorer parts of India than in more economically advantaged areas of the world. Other scholars such as Alderman¹⁵ argued that perhaps the governments of developing countries contributed to scholars' lack of knowledge about the sector. Researchers never grasped the size of the private sector in the developing world because, as Alderman notes, "Governments occasionally prohibit, often regulate, and frequently ignore private schooling."¹⁶ This argument is convincing: most data on schools, even in this study, is government-issued, and if governments have an incentive to ignore private schools, then data on private schooling is complex and incomplete.

James Tooley first developed a systematically compelling support of the assumptions of Kingdon, Alderman, and others through a block-by-block census reports on low-cost private schools in countries ranging from India to Ghana and Kenya.¹⁷ Tooley's initial study provided empirical examples of how widespread the low-cost private school phenomenon was across the developing world, showing how in some major cities, private enrollment exceeds 60 per cent. Other researchers have substantiated these claims in countries from Malawi¹⁸ to Nigeria¹⁹ to Pakistan²⁰ to Indonesia²¹ to Madagascar.²²

¹³ G.G. Kingdon, "Private Schooling in India: size, nature, and equity effects." London School of Economics, DEP no. 72, 1996.

¹⁴ Anuradha De, Jean Dreze, and the PROBE Team, *Public Report on Basic Education in India*, (Oxford: Oxford University Press, 1999).

¹⁵ H. Alderman, P.F. Orazem, and E.M. Paterno, "School Quality, School Cost, and the Public/Private School Choices of Low-income Households in Pakistan," *Journal of Human Resources*, 36 (2), 2001, 304-326

¹⁶ Ibid.

¹⁷ James Tooley, *The Global Education Industry: Lessons from Private Education in Developing Countries*, (Philadelphia: Coronet Books, 2001).

¹⁸ Pauline Rose, "Privatisation and Decentralisation of Schooling in Malawi: default or design?" *Compare*, 35(2), 2005 153-165.

¹⁹ Pauline Rose and M. Adelabu, Private Sector Contributions to Education for All in Nigeria, in P. Srivastava & G Walford (eds.) *Private Schooling in Less Economically Developed Countries: Asian and African Perspectives*, 67-87. (Oxford: Symposium Books, 2007).

²⁰ Alderman 2001.

²¹ Colin Bangay, "Private education: relevant or redundant? Private education, decentralisation and national provision in Indonesia." *Compare*, Volume 35, Number 2, June 2005, pp. 167-179(13).

These authors argue that private education is helping educate the world's poor in a substantial way: Tooley and Dixon point out, for example, that when private school enrollment is included, Hyderabad is meeting the UN Millennium Challenge goal of Education for All; without the inclusion of low-cost, unrecognized private schools, Hyderabad is 8 per cent behind target enrollment.²³ Those who subscribe to this school of thought argue that private schooling needs to be examined if anyone is interested in global education development for the poorest.

Another school of thought in this debate is more skeptical of low-cost private schools, and discourages study and investment in the government school sector. A prominent example of this is the UNESCO Education for All Global Monitoring Report, published in 2008. While the report acknowledges private education, it conducts little analysis of the sector, arguing that that “private finance and provision are not substitutes for public systems that offer everyone the option of a good quality education.”²⁴ Maile, in a study of South Africa, argues that private schools in the developing world “dupe families”²⁵ into paying (relatively) high fees for low-quality education, and a 2008 *Times of India* survey of schools agreed with UNESCO in concluding that private schools were of unpredictable quality at best.²⁶ And Keith Lewin argues that “private schools for the poor” do serve the *poorest*: some researchers argue that low-fee private schools are primarily available for the richest of the lowest class, and truly private education that is unsubsidized can only have limited impact for the poorest of the poor.²⁷

Because of the sheer size of the private schooling sector, rejecting treatment of the private sector, as UNESCO does on ideological grounds, is not realistic. The presence of a large low-cost private schooling sector, even if it is not a perfect substitute for government schooling, still ought to be part of any analysis of education in the developing world—even if only as a way to analyze government's shortcomings. UNESCO takes a normative approach to the argument, acknowledging that “education is a public good”, and privatization ought to be rejected in principle. But the reality is that governments are failing to educate large numbers of citizens. In a census survey of Hyderabad, India, only 29 per cent of low-income children attending school attended government school; the figures were 27 per cent in similar studies of slums in Ga, Ghana, 25 per cent in Lagos, Nigeria, and 15 per cent in Nairobi, Kenya.²⁸

²² P. Glick, P. & D.E. Sahn, “The Demand for Primary Schooling in Madagascar: price, quality, and the choice between public and private providers,” *Journal of Development Economics* 79 (1), 2006, 118-145.

²³ James Tooley and Pauline Dixon, “Private Education in Low-Income Families”, in Prachi Srivastava and Geoffrey Walford (eds.), *Private Schooling in Less Economically Developed Countries*, (Oxford: Symposium Books, 2007), p. 24.

²⁴ Education for All Global Monitoring Team. *Overcoming Inequality: Why Governance Matters*. (Paris: UNESCO, 2008), p. 29.

²⁵ Simeon Maile, “False Consciousness in School Choice: School Choice in South Africa,” *Education and Urban Society*, 37(1), 2004, 94-116.

²⁶ Tilak, J.B. *Private Schooling in Rural India*. Working Paper Series, No. 76. New Delhi: NCERT; R. Banerji, Making the Grade: teach children the joy of learning, *The Times of India*, 14 July 2003. “Overcoming Inequality: why governance matters.” Education for All Global Monitoring Team 2008.

²⁷ Lewin, Keith. “The Limits to Growth of Non-government Private Schooling in sub-Saharan Africa. in P. Srivastava & G Walford (Eds) *Private Schooling in Less Economically Developed Countries: Asian and African Perspectives*. (Oxford: Symposium Books, 2007).

²⁸ Tooley and Dixon, 2007, p. 23.

In this study, I do not make normative claims about private education, but I empirically acknowledge the vast impact that private schooling has in global education. With that established, this study seeks to augment the debate by acknowledging that (a) private schools do exist, (b) they are worth the attention of government officials and political scientists, and (c) through multivariate analysis and case studies, it is possible to explain variation between specific areas in the prevalence of private schools in poor countries.

The argument that parents are being “duped” is also not entirely convincing: these studies deal with a limited amount of data over a short period of time, and the evidence that parents are responsive to changes in quality is equally substantiated. Srivastava concludes, for example, that parents are more responsive to changes in school quality than conventional wisdom might dictate, and the relationship between a parent and the school is heavily involved.²⁹ If parents are responsive to school quality, and an owner attempts to “dupe” parents, then the schools often do not last for long. And in an econometric study of families’ spending on education, Tilak provides empirical evidence countering Lewin’s argument by finding that, though low-fee private schools are expensive for poor income families in India, families tend to prioritize education to the point that low-fee private schools are affordable, even for the very poor.³⁰

According to one case study of 60 schools in the Indian city of Lucknow, the primary reason that families choose private schools is perceived superior quality to government schools.³¹ According to a survey of 600 families across seven states conducted by India’s largest teachers’ union, low-income families’ largest reasons for choosing private schools are, in order, poor or nonexistent government-school infrastructure, lack of English-medium education, and insufficiency or absenteeism of government-school teachers.³² Families in developing countries also choose private schools based on social status (not that differently from the West).³³ To address these issues, this thesis will examine parental choice.

There is evidence that families’ preferences are justified and private school students perform better than their government school counterparts.³⁴ Mehrotra finds that the facilities and attendance are significantly better in private schools, and student performance is better also, though private schools do little to redress gender and caste differences, particularly in poorer areas.³⁵ De *et. al.* find that, especially in very poor areas, government schools are

²⁹Prachi Srivastava, “For Philanthropy or Profit? The Management and Operation of Low-Fee Private Schools in India,” in P. Srivastava & G Walford (eds) *Private Schooling in Less Economically Developed Countries: Asian and African Perspectives*, 67-87. (Oxford: Symposium Books, 2007), p. 174-176.; Prachi Srivastava, “Private Schooling and Mental Models about Girls’ Schooling in India,” *Compare*, 36(4), 2005, pp. 497-514.

³⁰Jandhyala Tilak. *Determinants of Household Expenditure on Education in Rural India*. (New Delhi: National Council of Applied Economic Research, 2001).

³¹ Srivastava 2007.

³²All India Federation of Teachers. “Teachers’ Absenteeism and Infrastructure of Schools in India.” (Ahmedabad: Education International, 2008).

³³Srivastava 2007, p. 174-175.

³⁴ James Tooley and Pauline Dixon, “De facto’ privatization and education of the poor,” *Compare: A Journal of Comparative Education*, Volume 36, no., 3, 2006, 443-462; Pratham Foundation, “Annual Status of Education Report 2007” (New Delhi: Pratham Foundation, 2008).

³⁵ Santosh Mehrotra and P. R. Panchamukhi, “Universalsing Elementary Education in India: is the Private School the Answer?” in P. Srivastava & G Walford (Eds) *Private Schooling in Less Economically Developed Countries: Asian and African Perspectives*, 67-87. (Oxford: Symposium Books, 2007).

geographically located too far from many families to attend school, and children who attend private school tend to have higher attendance and greater measured achievement.³⁶ (Yet De found the same objection as Lewin: that while the poor are attending private school, the *very poorest* do not have access to private school.) But the evidence of better performance, to this point, is limited. This study is not able to address directly one major gap in the literature: systematic evaluation of the quality or effectiveness of the low-fee private schools.

Yet some school is better than no school. I find, through case studies, what other researchers support: there are some cases in many of the poorest slums in the world where private education is parents' only choice. In the case of the slums of Mumbai (see: Chapter 6), government schools are scarce, and students often have to walk two hours from home to reach the nearest one. And when saying that private schools do not educate the *poorest*, De and Lewin's studies do not adequately account for unrecognized schools. As Dixon³⁷ explains, the phenomenon of unrecognized schools, whose enrollment figures are not counted in official government statistics for reporting and resource allocation, provides a skewed perspective on the governmental side for school management. Unrecognized schools, as I will outline in future chapters, are often serving the poorest of the poor.

Most of the relevant literature on low-cost private schools has come from scholars of education or development studies, but the *political* aspect of low-cost private schools has often been overlooked. Existing studies either discount low-cost private schools completely, citing education as a normative universal "public good",³⁸ or discount the role of government, saying that private schools arise because the "government system is perceived to be inadequate"³⁹, that they exist because of the poor and declining quality of government education,⁴⁰ or inadequate infrastructural capacity of government to handle educational needs alone.⁴¹ Igor Kitaev begins to talk about the factors that shape private school enrollment as a "triangle of government policy vs. family income vs. demography,"⁴² yet the existing literature has not sufficiently examined the relationship between government policies and the private sector.

Some scholars, most prominently E.G. West,⁴³ question whether education is a public good to begin with. In tracing the development of the private school sector and the political economy of education reform in the government sector, West, Coulson, and others argue that the private market is better equipped than governments to efficiently and

³⁶Anuradha De, C. Noronha, and M. Samson, "Private Schools for Less Privileged: some insights from a case study," *Economic and Political Weekly*, 37(52), 2002, 5230-5236.

³⁷Pauline Dixon, "An Inspector Calls: The Regulatory Environment in Andhra Pradesh," [*International Journal of Educational Development*, Volume 25, Issue 3](#), May 2005, Pages 269-285.

³⁸Education for All Global Monitoring Team, 2008.

³⁹Geoffrey Walford and Prachi Srivastava, "Examining Private Schooling in Less Economically Developed Countries: key issues and new evidence", in P. Srivastava & G Walford (Eds) *Private Schooling in Less Economically Developed Countries: Asian and African Perspectives*, (Oxford: Symposium Books, 2007), p. 7.

⁴⁰Tooley 2001.

⁴¹Bangay 2005.

⁴²Igor Kitaev, "Private Education in Developing and Transitional Countries," in P. Srivastava & G Walford (Eds) *Private Schooling in Less Economically Developed Countries: Asian and African Perspectives* (Oxford: Symposium Books, 2007), p. 108.

⁴³E. G. West, *Education and the State*, (London: Transatlantic Arts, 1970).

effectively handle education for the poor.⁴⁴ Tooley and Brighouse argue that vigorous support of the low-cost private sector can “reclaim education” for the poor, especially in cases in which governments fail to provide education.⁴⁵ The fact that governments explicitly and openly define education as a public good complicates the issue: as stated in the intro, the vast majority of the world’s governments declare a commitment to free, universal education. However, by making this claim, governments also might crowd out the incentive for a private sector to play a role in universal education.

Through the selection of certain independent variables, I explore these issues and others in the field of comparative government. In exploring the role of teachers as a politically potent interest group, this report examines George Tsebelis’ argument that most politicians in democratic societies are playing “two-level games” when making policy—seeking the best policy outcome, while also looking at policies that will assure re-election.⁴⁶ Government officials are highly responsive to influential electoral blocs, such as teachers’ unions, when making policies affecting the quality of government schools and supply of private schools. Variables such as government spending, teacher job protection, absenteeism, and language of instruction are all related to interest-group politics, in this case with politically powerful teachers’ groups as main actors. As Mancur Olson writes in *The Logic of Collective Action*, “the large labor union, though not a part of the government, must still be coercive, if it attempts to fulfill its basic function and still survive.”⁴⁷

Elinor Ostrom describes the problem of “social dilemmas”⁴⁸ that get in the way of the production of publicly provided goods. If we accept governments at their word in the UN Millennium Challenge Goals, education is one such public good. In this case, if a quality education is hard to quantify, and parents have very little information about the quality of their children’s schooling. Moreover, if education outcomes are not easily punished or rewarded at the polls, what incentive do politicians have to provide quality of education? Yet when influential voting blocs, such as teachers’ unions, can easily quantify and target certain public policies, discrete groups wield power beyond merely the size of their group. In India, there are rarely, if ever, “parents’ unions” to counter “teacher’s unions”, and the results of a poor education policy—low test scores, high literacy—is not as immediately visible as a teacher’s paycheck. Teachers’ unions have a major stake in certain policies (teacher pay, absenteeism policy, and length of vacations), and heavy incentive to lobby and vote. Hoxby also argues that teachers feel that they have “superior information about input mixes,”⁴⁹ and unionization allows a greater voice into these inputs.

⁴⁴E.G. West, “The Political Economy of American Public School Legislation,” in E.G. West, *Education and the State*, (3rd edition), (Indianapolis: Liberty Fund, 1994). Andrew Coulson, *Market Education: The Unknown History*, (New Brunswick and London: Transaction Publishers, 1999).

⁴⁵Harry Brighouse, *School Choice and Social Justice*, (Oxford: Oxford University Press, 2000); James Tooley, *Reclaiming Education*, (London: Continuum, 2000).

⁴⁶ George Tsebelis, *Nested Games: Rational Choice in Comparative Politics*, (Berkeley: University of California Press, 1990).

⁴⁷ Mancur Olson, *The Logic of Collective Action*, (Cambridge: Harvard University Press, 1971).

⁴⁸ Elinor Ostrom, “The Logic of Collective Action,” in Michael McGinnis, *Polycentric Games and Institutions*, (Ann Arbor: University of Michigan Press, 2000).

⁴⁹ Caroline Hoxby, “How Teachers’ Unions Affect Education Production,” *Quarterly Journal of Economics*, 111 (4): 671-678, 1996.

This report examines the role of the politics behind government provision and explores a counter-argument: when a collective-action problem leads to failure of the government sector, and government is not responsive to citizens' needs, citizens are more likely to privatize what has been previously viewed as a collective function. Trust in government, the relationship between teacher job protection, union strength, and teacher absenteeism, and the language of instruction are all salient concerns. The large-N regression and the case studies will address these issues.

In this context, private education ought to be viewed as a complement to, or an active choice over, government schooling—in many cases, providing services to the poor that government does not have the capacity to—but not a wholesale theoretical rejection of government's role. Government policies, including spending and curriculum, help explain the size of the private sector. Most existing literature either normatively advocates the role of private schools in educating the poor or dismisses them outright as a theoretically unsatisfactory replacement for the essential government function of education. By attempting to explain why and in which cases low-income parents are likely to choose private schools, I seek to (a) substantiate and build on the claims that private education *is* for the poor; (b) build a large-N model in an attempt to explain variation in enrollment, so that future researchers and policy makers can explain *where* and *why* we might expect to see high private enrollment in poor areas, and (c) involve governmental variables in the models and case studies so we can best explore the relationship between governments and the private sector in educating the world's poor.

3

The Theory Behind Private Education Development

Although the governments of every Indian state provide free education through age 14, in many Indian states over half of school-age children attend private schools.⁵⁰ Given that these states have a stated commitment to provide free and universal education, when and why, in many cases, do low-income citizens in the developing world with very little disposable income pay fees to send their children to private schools in large numbers? To answer this, we must analyze the role of key players in government and private education. Which principal actors are involved in the development of the educational sector? Which powers/resources do these actors have, and how do they contribute to variation in enrollment? The principal actors, which are outlined as follows, are government actors (public officials), teachers, parents, and school operators/entrepreneurs.

Agents and Factors Affecting Provision/Quality of Government Schools

Elected officials in state assemblies and Indian Administrative Service bureaucrats affect government and private education. The government determines the funding for government-operated schooling, as well as the curriculum, including the language of instruction. Governments have the incentive of striving for (or being seen to strive for) educational excellence for government schools in their district. High-quality government schools can provide economic opportunity and social advancement, especially for lower-income members of society. Government actors affect provision of government schools by increasing funding for teachers, classrooms, or supplementary programs such as a free mid-day meal for students in order to increase government school availability. The role of government as an allocator of resources shapes government-school provision. Governments often desire to support certain sectors at certain times, driving budget outlays in areas such as teachers' salaries and medium of instruction. In addition, lack of funds can shape governmental allocations, too.

The teachers in government schools are the systems' largest group of employees—the largest union in the state of Andhra Pradesh has 120,000 members of the state's 275,000 employees⁵¹—and also comprise an influential political bloc with significant electoral participation and sway. As a result, teachers have substantial job protection and political influence. Teachers often act to fulfill government civil service roles, such as collecting the Census, performing local bureaucratic tasks, and working in parts of political leaders' organizations. In 1974, India instituted a “one-child policy” to control population size;

⁵⁰National Institute of Education Awareness and Planning, “District System Information on Education, 2007,” <www.dise.in/ar2005.html>; National Council on Education Research and Training, “NCERT 7th All-India Education Survey,” 2003, <<http://gov.ua.nic.in/NScheduleData/>>.

⁵¹Membership figure obtained in writing from Andhra Pradesh United Teachers' Federation. Teacher figures from National Institute of Education Awareness and Planning, 2007.

when the populace rebelled, the government repealed the policy, but enlisted teachers to conduct family planning courses across the country.

But the relationship between teachers and the civil service does not always have positive consequences. With such heavy job protection, teachers are often absent from class. Studies illustrate that teachers in government schools are absent, on average, 25 per cent of the time, which is significantly more than their private school counterparts.⁵² One study found, on unannounced visits to 3,700 schools, that, on average, 25 per cent of government-school teachers were absent—the states ranged from 15 per cent absences in Maharashtra to 42 per cent absences in Jharkand.⁵³

According to prior surveys, some teachers are absent because of the close relationship between teachers' unions and the government sector—they are carrying out administrative, political, or election-related work, and other teachers are absent because of the lack of accountability surrounding teacher absence, specifically administrators' inability to fire teachers.⁵⁴ In interviews, teachers' union leaders in India consistently stated that protecting the employment of their teachers is their top priority.

The role of interest groups affecting government policy is well documented. With so many teachers comprising such a share of the votes, if the teachers were to form an interest group, they could have a disproportionate effect upon policy. Tsebelis' "two-level game", where government officials both are attempting to conduct good public policy and win re-election, is a salient concern in a democracy such as India. Governments need to support policies in educational provision that can garner them electoral support. Therefore, political actors are most likely to make policy decisions that will also give them electoral benefits.⁵⁵ When a group such as a teachers' union (a) offers policy expertise (curriculum guidance, regulation suggestions, teacher pay scales) that helps government officials guide policy, and (b) has a significant number of votes to support the politicians' decisions, the group is likely to influence the way government functions.

Teachers' objectives can be discerned from the State Teachers' Federations of India (an association of the largest teachers' unions in ten of the largest states in India). The primary objective of the unions is to organize "united actions in various forms at the national level and at the state level on the problems before the community of school teachers including the demands for better living conditions, security of service, and high quality of Education etc."⁵⁶ Some scholars argue that these objectives are at odds with the goals of the parents and students for higher quality education: in political decision-making,

⁵²Kremer et. al, "Teacher Absence in India: A Snapshot," *Journal of the European Economic Association*, April/May 2005, Vol. 3 No. 2-3, 2005, 658-667; De et. al., *Public Report on Basic Education in India*, (Oxford: Oxford University Press, 1999)

⁵³ Kremer 2005.

⁵⁴Kremer 2005; All India Federation of Teachers, "Teachers' Absenteeism and Infrastructure of Schools in India." (Ahmedabad; Education International, 2008).

⁵⁵George Tsebelis, *Nested Games: Rational Choice in Comparative Politics*, (Berkeley: University of California Press, 1990).

⁵⁶ "State Teachers' Federation of India Manifesto." Obtained in writing from Andhra Pradesh State Teachers Federation, 30 December 2008.

teachers will place greater emphasis on the outputs that affect them directly (their paycheck) than those that impact them indirectly (their students' performance).⁵⁷

Even if teachers were hostile to the private sector, private schools would have national protection from any potential local political movement to get rid of them entirely. In 2003, the Indian Supreme Court stated an unequivocal protection of private education, saying, "a combination of unprecedented demand for access to higher education and the inability or unwillingness of government to provide the necessary support has brought private education to the forefront."⁵⁸ After this ruling, states that had more repressive policies towards private schooling had to moderate their tone, and private school enrollment skyrocketed. Yet India's national government is notably weak; local governments often ignore influence from Delhi. So while national private school protection and codification is important to note, local factors still influence provision more.

Parental preferences also play a role in private enrollment. Parents' mobility influences relative government ability of schools. In many fast-growing urban centers, families are migrating to the city more quickly than government can supply schools, so large urban populations are faced with schools that are either too few, too far apart, or nonexistent. If parents demand schools by "voting with their feet"—either moving to an area with low school provision, or by leaving government schools for private schools that offer, for example, English-medium education, governments could eventually respond with more schools or schools with a different curriculum.

Parents also recognize teacher absence, and cite government-school teacher absenteeism as one reason for choosing private schools.⁵⁹ Private school teachers, when controlling for economic and urban/rural factors, are absent significantly less than government-school teachers.⁶⁰ Also, in the same cross-India study that counted one teacher fired among 3000 government schools for absenteeism, 35 out of 600 private schools in the same randomized sample reported firing a teacher for absenteeism.⁶¹

Empirical evidence, then, suggests that parents' opinions may be justified. In India, a survey of 2,103 teachers across India found that a union teacher, controlled for self-selecting effects that are related to union membership, earns 9.5 per cent more than a non-union teacher.⁶² But teachers in government school are not necessarily better: private-school teachers have, in some analyses, marginally more years of schooling and better results in

⁵⁷D. Ballou and M. Podgursky, "Teacher Unions and Education Reform: Gaining Control of Professional Licensing and Advancement," in Tom Loveless (ed.) *Conflicting Missions: Teacher Union and Education Reform*. (Washington, DC: The Brookings Institution, 2000); S.E. Rivkin, E. Hanushek and J. Kain, "Teachers, Schools, and Academic Achievement." *Econometrica*, 2005, 73(2):417-58.

⁵⁸The Supreme Court of India. "Civil Original Jurisdiction: Writ Petition (Civil) No. 517 Of 1995, T.M.A. Pai Foundation & Ors. (Petitioners) Versus State of Karnataka & Ors (Respondents)." 20 December 2008, <<http://indiankanoon.org/doc/512761/>>

⁵⁹ Geoffrey Walford and Prachi Srivastava, "Examining Private Schooling in Less Economically Developed Countries: key issues and new evidence", in P. Srivastava & G Walford (Eds) *Private Schooling in Less Economically Developed Countries: Asian and African Perspectives*, (Oxford: Symposium Books, 2007).

⁶⁰ Kremer 2005.

⁶¹ Ibid.

⁶² Geeta Kingdon and Francis Teal, "Teachers Unions, Teacher Pay and Student Performance in India: A Pupil Fixed Approach." CESifo Working Paper No. 248, 20008, available at www.cesifo-group.org/wp.

school than their government teacher counterparts.⁶³ In a study of 186 schools across India, Kingdon and Teal found, using a methodology that allows for student controls, that the students of union teachers performed a standard deviation worse than the students of non-union teachers.⁶⁴

Agents and Factors Affecting Provision/Quality of Private Schools

Government policies affect how private schools develop across the world. An examination of private school enrollment over time as countries undergo political shifts provides telling examples. After the election of Chavez in Venezuela and Morales in Bolivia, two leftist leaders who put strong emphasis on central government and have imposed strong restraints on the private sector, primary and secondary enrollments in private school dropped 50 per cent in both countries.⁶⁵ “Society cannot allow the private sector to do whatever it wants,”⁶⁶ said Venezuelan President Hugo Chavez in announcing stricter controls on the private schools.

Upon assuming the Venezuelan Presidency in 1999, Hugo Chavez summarily closed many private enterprises, including schools. In 2007, Chavez announced that private schools would need to follow strict regulations with respect to curriculum, hiring practices, and financial management, and would be subject to surprise visits from inspectors. Any school that refused an inspection would be closed on the spot. Evo Morales, president of Bolivia, following Chavez’ lead, publicly stated his desire to end private education in Bolivia.⁶⁷

In India, on the national level, private schools are protected. The two main national parties, the BJP and the Congress Party, both have pursued policies in recent years that increase public-private partnerships and expand the role of the private sector in collaboration with the state. In different states, the barriers for supply of private schools are different. Governments can provide financial aid to some private schools, which may have historical motives (governments in post-Colonial India would rather fund quality existing private schools than establish new ones) or political ones (a Hindu-nationalist party in Mumbai, for example, provides funding to Hindi-medium private schools). And business barriers differ, too. In the state of Maharashtra, home of Mumbai, registering a business takes, eight days on average, whereas in Delhi, registering a business takes an average of 20 days.⁶⁸ Starting a school requires similar logistical steps to starting a business, and state-by-

⁶³ Geeta Kingdon and Francis Teal, “Does performance related pay for teachers improve student performance? Some evidence from India,” *Economics of Education Review*, Elsevier, vol. 26(4), August 2007, p. 473-486.

⁶⁴ Kingdon and Teal 2008.

⁶⁵ The World Bank, “EdStats,” 2008, www.worldbank.org/education/edstats.

⁶⁶ “Chavez Warns Private Schools Not To Resist His Inspectors,” *Associated Press*, September 18, 2007.

⁶⁷ America Vera-Salva, “Evo Morales Has Plans for Bolivia,” *In These Times*, December 18, 2005. It is worth exploring, however, given the prevalence of unrecognized, or black-market, private schools, whether these schools actually do exist in reality. Field research is the only way to address this point. Tooley tells a story of a talk he once gave in Zimbabwe about low-cost private schools. A government official present informed Tooley that there were no such schools in Zimbabwe. In a short walk around the hotel, Tooley found several low-cost private schools, unrecognized, on the streets of Harare.

⁶⁸ The World Bank Group. *Doing Business in India 2009*. (Washington: The World Bank: 2009). <http://www.doingbusiness.org/ExploreEconomies/?economyid=89> (accessed January 20, 2009)

state variances in tax policy, legal framework, and business conditions could affect the supply in the private sector.

Government officials also hinder or encourage the provision of private schools by motives of personal financial gain. Corruption taints private school regulation. As Dixon shows, for example, government recognition can be bought with a bribe—if a school operator can afford a bribe, the government official has the incentive to put the stamp of recognition on that school.⁶⁹

Government teachers oppose private education for both ideological and practical reasons. Teachers have a stated commitment to universal and compulsory government education, and many do not feel that poor families ought to pay money for private school. Practically, low-fee private schools are competitors for government schools, and teachers have a rational incentive to limit their supply in order to protect the pre-eminence of government school, or, as one union official said, “preserve the brand.”

Individuals and groups create and operate low-cost private schools. For these schools to exist, there has to be significant incentive for independent school operators to work in the sector. As the case studies illustrate, a plurality of low-cost private schools are founded and operated by former teachers from both government and private schools, who either see an opportunity to educate their communities or who view starting a school in a place with sufficient customer demand as a desirable income and lifestyle. Other school founders are entrepreneurs who may have business or management experience. Roughly half of the school operators interviewed in this study came from backgrounds outside of education. Running schools can be profitable. In one case study, I describe a successful low-cost private school that spun off into a chain of six schools. Therefore, it stands to reason that the factors that would lead to entrepreneurial activity—access to capital, legal ability to start a business and raise funds, a loose regulatory framework, and a private sector that makes it easy to open schools or businesses—would be linked to a ready supply of low-cost private schools.

Owners and operators in the low-cost private school sector argued that their main competitors were other low-cost private schools, and not the government schools. Families’ decisions to send their children to private school lead to intense competition between schools, with fierce pressure for good facilities, low fees, and high responsiveness to student needs. Even though private schools are, according to government policy, not allowed to admit students after September 30, many schools I visited had a sign prominently posted that said “Open Admission”, meaning students were able to come in year-round. The school operators face similar barriers to market entry that entrepreneurs do, and have to market schools in a similarly heavily competitive scene.

School operators deal with significant factors that affect demand for their services. Government school availability is one. In areas such as the Mankhurd suburb of Mumbai, where the government has recently re-settled large numbers of Mumbaikers, there is no corresponding government-school infrastructure to accommodate the new arrivals. As a

⁶⁹Pauline Dixon, “An Inspector Calls: The Regulatory Environment in Andhra Pradesh,” *International Journal of Educational Development*, Volume 25, Issue 3, May 2005, Pages 269-285.

result, entrepreneurs have heavy incentive to set up schools, as they face no competition from free government schooling. Even so, entrepreneurs still face “competition” from students not going to school—when children do not attend school, it is a parental choice, too.

Factors Affecting Parental Preference for Private Schooling

Many low-income families in India make substantial sacrifices to send their children to private schools, and as a result, private schools are in high demand. In a survey of 153 schools in Hyderabad, the average monthly fee for students entering first grade in a recognized private school is USD \$2.⁷⁰ In 2005, the average minimum-wage worker in Hyderabad made roughly \$37/month.⁷¹ To send each child to private school, a minimum-wage working family will pay roughly 5 per cent of their monthly income: a substantial portion, especially for the very poor, but one that parents are willing to pay.

Private schools are only a viable option if parents can afford them. Even low-cost private schools are too expensive for the poorest of the poor—if private school fees are too high, or parents are too low-income, private school enrollment will not be an option. Many schools do provide scholarship schemes and concessions, but they do not provide them on a large enough scale to impact the entire low-income population and sustain an entire school sphere.

Much of parents’ preference for private education depends on the real or perceived quality of private education. Several studies demonstrate how parents believe private schools are of better quality than government schools.⁷² The demand for private schools comes from a perception that government schools are not providing acceptable education for children, as manifested by low test scores, absent or ineffective teachers, and “status” indicators of private schools such as uniforms or merely being able to tell one’s peers that “my child goes to private school.”

Factors of geography and urbanism can affect preference, too. Urban areas, I hypothesize, have higher enrollment not only because of the problem of provision cited earlier (urban areas are more likely to have highly mobile, and often fast-growing, populations, and government school provision cannot keep up with school demand), and families are likely to prefer schools closer to home, too. The operators of many low-fee private schools that I visited had a school bus on their “wish list”—parents would not send students to schools that were outside of a short walk away. In an analysis of school choice in Lahore, Pakistan, Alderman *et al.* found that parents are more likely to choose private schooling (and pay more for private schooling) the closer the school is to the parents’ house than the government school. The mean distance of a private school to a house in this study

⁷⁰ James Tooley and Pauline Dixon, “Private Education for Low-Income Families.” (2007), in Prachi Srivastava and Geoffrey Walford (Eds.), *Private Schooling in Less Economically Developed Countries*, (Oxford: Symposium Books, 2007).

⁷¹ Ibid.

⁷² Tooley and Dixon 2007; Walford 2007; Santosh Mehrotra and P. R. Panchamukhi, “Universalising Elementary Education in India: is the Private School the Answer?” in P. Srivastava & G Walford (Eds) *Private Schooling in Less Economically Developed Countries: Asian and African Perspectives*, 67-87. (Oxford: Symposium Books, 2007).

was 1km, compared to double that for government schools.⁷³ Population density surely has something to do with this: urban areas are more likely to have a higher population concentration, in a smaller net area, and in urban areas, families are more likely to have a private school alternative close to home.

School curriculum and language of instruction can also impact parents' preference. Many families choose private schools because they are English-medium. English provides a competitive advantage: though the country has official languages at the state level, ranging from Marati (in Maharashtra, home to Mumbai) to Telugu (in Andhra Pradesh), English is one of the two official languages for state business (along with Hindi). English is the most common language in newspapers across India,⁷⁴ and in a nation as diverse as India, English has a political advantage, too: unlike Hindi, it is ethnically and geographically neutral. English does, however, have strong class connotations and Western associations. Jawaharlal Nehru, the first Prime Minister of India, sought a future for a secular, progressive, modern country, and English was a symbol of both unity (overcoming religious and geographic barriers) and modernity.⁷⁵

Today, English serves as the language of expertise and management in India; politicians, if they can speak good English, will often do so to assert elite status.⁷⁶ As a result, English maintains a powerful presence among the poor of India: the vast majority of low-income parents I interviewed believed that if their child can speak English, he or she would be guaranteed a middle-class job. In previous demand-side analysis of the low-fee private school sector, the majority of lower-middle class Indians viewed English as their ticket to mobility—just within reach, but with required sacrifices.⁷⁷ Private school tuition is one of these channels.

After Indian independence in 1947, the Indian Constitution organized the country linguistically. Each state has its own regional language, with the exception of Nagaland, which has no majority language. The Constitution gave the power to the individual states to decide whether to keep English-medium schools, or choose Hindi or the local language as the primary medium of instruction.⁷⁸ As a result, local debates raged about which languages would be taught and in how many schools—and politics still controls the process today. In all, there are 41 languages taught in government schools across the country,⁷⁹ and different states have made different decisions regarding English-language education. In schools up to Level X, states range from having no schools with English as the primary medium of instruction (states such as Orissa, West Bengal, and until last year, Andhra Pradesh) to

⁷³ H. Alderman, P.F. Orazem, and E.M. Paterno, "School Quality, School Cost, and the Public/Private School Choices of Low-income Households in Pakistan," *Journal of Human Resources*, 36 (2), 2001, 304-326

⁷⁴ E. Annamali, "Medium of Power: The Question of English in Education in India", 1998, in James W. Tollefson and Amy Tsui, *Medium of Instruction Policies: Which Agenda? Whose Agenda?* (London: Routledge, 2003.)

⁷⁵ Badri Raina, "A note on language, and the politics of English in India," in Svati Joshi (ed.), *Rethinking English*. (New Delhi: Trianka, 1991), p. 264-297.

⁷⁶ David Faust and Richa Nagar, "Politics of Development in Postcolonial India: English-Medium Education and Social Fracturing," *Economic and Political Weekly*, Vol. 36, No. 30, Jul. 28-Aug. 3, 2001, p. 2878-2883

⁷⁷ Ibid.

⁷⁸ Annamali, 1998.

⁷⁹ National Council on Education Research and Training, 2003.

having close to 100 per cent English-medium schools (Arunachal Pradesh and Nagaland). English-medium schools are more common in urban areas than rural areas.⁸⁰

Governments use language as a political tool. Sonntag outlines the political development of language instruction in two similar Northern Indian states, Bihar and Uttar Pradesh (UP).⁸¹ They are the third largest and largest states by population; respectively, they both are majority Hindu, but have sizable Muslim minorities (16.5 per cent in Bihar, and 18 per cent in UP); and both have sizable rural poor populations.⁸² In 1993, the Chief Minister of Bihar, Lallu Prasad Yadav, introduced English “to consolidate his own support base among aspiring backwards-case youths who see English as their ticket for upward mobility, as well as, possibly, reaching out beyond his local base to non-Hindi states in a bid for national recognition.”⁸³ At the same time, the Chief Minister of Uttar Pradesh, Mayalam Singh Yadav, used the rallying cry, “*angrezi batao!*” or “out with English!” Uttar Pradesh’s Chief Minister was the head of a fragile coalition, and pushed the *angrezi batao* movement to consolidate support among fragmented Hindu nationalist parties. Sonntag’s case illustrates how English figures prominently in debates over social mobility and cultural identity. Governments both respond to citizens’ wishes and push their own aims when creating English-language government schools and restricting English-language private education. These decisions have a major influence on parental choice.

Yet even if Indian citizens demand English, public choice scholars such as Tullock, Selden, and Brady are highly critical of the pace at which governments can keep pace with parents’ wishes.⁸⁴ In this case, the argument goes, the bureaucratic responsiveness of the Indian government to provide English-language instruction cannot keep pace with parents’ desire for English-language schools. According to this argument, English-language private schools have arisen because bureaucratic features of the Indian government have kept the government from providing the kind of schools that parents prefer.

Finally, cultural factors have a significant impact on parental choice. In a 1993 World Bank study of cross-national private school enrollment, Estelle James’ multiple regression of private school enrollment across developing countries cites religious heterogeneity as the single largest factor that explains private school enrollment variation across countries.⁸⁵ Religious families, the hypothesis goes, are more likely to send their children to private schools to receive specifically religious instruction: parents may want their children to attain religious instruction, both in the Qu’ran and Arabic, in the Muslim case, and the Bible in the Christian case.

Low-fee private schools do have some direct connection to parental choice through factors associated with religion. Several schools visited in the case studies had optional

⁸⁰Ibid.

⁸¹Selma Sonntag, “The Political Salience of Language in Bihar and Uttar Pradesh,” in *Commonwealth and Comparative Politics*, 1994, 34(2)1-18.

⁸²Census of India. www.censusindia.gov.in.

⁸³Sonntag 1994.

⁸⁴Gordon Tullock, Arthur Seldon, and Gordon Brady, *Government Failure: a Primer in Public Choice*, (Washington: Cato Institute, 2002).

⁸⁵Estelle James, “Why do different countries choose a different public-private mix of educational services?” *Journal of Human Resources*, 28:3, 1993.

subjects in Arabic, separate rooms set aside for prayer time, and facilities (such as pre-prayer washrooms) to accommodate Muslim children. Also, religion can also be highly tied to other factors that explain parental choice: for example, Muslim parents in Hyderabad speak Urdu, and most schools in Andhra Pradesh are Telugu-medium.

Empirically, low-fee private schools rarely have an explicitly religious nature. When taking into account private school enrollment, I do not include Muslim-affiliated *madrasabs*—schools with explicitly religious instruction—as private schools. Because of the substantive differences in education type, the Government of India does not count *madrasabs* in private enrollment, and neither does this report. The standard factors driving private enrollment in this political science theoretical framework do not typically play into a family’s choice to send a child to a *madrasab*. In effect, *madrasabs* are not “competing” with government or private schools, so their effect is not incorporated into the enrollment figures in this study. Even though *madrasabs*, Hindu *asbrams*, and other explicitly religious schools do not count as “private schools,” this study will explain how religious affiliation still has a link with private enrollment.

Conclusion: Factors that Influence Private School Enrollment

The following explanatory framework helps answer the research question of why, in developing countries, parents are spending a large portion of their income on education—which governments declare to be a universally provided good.

- A) Government School Availability and Quality. Which factors indicate government failure in school provision? In other words, in which cases do government schools fail to provide what citizens want? Are there cases in which governments simply fail to provide education?
- B) Private School Availability and Quality. Which factors indicate private school availability? In other words, are private schools both available and accessible to all families? Do comparatively wealthier states, for example, have a higher private enrollment?
- C) Parental Preference for School Type. When government schools *do* exist in sufficient numbers alongside private schools, in which cases will families choose to enroll children in private schools over government schools? Does curriculum matter? Do other cultural factors?

In response to these questions, the dependent variable, across the cases analyzed for this study, is likely to vary as follows:

Table 3.1: Public-Private Choice Matrix

Case	1	2	3	4	5
A) GOVT. SCHOOL AVAIL./QUAL.	Y	Y	Y	N	N
B) PVT. SCHOOL AVAIL./QUAL.	N	Y	Y	N	Y
C) PARENTAL PREFERENCE	n/a	Y	N	n/a	n/a
Hypothesized DV Outcome:	G	P	G	none	P

While this choice matrix is a heuristic—there will never be absolute, 100 per cent enrollment in government schools or private schools—it is a useful tool for understanding how private enrollment could vary.

Low-income citizens, in substantially large numbers, send their children to private schools either when government fails to provide schools, or when private schooling is perceived to be of higher quality than government schooling. Table 3.1 analyzes the hypothetical cases. (The cases outlined are not dichotomous options, but hypotheses of probability.)

Case 1: Government School Availability, no Private School Availability

Students are more likely attend government schools in cases where free government schooling is provided and there are no private options. Examples: rural villages in India that have a rural school but do not have private options; lowest-income citizens in cities who cannot afford even low-cost private schools; students who do not attend school at all).

Case 2: Government School Availability, Private School Availability, Private School Preference

In cases where government-schools do exist in sufficient numbers, there are many accessible and affordable private schools, and families have reason to prefer the private option, families are more likely to send their children to private schools. Examples: cities where English-language schooling is offered in private schools but not government schools; religious families who want students to get religious-based instruction.

Case 3: Government School Availability, Private School Availability, No Private Preference

In cases where government schools exist in sufficient numbers, private schools are accessible and affordable, but citizens do not prefer private schools, government school enrollment will be high. Examples: states and cities with highly perceived government school quality.

Case 4: No Government School Availability, no Private School Availability

In cases where government schools are not available or accessible, and there is no private school availability, families will not be able to send their children to school at all. In these cases, there are likely to be large amounts of out-of-school children. Examples: The poorest families in urban slums and resettlement areas that have no government schools and cannot afford to send their children to low-fee private schools.

Case 5: No Government School Availability, Private School Availability

In cases where government schools are either not available or not accessible, but private schools are, private school enrollment is likely to be high. Example: slum-dwelling families who can afford very low-budget private schools and live in areas where no government schools are nearby.

Conclusion

Governments, teachers, “edupreneurs”, and parents affect both the supply and demand of low-cost private schools in each state. Factors that influence these actors’ actions vary across states. This study analyzes a large-N sample of 70 distinct areas (the urban and rural areas in the 35 states and territories of India), testing independent variables to explain this variation. In addition, two in-depth cases are emblematic of the outlined private school

choice: one area where there is government provision, private provision, and private preference—the metropolis of Hyderabad, and one area where there is no government provision, but heavy private provision—the slums of northern Mumbai.

4

Research Method, Data Operationalization, and Analysis

In the previous chapter, I have developed hypotheses as to what affects school quality and parental decision-making in opting for private school education. The multiple regression analysis in this chapter tests these hypotheses by examining variation in private school enrollment across India.

Dependent Variable: Private School Enrollment

The dependent variable is the private school enrollment as a percentage of all children enrolled in school. Schools in India fall, broadly, in four types of categories:

1. *Government Schools*

According to Indian law, education is compulsory through age 14,⁸⁶ and government provides free, universal access to primary education. While a primary and secondary education is codified as a “national” right, the responsibility for school administration and funding falls to the local governments of India’s thirty-five states and territories, rather than the federal government. This invariably creates differences in policies across states due to the politics behind education. Each state’s Department of Education sets hiring practices, curriculum, medium of instruction, textbooks, uniforms, and more. Teachers in government schools are part of the civil service, and their salaries are on the civil service pay structure.⁸⁷

Unlike the US or the UK, where students are assigned to government schools based on district allocation, Indian government schools use no similar assignment. Indian government schools have open, non-selective admissions: students have the right to be seated at a school at which they show up. This can be beneficial to many poor students. Students who are part of families that move from village to village have an easier time changing school enrollment. With this highly fluid policy, however, schools have difficulty keeping a register on attendance.

Government spending can have tangible effects on the quality of government schools. For example, in 1982, the state of Tamil Nadu began a “Mid-Day Meal” program, which fed children ages 2-9 in schools in rural areas. Citing the success of the program, the program was nationalized in 1995.⁸⁸ Since its introduction, the mid-day meal has boosted school attendance as much as 50 per cent in rural areas and as much as 19 per cent in urban areas—girls, especially, are more likely to attend school when there is a mid-day meal.⁸⁹ In

⁸⁶Constitution of India, Article 21-A

⁸⁷G.G. Kingdon, “Private Schooling in India: size, nature, and equity effects.,” London School of Economics, DEP no. 72, 1996.

⁸⁸Si Rajan and A Jakayumar. “The Impact of the Noon Meal Program on Primary Education: An Exploratory Study in Tamil Nadu.” *Economic and Political Weekly*, 27:43/44(October 1992), p. 2372-2380.

⁸⁹Jean Dreze and Aparitja Goyal, “Future of Mid-Day Meals,” *Economic and Political Weekly*, 38:44 (November 2003), p. 4673-4683. The study covers regions that introduced a comprehensive mid-day meal programme, and

this case, government spending specifically targeted at poverty-related initiatives affected both government school quality and government school attendance.

2. *Private Aided Schools*

Private aided schools are becoming increasingly rare throughout India. Most private-aided schools, according to the chair of the Private Aided Schools Federation in Hyderabad, were begun before the fall of the British Empire by religious organizations or charities (in this operator's case, a religious group). After Indian independence in 1947, governments often funded the annual operating costs of the privately started schools, and continue to do so today. Some private aided schools are converted entirely into government schools, while others simply phase out with gradually reduced government funding. Either way, very few new private aided schools are established.

Private aided schools, for the purposes of this study, are counted in the numbers of government schools. All relevant factors that are related to whether parents choose—or can afford—private school—students pay fees, teachers have flexibility, curriculum is English-medium—are typically absent in private aided schools. Private aided schoolteachers are union members. The Indian civil service dictates teacher salaries and hiring practices, and schools receiving private aid pay teachers on the government's pay scale.⁹⁰ The only function that is private in private aided schools is the management.

3. *Private Unaided Recognized Schools*

Private unaided schools receive no government financing. Historically, these schools have been religious (usually Christian missionary), but in more recent years, they are self-started and self-funded by entrepreneurs.⁹¹ Today, most private unaided schools still teach in English.⁹² "School recognition" is a government distinction. Many of the private schools I visited, even the ones that do not cater to the elites, are formally registered. Especially in the poorer neighborhoods, schools are proud of government recognition. Across Hyderabad, any bystander can see large signs that read "RECOGNIZED BY GOVERNMENT OF AP [Government of Andhra Pradesh]." To be recognized, schools must meet certain criteria. For example, they must have a library, a playground, and at least a 50,000-rupee (\$1,000 USD) account balance.⁹³ Recognized private schools are formally allowed to operate in the state, and often, being "recognized" is a motivating factor for parents to choose the school.⁹⁴

compares attendance in regions/districts with full implementation with regions/districts that had partial or no implementation.

⁹⁰S. Bashir, "The Cost Effectiveness of Public and Private Schools: knowledge gaps, new research methodologies, and an application in India," in C. Colclough (Ed. *Marketizing Health and Education in Developing Countries*. (Oxford: Clarendon Press, 1997).

⁹¹Santosh Mehrotra and P. R. Panchamukhi, "Universalising Elementary Education in India: is the Private School the Answer?" in P. Srivastava & G Walford (Eds) *Private Schooling in Less Economically Developed Countries: Asian and African Perspectives*, (Oxford: Symposium Books, 2007).

⁹²Anuradha De, Jean Dreze, and the PROBE Team, *Public Report on Basic Education in India*, (Oxford: Oxford University Press, 1999).

⁹³ Standards obtained in writing from the Government of Andhra Pradesh, July 2008. *The Andhra Pradesh Registered Schools (Establishment, Recognition, Registration, and Regulation) Rules*, 1987.

⁹⁴ Prachi Srivastava, "For Philanthropy or Profit? The Management and Operation of Low-Fee Private Schools in India. In Srivastava and Walford, *Private Schooling in Less Economically Developed Countries*, (Oxford: Symposium Books, 2007).

In some cases, government recognition indicates very little in terms of quality. In many cases, the “library” is a few books on a shelf in the school office. Dixon notes how a bribe is sufficient for recognition. Depending on the corruption of the local investigative officer, recognition can cost as much as \$12,000.⁹⁵ Many high-quality schools, including one I visited, choose not to be recognized because the price of bribery is too high. And once a school is recognized, there are no formal mechanisms for re-recognition—no regular quality control checks exist.

4. *Private Unaided Unrecognized Schools*

Many private schools, especially in low-income areas, are *not* government recognized. There is no official register of these schools, and they have often been operating for a much shorter time period than recognized schools. Because of this, data on these schools is notoriously hard to find. But these schools must not be overlooked. According to Arun Mehta’s comprehensive register of schools in Punjab, 2,640 of a total 10,673 private schools in the region are unrecognized.⁹⁶ And in a block-by-block survey in Hyderabad, Tooley and Dixon found that in the slums of Hyderabad, 23.3 per cent of all students attend schools that were unrecognized at the time of their visit.⁹⁷

Unrecognized schools are not necessarily of lower quality than recognized schools. Arun Mehta’s 2005 survey of Punjab revealed the following trends:

Unrecognized schools, when compared to recognized schools:

- Are most likely to occur in urban areas
- have a higher percentage of female students and teachers
- have more qualified teachers
- have more favorable student-teacher ratios
- and have much higher English-medium instruction rates than recognized schools.⁹⁸

And though recognition is important for some parents, others do not know whether their students’ school is recognized or unrecognized.⁹⁹ The requirements are basic and can be skirted. To be recognized, for example, a school has to have a computer lab, a library, an office, and a science lab. One recognized school I visited had all four in one 8’ by 10’ room—the computer on the desk of the office was the “computer lab,” and one bookshelf on the wall qualified as both the library and the science lab. As the case studies will describe, school owners testified not that they wanted to flout the law, but they could not afford to provide the regulatory requirements that are neither relevant nor reasonable for low-cost private schools to provide. Some regulations, according to school operators, are simply impossible to meet.

⁹⁵Pauline Dixon, “An Inspector Calls: The Regulatory Environment in Andhra Pradesh,” *International Journal of Educational Development*, Volume 25, Issue 3, May 2005, Pages 269-285.

⁹⁶Arun Mehta, *Elementary Education in Unrecognized Schools in India: A Study of Punjab based on DISE data*, (New Delhi: NIEPA, 2005).

⁹⁷Dixon 2005.

⁹⁸ Mehta 2005.

⁹⁹James Tooley, Pauline Dixon, and SV Gomathi, “Private schools and the millennium development goal of universal primary education: a census and comparative study in Hyderabad, India”. *Oxford Review of Education*: 33:5, 539-560, 2007.

Tooley and Dixon, in a survey of 14 schools in Hyderabad, illustrated how 7 of 14 private school operators ensured recognition by paying a bribe. The study describes a school operator gaining recognition from a supervising official who did not enter a single classroom in the school: “I paid Rs. 25,000 to get recognition and on top of that my yearly bribes total between Rs. 7,000 and Rs. 11,000—I count that as a cost to my business. If I didn’t pay my school would lose recognition and that would affect my business.”¹⁰⁰ In their study, no school actually met the basic requirements for recognition, yet 13 of the 14 that Tooley and Dixon visited had achieved government recognition.¹⁰¹

Methodology behind the development of the independent variable

In this study, the dependent variable is private school enrollment, recognized and unrecognized, as a percentage of all school enrollment figures. I have broken down the 35 states in India into urban and rural regions, so the universe of cases is 70. By analyzing private school enrollment at the urban/rural level in each state, I acknowledge that private schooling in rural areas looks substantially different from private schooling in urban ones.

Most private schools in urban areas are located in neighborhoods and draw students who can walk to school; rural private schools face the need to provide transport—go to a village in rural India, and the 4 o’clock private school bus comes through town like clockwork. Also, because of higher population density, urban private schools are faster growing. In the past thirty years, private school enrollment in urban areas across India has roughly doubled, while private school enrollment in rural areas has stayed the same.¹⁰² To account for the differences in the statistical model, I have included an urban/rural dummy variable to control for variation. For most independent variables, I have separate measurements for urban and rural units. Finally, to account for possible similarities within a particular area, I have used clustered standard errors coded by urban and rural regions between each state.

Obtaining appropriate data for the size of the private education sector is difficult. Three different statistical organizations—National Social Survey Organization (NSSO), District Information System for Education (DISE), and National Council for Education Research and Training (NCERT)—compile data for the government, and there are disparities between the three. Consistent reporting and the lack of a data-carrying infrastructure make it difficult to obtain reliable data.

Some academic studies do not make an effort to account for the unrecognized sector—simply saying that private enrollment figures are, in practice, higher than the studies account for.¹⁰³ The most accurate counts have come from researchers who have sent teams of surveyors to calculate school enrollment, walking through cities block-by-block, and

¹⁰⁰Pauline Dixon, “The Regulation of Private schools serving Low-income families in Hyderabad, India: An Austrian Economic Perspective,” *Economic Affairs*, vol. 24, no. 4, December 2004, p. 31-37.

¹⁰¹Ibid.

¹⁰²National Council on Education Research and Training, “NCERT All-India Education Survey, 1973,” available online at <http://gov.ua.nic.in/NScheduleData/>; National Council on Education Research and Training, 2003.

¹⁰³Srivastava 2007, Prachi Srivastava, “Private Schooling and Mental Models about Girls’ Schooling in India,” *Compare*, 36(4), 2005, pp. 497-514; Estelle James, “Why do different countries choose a different public-private mix of educational services?” *Journal of Human Resources*, 28:3, 1993; Kingdon 1996.

tabulating enrollments of every school in sight—in census studies such as those conducted by Mehta in Punjab and Pratham Foundation across India, and Dixon and Tooley, Dixon, and Gomathi in Ghana, Nigeria, Kenya, and India.¹⁰⁴ Another potential way that available data might miscalculate *actual* enrollment is double-enrollment—in my own research, I found students who attend private schools in the mornings and afternoons, but attend government schools at lunchtime in order to receive a free mid-day meal. Even though enrollment figures, in absolute terms, are most likely underestimated, the comparative nature of this analysis still provides a valuable control to discern patterns shaping the sector.

But the unrecognized sector is too large to ignore, and this study has constructed the best possible estimate of the size of the sector. The District Information System for Education (DISE) is generally considered to be the most reliable data on government and private school enrollment. NCERT, in its All-India Education Survey, is the only statistical organization that measures unrecognized school enrollment. For this measure, I have used a combination of DISE figures for state and recognized private school enrollment and the NCERT figures to estimate unrecognized school enrollment. While the unrecognized school figures may still be a low (it is possible that private enrollment is even higher than these figures show), this is still the most reliable basis for comparison available.

It is most important to note that the enrollment figures for all regions are a percentage of *total* enrollment, not low-cost private school enrollment. While this study is most concerned with low-cost private schools, individual-level data on fees for schools per region, or the percentage of schools in a region that are low-cost, are simply not available. That said, income distribution and inequality in India are so large that total private school enrollment can justifiably be used as a proxy for low-cost private school enrollment. Income inequality in India is massively disproportionate—the percentage of the population living below the poverty line is so large that those who could afford high-fee schooling make up a disproportionately miniscule percentage of the population. The mean income in India, according to a 2002 World Bank study, ranked at the 23rd percentile.¹⁰⁵ And the state-run National Commission for Enterprises in the Unorganized Sector estimated in 2005 that over 80 per cent of Indians were living on less than US \$0.50/day, half of the globally defined poverty line.¹⁰⁶ Tooley and Dixon's 2001 and 2005 surveys of three of the nine zones in Hyderabad did not find a single high-fee private school, compared to hundreds of low-fee private schools.¹⁰⁷ The case studies outlined here found similar fee structures.

¹⁰⁴Mehta 2005; Pratham Foundation. *Annual Status of Education Report 2008*. (New Delhi: Pratham Foundation, 2008); Tooley, Dixon, and Gomathi 2007.

¹⁰⁵Branko Milanovic and Shlomo Yitzhaki, "Decomposing World Income: Does the World Have A Middle Class?" *Review of Income and Wealth*, Series 48, Number 2, June 2002.

¹⁰⁶"Report on Conditions of Work and Promotion in the Unorganized Sector." National Commission for Enterprises in the Unorganized Sector. 2005. 10 February 2009. <<http://nceus.gov.in/>>.

¹⁰⁷James Tooley and Pauline Dixon, "Private Education for Low-Income Families," in P. Srivastava & G Walford (Eds) *Private Schooling in Less Economically Developed Countries: Asian and African Perspectives* (Oxford: Symposium Books, 2007), p. 15-37.

Table 4.1: Private School Enrollment By State¹⁰⁸

State/Region	Private Enrollment (rural)	Private Enrollment (urban)
A&N Islands	8.1%	27.1%
Andhra Pradesh	26.5%	73.6%
Arunachal Pradesh	5.2%	27.2%
Assam	25.9%	22.8%
Bihar	3.8%	28.1%
Chandigarh	42.4%	46.2%
Chhattisgarh	7.7%	39.8%
D&N Haveli	8.9%	33.2%
Daman & Diu	10.4%	23.6%
Delhi	23.5%	44.5%
Goa	56.0%	75.1%
Gujarat	9.7%	47.4%
Haryana	26.0%	58.7%
Himachal Pradesh	16.3%	58.9%
Jammu & Kashmir	29.5%	75.1%
Jharkhand	6.8%	41.6%
Karnatka	15.2%	62.6%
Kerala	65.0%	70.5%
Lakshadweep	2.2%	0.0%
Madhya Pradesh	16.1%	67.7%
Maharashtra	31.0%	73.6%
Manipur	51.4%	74.1%
Meghalaya	60.3%	75.9%
Mizoram	12.7%	42.0%
Nagaland	48.3%	78.5%
Orissa	5.4%	27.6%
Pondicherry	36.4%	58.4%
Punjab	29.0%	69.5%
Rajasthan	24.6%	65.2%
Sikkim	19.8%	61.2%
Tamil Nadu	35.7%	77.1%
Tripura	3.8%	27.9%
Uttar Pradesh	27.7%	71.3%
Uttaranchal	21.4%	62.3%
West Bengal	34.0%	52.7%
India average	22.7%	62.8%

¹⁰⁸Recognized enrollment compiled from National Institute of Education Awareness and Planning, “District System Information on Education, 2007” available online at www.dise.in/ar2005.html; unrecognized enrollment compiled from National Council on Education Research and Training, “NCERT All-India Education Survey, 2003,” available online at <http://gov.ua.nic.in/NScheduleData/>; total enrollment compiled from the sum of government and private enrollment from DISE 2007 and unrecognized enrollment from NCERT.

Another methodological issue is that the relationship between many of the independent variables here—such as national state domestic product/capita and literacy rate—and the dependent variable of private enrollment can lead to an ecological fallacy. I am making inferences about an individual-level relationship—a parent’s view of education—on the basis of patterns in data by region. In an ideal world, individual-level survey data, state-by-state, of parents’ view towards education would be a much better proxy for the latent variable. But the lack of available individual-level data on this topic makes such an analysis impossible. Even though some variables are aggregate-level data, the uses of these variables are the best attempt to capture the important variation in education level and possible value placed on education.

Independent Variables **Variables Related to Government-School Availability and Quality**

Government Satisfaction

Many parents send their students to private school because of a perception that the government is unable to deliver a quality education. In many states, Indian citizens have a lack of trust government *in general*, not solely with respect to education. As an attempt to capture this factor, one independent variable in the model is public opinion of government performance. This variable measures the percentage of citizens who, in the 2004 National Election Survey, the largest nationwide public opinion survey, said they were “satisfied” or “fully satisfied” with the performance of the government in providing public services.¹⁰⁹

If citizens perceive that governments are incapable of providing quality services, parents are more likely to turn to the private sector. I hypothesize that this variable will have an inverse relationship with private school enrollment. The more satisfied parents are with government performance, the higher the quality of government schools is likely to be perceived, and the less likely parents are to enroll their children in private school.

Government Spending on Education, Percentage of Total Spending

As the case of the mid-day meal illustrates, government expenditures on schooling can have a real effect on school quality. And certain government investments can raise the quality of government schools, making it less likely for private schools to exist. When governments do not sufficiently invest in educational infrastructure, parents may turn to private schools out of a matter of necessity.

The primary funding mechanism of government schools is the state. I hypothesize that there is a negative relationship between percentage of total government spending in a state that is spent on education, and private school enrollment. The more a state government spends on education, the higher in quality government schools are likely to be, and the less likely low-income parents are to choose private schooling. To operationalize

¹⁰⁹National Election Study Team. “Results: National Election Study 2004.” Delhi: CSDS, 2004. 3 January 2009. <<http://www.csdsdelhi.org/nes2004/>>

this, I have measured the percentage, state-wise, of total budgetary expenditures on education in each state.¹¹⁰

More than other independent variables in this model, government spending faces a problem of endogeneity. I argue that lower government spending leads to less development in the government-school sector, driving parental enrollment in the private sector. An alternative hypothesis could be that in states where there is high private school enrollment, governments feel compelled to spend less money on government-school education. A better examination of this would be a time-series regression to trace causal relationships, but for that purpose, sufficient data on school enrollment are not available. Even if we cannot make causality claims, a statistically significant relationship between government spending and private school enrollment still provide evidence of a relationship between government spending and private school choice.

Sarva Shiksha Abhiyan Funds Released, Per Capita

Though each state provides most of the funding and support for education, the Government of India provides a significant supplement, especially in the poorest areas. Sarva Shiksha Abhiyan (Hindi for “Education for All”) is a program established by the federal government to provide supplementary funding to the most economically backwards communities—many of the families choosing private school. SSA provides supplemental funding for infrastructure, staff, and expenses such as uniforms.

SSA targets the poorest areas in each state. I hypothesize that the more the government disburses in SSA grants per region, the higher the quality of government school in that region, and the less likely parents are to choose private school. This variable measures the effect of specific government policies targeting spending on education in high-poverty areas on private enrollment. I have taken SSA funds released, by area, and divided them by the population for the area, to have an indicator of per capita federal government expenditures on education for the poorest.¹¹¹

Urban/Rural

The table of private school enrollment shows clear differences in levels of urban and rural enrollment, even at primary examination. To control for inherent environmental factors between urban and rural areas, an urban/rural dummy variable was introduced to indicate whether each specific region is an urban or a rural one. For reasons already discussed, I hypothesize that urban areas are more likely to have higher private school enrollment than rural areas.

Party Balance: Congress vs. BJP/Local Parties

¹¹⁰Ministry of Human Revenue. “State-wise Percentage of Total Plan and Non-Plan Budgeted Expenditure on Education and Other Department of Total State Plan and Non-Plan Budgeted Expenditure (Revenue Account) in India, 2006-2007.” Government of India. 3 February 2009.

<<http://www.indiastat.com/india/ShowData.asp?secid=442214&ptid=369168&level=7>>

¹¹¹“State-wise Funds Released under Sarva Shiksha Abhiyan in India (2005-2006 to 2006-2007).” Government of India. 3 February 2009.

<<http://www.indiastat.com/india/ShowData.asp?secid=401319&ptid=369151&level=4>>

Political persuasion of state governments can affect the provision and quality of government schools. It is unclear what effect political parties have on government policy, specifically with respect to private schools. One of the main drivers of private education, however, is the desire for English-language instruction. In India, the Congress Party has consistently been an advocate of English-language instruction, whereas the national BJP has been a strong supporter of government-sponsored, Hindi-medium education, and local parties such as Telugu Desam party in Andhra Pradesh or Shiv Sena party in Mumbai have been advocates of government-sponsored, local-medium instruction. As a result, I hypothesize that in areas that are controlled by Congress or Congress-led coalitions, private school enrollment will be lower. I have constructed a dummy variable coding a “1” for if Congress-controlled or a “0” for if BJP or local government-controlled.¹¹²

Percentage Non-Teaching Activities

Many parents cite the inactivity of government-school teachers as a reason for sending children to private school. The politics of union influence and job protection plays a major role in this factor. When parents think that teachers do not teach, the private sector becomes more attractive. But measuring teacher absences, state-by-state, is difficult. Two schools I visited I had no visual confirmation of a teacher all day, and the schoolmaster said the teacher was not present, but in the official logbook in the school office the teacher was signed in. Government figures for *real* absences are not reliable.

Where we *do* have data, though, is in the “official activities.” The national census measures the percentage of teachers in each state who take on official non-teaching roles, meant to be performed during school hours. This could involve work ranging from political campaigns to local government work. States that give teachers more of an active non-teaching role are more likely to have teachers who will be absent from the classroom. When the teacher is taken out of his or her primary role, students do not have contact with the teachers and government performance—actual or perceived—decreases.

This variable measures the percentage of teachers in government school who are engaged in non-teaching activities. This factor is officially reported by schools and measured by the DISE survey.¹¹³ I hypothesize that the higher the percentage, the more parents will choose private school.

Variables Related to Private School Availability/Quality

In the previous chapter, I outlined how both the availability of private schools and the quality of private schools drove the development of the sector. In many areas, private schools must (a) exist, and (b) be affordable for parents to even have the option to choose. In order to help prove the premise that private schools are highly accessible to the poor in India, I test the relationship between the wealth of a region and private school enrollment (with a null result supporting this assertion). In terms of provision, as many of the private

¹¹²“State Assembly Elections: Results” <<http://www.indiastat.com>>.

¹¹³ District Information System for Education, “% of Teachers Engaged in Non-Teaching Activities”, DISE Survey 2007, 20 December 2008, <www.dise.in>

schools are run as businesses, by entrepreneurs, I seek to analyze the relationship between entrepreneurial activity in a region and private enrollment in that region.

National State Domestic Product/Capita

The National State Domestic Product/Capita is the Ministry of Statistics and Programme Implementation's analysis of NSDP/Capita by region, as a measure of the wealth in the state or region.¹¹⁴ One premise of this report is that private schooling in India is accessible to both poor and rich families. A statistical relationship between these two variables—that regions that are relatively poorer are less likely to have higher private school enrollment than regions that are richer—would reject my hypothesis. Because of heavily skewed income distribution in India, though, I do not consider the presence of expensive private schools to factor prominently in this analysis. This variable has been also included as a control variable in order to control other factors (such as literacy rates) that may strongly be related to NSDP/capita and see if their relationship holds up with private school enrollment independent of state wealth.

Levels of Entrepreneurship (Small Scale Industries/Capita)

In addition to educators, people from backgrounds such as marketing or business establish schools. Starting a school takes a certain level of entrepreneurship—different states have different regulations for establishing a school, raising capital, and operating an industry. In many ways, the barriers to opening a school are similar to any small-scale industry (a small business, labeled SSI by the Government of India).

To attempt to operationalize the business barriers to establishing a school, as well as capture the culture of entrepreneurship, this variable treats a school as a type of SSI and measures each region by the number of SSI in the region per capita.¹¹⁵ I hypothesize that states with a higher number of SSIs/capita will have lower business barriers to establishing a school (or any business) and/or a higher entrepreneurial spirit. There will be a direct relationship between SSI/capita and private school enrollment.

Registered Companies/Capita

As another way to operationalize entrepreneurship and business culture, I measured, state-wise, the number of registered companies per capita.¹¹⁶ I hypothesize that the higher the number of registered companies/capita in a state is, the higher private school enrollment will be.

Entrepreneurs

¹¹⁴Fifth Economic Census of India. "NDSP per Capita 2005." 1 December 2008.

<mospi.gov.in/economic_census.htm.>

¹¹⁵Government of India, "State-Wise Number of Small Scale Industries in India 2007," Lok Sabha Unstarred Question No. 1047. 3 February 2009. <http://www.indiastat.com>, "Economic Data."

¹¹⁶Government of India, "State-Wise Registered Companies in India 2007," Government of India, Rajya Sabha Unstarred Question No. 192. 3 February 2009. <http://www.indiastat.com>, "Economic Data"

Finally, as a third attempt to operationalize entrepreneurship, I have developed a variable of the percentage of individuals in a region who self-identified as entrepreneurs or small-scale industry owners in the Economic Census of India, 2005.

Variables Related to Parental Preference for Schooling

The final factor in private school enrollment is factors outside of government and private provision that might cause a parent to choose a private school. These may be linguistic, religious, and cultural factors. This set of independent variables is an attempt to investigate these structural and cultural factors that might influence parental choice.

Percentage of Schools with English as Primary Medium

In my research, parents and teachers cited English instruction as the primary explanation for private school choice. I hypothesize that the greater the supply of English-language government school instruction, the more reduced the demand is for low-cost private schools from poor families who want to use their “ticket to the middle class.” This variable tests the percentage of government schools, in a region, that teach with English as the primary or only medium. I hypothesize that the higher the percentage of English-medium schools, the lower private school enrollment.¹¹⁷

There is a potential problem with endogeneity here, too. As I will examine in the Hyderabad case study, many states develop English-medium government schools precisely because of the demand for English-medium instruction (which leads many parents to choose private schools in the first place). So a low percentage of English-medium government schools in the state could lead to higher private school enrollment, because of lack of government supply, or it could mean that English-language instruction is, comparatively, not as much of a value in that state (hindering one of the driving factors in parental choice in the private sector). The process tracing methodology of the case studies will better attempt to explore the causal mechanism here.

Religious Heterogeneity

As some of the low-cost private schools in Hyderabad have a religious connection, I have investigated the variable of religious heterogeneity by using percentage Muslim student enrollment as an independent variable. I explore specifically Muslim students—not incorporating other religions—for two reasons. First, Muslim students are the only religious group for which educational studies provide data. Many Muslim families in Hyderabad and other cities speak Urdu as a primary language, whereas government-schools are often in the mother tongue of a Hindu-majority population (Telugu in Andhra Pradesh, Marati in Maharashtra, and so forth). Christians and other religions do not have the distinct language problem. Moreover, Muslim families are more likely to need specific allowances during the day, such as time and space to pray. Therefore, there is reason to examine whether Muslim families are more likely send their children to private school.

¹¹⁷District Information System for Education, “English-Medium Schools by Region”, received in writing 24 December 2008.

To test this, I have operationalized the religious variable as the percentage of students who are Muslim of all students attending school.¹¹⁸ I hypothesize that the higher percentage of a Muslim population, controlling for other factors, the higher private school enrollment will be.

Literacy Rate

Across Hyderabad and Mumbai, parents repeatedly cited the overwhelming importance of education as a reason why they would spend large proportions of their income to send their children to private school—if they felt that private education was providing their children with the best available educational needs, they would make financial sacrifices to do so. Poor families spend up to one third of their income sending their children to private school because they value education so highly.¹¹⁹ Many parents that I spoke with have sold, pawned, or mortgaged comforts to send their children to private school, if it meant that the child's education would be substantially better (and some families I spoke with sold land that had been in their family village for generations). This variable is difficult to operationalize in a model, though. Individual level data about the value of education, such as state-wise public opinion surveys, are not available.

I have used literacy for this model as a proxy for value placed on education, as I assume that more literate parents will value education more. A potential problem with this assumption may be that quality of government schooling varies across region but not across time, low-literacy areas will also have poor public schools (ideally, a time-series analysis would be done here). Nevertheless, literacy rates are a sufficient proxy for existing levels of education. One study of Pakistan, with many similar cultural indicators to some states in India, indicates that literacy rates are an excellent indicator of private schools as one way codify the latent dimension of the value that a family places on education.¹²⁰ Figures from the Census of India break down literacy rates by region.¹²¹ I hypothesize that more literate parents will place a higher cultural value on education, and will therefore be more likely to send their children to private school. Also, literacy rates are a valuable control on other factors, such as education spending, NSDP/capita, and percent of teachers engaged in non-teaching activities.

In summary, I examine the following variables, and hypothesize that they have the following relationships with private school enrollment:

¹¹⁸District Information System for Education, "Muslim Enrollment." 28 November 2008. <www.dise.in>

¹¹⁹K. Watkins, "Private Education and Education for All," *Economic Affairs*: 24:4, 2004, p. 8-11.

¹²⁰Couch et. Al., "Private School Enrollment and Public School Performance," *Public Choice*, Volume 6 Number 4, 1993.

¹²¹Education Statistics of India, "State-Wise and Gender-Wise Literacy Rates in Rural/Urban Areas," 2004,15 December 2008, <<http://education.nic.in/stats/detail/3.pdf>>

Table 4.2: Hypothesized Effects of Independent Variables on Private School Enrollment

Government-School Availability and Quality

<i>Variable</i>	<i>Hypothesized result</i>
Government Satisfaction	Statistically significant, negative relationship
Government spending/% overall	Statistically significant, negative relationship
% Non-teaching Activities	Statistically significant, positive relationship
SSA Spending/capita	Statistically significant, positive relationship
Congress dummy variable	Statistically significant, negative relationship
Urban/Rural	Statistically significant, positive relationship

Private School Availability and Quality

<i>Variable</i>	<i>Hypothesized Result</i>
SSI/Capita	Statistically significant, positive relationship
Companies/Capita	Statistically significant, positive relationship
Entrepreneurs	Statistically significant, positive relationship
NSDP/Capita	Null result

Parental Preference

<i>Variable</i>	<i>Hypothesized Result</i>
% Schools/English Medium	Statistically significant, negative relationship
Literacy rates	Statistically significant, positive relationship
% Muslim	Statistically significant, positive relationship

Statistical Model and Results

To test the statistical relationship between these independent variables and the dependent variable of private school enrollment, I ran three separate multiple regressions, one for each category above. Thereafter, I estimated a composite model including all statistically significant variables from the previous models. The dependent variable used for the regression was $\log(p/(1-p))$, where p is the percentage of students enrolled in private schools. The regression is still an OLS regression, but the log transformation on the dependent variable has been done to eliminate a hypothetical result of private enrollment being less than 0%, or greater than 100%. To control for common variances within states across the variables, I have clustered standard errors to test for correlation between intra-state observations.

Table 4.3: The Effect of Government School Availability/Quality on Private Enrollment

<i>Variable</i>	<i>Coefficient</i>	<i>SE (robust)</i>
Government Satisfaction	-1.50*	.756
% Non Teaching Activity	1.65**	.564
Urban	1.54**	.130
Government Spend %	-.082*	.035
SSA Spend/Cap	-.027**	.007
Congress	.303	.251
Constant	.467	.594

R-squared: .68

*p<.05

**p<.01

N=70

According to the R-squared result, these factors explain 68 per cent of the variation in the dependent variable. The percentage of teachers engaged in non-teaching activities and the urban/rural dummy variable are directly related to higher private enrollment, consistent with the hypotheses. The level of government satisfaction, the percentage of state government spending allocated to education, and the SSA spending/capita are inversely related to private enrollment, consistent with hypothesis. There is no statistically significant relationship between the governing party and private enrollment, failing to reject the null hypothesis.

These data support the hypothesis that when governments provide quality education, in this case through state-level investment, and federal spending on schooling for low-income students, private enrollment is lower. Yet when teachers, as a result of high job security or political patronage, spend more time engaged in non-teaching activities, private enrollment is higher—possibly due to a decrease in education quality in government schools. And when citizens of a particular region are not satisfied with the government’s performance, parents in that region are more likely to choose private schools. The political affiliation of the governing coalition is not linked to private enrollment—perhaps because, in India, different parties in different states have different ideologies with respect to the private sector (the primary over-riding theme in Congress is secularism—not an economic philosophy).

Table 4.4: The Effect of Private School Availability/Quality on Private Enrollment

<i>Variable</i>	<i>Coefficient</i>	<i>SE (robust)</i>
SSI/Capita	.064*	.026
Companies/Cap (*100)	4.50	2.92
NSDP/Cap (*100,000)	.612	1.35
Entrepreneurs	6.01	7.31
Constant	-1.73	.455

R-squared: .121

*p<.05

**p<.01

N=70

Economic factors related to private school availability and quality seem to explain very little of the variation in private school enrollment compared to factors related to government school availability and quality—only 12 per cent of the variation, according to this model.

The positive, statistically significant relationship of small-scale industries/capita with private school enrollment supports the hypothesis that states with higher levels of entrepreneurship have higher private school enrollment. But the null result of the other variables, most notably NSDP/capita, seems to suggest that economic factors do not play as significant of a role in private school enrollment as other factors. It is possible, however, that entrepreneurship and registered companies/capita are collinear with SSI/capita. To test for this, I re-ran the regression taking out SSI/capita, but the variables for entrepreneurship and registered companies/capita still did not register as significant.

The null result of the NDSP/capita variable helps corroborate the idea that private schools are overwhelmingly educating the poor. Because there is no statistical relationship between the relative wealth of a region and private school enrollment, we can, with greater confidence, assert that India's wealthiest areas are no more likely to have private schools than India's poorest areas.

Table 4.5: The Effect of Parental Preference Factors on Private Enrollment

<i>Variable</i>	<i>Coefficient</i>	<i>S..E. (robust)</i>
English Med. Schools	.005	.005
Literacy Rate	5.78**	.872
% Muslim	.552**	.134
NSDP (*100,000)	.623	.874
Constant	-1.73**	.455

R-squared=.398

*p<.05

**p<.01

N=70

The R-squared result here shows that factors that influence parental choice—language, religion, culture, and educational value—explain almost 40 per cent of the variation in private enrollment across India.

English medium education, which, in the case studies, was the most commonly cited factor driving private enrollment, did not have a significant relationship with private enrollment in this regression. This can possibly be explained by the relatively indeterminate time-series causal link between English-medium schools and private education. In some states, private enrollment is high because parents want English-language education. In return, states build and create English-medium schools, responding to demand. In this case, English-medium school enrollment would be high, even if a shortage of English-medium schools created demand for private schools. Because of this reciprocal relationship, a time-series analysis of English-medium government schools and private school enrollment would be better to explain this variable.

We do see a strong, statistically significant relationship between literacy rates and private school enrollment—though we cannot be too confident about claims of causality here. There is also a danger of making an ecological fallacy when using the aggregate-level data (literacy rate percentage) to explain individual-level choices. But given the scarcity of data on education as a cultural value—there is, for example, no individual-level survey data—this is one attempt to get at the latent factors of an existing context of high education level and cultural value around education. We also see a strong, statistically significant, direct relationship between the percentage of Muslim students in an area and private enrollment—supporting the hypothesis that religious affiliation is a major driver of private enrollment.

Table 4.6: Composite Model: Factors Related to Private Enrollment in India

<i>Variable</i>	<i>Coefficient</i>	<i>S.E. (robust)</i>
Government Satisfaction	-2.03*	.942
% Non-Teaching Activity	1.46*	.543
% Urban	1.05**	.365
Gov Spend % on Ed	-.084*	.036
SSA Spend/Cap	-.015*	.006
SSI/Cap	.011	.020
Literacy Rate	2.69	1.87
% Muslim	.329**	.097
NSDP (*100,000)	.070	.975

*significant at $p < .05$

**significant at $p < .01$

$R^2 = .7108$

$p = 0.000$

$n = 70$

In this regression, I have used the variables that were statistically significant in the sub-models to construct one integrated model of the variation in private school enrollment across states. This model has a very good fit, explaining over 71 per cent of the variation.

Also, I have included one variable that was not significant in the sub-models, NSDP/capita, in the larger model as a control variable, given its close relationship to the research question.

Conclusions from the Models

In these models, factors involving government provision and quality explain more of the variation in private enrollment than anything else. The factors related to parental choice explain a substantial amount of the variation, but not as much as the government-related factors. And finally, the factors related to the private sector—wealth of the region and entrepreneurship—explain very little of the variation. According to these results, if we want to understand what affects private school enrollments, we must look at the context of the political sector.

Government satisfaction has a statistically significant, inverse relationship with private enrollment. The result is clear: the less satisfied citizens are with government performance, the more likely they are to choose private schools for their children. This suggests that a major factor of variation in private enrollment is *perception* of government quality; if citizens believe that the government is incapable of providing quality services, then they are more likely to place their children in private schools.

The percentage of teachers engaged in non-teaching activities has a strong, inverse, statistically significant relationship with private school enrollment. The percentage of teachers in non-teaching activities is a way to operationalize teacher absenteeism and other adverse effects from heavy teacher job security. When teachers are not in the classroom, schools suffer. Whether teachers are taking the census, taking the day off, or participating in an election, they are not teaching. Statistically, in areas where teachers are more likely to be engaged in non-teaching activities, parents are less likely to enroll their students in private school.

The urban/rural breakdown is positive and statistically significant: private schools are more likely to occur in urban areas. Even when controlling economic and cultural variables, such as wealth or literacy, there is still a positive and statistically significant difference between private school enrollment in urban and rural areas. This may be due to factors such as higher population mobility in urban areas (see: Mumbai case study) or higher population density in urban areas (parents want to send their children to schools close to their home). Low-cost private schools are more likely to occur in urban areas rather than rural ones.

State government spending is inversely and strongly related with private school enrollment. Government funding for government school can determine whether there are enough schools built to meet demand (see: Mumbai case study), and can be related to quality, too. Even when controlling for other factors, the more that governments spend and prioritize education, the lower private school enrollment is. Closer examination in the case studies can help deal with the problem of endogeneity noted earlier.

The variable of Sarva Shiksha Abhiyan spending/capita has a strong, inverse relationship with private enrollment. The more that governments spend, specifically on targeted education initiatives in high-poverty areas, the lower private enrollment is. This has two meaningful implications: first, in high-poverty areas, governments are “competing” with

private schools for students, and higher quality government education can influence parental choices; and second, private enrollment (or lack thereof) is, in low-income districts, significantly related to governments' policy choices.

The null result with NSDP/capita helps support a hypothesis central to this thesis: richer areas are not likely to have higher private school enrollment than poorer areas, even when controlling for literacy rates, government spending, and the other variables in this model. Private schooling in India is for poor families as well as rich ones. The fact that there is no statistical relationship between wealth of an area and private school enrollment illustrates the nature of the private sector in India, and explains that factors other than income and wealth are driving private enrollment.

Small-scale industries per capita, statistically significant in the earlier model, are not statistically significant in the comprehensive model. The null result from this attempt to operationalize entrepreneurship suggests that private school enrollment is more demand-driven than supply-driven.

Even when controlling for NDSP/capita, urban/rural breakdown, and other factors, there is a strong, statistically significant relationship between the percentage of families that are Muslim and private school enrollment. The literature proposes how religion plays a large role in private school choice, and this model supports it regions with higher concentrations of Muslim students are likely to have higher private school enrollment.

The most potentially problematic variable to examine is literacy. This variable is meant to test the relative cultural value of education, even when controlling for other factors that may explain the environment, such as urban/rural breakdown or NDSP/capita. When controlling for the other factors in this model, there is no statistically significant relationship between literacy rate and private school enrollment. Literacy could be related to other factors, such as urban/rural, that better explain the relationship. As mentioned before, survey data testing the cultural value of education would be ideal to examine this latent dimension.

Finally, the fact that a variable is insignificant in Tables 4.3, 4.4, and 4.5 does *not* necessarily mean that I should exclude it from your composite model. There may be a relationship between two of the independent variables in separate sub-models that will lead a variable to be significant in the larger model. As a result, after running the model in Table 4.6, I re-ran the composite regression multiple times, one-by-one including the variables found to be not significant in earlier models. None of the variables found insignificant in the sub-models were found to be significant in the sub-model in this analysis.

These four statistical models are an attempt to generalize major factors that are related to private school enrollment across. As outlined here, potential problems of causality, endogeneity, and inter-relatedness of variables ensures that a large-N model alone only partially demonstrates the relationship between these factors and private schools. The next two chapters outline case studies that further support the claims already advanced here.

5

The Case of Hyderabad

Preliminary Conclusions and Need for Case Studies

Recall the government-private choice matrix:

Case	1	2	3	4	5
A) GOVT. SCHOOL AVAIL./QUAL.	Y	Y	Y	N	N
B) PVT. SCHOOL AVAIL./QUAL.	N	Y	Y	N	Y
C) PARENTAL PREFERENCE	n/a	Y	N	n/a	n/a
Hypothesized DV Outcome:	G	P	G	none	P

According to the theory behind this study, private school enrollment is likely to be higher when (a) government school availability and quality exists, but parents prefer private schools for other factors (case 2), or when government school availability and/or quality simply does not exist (case 5). The next two sections outline the case of Hyderabad, an example of case 2, and Mumbai, and example of case 5, to better explain the puzzle of private schools for the poor.

The case studies are also an attempt to illuminate what these schools look like in practice. The lack of reliable data in India at times makes a large-N explanation not sufficient by itself—by explaining what the low-cost private school sector looks like in two different Indian cities and how it has developed, in light of the factors identified in the large-N study, the cases seek to supplement the model's result.

Case Study Methodology

Before I outline the case of Hyderabad, I must discuss the methodology used in the case study in this chapter and the following chapter. In the case studies, I examine the same factors as the multiple regression analysis. Namely:

- What determines government school availability/quality across India?
- What determines private school availability/quality in different regions in India?
- What factors lead parents to choose private schools over government schools, especially in poor areas?

The research reported here uses three sources of evidence:

- (a) interviews with senior politicians, teachers' union leaders, government officials, and NGOs in the education sector;
- (b) interviews with school owners, operators, teachers and parents;
- (c) basic collected data on schools, including school enrollment figures, observations about medium of instruction, fees, and general budget data.

A random sample of 20 schools in one low-income area of Hyderabad (labeled A–U in what follows) and 19 schools in a low-income area Mumbai (labeled 1-19 in what follows) were selected by calling unannounced on schools and requesting interviews with the school manager. The school manager would consent to an interview, as well as a tour of the school. In some cases, the researcher would interview teachers and parents present at the school. The methodology follows the same approach as previous studies in the low-cost private school sector in India¹²². Each school selected in Hyderabad was based in central city Hyderabad, outside the Old City, to build on prior research and literature—as the bulk of Tooley and Dixon’s work was conducted in three of Hyderabad’s nine zones, comprising the Old City.¹²³

The first schools were selected based on available directory information concerning government schools and private recognized schools. In addition, to locate unrecognized schools, I would ask school managers for the location of schools nearby (especially useful for unrecognized schools) and call on them unannounced. When the school manager was not proficient in English, a Telugu or Urdu-medium interpreter would aid in the interview process.

In most schools, at least two teachers per school were also interviewed, as well as at least two students (a boy and a girl from tenth class) were also interviewed. In all, over one hundred parents or guardians were interviewed, either in their homes or when the parent came to collect the child from school. Approximately three-quarters of parents interviewed were mothers and one-quarter fathers.

The school managers were interviewed to explore the history of the school, their backgrounds, needs for the school, their marketing strategies, and the relative competition from other schools, government or private. Parents interviewed were asked about reasons for choosing private school or government school, priorities for their children’s education, and fee payments. Teacher interviews were concerning reasons for pursuing the teaching profession, and priorities in teaching. “Expert interviews”—government officials, teachers’ union leaders, NGO workers—were conducted to investigate large-order explanations for the size and scale of the sector, as well as determining political priorities of the actors involved. When interviewees’ names are cited, the interviewee consented to their identification. All interviewees, whether anonymous or not, consented to their comments and findings disseminated in academic settings.

Clearly, these case studies have methodological limitations. This is to be expected for any social-science case study, especially on a topic like this with a relative poverty of data and prior study. As one limitation, the interview questions expanded the more schools I visited. Major factors involved in school choice—such as English-medium instruction and the role of entrepreneurship in establishing schools—after I began the interview process.

¹²²Pauline Dixon, “An Inspector Calls: The Regulatory Environment in Andhra Pradesh,” *International Journal of Educational Development*, Volume 25, Issue 3, May 2005, Pages 269-285.

¹²³James Tooley, Pauline Dixon, and SV Gomathi, “Private schools and the millennium development goal of universal primary education: a census and comparative study in Hyderabad, India”. *Oxford Review of Education*, 33:5, 539-560, 2007.

These case studies, therefore, are more “model-building”, than “model-testing”—many of the independent variables in the large-N analysis were derived from the interviews.

The interview structure is not as formal as it could have been—in a better case study, all schools would be asked the exact same questions for a rigorous comparison—but certain answers to questions repeatedly, and unprompted, continued to arise (for example, the prominence and importance of English-medium education) that warranted further questioning. I do defend these data as scientifically reliable and replicable—any researcher willing to conduct a similar study with a similar methodology would obtain the same or similar data on school enrollment, school fees, medium of instruction, school managers’ background, and more.

Finally, scholars such as King, Keohane, and Verba would criticize these case selections on the grounds that these cases are selected based on the dependent variable.¹²⁴ Both North Mumbai and Hyderabad are areas with high private enrollment. King, Keohane, and Verba might say that because my case studies do not have outcomes of both high private school choice and high government school choice, they do not sufficiently prove hypotheses on variation. According to this argument, *all* parents might be dissatisfied with some of the aspects of government schooling that I explain as drivers of private choice. To fully examine the issue, I would need to investigate cases in which parents chose government schools.

But I justify the methods here. To take the King, Keohane, and Verba approach would distract from the research question: “why (and in what cases) do parents send their children to *private* schools?” I am not attempting to explain preference for government schools; rather, I am focusing specifically on private school choice. To address this, the case studies of Hyderabad and Mumbai employ what George and Bennett call “process-tracing,” or the “method that attempts to identify the intervening causal process—the causal chain and causal mechanism—between an independent variable (or variables) and the outcome of the dependent variable.”¹²⁵ The question of “Why do some parents (still) choose to send their children to government schools?” is a useful question for future research, but is not the focus here. Rather, I seek to give a bottom-up answer to the research question of private school choice specifically by identifying the causal process behind how private schools develop and how, why, and in what cases parents choose to send their students to these schools.

The case studies are the best way to explore the causal mechanisms that are difficult to capture in a multiple regression in greater depth. Despite their limitations, these case studies are not intended to be a comprehensive summary of the low-cost private school sector, but an attempt to examine how variables that are significant on a large scale actually affect, in practice, the development of the private sector on the ground. In addition, I seek to outline for the reader how the low-cost private sector, in the areas where it is more likely to develop, actually develops. The case studies are better able to explain the causal

¹²⁴Gary King, Robert Keohane, and Sidney Verba, *Designing Social Inquiry*, (Princeton: Princeton University Press, 1994).

¹²⁵AL George and Andrew Bennett, *Case Studies and Theory Development in the Social Sciences*, (Cambridge: MIT Press, 2005), p. 206.

mechanisms variables, such as English-medium education, that are hard to operationalize in a statistical regression.

For the first case study, I examined 20 schools in a selected area of Hyderabad. I worked in a zone of central city Hyderabad different from Tooley and Dixon’s area of focus (though I draw on their research, I did not want to duplicate efforts). Many school operators—particularly those of unrecognized schools—requested privacy, so I do not give the school names—I code each school according to a corresponding number.

The school visits were conducted over two periods: June-July 2008 and December 2008-January 2009. Each visit consisted of gathering basic information about the school, the background of the owner, enrollment, and financial details, as well as qualitative follow-up questions about the development of the school.

These samples are an attempt to describe the sector in the city of Hyderabad and in Mumbai, and they trace the process of private school development, and capture, on an individual level, the explanatory factors that are significant in the large-N analysis.

The Case of Hyderabad

Andhra Pradesh, though it is one of the poorest states in India, has one of the five highest rates of private school enrollments.¹²⁶ Its capital of Hyderabad serves as an excellent case to examine how private schools in India have substantially high enrollment primarily due to factors such as English-medium instruction and religion that lead parents to choose private schools.

Table 5.1: Schools in a Selected Area of Hyderabad (Central City)

Management	# of Schools	Total Estimated Enrollment
Government	8	2,785
Private Aided	1	830
Private Unaided (R)	7	8,470
Private Unaided (UR)	4	975

SCHOOLS WITHIN A SELECTED AREA OF HYDERABAD

School Name	Enrollment	S/T	Type	Fees (avg.)	Medium
School A	830	46	Private Aid	15	E
School B	400	25	Private R	250	E
School C	250	40	Private R	300	E
School D	500	35	Private R	250	E
School E (c)	4,400	45	Private R	600	E
School F (c)	990	35	Private R	450	E
School G (c)	1050	45	Private R	800	E
School H (c)	880	40	Private R	450	E
School I	480	37	Private UR	150	E

¹²⁶ Reserve Bank of India. “National State Domestic Product 2008.” 15 February 2009. <www.indiastat.com>.

School J	800	35	Private UR	425	E
School K	385	30	Private UR	80	E
School L	320	35	Private UR	200	E
School M*	72	14	Government	0	T
School N*	150	25	Government	0	T
School O*	733	81	Government	0	T
School P***	105	11	Government	0	T
School Q***	61	9	Government	0	T
School R***	268	15	Government	0	T
School S**	257	26	Government	0	T
School T**	1139	75	Government	0	T

In this section, I break down the analysis of Hyderabad into the sub-categories of the large-N study that drive private enrollment. I will focus on specific findings from school visits and interviews that give greater depth and explanation to the statistical model.

Government School Availability/Quality

The Role of Teachers in Hyderabad

The field research here was conducted in Hyderabad during the introduction of English-medium government schools. The political developments behind this policy change help explain why there is a statistically significant link in the larger model between teacher absence and private enrollment.

The statistical model noted the strong, statistically significant relationship between teacher absence (as defined by non-teaching activity) and private school enrollment. Parents both in prior research on school choice¹²⁷ and in interviews cited teacher absence as a main reason for choosing private schools. “I went to school, and I saw no teachers there,” says one parent, citing his reason for deciding to enroll his two sons in private school. The job security provided by teacher’s unions and the political function of teachers are compelling reasons for this. The empirical result of the relationship between the number of days non-teaching and private enrollment supports this hypothesis.

What motivates teachers’ unions in Hyderabad? Teachers’ union leaders in interviews for this project cited two goals: the furthering of educational quality, and protection of the jobs and rights of the teachers. Among the Andhra Pradesh United Teachers’ Federation (the largest union in the state with a membership of 120,000 of the state’s 275,000 government school teachers), the priority is more the latter.¹²⁸ “Our number one object,” says N. Narayana, the General Secretary of the AP UTF, “is to protect our teachers’ and workers’ life.” What, politically, does this look like? Andhra Pradesh’s state legislature is bicameral, as in many Indian states. A Legislative Council of 90 members serves as the Upper House. Different sections of the Legislative Council are reserved for different

¹²⁷Prachi Srivastava, “Private Schooling and Mental Models about Girls’ Schooling in India,” *Compare*, 36(4), 2005, pp. 497-514

¹²⁸Figure obtained in writing. from Andhra Pradesh State Teachers’ Union, 30 December 2008

sectors of the population. Teachers' union leaders are eligible for two: "Teachers" and "Graduates." Leadership of the Andhra Pradesh United Teachers' Federation holds 3 of the 8 seats allotted to teachers, and 4 of the 8 seats allotted to graduates. Almost 10 per cent of the Legislative Council of the Andhra Pradesh State Assembly is teachers' union leadership.

The strength of teachers' unions affects government policy both in theory and in practice. "Do you know how many of the voters in our district are teachers or families of teachers?" said S. K. Venkataramana, Minister for Education for the state of Andhra Pradesh. "Our elected officials know their constituencies." Minister Venkataramana walked through the electoral math—tracing the share of voters, by district, who are teachers or in their families. Teachers have significance, and politicians playing "two-level games" cannot ignore them.

Many parents choose private schools for their children because the vast majority of private schools—over 98 per cent in Andhra Pradesh—teach in English.¹²⁹ In response, in 2007, the government of Andhra Pradesh introduced 6,500 English instruction schools across the state as a pilot program.¹³⁰ Teachers' lobbying groups have been largely opposed to English-medium schools across the state. Plank 7 of the State Teachers' Federation of India states that the "mother tongue should be the language of instruction at all levels." When the state in summer 2008 announced that 6,000 schools would be changed to English-medium, the unions protested severely.¹³¹

In many ways, the teachers were justified: the state offered a 13-day workshop to re-train teachers how to teach in English. For teachers who had been teaching in the local medium their careers, and had spotty English, the General Secretary of the United Teachers Federation said, "a 13 days program is not sufficient." Today, the union has changed its tone: "We have welcomed English-medium into government schools," says the Andhra Pradesh United Teachers' Federation, "because the changing circumstances of globalization means job opportunities are widening in the private sector and abroad for English speakers."

But in *practice*, English-medium government schools are not teaching in English. Teacher job protection in India gives the teachers no incentive to teach in English. Government-school teachers in India are well compensated. According to previous studies, wages in private schools are between 38 and 45 per cent lower than in government schools in the same district.¹³² Government-school teachers have very high job security. Of the 30 government-school teachers I interviewed in Andhra Pradesh, 100 per cent of respondents

¹²⁹ A survey of the government and recognized private schools in AP. *Hyderabad School Directory*. (Hyderabad: KAB Publications, 2007).

¹³⁰ "English medium in Government schools from this academic year," *The Hindu*, May 7, 2008.

¹³¹ G. Nagaraja, "Mixed Response to Workshop on English Medium Schools," *The Hindu*, May 23, 2008.

¹³² In a study of 30 schools in Uttar Pradesh, Kingdon finds that wages are 38% lower. Geeta Kingdon and Francis Teal, "Does Performance Related Pay for Teachers Improve Student Performance?" *Economics of Education Review*, 2008. Kansal finds in analyzing 233 teachers in New Delhi that wages in private schools are 42% lower. S.M. Kansal, "Disparity in Income and Levels of Living Among Teachers in Delhi," *Economic and Political Weekly*, 25 No. 46, 17th November 1990: 2547-2554. Govinda and Varghese's study of 111 teachers in Madhya Pradesh find wages that are 45% lower. R.Govinda and N.V. Varghese, *Quality of Primary Schooling in India: A Case Study of Madhya Pradesh*. (Paris: International Institute for Educational Planning, and New Delhi, NIEPA, 1993.)

cited “job security” as a main motivation for going into teaching. Government-school teachers are significantly difficult to fire: being paid on a government pay scale, they have the job protections of federal employees.

As a result, no legal ramifications exist for teachers not teaching in the English-medium. The Naandi Foundation regularly conducts independent assessments of government schools in Andhra Pradesh. According to Naandi officials, the English-medium government schools in Andhra Pradesh have, through teachers’ resistance, lack of training, or both, not become English-medium schools in practice. Minister Venkataramana laments how the government has had great difficulty implementing the English-language government-school instruction, and because of the teachers’ job protection, there was no legal recourse for the teachers who could not or would not implement the government policy.

The English-medium example illustrates how, in practice, government-regulated teacher protection may impact classroom quality and encourage the private sector. If government reforms to meet parental demand (such as English-language education) are not enacted *in practice*, parents are likely to continue to prefer private schools. The role of teachers in English introduction is an explanatory case of the principal-agent problem that plagues Indian schooling. If both the principal (government authorities) and the agents (the teachers) are not committed to a goal, then the result will not be enacted. Teachers have little incentive, because of high job security, to respond to government demands. Even if governments want to provide high-quality schooling, in the most pessimistic cases, teachers have little incentive to teach, in this case, in English.

In other cases, the principal may limit a teacher’s capacity to be in the classroom. Governments willingly pull teachers out of classrooms to serve government functions, giving teachers who would want to teach other obligations. I visited one school and asked a teacher if she had ever had to perform political activities for either the union or the government. She estimated that she and her fellow teachers spend ten days a year doing obligatory non-teaching activities. “When they ask me to participate, I participate,” she says.

I also observed the problem of absenteeism first-hand. Every school is required to have, on the wall of the principal’s office, a board with the teachers on the payroll. In each school I visited, I counted the teachers on the board and compared them with the teachers I personally verified were in the school. On average, 75 per cent of the teachers on the payroll were present on any given day. One government school I visited was without the mathematics teacher because the teachers’ local political patron had forced the teacher to withdraw to work a political campaign for the month. (As a result, the students did not have math.) On the ground, government school principals and witnesses alike said that teachers’ “non-teaching activities” seriously impacted the schools.

Teachers’ political roles in some of the observed schools were overt. I asked one government-school teacher when she engaged in political activities through the union. “Whenever they ask,” she responded. “They make sure I have good salary, and it only costs 50 rupees/month.” She estimated that she spent about ten days/year on non-teaching activities, often election-related.

An examination of Hyderabad might explain why there is not a statistically significant result between government-school English medium schools and private enrollment in the multiple regression models. Parents that I interviewed expressed serious doubts about the ability of the English-medium government schools to actually teach English. If government-schools that are English medium are not actually teaching English—and parents know it—then higher numbers of English-medium schools would not have any effect on private school enrollment.

Availability of/Investment in Government School

As Table 5.1 indicates, the government has created an underlying infrastructure of government schools in Hyderabad. Within roughly a three-mile radius, I found nine government-run schools. The government-schools in Hyderabad were ample, with a small school on every two or three blocks, and a large school within easy access of any given area. Moreover, compared to the West, where students in a given area are allocated to a specific school, the government-schools across India are open admission. Parents in a specific area can enroll their students in any school at any time, and a school is required to take the student who shows up. While a couple of the schools (School O, School U) were massive, with over 700 students, many of the schools were only one or two stories with a small number of classrooms. Andhra Pradesh spends 12 per cent of its total budget on education, ranking it 24th among states and regions of India.

While the government school infrastructure was there, the schools lacked many basic amenities—such as desks or blackboards—that were present in the private schools. In the eight government-schools I visited, three did not have working toilet facilities. In Andhra Pradesh, only 40 per cent of all schools have a working toilet for girls, ranking the state fifteenth among all states and regions.¹³³ When I interviewed parents who sent their children to private schools about why they were unsatisfied with the government schools, the three most commonly cited concerns were lack of English instruction, teacher absence, and infrastructure concerns.

From my observations in Hyderabad, the lack of government school availability, on the ground, did not explain why parents chose private schools. Though lack of quality, specifically, lack of key infrastructure components such as buildings, toilets, and walls, might be a key explanatory factor.

Private School Availability/Quality

Government Regulation of Private Schools in Hyderabad

In Hyderabad, 4 of the 20 private unaided schools that I visited met the basic requirements for government recognition. Yet 16 of 20 were government recognized. Government regulation of private schools is a difficult variable to operationalize in the large-N study, as not enough comparative data exists on government regulations. An investigation

¹³³ District Information System for Education. “2007-2008 Report.” Delhi: National Institute on Education Planning and Administration, 19 February 2009, <www.dise.in>

of Hyderabad, though, illustrates how government regulations do drive much of private school availability in Hyderabad.

Minister Venkataramana talked about the importance of the unrecognized schools, and their relative safety from legal action. “They are not supposed to exist,” he said, “but you have to recognize that they are educating students that we would not be educating otherwise. We do not make much of an effort to shut them down because we do not want to put children on the streets.” Despite Mr. Venkataramana’s assurance, in December 2008, Andhra Pradesh issued closure notices to 105 unrecognized schools, citing the prevalence of the schools and the difficulty that students at the schools had gaining passage to the exams.¹³⁴

One primary disadvantage of the unrecognized schools is that children who attend them cannot sit for the critical Level X exam, whose score determines much of a student’s future. Students who attend an unrecognized school have to obtain a “hall ticket” to take the Level X exam as, essentially, a home-school student sitting in a recognized school. (The sale of hall tickets is a profitable business for private school operators). Two unrecognized school operators I spoke with said that typically, local recognized school operators will, for a fee, allow unrecognized school students in the area to take the exams in their school. Yet the state only shut down 105 of an estimated 14,000 unrecognized schools in the province.¹³⁵

Many unrecognized schools do not broadcast their status. The only thing a school needs to be able to claim recognition is a paintbrush. I visited two schools multiple times in my Hyderabad case study that said, on the outside, “Recognized by Government of A.P.” On my first visit, the schools told me they were recognized. On a return visit, each of them admitted they had not yet achieved government recognition but had it in the process. These schools’ students are not included in official enrollment figures: in the eyes of the government, the 320 students at School I in Hyderabad—one of the schools—are not receiving an education or are home-schooled.

The sizable, thriving unrecognized school sector in Hyderabad points to the necessity of incorporating unrecognized schools in research on the private school sector. All unrecognized schools that I visited expressed a desire to one day be recognized—their search for recognition was, school-by-school, in various stages of processing. Academics interested in education anywhere in the developing world must acknowledge and account for unrecognized schools—though they do not appear in official government figures, unrecognized school enrollment accounted for nearly ten per cent of overall school enrollment in this stratified sample.

Role of Entrepreneurship in School Development

The Central Board of Secondary Education of India guidelines state that “schools are to be run as a community service and not a business, and commercialization does not

¹³⁴ “State to Shut Down 105 unrecognized schools”, *Deccan Chronicle*, December 25 2008.

¹³⁵ National Council on Education Research and Training, “NCERT 7th All-India Education Survey,” 2003 available online at <http://gov.ua.nic.in/NScheduleData/>.

take place in the school in any shape whatsoever.”¹³⁶ At each school I visited, I inquired about the budget of the school. I analyzed monthly fee payments and compared them to monthly costs, and, on average, schools ran a profit on the account—though in most cases, the profit was little more than USD \$100 per month. According to the law of the Government of India, the school entrepreneurs cannot take that in as a profit.

In a case study of 60 low-cost private schools in Uttar Pradesh, Srivastava argues that “although owners may have had some motive for ‘social service’ and philanthropy, especially in cases where [low-fee private] schools were opened in their own community, increasing market forces provided a more immediate daily concern for client retention and profit maximization.”¹³⁷ Tooley¹³⁸ and Shah and Veetil¹³⁹ illustrate how, though this is technically illegal, individual entrepreneurs are running many of these schools on a for-profit basis. This proposition is empirically difficult to test, as investigation of account balances do not show how much an individual school operator may be profiting from the school (and the illegal nature of for-profit schooling does not lend itself to transparency in a researcher’s investigation).

The causal link between profit-making and school establishment is hard to establish. At the very least, though, entrepreneurial school operators, if they do not make profits, still draw a reliable salary as business owners. As the founder/operator of School B said to me, “Some families run shops for a living—I run a school.” Also, the stated motives of over 75 per cent of the school operators, in my interviews, for establishing the schools had some sort of altruistic bent. Responses included “my father left money in his will to establish a school”; “I wanted a quality religious education for the Muslims and Christians in the area”; “I taught in government schools for a career and wanted a quality alternative.”

The background of school operators prior to school founding might empirically support some of the literature’s claims of “edupreneurship.” When beginning research in Hyderabad, I was not aware of the large degree to which school operators came from a non-education background. I did not ask school operators at the outset what their background was prior to operating the school. But another researcher, Shruti Joshi, conducted a similar census of forty-two private schools in the neighborhoods I was working in early 2008 that supports my own observation of a large number of school founders coming from entrepreneurial, rather than educational, backgrounds. The following table shows Joshi’s findings:

¹³⁶Government of India, “CBSE Guidelines,” obtained in writing from the Government of India, July 2008.

¹³⁷Prachi Srivastava, “For Philanthropy or Profit? The Management and Operation of Low-Fee Private Schools in India. In Srivastava and Walford, *Private Schooling in Less Economically Developed Countries*, (Oxford: Symposium Books, 2007).

¹³⁸ James Tooley, *The Enterprise of Education*, (New Delhi, Liberty Institute, 2001).

¹³⁹ Shah, Parth J. and Veetil, Vipin P., Private Education for Poor in India (December 2006). Available at SSRN: <http://ssrn.com/abstract=950146>

Table 5.2; Shruti Joshi study: Professional Background of School Owners/Entrepreneurs in Hyderabad¹⁴⁰

Professional Background	Number of Founders / Present Owners	Percentage
Worked in other schools	16	38
Initiated with present school	13	31
Worked in the Middle East	5	12
Business	2	5
Qualified Teacher turned Journalist	1	2
Social Worker and Teacher	1	2
Software Engineer in USA	1	2
Worked in India as Clerk	1	2
NA	2	5
Total	42	100

The table illustrates how a substantial number of school operators came from a non-educational background. Strikingly, five school founders worked away from their families in the Middle East, returning with substantial savings, and used their money as nest eggs to found a school. Many school operators did not typically have their own funds to establish schools—these private school operators would raise money from friends and acquaintances and establish a non-profit society or trust.

Finally, one rapidly growing observed phenomenon is the rise of chain schools. Schools E-H were all schools, run by one central operator out of School E. Many schools have recognizable brand names, and operators run them as chains or franchises. One notable example is the series of Gotham Model Schools in Hyderabad—a chain of schools that caters to low-income parents. One of the members of the Gotham Schools was accepted to an IIT—India’s most elite series of universities. The student’s photo and admission status was plastered across Gotham Schools across the city, increasing the schools’ notoriety and fame.

The operator of schools E-H in this case founded his first school in 1990. That school now has 4,400 students. In total, his four schools now number over 8,000—and he has plans to operate two more. His school name has instant recognition in the neighborhood. “Go to the shops, the street vendors, ask them what they think of my school. Everybody knows it—everyone from three years to eighty years can direct you to one of my schools,” he said. (An informal survey validated his assertion.) “My school is a family business—we started from a society, raising money, and my mother, father, and wife are all trustees.” When I asked him about profit-making chains, he said, “I know these schools. Many of them do not last for more than three or four years, because if you are not invested in education, running a profitable school is harder work than the money you can make.”

¹⁴⁰Shruti Joshi, *International Education Initiative: Ecosystem Development Project*, (Atlanta: Gray Matters Capital Foundation, 2008).

Although in the large-N study the link between entrepreneurship, as this study has operationalized the variable, and private school enrollment is a bit tenuous, the case study revealed a strong link between doing business and prevalence of private school supply. Whether it is through the explicit business model of chain schools, the substantial number of school founders who did not come from an educational background, or the potential profit in operating a school, on the ground, “edupreneurs” have a large role in private school creation.

Parental Preference

Within Hyderabad, two factors related to parental preference clearly explain the prevalence of the private sector. While the large-N model did not show any clear correlation between English-medium government schools and private enrollment, the desire to learn English was the most important factor driving parental preference in the Hyderabad case study. Another factor, religion, matters, too. Parents—particularly Muslim parents—want to choose private education when it has advantages over government education.

Medium of Instruction

School operators in Hyderabad said that they established English-language schools to fill a need that government schools did not. Parents in this study also stated a clear preference for English. Throughout the research in Hyderabad, I consistently asked auto-rickshaw drivers—which one report estimates constitute a plurality of the fathers of budget school parents¹⁴¹—whether they send their children to public or private school. Most of them respond, “private school.” Auto-rickshaw drivers in Hyderabad and in Mumbai make an estimated income of \$3-\$5/day.¹⁴² Then I ask them, “Why private school?” The vast majority of auto drivers interviewed responded, “English.”

The medium of instruction in any government school is a highly charged political process that requires an assessment of Indian political development to understand. The politics of a state affects the medium of instruction, which in turn affects the attractiveness of the low-cost private sector. In Andhra Pradesh, the government schools have traditionally conducted courses in Telugu, the local medium. After Independence, many states not only removed English from government schools, but banned English-medium private schools, too. As a result, English-medium private schools that developed were either operated illegally or shut down. Linguistic minorities across India protested, however (the majority of Hyderabad is Telugu-speaking Hindu, but a significant plurality is Urdu-speaking Muslim). In 1998, the Indian Supreme Court ruled that, to protect linguistic minorities, private school operators could teach in whatever medium of instruction they desired. This provided the biggest boon to English-medium private schools.¹⁴³

¹⁴¹Joshi 2008.

¹⁴²Compilation of 30 interviews with parents in target areas, Hyderabad, June-July 2008.

¹⁴³E. Annamali, “Medium of Power: The Question of English in Education in India”, 1998, in James W. Tollefson and Amy Tsui, *Medium of Instruction Policies: Which Agenda? Whose Agenda?* (London: Routledge, 2003.)

Every single private school I visited in Hyderabad was in an English-language medium. Other studies support this prevalence.¹⁴⁴ With the exception of only a couple Urdu-medium schools in the heavily Muslim Old City, Tooley *et. al.* found that almost all private schools in Hyderabad were English-medium, too.¹⁴⁵ The state language of Andhra Pradesh is Telugu, and the government, which is highly patriotic, tries to promote Telugu as much as possible. I have asked the private-school operators about the possibility of an English ban—they say that they will not change because, for poor families, English-medium is their biggest selling point. They instead propose to get around the ban, if it happens, by promoting their school as an “English-Telugu Medium School” and, off-the-record, teach completely in English.

Due to the Indian Supreme Court protection, it is unlikely that English-medium bans will be upheld. In summer 2008, after the state of Karnataka attempted to shut down over 1000 English-medium private schools, the High Court of Karnataka struck down the government order mandating the local language of Kannada as the local government medium of instruction. The court ruling argued, “Without English, communication is difficult in many parts of the country, inter state communication is difficult. In a multi-lingual country English is a link language.”¹⁴⁶

The state of Andhra Pradesh, recognizing the large attraction of English-medium schools in the private sector, has opened over 70 English-medium schools in the government sector in the last year alone, and is pushing to move schooling to English-medium. Yet, as already discussed, other political factors such as the political strength of teachers, may prevent this from happening in practice. Teachers boycotted the 13-day training course in May 2008 with little apparent recourse.¹⁴⁷ The government is lukewarm on the English-medium schools at best, and the teachers, because of the unions’ political clout, face very few repercussions if they refuse to teach.

Teachers’ unions also consistently oppose English-medium for more pedagogical reasons. The Municipal Primary Teachers’ Union, the largest teachers’ union in Mumbai, has launched a mother-tongue-only campaign—for both private and government schools—across the city. “We believe that, in English-medium schools, children develop *no* language,” says Shilpa Naik, the Working President of the MPTU. Children, Ms. Naik says, do not develop good mother-tongue language skills at school, and do not practice English at home. For these reasons, many NGOs, such as Akanksha, the largest education-related NGO in Mumbai, push mother-tongue instruction.

Even after the introduction of the English-medium program, Andhra Pradesh still has only 3.4 per cent of its urban schools in English-medium (and, as this study shows, it is doubtful whether those schools are teaching English)¹⁴⁸ This ranks Andhra Pradesh 27th

¹⁴⁴Joshi 2008.

¹⁴⁵James Tooley, Pauline Dixon, and SV Gomathi, “Private schools and the millennium development goal of universal primary education: a census and comparative study in Hyderabad, India”. *Oxford Review of Education*. 33:5, 539-560, 2007.

¹⁴⁶TA Johnson, “Kannada Medium not must for private schools”, *Indian Express*, 3 July 2008.

¹⁴⁷“English Medium in Government Schools from this Academic Year,” *The Hindu*, May 7, 2008.

¹⁴⁸“English-Medium Schools,” District Information System for Education Report 2008, obtained in writing from www.dise.in

among states for English instruction in primary areas. Why, if English-medium is so clearly an explanatory factor in the case study, is it not significant in the larger model?

One factor may be a problem of endogeneity. The Andhra Pradesh government created English-medium schools because parents and constituents caused direct pressure for English-language education. It may be that in the states with higher demand for English-medium schools, governments have created English-medium schools, so the mere existence of a high number of English-medium government schools is indicative of the latent factor that would lead to parental preference for private schools. Another possible explanation is that, in Andhra Pradesh, parents do not believe that the English-medium government schools actually teach English. If this perception is the case across India, the mere provision of English-medium government schools may not keep parents from choosing private schools.

Role of Religion

Many parents choose private schools for primarily religious reasons, specifically Muslim parents. Prior studies such as Kingdon and James have illustrated the clear statistical link between religion and private school—James’ World Bank study listed religious heterogeneity as the variable with the closest relationship to private enrollment across an international sample.¹⁴⁹ In the large-N analysis, religious affiliation again proved to be statistically significant. Though it should again be noted that although religious considerations drive enrollment, in this report, private enrollment does not include *madrasa* enrollment and, in this study, none of the schools that I visited were *madrasas*.

I have already outlined the reasons why a Muslim parent specifically might choose a private school (even without a direct religious affiliation). For the past fifty-five years, since the partition of India, Hyderabad has had the largest urban concentration of Muslims in the India-Pakistan subcontinent. Today, urban Andhra Pradesh has the fifth-largest concentration of school-age children who are Muslim.¹⁵⁰ Factors cited in interviews with Muslim parents for why they choose private school for their children include: time set aside in private school for prayers, facilities for religious activities (for example, washing before daily prayers), separate subjects in Arabic (not taught in any schools that I visited in Hyderabad, but consistently taught in schools in the Old City), and infrastructure facilities, particularly for girls. The on-the-ground observations in Hyderabad confirmed hypotheses and statistical results from several larger studies.

Conclusion

Parental preference primarily drives educational enrollment in Hyderabad. Government schools do exist, and in sufficient numbers, but the observed infrastructure—buildings, toilet facilities, and desks—is poor. Moreover, the considerable strengths of the teachers’ union indicate high teacher absences and a lack of implementation of policy change, as evidenced by the difficulty of transforming to private schools. Private schools

¹⁴⁹Estelle James, “Why do different countries choose a different public-private mix of educational services?” *Journal of Human Resources*, 28:3, 1993.

¹⁵⁰National Council on Education Research and Training 2003.

overwhelmingly offer English-medium instruction, a factor important to parents and one that the government has been unable to provide. In addition, a high level of entrepreneurial activity drives innovation and low-cost counters to government supply. Government provision in Hyderabad is sufficient, but only at a minimum amount of quality. Even though government schools are plentiful, factors such as superior infrastructure and more responsive curriculum lead parents to choose private schools in Hyderabad.

6

The Case of Mumbai

Mumbai: an Overview

In the past decade, the city of Mumbai, in order to assert its downtown area as a business and financial center, has undergone major renovations. As a result, the city cleared out many of the slums in the downtown areas of Colaba, Nariman Point, and Churchgate, and resettled the population to the suburbs. One such area targeted for resettlement was the area of Mankhurd/Deonar. The government constructed large public housing such as the high-density Lallobhai Compound for the re-settled slum population, and hundreds of thousands of people moved to the suburbs.

One problem with the resettlement, the residents of Mankhurd testify, is the lack of planned infrastructure in the new settlements. In some slums, says Shilpa Naik, the National Contact for the Indian Federation of Teachers, “private education is very essential because of economic needs.” As noted before, in the slums of Hyderabad, 23.3 per cent of all students attend unrecognized schools.¹⁵¹ According to one organization, the highest density of private schools in Mumbai is the suburban areas of Mankhurd, Chembur, and Goregaon¹⁵²—all targets of government slum resettlement programs.

In the Mankhurd area, private schools arise primarily out of necessity and lack of government provision. For this case study, I outline here a stratified sample of Mankhurd/Chembur to report a cross-section of schools within this selected city. In one selected area of Mankhurd, 19 schools were surveyed. The schools comprised a total population of almost 30,000 students. The only government-school within an hour radius went through grade seven only, was enrolled to its limits (students leaned against walls and sat on the floor in class), and still only comprised less than half of all enrolled students in this narrowly selected low-income area.

The following tables outline enrollment figures and school-level detail for the target area:

Table 6.1: Schools in a Selected Area of the Suburb of Mankhurd/Chembur

Management	# of Schools	Total Estimated Enrollment
Government	2	12,716
Private Aided	2	2,394
Private Unaided (R)	14	14,500
Private Unaided (UR)	3	445

¹⁵¹James Tooley and Pauline Dixon, “Private Education for Low-Income Families,” in P. Srivastava & G Walford (Eds) *Private Schooling in Less Economically Developed Countries: Asian and African Perspectives* (Oxford: Symposium Books, 2007), p. 15-37.

¹⁵²Unpublished data compiled by Pratham Foundation, 2008.

SCHOOLS WITHIN A SELECTED AREA OF THE MANKHURD/ CHEMBUR
SLUMS OF MUMBAI

School Name	Enrollment	S/T	Type	Fees	Medium
School 1	400	40	Private R	80	E
School 2	45	45	Private UR	150	E
School 3	1400	40	Private R	100	E
School 4	500	35	Private R	150	E
School 5	960	60	Private R	600	E
School 6-English	500	50	Private R	400	E
School 6-Marati	300	60	Private R	80	M
School 7	250	20	Private UR	100	E
School 8 (S)***	1194	75	Private Aided	0	E
School 9 (P)*	840	65	Private R	380	E
School 10	700	30	Private R	170	E, U
School 11	1000	40	Private R	80	E, M
School 12	1000	60	Private R	180	E
School 13**	8,176	45	Government	0	E, M, U, G, H, T
School 14**	4,000	65	Government	0	E, M, U, G, H, T
School 15-English	1300	50	Private R	250	E
School 15-Hindi	1200	50	Private Aided	0	H
School 16	2500	65	Private R	300	E
School 17	1600	60	Private R	250	E
School 18	150	20	Private UR	80	U
School 19 (c)	1500	45	Private R	190	E

Enrollment: Total enrollment of the school.

S/T: Student/teacher ratio, on average, per section.

Status: Government, Private Aided, Private Recognized, Private Unrecognized.

Fees: in rupees/month (50 rupees approximately equals \$1 USD)

Medium: E=English, M=Marati, U=Urdu, H=Hindi, G=Gujarati, T=Tamil.

**School only covers primary school*

***School only covers primary and lower secondary school.*

****School only covers secondary school*

(c) Chain: school is part of a chain management

Government School Availability/Quality

Government Spending on Education/Government Provision of Education

Even with an immense population, Mankhurd has only one government school—and that school only goes through Grade 7. The principal of the Deonar Municipal School, the lone government school in Mankhurd, says that if a student wants to attend school beyond that, they have to take an hour-long bus ride each way to Chembur—or attend private school. The NGO Akanksha estimates that 200,000 people live in the Lallubhai Compound, a “slum resettlement” government housing facility. Sixteen ten-story buildings

are built within a ten-acre campus. Yet very few government schools exist in the vicinity for students to attend.

To understand why such a large concentration of Indians lives in an area with so few schools, we must analyze the context of the Indian slum. Slums are an essential part of Indian political life. Slum political influence in India is substantially higher, in contrast with poor populations in the West. Whereas in the US, income and likely voter turnout have a positive relationship, in India, the most regular and faithful voters are the poorest. Pushpendra's analysis of sub-groups in India's National Election Survey at the end of the 1990s shows that scheduled caste/scheduled tribe turnout was 89.2 per cent in the 1996 general elections, compared to 85.6 per cent in the upper castes. In the 1998 elections, voter turnout among scheduled castes/scheduled tribes was 93 per cent, compared to 91 per cent in the upper castes.¹⁵³ As outlined in Chapter 4, India's population is heavily skewed towards the lower classes. High turnout among the lower classes overwhelms the influence of higher-income Indians simply because there are so many more low-income Indians.

This leads to the argument among scholars such as McMillan and Yadav 1999¹⁵⁴ that, in Indian politics, the poorest have substantially higher political influence than in most Western countries. As evidence, these scholars point to the prevalence of poor-focused programs, such as "reservations" in hiring and university placements (compared to affirmative-action policies in the US). Compared to turnout of lower-class groups in Western democracies, the turnout of the poor in India is comparatively much higher. Compared to the case of India, the American National Election Studies data for two comparable elections in the 1990s show that the lowest-income bracket in the US voted at a rate of 46.8 per cent and 58.7 per cent in local and national elections, respectively, while the highest-income bracket voted at a rate of 58.2 per cent and 71.2 per cent.¹⁵⁵ The rise of political parties that cater specifically to Dalits also illustrates their political significance. The BSP controls Uttar Pradesh, the largest state in India, and the Republican Party of India, which has significant influence in Maharashtra, fight for policies that openly favor Dalits, scheduled castes, and scheduled tribes.

This political significance, according to K. Sriram of the Akanksha Foundation, an NGO in Mumbai that works with schools in the slums, dramatically shapes the educational sphere. "Because of migration trends into concentrated areas of Mumbai, there is a huge bottleneck in government provision of education," Sriram says. "Government services cannot keep pace with schools." The Mumbai slum of Dharavi contains over 500,000 people according to the census of India in 2001, and many estimate the size two to three times that. One teachers' union official connected with Maharashtra politics testified that the city refuses to break up the slum, however, because it operates as a tremendous vote bank on election-time. When slums are cleared, governments often push significant resettlement policies.

¹⁵³ Pushpendra, "Dalit Assertion Through Electoral Politics," *Economic and Political Weekly*, Vol. 34, No. 36 (Sep. 4-10, 1999), pp. 2609-2618

¹⁵⁴ Alistair McMillan, *Standing at the Margins: Representation and Electoral Reservation in India*, (Oxford: Oxford University Press, 2005); Yogendra Yadav, Understanding the Second Democratic Upsurge, in Francine Frankel et. al. (eds) *Transforming India, Social and Political Dynamics of Democracy*, (Oxford, Oxford University Press, 2000).

¹⁵⁵ Todd Shields and Robert Goidel, "Participation Rates, Socioeconomic Class Biases, and Congressional Elections: A Crossvalidation", *American Journal of Political Science*, Vol. 41, No. 2 (Apr., 1997), pp. 683-691

Governments are responsive to voters when housing is concerned, but education often falls through the cracks.

The consequence of this combination—large government re-settlement policies and low government provision of education—creates high demand for private schools. As the table of schools illustrates, the enrollment in the cross-section I analyzed was close to thirty thousand, but the schools were only able to accommodate approximately twelve thousand. Schools 1, 2, and 4 were literally run out of family apartments in the Lallobhai Compound, providing an educational space where the government failed to provide one. In the case of Hyderabad, governments provided sufficient space schools, but parents, for various reasons, chose private schools. In the case of Mumbai, government provision in the suburban slums never existed at all.

Role of Teachers

The largest teachers' union in Mumbai speaks of private-school influence more in the language of marketing than competition. "We want to change the mindset of everyone with regard to public education," says Ramesh Joshi, president of the Municipal Primary Teachers' Association in Mumbai. The problem with many politicians, Joshi says, is that it is not "politically convenient" to support free and compulsory education. With the huge popularity of private schooling, the union argues, government schools are easily blamed for problems and have no advocates. "Government schools are much better than their reputation," Joshi argues, and government policies supporting private education undermine the opportunity for the poor. As Shilpa Naik, national contact person for the Indian Teachers' Federation, says, "universal, compulsory education is the last door for a poor man's child."

Teachers in Mumbai seem to be more attuned to absences. In the past five years, the Mumbai teachers' union has launched an intense lobbying effort to keep the teachers from performing non-teaching activities. According to Ramesh Joshi, now, according to municipal law in Mumbai, it is forbidden for teachers to be asked to perform non-teaching activities. Teachers at the two government schools that I visited confirmed this. And the lobbying seems to have paid off. According to 2007 statistics, only eight per cent of teachers in urban Maharashtra were engaged in non-teaching activities, ranking Maharashtra seventh lowest of any state or territory.¹⁵⁶

Teacher attendance is one indication of the relatively higher quality of government schools in Mumbai. Parents when interviewed, on average, had much higher opinions of government schools. As evidenced by the enrollment data, though, lack provision seems to be a much larger problem to parents than lack of quality.

¹⁵⁶National Institute of Education Awareness and Planning, "District System Information on Education, 2007," <www.dise.in/ar2005.html>

Private School Availability/Quality

Government Regulation of Private Schools

In the case study in Mumbai, 9 of the 20 private unaided schools met the basic requirements for government recognition. Yet 18 were officially government-recognized schools. Two concepts were recurring: first, in Mumbai, educational societies or trusts would run multiple schools. If *one* of the societies had a recognized school, they would advertise a separate unrecognized school that the society ran as a school run by a “recognized society.” School 7 was an example of this. According to school owners, Maharashtra conducts more frequent inspection, monitoring, and regulation of unaided schools’ recognition than most states. Data to substantiate this observation is difficult to obtain, but the observation was noted frequently enough to deserve mentioning. Andhra Pradesh’s laws and enforcement are friendlier to private entrepreneurs in general: according to the World Bank, Mumbai’s regulatory framework is more complicated: it requires twice as long to register a new property (such as a school) and twice as many days in court, on average, to enforce a contract in Mumbai as it does in Hyderabad.¹⁵⁷

Secondly, private *aided* schools are more prevalent in Mumbai. Whereas in Hyderabad, the government of Andhra Pradesh rarely grants aid to new schools, and is cutting back on private *aided* schools that exist, in Mumbai, the government is regularly granting aid to new private schools, and vigorously funding existing ones, sometimes with political motives (as the upcoming section on religion will explain). In the Mumbai metropolitan area, of over 2,200 private schools, 1153 are government aided; in the Hyderabad metropolitan area, of over 2,100 private schools, only 261 are government aided.¹⁵⁸ Further study ought to explore the interplay between aided and unaided private schools in the development of this sector.

The Role of Entrepreneurs

“I don’t know how I got started with this school. I got roped in.” The principal of School 16 in Chembur, Mumbai, has been running a school that now has 2,500 students for 43 years. School 16 was started by a self-funded group to provide low-cost private education in the neighborhood of Chembur. Placed at a central location—right in between the railway and bus station—School 16 has impressive facilities and sharp-looking uniforms. Moreover, the school charges only 400 rupees/month, and 100 per cent of students pass the Level X exam.

When the school started, its management sought the current principal to run the school, even though he had no educational experience. He was a businessman whose background was in marketing and advertising—the operators needed a person to market the school to the growing community. The principal was hired to create a personality for the school and a plan to recruit students. Forty-three years later, he is still there.

¹⁵⁷The World Bank Group, “Doing Business in India,” *Doing Business in South Asia* (Washington: The World Bank, 2007), p. 29-36.

¹⁵⁸ “School Report Cards,” District Information System for Education, (New Delhi: National University of Education Planning and Administration, 2008). 17 February 2009. <www.schoolreportcards.in>

This story is not uncommon and validates the experience from Hyderabad. School operators are largely entrepreneurs. As a comparison with Shruti Joshi’s analysis of Hyderabad schools, I surveyed the school operators in the schools I visited in Mumbai on their professional background. A similar number came from both the educational sector and the private sector:

Table 6.2: The Career Backgrounds of Mumbai School Operators

Professional Background	Number of Principals/Founders / Present Owners	Percentage
Worked in other schools (teacher, principal)	7	37
Initiated with present school (education background)	3	16
Business (executive, business owner)	4	21
Marketing	1	5
Religious Affiliation (Clergy or otherwise)	3	16
Inherited school from family	1	5
Total	19	100

Both the case of Hyderabad and in Mumbai, entrepreneurs drive a significant portion of private school enrollment.

Parental Preference

Medium of Instruction

The case of private education in the slums is one of necessity: government supply of schools simply cannot meet parents’ demand. The medium of instruction is a key indicator to how high the demand is. In Hyderabad, over 98 per cent of the recognized schools are English-medium. In Mumbai, that figure is much lower. I visited a Marati and Urdu medium private school, each charging roughly 80 rupees/month, in the slums of Mumbai. In Hyderabad, parents go the extra mile to have their children learn English. In Mumbai, parents pay for children to be educated in the same language as the government school, often in poor facilities, because the government school simply did not exist.

Compared to English-language instruction in the case of Hyderabad, the linguistic politics of Mumbai are more complicated. Mumbai has a much larger linguistic mix: Gujarati, Telugu, Tamil, Marati, Hindi, English, and Kannada are all languages of instruction in government schools. Governments even support private schools that support linguistic political aims. School X was established to further the aim of “Sanatan”—which the school principal defines as “All Indians belong to the Hindu race.” The school has English and Hindi-medium sub-schools (approximately 1,000 students per school). Both schools were originally private, charging roughly Rs. 350 /month (\$7). The Shiv Sena, a Maharastra-based Hindu nationalist party, subsidized the Hindi medium school. Today, English-language students pay Rs. 450; Hindi students pay nothing. The school is much more accessible to

those who want to learn Hindi. Even still, 80 per cent of the English-language students in School 15 live in slum areas.

In one government school, the school had seven different sections, each teaching a different language (the population in the area spoke everything from Urdu to Tamil). Parents, when enrolling their students in school, were able to choose their students' language of instruction. The largest medium of choice, English, had 2,400 students out of 8,100. (The second most popular, Marati, the local language of Maharashtra, had close to 1,400). Many other states, such as Bihar, have had English-medium instruction in the pipeline for much longer, with teachers trained through the process to teach in English.

Through analyzing the table of schools in the selected area of Mumbai, we can see a few trends related to English-medium education. English-medium schools, it appears, are more prevalent—and have higher demand—than local-medium schools. School 6, run by a school company that runs both a Marati-medium school and an English-medium school, is able to charge five times as much for its English-language instruction and attract more students, too. The schools in the target area are primarily English-medium. A few of the schools accommodate thousands of students—they do so by teaching in shifts: one from 7-2, one from 3-9. We do see, even in this small sample, a larger percentage of non-English medium schools than in Hyderabad. And almost all of them charge less than US \$5/month.

Religion

In this stratified sample in Mumbai, I did not encounter as high of a concentration of Muslims as I had in Hyderabad. Nevertheless, I still saw in one school the major influence of religion. School 7 had been established the year before by a young Muslim man whose father had always wanted to establish a school with explicitly religious instruction—including Arabic classes, a separate hall for prayer, and set-aside time for prayer. I visited the school and spoke to the tenth form class (the oldest students), and asked where each of the students had come from, and why. Every single one of the twelve students cited a nearby private school, and all but one of them said they had changed because of “religion.”

Conclusion

Lack of government provision, particularly in the slum areas, drives private enrollment in Mumbai. Private unaided schools are less prevalent in the southern part of the city, where government schools are better equipped to handle the population. But in the slum areas in the northern suburbs, where the population is fast-growing and government cannot keep up with changes in population and demographics, private enrollment is higher. The higher presence of non-English medium schools in Mumbai compared to Hyderabad suggest that factors other than language are affecting private enrollment in the former. Yet the case of School 15 shows that parents are willing to pay a premium for English instruction. Mumbai also has higher government involvement in private aided schools, which is likely tied with tighter regulation of unrecognized schools and higher prevalence of unaided schools in general. Though Mumbai, in general, has higher governmental investment in schools in certain areas, and higher government involvement in school administration in general, the sheer lack of provision in certain slum areas creates a space for private entrepreneurs to meet the needs of the citizens there.

7

Conclusion: The Private Sector and the Poor

Why are parents in very poor areas of the developing world willing to spend substantial portions of their income to send their children to private school? Private schools are meeting parents' needs and preferences in ways that governments are not. This study has demonstrated that governments' actions, combined with parental preference, have led to private education providers playing a major role in the future of children in developing countries. The large-N results in this study have generalized traits observed in prior literature, as well as tested variables relevant to the field of comparative politics that have not been explored before. This report generalizes the case studies of Dixon, Tooley, Srivastava, and others through this model, and substantiates many of their general hypotheses. The case studies of Mumbai and Hyderabad have explored causal links, as well as variables that are difficult to successfully operationalize in a statistical model.

In the field of education in India, there is a clear government failure to meet the needs of citizens. Factors ranging from the government's lack of investment in schools and their infrastructure (everything from walls to toilets), to the adverse in-classroom consequences of teachers' political clout affect the size of the private sector. The statistical link between government spending and private enrollment as well as the relationship between government satisfaction and private enrollment underscore this. The negative, significant relationship between individual-level survey data on government satisfaction and private enrollment also shows that government school quality is as much about citizen perception and satisfaction as it is curriculum and buildings. When citizens do not trust their government, they turn to the private sector.

The negative relationship between Sarva Shiksha Abhiyan spending/capita and private enrollment is one of this study's most significant findings. In areas where the government is spending more per capita on targeted education programs in high-poverty areas, private enrollment is lower. Though the large-N cannot prove a causal link, this finding does suggest several things: first of all, governments are competing with private schools for enrollment in high-poverty areas, and second of all, parents are less likely to choose the private option when governments are openly and directly addressing schools in high-poverty areas in general. When governments perform better in general, and spend more on education specifically, their citizens are less likely to turn to private options.

This study has also proven that there are some factors that cause parents to prefer private school to government school, even if all things being equal the government school is of high quality. Language of instruction policy, religious factors (regardless of whether the private school is secular), and the cultural value that parents themselves place on education all play a role in whether parents will choose between private options and government options. Politics, of course, plays into those policies, too: many choices regarding religion and language are the result of governmental debates and political process. We also see the private sector have higher enrollment in cases where it is more able to respond quickly to

citizens' needs and desires. When large amounts of people move into an area, as in the Mumbai case study, private schools are able to handle the growth better than the governmental sector, and in areas where citizens want English instruction, but the government is only teaching in the local medium, private schools are the beneficiaries.

The most significant finding of this study is that private schooling in the developing world is demand-driven. Private schools exist because citizens believe they are fitting their needs better than the government schools have the capacity to. In the large-N study, factors related to parental choice and government availability have a greater effect on variation in private school enrollment than factors related to private provision. The most notable null result is the one showing no relationship between the wealth of a region and private enrollment: private schools are equally likely to exist in poor areas. The case studies validate these claims: private schools exist because of the parental demand for quality and content (language) in Hyderabad; in addition to these desires, private schools additionally exist because parents demand, so to speak, the availability of schools *in general* in Mumbai, and the private sector is able to supply these.

This study does have its limitations. Although I have made my best efforts to provide the best available data and make the best available explanations for variations in private enrollment, a few problems could be addressed with further study (and better existing data). First, there is an ecological fallacy of making individual-level conclusions with aggregate-level data. A better analysis would have individual-level survey data from Indian citizens (parents) on attitudes towards government education, attitudes towards private education, factors driving private choice, and the level of information that parents have regarding specific private and government schools.

Other studies could also explore particular aspects of this study, dealing specifically with causal links. While this study has definitely established relationships between variables, I have only been able to examine causality through the case studies. To explore the endogeneity problem with government spending, or well as the causal link between English-medium instruction and private enrollment, time-series analysis would be preferable. Finally, there is very little information and data on rural schools, as well as very little data on school fees, making it difficult to explore either the urban/rural divide or the distinction between private schools between the rich and the poor. In this study, I have conducted a defensible, replicable study with the best data at hand, but future studies could address this issue more directly.

Finally, the question of measuring the actual quality difference in private schools for the poor is outside the scope of this report, but critical for academics, policymakers, and governments to address. In areas such as Mankhurd, where government schools simply do not exist in sufficient numbers, the quality difference in private schools is clear: something is better than nothing. But further study needs to address Maile's contention that private schools "dupe" families.¹⁵⁹ Although studies prove how, as outlined in the literature review, parents believe that private schools are better, and several studies support that private

¹⁵⁹Simeon Maile, "False Consciousness in School Choice: School Choice in South Africa," *Education and Urban Society*, 37(1), 2004, 94-116.

schools provide better education, reliable metrics for judging low-cost private school quality do not exist. Parents have little judge for how good their students' school is.

Any government or private actor desiring to pursue private schooling as a preferable option for the world's poor needs to be able to communicate school quality to parents. Srivastava¹⁶⁰ and Tilak¹⁶¹ have convincing evidence that private schools provide superior education. Maile makes the counter-argument that private schools trick poorly educated parents. Both studies deal with small sample sizes, though, over limited periods of time. A better conclusion to the question is necessary, and the field is ripe for the development of quality assessments of low-cost private schools.

This study is a refutation of those who want to ignore private education for the poor. The sheer numbers of students in private schools—especially those in unrecognized schools, which have been overlooked by all but a handful of scholars—number in the millions, according to the projections here. But this should not serve as an indictment of governments involved in education in the developing world. If anything, this report should provide greater incentive for government schools to provide programs: the lack of government investment, as measured by spending, is one of the largest statistical factors in private choice, as well as the Sarva Shiksha Abhiyan program, specifically targeting high-poverty areas.

The fact that private school enrollment is demand-driven points to a larger commentary on the political economy of the developing world. In this case of education, the poor prefer to make consumer choices at a cost rather than to make free assistance. My conclusion counters the notion that the poor are willing to be passive recipients of charity. These schools are not supported by nonprofits or government voucher schemes; they are financially independent and get their cash flow from the families of their students. In the field of education in India, demand drives supply, and the poor are just as determined to make consumer choices as the rich.

Along these lines, studying private education in a comparative context is one way to address the relationship between governments and the private sector in a larger context. Researchers such as Hammer¹⁶², when exploring healthcare provision in the development world, explain how private sector activity can impact public investments. Across the developing world, entrepreneurs are increasingly pursuing private sector programs with social benefit. Researchers such as Jonathan Morduch,¹⁶³ C.K. Prahalad,¹⁶⁴ and London and Hart¹⁶⁵ talk about the possibility of social enterprises—privately run business models that

¹⁶⁰Prachi Srivastava, "Private Schooling and Mental Models about Girls' Schooling in India," *Compare*, 36(4), 2005, pp. 497-514.

¹⁶¹Jandhyalaya Tilak. *Determinants of Household Expenditure on Education in Rural India*. (New Delhi: National Council of Applied Economic Research, 2001).

¹⁶²Jeffrey Hammer, "Economic Analysis for Health Projects," *World Bank Research Observer* 12(1):47-72, 1997.

¹⁶³Jonathan Morduch, "The Microfinance Promise," *The Journal of Economic Literature*, Volume XXXVII (December 1999), pages 1569-1614

¹⁶⁴CK Prahalad, *The Fortune at the Bottom of the Pyramid*, (Philadelphia: Wharton School Publishing, 2004).

¹⁶⁵T. London and S. L. Hart, "Reinventing Strategies for Emerging Markets: Beyond the Transnational Model," *Journal of International Business Studies*, 35: 350-370, 2004.

provide services for social benefit—to spur economic development in the world in the way that traditional government programs in ways that nonprofit ventures and government poverty alleviation programs have not. Prahalad and Hall argue that low-income citizens, in many cases, prefer to pay low costs rather than receive free services, and private enterprise is able to address issues where government cannot.

Perhaps the most publicly prominent example is Muhammad Yunus and the Grameen Bank. Winner of the 2004 Nobel Peace Prize, Yunus is credited with having lifted millions of Bangladeshi citizens out of poverty with small-scale loans of as little as \$30/month. Following the example of microfinance, perhaps a political scientist interested in economic development ought to examine the role of the private sector, in conjunction with the public sector, in the developing world. On a large scale, this paper seeks to ground that argument specifically in the case of schools.

Still, scholars are skeptical of private enterprise as a cure-all: as Morduch explains, “the win-win rhetoric promising poverty alleviation with profits has moved far ahead of the evidence.”¹⁶⁶ Indeed, while some microfinance organizations such as Yunus and the Grameen Bank have done well economically, others are still developing a sustainable business model. But a private market does exist for schools, even among the very poor, and these case studies examine cases in which parents would choose low-cost schooling over free schooling, even with very little disposable income. By identifying factors related to private school enrollment, we can help answer, in one specific case, the relationship between governments and the private sector in factors related to services for the poor.

The low-cost private school model is not necessarily transferable, however, to public policies in developed countries. Academics such as Milton Friedman¹⁶⁷ and politicians such as George W. Bush¹⁶⁸ propose “school voucher” programs—publicly funded programs to give parents funds to pay for private schools. The research question here is not aimed at exploring the role of public assistance in private education, and so this study does not evaluate—and, therefore, is neither an endorsement for, nor a refutation of—programs such as school vouchers. Instead, this report illustrates how, in some of the poorest neighborhoods in the world, private schools are affordable to parents *without* vouchers or government assistance.

The beginning of this report addressed the common conception in the West that private schools are the bastion of the wealthy. This study does not necessarily provide a proof that private schooling for the poor is the most desirable education policy solution in developed countries. When analyzing the budgets of low-cost private schools, we find that many cost inputs—rent, salaries, and more—are substantially, proportionally lower than they would be in developed countries, and this is a primary reason why fees are so comparatively low. It is possible that private schools are not widespread enough in developed for the

¹⁶⁶ Morduch, 1999.

¹⁶⁷ Milton Friedman, “Public Schools: Make Them Private,” Cato Institute Briefing Paper No. 23, (Washington: Cato Institute, 1995)

¹⁶⁸ Michael Janofsky, “Parents Lead the Way as States Debate Voucher Schemes,” *New York Times*, January 31, 2000.

market to reduce the cost of making private schools accessible to low-income students in these countries, but this hypothesis is currently empirically unsupported.

Nevertheless, India alone is a country with over one sixth of the world's population, and the "developing world," broadly defined, contains a population that is much larger. This report is a testament to how a substantial proportion of the future of the developing world is being educated right now, and the causes of both private enrollment itself and variations across states. Governments and individuals, through action or inaction, are equally complicit, and policymakers, scholars, and government officials ought to study these causes in changing or addressing government or private schools in the future.

Suggested Future Reading On Low-Cost Private Schools

The literature on low-cost private schools is dense, and growing. Here is a catalog of works, organized by subject area, to explore the ecosystem surrounding private schools for the poor:

Case Studies on Low-Cost Private Schools in India

De, Anuradha, Jean Dreze, and the PROBE Team. *Public Report on Basic Education in India*. (Oxford: Oxford University Press, 1999).

Govinda, R. and N.V. Varghese *Quality of Primary Schooling in India: A Case Study of Madhya Pradesh*. (Paris: International Institute for Educational Planning, and New Delhi, NIEPA, 1993)

Hyderabad School Directory (Hyderabad: KAB Publications, 2007).

Joshi, Shruti. *International Education Initiative: Ecosystem Development Project*. (Atlanta: Gray Matters Capital Foundation, 2008).

Mehta, A. "Elementary Education in Unrecognized Schools in India: A Study of Punjab based on DISE data." (NIEPA, New Delhi, 2005).

Srivastava, Prachi. "Private Schooling and Mental Models about Girls' Schooling in India." *Compare*, 36(4), 2005, pp. 497-514.

Tooley, James, Pauline Dixon, and SV Gomathi. "Private schools and the millennium development goal of universal primary education: a census and comparative study in Hyderabad, India". *Oxford Review of Education*: 33:5, 539-560, 2007.

The Private Education Sector in India

Bashir, S. "The Cost Effectiveness of Public and Private Schools: knowledge gaps, new research methodologies, and an application in India." in C. Colclough (Ed.) *Marketizing Health and Education in Developing Countries*. (Oxford: Clarendon Press, 1997).

De, A., Noronha, C. & Samson, M. "Private Schools for Less Privileged: some insights from a case study." *Economic and Political Weekly*, 37(52), 2002, 5230-5236

Kingdon, G.G. *Private Schooling in India: size, nature, and equity effects*. London School of Economics, DEP no. 72, 1996.

Mehrotra, Santosh, and P. R. Pancharukhi, "Universalising Elementary Education in India: is the Private School the Answer?" in P. Srivastava & G Walford (Eds) *Private Schooling in Less Economically Developed Countries: Asian and African Perspectives*. (Oxford: Symposium Books, 2007).

Shah, Parth J. and Veetil, Vipin P., "Private Education for Poor in India." SSRN, December 2006, <<http://ssrn.com/abstract=950146>>

Srivastava, Prachi. "For Philanthropy or Profit? The Management and Operation of Low-Fee Private Schools in India," in P. Srivastava & G Walford (Eds) *Private Schooling in Less Economically Developed Countries: Asian and African Perspectives*, 67-87. (Oxford: Symposium Books, 2007).

Tilak, J.B. *Private Schooling in Rural India*. Working Paper Series, No. 76. (New Delhi: NCERT, 2001.)

Tilak, J.B. *Determinants of Household Expenditure on Education in Rural India*. (New Delhi: National Council of Applied Economic Research, 2001).

Tooley, James, and Pauline Dixon. "De facto' privatization and education of the poor," *Compare: A Journal of Comparative Education*, Volume 36, no., 3, 2006, p. 444.

Low-Cost Private Schools Globally

International Comparison

Bangay, Colin. "Private education: relevant or redundant? Private education, decentralisation and national provision in Indonesia." *Compare*, Volume 35, Number 2, June 2005, pp. 167-179(13).

Education for All Global Monitoring Team. *Overcoming Inequality: Why Governance Matters*. (Paris: UNESCO, 2008).

James, Estelle. "Why do different countries choose a different public-private mix of educational services?" (1993). *Journal of Human Resources*, 28:3.

Kitaev, Igor. "Private Education in Developing and Transitional Countries." in P. Srivastava & G Walford (Eds) *Private Schooling in Less Economically Developed Countries: Asian and African Perspectives* (Oxford: Symposium Books, 2007).

Milanovic, Branko, and Shlomo Yitzhaki. "Decomposing World Income: Does the World Have A Middle Class?" *Review of Income and Wealth*, Series 48, Number 2, June 2002.

Tooley, James. *The Global Education Industry: Lessons from Private Education in Developing Countries*. (Philadelphia: Coronet Books, 2001).

Tooley, James. *The Enterprise of Education*. (New Delhi, Liberty Institute, 2001).

Tooley, James, and Pauline Dixon. "Private Education for Low-Income Families," in P. Srivastava & G Walford (Eds) *Private Schooling in Less Economically Developed Countries: Asian and African Perspectives* (Oxford: Symposium Books, 2007).

Watkins, K. "Private Education and Education for All." *Economic Affairs*: 24:4, 2004, p. 8-11.

Pakistan

Alderman, H., Orazem, P.F., and Paterno, E.M. School Quality, School Cost, and the Public/Private School Choices of Low-income Households in Pakistan, *Journal of Human Resources*, 36 (2), 2001, 304-326.

Sub-Saharan Africa

Lewin, Keith. "The Limits to Growth of Non-government Private Schooling in sub-Saharan Africa. in P. Srivastava & G Walford (Eds) *Private Schooling in Less Economically Developed Countries: Asian and African Perspectives*, 67-87. (Oxford: Symposium Books, 2007).

Glick, P. & Sahn, D.E. "The Demand for Primary Schooling in Madagascar: price, quality, and the choice between public and private providers," *Journal of Development Economics* 79 (1), 2006, 118-145.

Maile, Simeon. "False Consciousness in School Choice: School Choice in South Africa," *Education and Urban Society*, 37(1), 2004, 94-116.

Rose, Pauline. Privatisation and Decentralisation of Schooling in Malawi: default or design? *Compare*, 35(2), 153-165, 2005.

Rose, P., & Adelabu, M. Private Sector Contributions to Education for All in Nigeria, in P. Srivastava & G Walford (Eds) *Private Schooling in Less Economically Developed Countries: Asian and African Perspectives*, 67-87, (Oxford: Symposium Books, 2007).

Indian Government/Politics of Education

Dreze, Jean, and Aparitja Goyal, "Future of Mid-Day Meals," *Economic and Political Weekly*, 38:44 (November 2003), p. 4673-4683.

McMillan, Alastair. *Standing at the Margins: Representation and Electoral Reservation in India*. (Oxford: Oxford University Press, 2005).

Rajan, Si, and A Jakayumar. "The Impact of the Noon Meal Program on Primary Education: An Exploratory Study in Tamil Nadu." *Economic and Political Weekly*, 27:43/44(October 1992), p. 2372-2380.

Private School Recognition in India

Dixon, Pauline. "The Regulation of Private schools serving Low-income families in Hyderabad, India: An Austrian Economic Perspective." *Economic Affairs*, vol. 24, no. 4, December 2004, p. 31-37.

Dixon, Pauline. "An Inspector Calls: The Regulatory Environment in Andhra Pradesh," *International Journal of Educational Development*, Volume 25, Issue 3, May 2005, Pages 269-285.

Medium of Instruction: English or Mother Tongue?

Annamali, E. "Medium of Power: The Question of English in Education in India." 1998. in James W. Tollefson and Amy Tsui, "Medium of Instruction Policies: Which Agenda? Whose Agenda?" (London: Routledge, 2003).

Faust, David, and Richa Nagar. "Politics of Development in Postcolonial India: English-Medium Education and Social Fracturing," *Economic and Political Weekly*, Vol. 36, No. 30 (Jul. 28-Aug. 3, 2001) p. 2878-2883

Raina, Badri. "A note on language, and the politics of English in India." In Svati Joshi (ed.), *Rethinking English*. (New Delhi: Trianka, 1991). p. 264-97.

Sonntag, Selma. "The Political Salience of Language in Bihar and Uttar Pradesh." *Commonwealth and Comparative Politics*, 1994, 34(2)1-18.

Teachers in India

All India Federation of Teachers. "Teachers' Absenteeism and Infrastructure of Schools in India." (Ahmedabad: Education International, 2008).

Ballou, D., and M. Podgursky. "Teacher Unions and Education Reform: Gaining Control of Professional Licensing and Advancement." in Tom Loveless (ed.) *Conflicting Missions: Teacher Union and Education Reform*. (Washington, DC: The Brookings Institution, 2000).

Hoxby, Caroline. "How Teachers' Unions Affect Education Production," *Quarterly Journal of Economics*, 111 (4): 671-678.

Kansal, S.M. "Disparity in Income and Levels of Living Among Teachers in Delhi." *Economic and Political Weekly*, 25 No. 46, 17th November 1990: 2547-2554.

Kingdon, Geeta, and Francis Teal. "Does performance related pay for teachers improve student performance? Some evidence from India." *Economics of Education Review*, Elsevier, vol. 26(4), August 2007, p. 473-486.

Kingdon, G., and Francis Teal "Teachers Unions, Teacher Pay and Student Performance in India: A Pupil Fixed Approach." CESifo Working Paper No. 248, <www.cesifo-group.org/wp>, 2008.

Kremer et. al. "Teacher Absence in India: A Snapshot." *Journal of the European Economic Association*, April/May 2005, Vol. 3 No. 2-3, 658-667

School Privatization (General)

- Brighouse, Harry. *School Choice and Social Justice*. (Oxford: Oxford University Press, 2000).
- Couch et. Al. "Private School Enrollment and Public School Performance." *Public Choice*, Volume 6 Number 4, 1993.
- Coulson, Andrew. *Market Education: The Unknown History*. (New Brunswick and London: Transaction Publishers, 1999).
- Friedman, Milton. "Public Schools: Make Them Private." *Cato Institute Briefing Paper No. 23*. (Washington: Cato Institute, 1995).
- Tooley, James. *Reclaiming Education*. (London: Continuum, 2000).
- West, E.G. *Education and the State*. (London: Transatlantic Arts, 1970).

Databases for Information On Indian Education

- "Census of India." 2009. <www.censusindia.gov.in>.
- District Information System for Education. Contains block-level information on school enrollment, school location, teaching statistics, Muslim enrollment, private enrollment, government-school enrollment, and more. <www.dise.in>
- District Information System for Education. "2007-2008 Report." Delhi: National Institute on Education Planning and Administration, 19 February 2009, <www.dise.in>
- Education Statistics of India. "State-Wise and Gender-Wise Literacy Rates in Rural/Urban Areas." 2004. 15 December 2008. <<http://education.nic.in/stats/detail/3.pdf>>
- National Council on Education Research and Training. "NCERT 7th All-India Education Survey." 2003. <<http://gov.ua.nic.in/NScheduleData/>>.
- National Council on Education Research and Training, "NCERT All-India Education Survey, 1973" <<http://gov.ua.nic.in/NScheduleData/>>
- National Election Study Team. "Results: National Election Study 2004." Delhi: CSDS, 2004. 3 January 2009. <<http://www.csdsdelhi.org/nes2004/>>
- National Institute of Education Awareness and Planning. "District System Information on Education, 2008." <www.dise.in/ar2005.html>
- Pratham Foundation. *Annual Status of Education Report 2008*. (New Delhi: Pratham Foundation, 2008).

“School Report Cards.” District Information System for Education. (New Delhi: National University of Education Planning and Administration, 2008). 17 February 2009. <www.schoolreportcards.in>

The World Bank, “EdStats,” 2008, <www.worldbank.org/education/edstats>.

The World Bank Group. “Doing Business in India.” *Doing Business in South Asia* (Washington: The World Bank, 2007).

The World Bank Group. *Doing Business in India 2009*. (Washington: The World Bank: 2009).

Private Schools for the Poor in the News

Banerji, R. Making the Grade: teach children the joy of learning, *The Times of India*, 14 July 2003.

“English Medium in Government Schools from this Academic Year,” *The Hindu*, May 7, 2008.

Johnson, TA, “Kannada Medium not must for private schools”, *Indian Express*, 3 July 2008.

Nagaraja, G. “Mixed Response to Workshop on English Medium Schools,” *The Hindu*, May 23, 2008.

State to Shut Down 105 unrecognized schools.” *Deccan Chronicle*. December 25 2008

Unni Krishnan (Supreme Court of India), T.M.A. Pai Foundation and Ors. vs. State of Karnatka and Ors., 31 October 2002, available at <http://indiankanoon.org/doc/512761/>.

Works Referenced

- Alderman, H., Orazem, P.F., and Paterno, E.M. School Quality, School Cost, and the Public/Private School Choices of Low-income Households in Pakistan, *Journal of Human Resources*, 36 (2), 2001, 304-326.
- Annamali, E. "Medium of Power: The Question of English in Education in India." 1998. in James W. Tollefson and Amy Tsui, "Medium of Instruction Policies: Which Agenda? Whose Agenda?" (London: Routledge, 2003).
- All India Federation of Teachers. "Teachers' Absenteeism and Infrastructure of Schools in India." (Ahmedabad: Education International, 2008).
- Banerji, R. Making the Grade: teach children the joy of learning, *The Times of India*, 14 July 2003.
- Ballou, D., and M. Podgursky. "Teacher Unions and Education Reform: Gaining Control of Professional Licensing and Advancement." in Tom Loveless (ed.) *Conflicting Missions: Teacher Union and Education Reform*. (Washington, DC: The Brookings Institution, 2000).
- Bangay, Colin. "Private education: relevant or redundant? Private education, decentralisation and national provision in Indonesia." *Compare*, Volume 35, Number 2, June 2005, pp. 167-179(13).
- Bashir, S. "The Cost Effectiveness of Public and Private Schools: knowledge gaps, new research methodologies, and an application in India." in C. Colclough (Ed.) *Marketizing Health and Education in Developing Countries*. (Oxford: Clarendon Press, 1997).
- Brighouse, Harry. *School Choice and Social Justice*. (Oxford: Oxford University Press, 2000).
- "Census of India." 2009. <www.censusindia.gov.in>.
- "Chavez Warns Private Schools Not To Resist His Inspectors." *Associated Press*. September 18, 2007.
- Constitution of India, Article 21, Section A.
- Couch et. Al. "Private School Enrollment and Public School Performance." *Public Choice*, Volume 6 Number 4, 1993.
- Coulson, Andrew. *Market Education: The Unknown History*. (New Brunswick and London: Transaction Publishers, 1999).
- De, Anuradha, Jean Dreze, and the PROBE Team. *Public Report on Basic Education in India*. (Oxford: Oxford University Press, 1999).

- De, A., Noronha, C. & Samson, M. "Private Schools for Less Privileged: some insights from a case study." *Economic and Political Weekly*, 37(52), 2002, 5230-5236
- District Information System for Education. "% of Teachers Engaged in Non-Teaching Activities." DISE Survey 2007. 20 December 2008. <www.dise.in>
- District Information System for Education. "Muslim Enrollment." 28 November 2008. <www.dise.in>
- District Information System for Education. "2007-2008 Report." Delhi: National Institute on Education Planning and Administration, 19 February 2009, <www.dise.in>
- Dixon, Pauline. "The Regulation of Private schools serving Low-income families in Hyderabad, India: An Austrian Economic Perspective." *Economic Affairs*, vol. 24, no. 4, December 2004, p. 31-37.
- Dixon, Pauline. "An Inspector Calls: The Regulatory Environment in Andhra Pradesh," *International Journal of Educational Development*, [Volume 25, Issue 3](#), May 2005, Pages 269-285.
- Dreze, Jean, and Aparitja Goyal, "Future of Mid-Day Meals," *Economic and Political Weekly*, 38:44 (November 2003), p. 4673-4683.
- Education for All Global Monitoring Team. *Overcoming Inequality: Why Governance Matters*. (Paris: UNESCO, 2008).
- Education Statistics of India. "State-Wise and Gender-Wise Literacy Rates in Rural/Urban Areas." 2004. 15 December 2008. <<http://education.nic.in/stats/detail/3.pdf>>
- "English Medium in Government Schools from this Academic Year," *The Hindu*, May 7, 2008.
- Faust, David, and Richa Nagar. "Politics of Development in Postcolonial India: English-Medium Education and Social Fracturing" *Economic and Political Weekly*, Vol. 36, No. 30 (Jul. 28-Aug. 3, 2001) p. 2878-2883
- Fifth Economic Census of India. "NDSP per Capita 2005." 1 December 2008. <mospi.gov.in/economic_census.htm>
- Friedman, Milton. "Public Schools: Make Them Private." *Cato Institute Briefing Paper No. 23*. (Washington: Cato Institute, 1995).
- George, AL, and Andrew Bennett. *Case Studies and Theory Development in the Social Sciences*. (Cambridge: MIT Press, 2005)
- Glick, P. & Sahn, D.E. "The Demand for Primary Schooling in Madagascar: price, quality, and the choice between public and private providers," *Journal of Development Economics* 79 (1), 2006, 118-145.

- Govinda, R. and N.V. Varghese *Quality of Primary Schooling in India: A Case Study of Madhya Pradesh*. (Paris: International Institute for Educational Planning, and New Delhi, NIEPA, 1993)
- Government of India. "State-Wise Number of Small Scale Industries in India 2007." Lok Sabha Unstarred Question No. 1047. 3 February 2009. <http://www.indiastat.com>, "Economic Data."
- Government of India, "State-Wise Registered Companies in India 2007," Government of India, Rajya Sabha Unstarred Question No. 192. 3 February 2009. <http://www.indiastat.com>. "Economic Data."
- Hammer, Jeffrey. "Economic Analysis for Health Projects." World Bank Research Observer 12(1):47–72, 1997.
- Hoxby, Caroline. "How Teachers' Unions Affect Education Production," *Quarterly Journal of Economics*, 111 (4): 671-678.
- Hyderabad School Directory* (Hyderabad: KAB Publications, 2007).
- James, Estelle. "Why do different countries choose a different public-private mix of educational services?" (1993). *Journal of Human Resources*, 28:3.
- Janofsky, Michael. "Parents Lead the Way as States Debate Voucher Schemes." *New York Times*, January 31, 2000.
- Johnson, TA, "Kannada Medium not must for private schools", *Indian Express*, 3 July 2008.
- Joshi, Shruti. *International Education Initiative: Ecosystem Development Project*. (Atlanta: Gray Matters Capital Foundation, 2008).
- Kansal, S.M. "Disparity in Income and Levels of Living Among Teachers in Delhi." *Economic and Political Weekly*, 25 No. 46, 17th November 1990: 2547-2554.
- King, Gary, Robert Keohane, and Sidney Verba. *Designing Social Inquiry*. (Princeton: Princeton University Press, 1994).
- Kingdon, G.G. Private Schooling in India: size, nature, and equity effects. London School of Economics, DEP no. 72, 1996.
- Kingdon, Geeta, and Francis Teal. "Does performance related pay for teachers improve student performance? Some evidence from India." *Economics of Education Review*, Elsevier, vol. 26(4), August 2007, p. 473-486.
- Kingdon, G., and Francis Teal "Teachers Unions, Teacher Pay and Student Performance in India: A Pupil Fixed Approach." CESifo Working Paper No. 248, <www.cesifo-group.org/wp>, 2008.

- Kitaev, Igor. "Private Education in Developing and Transitional Countries." in P. Srivastava & G Walford (Eds) *Private Schooling in Less Economically Developed Countries: Asian and African Perspectives* (Oxford: Symposium Books, 2007).
- Kremer et. al. "Teacher Absence in India: A Snapshot." *Journal of the European Economic Association*, April/May 2005, Vol. 3 No. 2-3, 658-667
- Lewin, Keith. "The Limits to Growth of Non-government Private Schooling in sub-Saharan Africa. in P. Srivastava & G Walford (Eds) *Private Schooling in Less Economically Developed Countries: Asian and African Perspectives*, 67-87. (Oxford: Symposium Books, 2007).
- London, T., and S. L. Hart. "Reinventing Strategies for Emerging Markets: Beyond the Transnational Model," *Journal of International Business Studies*, 35: 350-370, 2004.
- Maile, Simeon. "False Consciousness in School Choice: School Choice in South Africa," *Education and Urban Society*, 37(1), 2004, 94-116.
- Mehta, A. "Elementary Education in Unrecognized Schools in India: A Study of Punjab based on DISE data." (NIEPA, New Delhi, 2005).
- Mehrotra, Santosh, and P. R. Panchamukhi, "Universalising Elementary Education in India: is the Private School the Answer?" in P. Srivastava & G Walford (Eds) *Private Schooling in Less Economically Developed Countries: Asian and African Perspectives*. (Oxford: Symposium Books, 2007).
- McMillan, Alastair. *Standing at the Margins: Representation and Electoral Reservation in India*. (Oxford: Oxford University Press, 2005).
- Milanovic, Branko, and Shlomo Yitzhaki. "Decomposing World Income: Does the World Have A Middle Class?" *Review of Income and Wealth*, Series 48, Number 2, June 2002.
- Ministry of Human Revenue. "State-wise Percentage of Total Plan and Non-Plan Budgeted Expenditure on Education and Other Department of Total State Plan and Non-Plan Budgeted Expenditure (Revenue Account) in India, 2006-2007." Government of India. 3 February 2009.
<<http://www.indiastat.com/india/ShowData.asp?secid=442214&ptid=369168&level=7>>
- Morduch, Jonathan. "The Microfinance Promise." *The Journal of Economic Literature*, Volume XXXVII, December 1999, 1569-1614.
- Nagaraja, G. "Mixed Response to Workshop on English Medium Schools," *The Hindu*, May 23, 2008.
- National Council on Education Research and Training. "NCERT 7th All-India Education Survey." 2003. <<http://gov.ua.nic.in/NScheduleData/>>.

- National Council on Education Research and Training, "NCERT All-India Education Survey, 1973" <<http://gov.ua.nic.in/NScheduleData/>>
- National Election Study Team. "Results: National Election Study 2004." Delhi: CSDS, 2004. 3 January 2009. <<http://www.csdsdelhi.org/nes2004/>>
- National Institute of Education Awareness and Planning. "District System Information on Education, 2008." <www.dise.in/ar2005.html>
- Olson, Mancur (*The Logic of Collective Action*. (Cambridge: Harvard University Press, 1971).
- Ostrom, Elinor. "The Logic of Collective Action." in Michael McGinnis, *Polycentric Games and Institutions*, (Ann Arbor: University of Michigan Press, 2000).
- Prahalad, CK. *The Fortune at the Bottom of the Pyramid*, (Philadelphia: Wharton School Publishing, 2004).
- Pratham Foundation. *Annual Status of Education Report 2008*. (New Delhi: Pratham Foundation, 2008).
- Pushpendra. "Dalit Assertion Through Electoral Politics." *Economic and Political Weekly*, Vol. 34, No. 36 (Sep. 4-10, 1999), pp. 2609-2618.
- Raina, Badri. "A note on language, and the politics of English in India." In Svati Joshi (ed.), *Rethinking English*. (New Delhi: Trianka, 1991). p. 264-97.
- Rajan, Si, and A Jakayumar. "The Impact of the Noon Meal Program on Primary Education: An Exploratory Study in Tamil Nadu." *Economic and Political Weekly*, 27:43/44(October 1992), p. 2372-2380.
- Reserve Bank of India. "National State Domestic Product 2008." 15 February 2009. <www.indiastat.com>.
- "Report on Conditions of Work and Promotion in the Unorganized Sector." National Commission for Enterprises in the Unorganized Sector. 2005. 10 February 2009. <<http://nceus.gov.in/>>.
- Rivkin, S., E. Hanushek and J. Kain (2005). "Teachers, Schools, and Academic Achievement." *Econometrica*, 73(2):417-58.
- Rose, Pauline. Privatisation and Decentralisation of Schooling in Malawi: default or design? *Compare*, 35(2), 153-165, 2005.
- Rose, P., & Adelabu, M. Private Sector Contributions to Education for All in Nigeria, in P. Srivastava & G Walford (Eds) *Private Schooling in Less Economically Developed Countries: Asian and African Perspectives*, 67-87, (Oxford: Symposium Books, 2007).

- “School Report Cards.” District Information System for Education. (New Delhi: National University of Education Planning and Administration, 2008). 17 February 2009. <www.schoolreportcards.in>
- Shah, Parth J. and Veetil, Vipin P., “Private Education for Poor in India.” SSRN, December 2006, <<http://ssrn.com/abstract=950146>>
- Shields, Todd, and Robert Goidel. “Participation Rates, Socioeconomic Class Biases, and Congressional Elections: A Crossvalidation.” *American Journal of Political Science*, Vol. 41, No. 2 (Apr., 1997), pp. 683-691.
- Sonntag, Selma. “The Political Salience of Language in Bihar and Uttar Pradesh.” *Commonwealth and Comparative Politics*, 1994, 34(2)1-18.
- Srivastava, Prachi. “Private Schooling and Mental Models about Girls’ Schooling in India.” *Compare*, 36(4), 2005, pp. 497-514.
- Srivastava, Prachi. “For Philanthropy or Profit? The Management and Operation of Low-Fee Private Schools in India,” in P. Srivastava & G Walford (Eds) *Private Schooling in Less Economically Developed Countries: Asian and African Perspectives*, 67-87. (Oxford: Symposium Books, 2007).
- “State Assembly Elections: Results” <<http://www.indiastat.com>>.
- State to Shut Down 105 unrecognized schools.” *Deccan Chronicle*. December 25 2008
- “State Teachers’ Federation of India Manifesto.” Obtained in writing from Andhra Pradesh State Teachers Federation, 30 December 2008.
- “State-wise Funds Released under Sarva Shiksha Abhiyan in India (2005-2006 to 2006-2007).” Government of India. 3 February 2009. <<http://www.indiastat.com/india/>>, “Sarva Shiksha Abhiyan.”
- Tilak, J.B. *Private Schooling in Rural India*. Working Paper Series, No. 76. (New Delhi: NCERT, 2001.)
- Tilak, J.B. *Determinants of Household Expenditure on Education in Rural India*. (New Delhi: National Council of Applied Economic Research, 2001).
- Tooley, James. *Reclaiming Education*. (London: Continuum, 2000).
- Tooley, James. *The Global Education Industry: Lessons from Private Education in Developing Countries*. (Philadelphia: Coronet Books, 2001).
- Tooley, James. *The Enterprise of Education*. (New Delhi, Liberty Institute, 2001).
- Tooley, James, and Pauline Dixon. “De facto’ privatization and education of the poor,” *Compare: A Journal of Comparative Education*, Volume 36, no., 3, 2006, p. 444.

- Tooley, James, and Pauline Dixon. "Private Education for Low-Income Families," in P. Srivastava & G Walford (Eds) *Private Schooling in Less Economically Developed Countries: Asian and African Perspectives* (Oxford: Symposium Books, 2007).
- Tooley, James, Pauline Dixon, and SV Gomathi. "Private schools and the millennium development goal of universal primary education: a census and comparative study in Hyderabad, India". *Oxford Review of Education*. 33:5, 539-560, 2007.
- Tsebelis, George *Nested Games: Rational Choice in Comparative Politics*. (Berkeley: University of California Press, 1990).
- Tullock, Gordon, Arthur Seldon, and Gordon Brady. *Government Failure: a Primer in Public Choice*. (Washington: Cato Institute, 2002).
- Unni Krishnan (Supreme Court of India), T.M.A. Pai Foundation and Ors. vs. State of Karnataka and Ors., 31 October 2002, available at <http://indiankanoon.org/doc/512761/>.
- United Nations, "Resolution Adopted by the General Assembly: United Nations Millennium Declaration," 2000. United Nations, 3 April 2009, <www.un.org/millennium/declaration/ares552e.pdf>
- United Nations Children's Fund. "UN Convention on the Rights of the Child." 1989. 21 December 2008, <www.unicef.org/crc>
- Vera-Savala, America. "Evo Morales has Plans for Bolivia." *In These Times*, December 18, 2005.
- Watkins, K. "Private Education and Education for All." *Economic Affairs*: 24:4, 2004, p. 8-11.
- West, E.G. *Education and the State*. (London: Transatlantic Arts, 1970).
- West, E.G. "The Political Economy of American Public School Legislation," in E.G. West, *Education and the State, (3rd edition)*, (Indianapolis: Liberty Fund, 1994).
- The World Bank, "EdStats," 2008, <www.worldbank.org/education/edstats>.
- The World Bank Group. "Doing Business in India." *Doing Business in South Asia* (Washington: The World Bank, 2007).
- The World Bank Group. *Doing Business in India 2009*. (Washington: The World Bank: 2009).
- Yadav, Yogendra. "Understanding the Second Democratic Upsurge." in Francine Frankel *et. al.* (eds) *Transforming India, Social and Political Dynamics of Democracy*. (Oxford, Oxford University Press, 2000)