Does Cost of Primary Education Matter: Evidence from Rural India

Summary

We find that direct costs of schooling reduce the probability of children attending school thereby making it difficult to achieve one of the Millennium Development Goals unless costs are further subsidized. Using data from rural India on 46,430 children, we find that a one unit increment in the logarithm of cost of primary schooling (Rupees 190) reduces the likelihood of going to school by 3 percentage points. This finding is robust across different measures of cost. Financial constraints too adversely affect schooling outcomes. We find that the probability of a child going to school from a household in the top wealth quartile is 11 percentage points higher than for a child from the bottom quartile.

1 Introduction

The Millennium Development Goals (MDG) include the objective of achieving universal primary education, i.e., to ensure that all boys and girls complete primary schooling. In India, in 1997, 67 million children in the age group 6-10 were attending primary school, while 28 - 32 million primary-aged children were not (World Bank 1997). With a large percentage of Indian children not attending school, if the MDG are to be met, then there is an urgent need for public action.

There is a burgeoning literature on the determinants of school attendance, expenditure on education and related schooling outcomes. One strand of literature examines whether primary education is indeed free and the related issue of form and extent of subsidies (Panchamukhi 1990, Tilak 1996a, 1996b, 2002, 2004). Panchamukhi (1990) found that households incurred substantial expenditures on education, both in government and local body schools[i]. Tilak (1996a, 1996b) argued that contrary to popular belief, primary education was not free in India, and that households indeed spend substantial sums of money. Among the costs incurred, even in government primary schools, are tuition fee, examination fee and other fees. Tilak (2002) concludes, "households from even lower socio-economic background, low income groups, households whose primary occupation is not high in the occupational hierarchy, all spend considerable amounts on acquiring education, including specifically elementary education, which is expected to be provided by the State free to all" (pp. 55-56). The Public Report on Basic Education in India (PROBE 1999) finds that in northern states of

India, such costs are substantial: “In fact, ‘schooling is too expensive’ came first (just ahead of the need for child labour) among the reasons cited by PROBE respondents to explain why a child had never been to school” (p. 32). In 1995-96, the average expenditure per student pursuing primary education in rural India in a government school was Rs. 219, for students going to local body schools, private aided schools and private unaided schools were respectively Rs 223, Rs 622 and Rs. 911 respectively (National Sample Survey Organization 1998).

Papers analysing the determinants of school participation using survey data from India typically concentrate on school quality and often deal with northern states for which such data are available. We use the 52nd round nationwide data of the National Sample Survey Organization (NSSO), India, to examine the factors affecting schooling decisions in rural India. We focus on direct costs of primary schooling, viz. fees, books, and stationery, an issue of paramount importance if the MDG have to be met. We shed light on whether such costs affect the likelihood of attending primary school. We seek to understand which households are most affected by the cost of education.

We also focus on the differences across social groups and in particular the differences between the following minority groups - scheduled castes and scheduled tribes. Scheduled castes are households characterized by social, educational and economic backwardness. On the other hand scheduled tribes are social groups that exhibit distinctive culture, geographical isolation, shyness of contact with the community at large and economic backwardness. Dreze and Kingdon (2001) point out that children from scheduled caste households have an ‘intrinsic disadvantage’. The probability of these children going to school is relatively low. The District Primary Education Program

(DPEP) tries to address this issue by reaching out to scheduled caste and scheduled tribe households, girls, working children, and disabled children (Shukla 1999).

We find that the probability of children from scheduled caste households going to school is lower by 4 percentage points as compared to other classes. For children from scheduled tribe households it is even lower: 16.3 percentage points.

Our results also confirm the importance of a household's economic status in children's attendance decision. We find that the probability of a child from a household in the top non food expenditure quartile going to school is higher by over 11 percentage points compared to a child from the bottom wealth quartile

An increase of Rs. 190 in the cost of primary schooling, (measured by cost of tuition, examination, other fees, books and stationery) reduces the likelihood of going to school by 3 percentage points. This finding is robust across alternative measures of cost. Also, the cost of schooling binds for the first three wealth quartiles of the population. Moreover, we find that the cost of schooling deters attendance for girls more than for boys. While the cost binds for the first quartile for boys, it binds for the first and second quartile for girls. These numbers suggest that despite government policies aimed at subsidizing the costs of primary education, direct costs of schooling deter positive educational outcomes.

Structure of Paper

2 Issues

The literature on child schooling reveals the following stylised facts, which are also uncovered by Grootaert and Patrinos (1999) in their four country study (Côte

d'Ivoire, Colombia, Bolivia, Philippines). Firstly, parental education has a strong positive influence on schooling outcomes and in particular for the girl child. The impact of mother's education is more pronounced for the girl child than for boys. Secondly, the economic well being of the household as measured by income or wealth indicators affects the likelihood of going to school. Poorer households are prone to income shocks and unable to insure themselves. Credit constraints prevent them from borrowing. They are less likely to send their children to school and more likely to pull the children out of school in the event of an adverse shock. Hence, there is also a link between the occupation of the household head and the likelihood of going to school. Thirdly, sibling rivalry too is important. Girls are likely to be pulled out of school in order to help with household chores.

Grootaert and Patrinos (1999) conclude that the key factors affecting child labour are household size and composition, education and employment status of the parents, household's ability to cope with income fluctuations, functioning of the labour market and the prevailing production technology. They find that even after conditioning on household characteristics, financial constraints increase the probability of child labour. They argue that since poor families are unable to insure themselves against adverse (income) shocks, children's labour is important for their ability to cope with the shock. This is true since children's wages comprise a large share of the family budget. Hence, it is also recognized that child labour and child schooling is not an either or decision and that the two are not mutually incompatible.

In the Indian context, analysing the National Council of Applied Economic Research (NCAER) data, Duraisamy (2002) concludes that parental education, family

income, and availability of middle schools within the village have a significant positive effect on child school enrolment decisions in India. Dreze and Kingdon (2001) and Leclercq (2001a, 2001b) find similar results for north India. However, they stress school quality as the key determinant of enrolment and grade attainment. Chin (2002), addressing one aspect of Operation Blackboard in India (change from one-teacher to two-teacher schools), finds that changes in school quality have a bigger impact on school completion and literacy among girls than boys. Kochar (2001) proxies for school quality by student teacher ratio and finds that this affects the probability of going to school.

However, the above studies have not explicitly focused on the cost of education. As mentioned earlier, in the Indian context, households incur large expenditures on children going to private schools, government and local body schools. Ilahi (2001) recognizes that ignoring the direct costs of schooling leads to a missing variable problem in schooling, labour and housework regressions. In the Indian context, we seek to explore this issue in greater detail.

2 Data

This study uses a nationwide rural household level survey data collected by National Sample Survey Organization, India in its 52nd round on "Participation in Education". The survey was conducted between July 1995 - June 1996. For details on sampling design and other related issues see National Sample Survey Organization (1998).

Since we concentrate on primary schooling, we look at children in the age group 5-12, covering 46,430 children. In addition to household-specific information, the survey

provides us cost information for children who go to school. For those who do not go to school the reasons for not attending school were recorded.

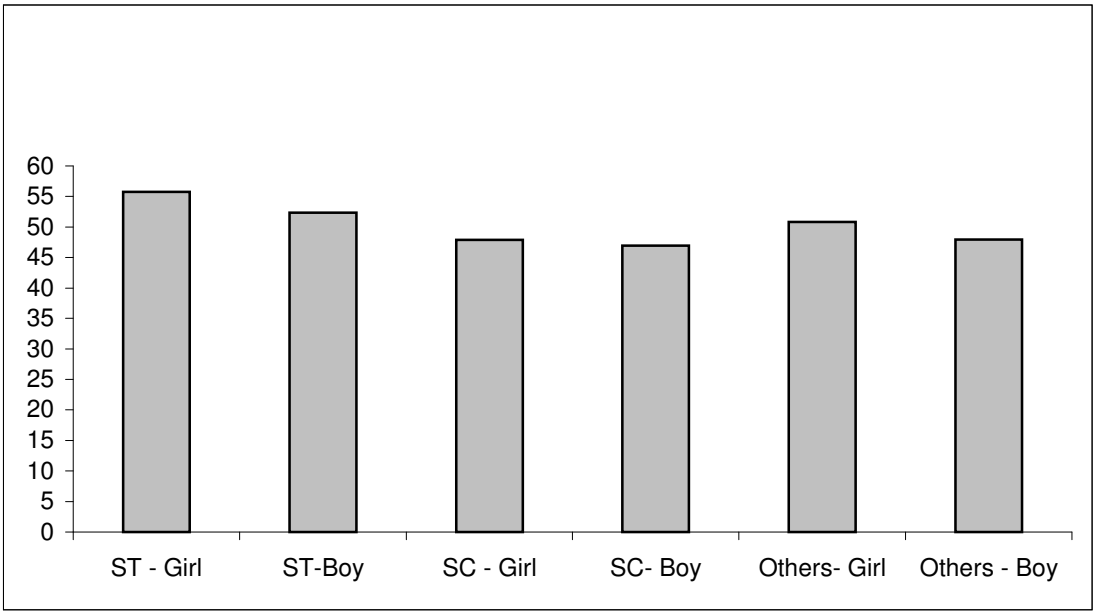
In the data set, 16 per cent of children are from scheduled tribe households, 19 per cent from scheduled caste households and the remaining are from other social groups. The percentage of boys and girls in the sample are 54 and 46, respectively.

Nearly 29 per cent of the children in our sample do not go to school. This includes those who have never enrolled and those who are not attending any more. There are sharp differences across gender. While nearly 23 per cent of boys in our sample do not attend school, the corresponding number for the girls is 35 per cent. Disaggregating according to social group reveals that 37 per cent of the children from scheduled tribe households and 32 per cent from the scheduled caste households do not attend while the corresponding figure for children from other social groups is 25 per cent.

As per the 1991 census data, the literacy levels among scheduled castes is 37 percent, among scheduled tribe households is 30 per cent as compared to the national average of 52 percent.

Using the data on reasons why a child did not attend school, we find that parents' or the child's attitude (no tradition in community, education not considered useful and parents not interested) towards education matters. Over 50 per cent of the respondents feel that education is not useful. Disaggregating according to social group reveals that this problem is of a lesser concern in case of households belonging to scheduled castes as compared to scheduled tribe households (Figure 1).

Figure 1: Percentage of Households having a Child not Attending School Considering Education not Useful, by Social Group and Gender



Source: NSSO 1998

Some attention has been devoted in the literature to the problems faced by children from scheduled tribe households (National Council of Educational Research and Training (NCERT) 1995a, 1995b, 1995c, 1995d). The scheduled tribes live in geographically isolated areas and are consequently not exposed to education and the mainstream society. It has been suggested that steps need to be taken to secure greater participation of parents of tribal children in school education and make them aware of the different incentive schemes for tribal children. The decision made by the household is conditioned on many factors including attitude towards education in the tribal community. Educated parents are more likely to send their children to school. The complaint by the parents of tribal children of an uninteresting curriculum, documented by earlier studies, needs to be addressed by greater awareness and hence participation on the part of the parents. The NCERT studies have suggested that village level education

committees, which have been successful in the western state of Maharashtra, need to be replicated in other states.

Figure 2: Percentage of Households Giving Financial Reasons for Child not Attending School, by Social Group

Source: NSSO 1998

Financial constraints are the second largest reason for non-attendance or non-enrolment. These constraints appear to bind more for the scheduled caste households. While 20 per cent of the scheduled caste households report that they do not send their children to school because of financial reasons (financial constraint, work for wage or salary, participation in other economic activities), the corresponding numbers for ST and other social groups are lower at 10.5 and 14.7 per cent, respectively (Figure 2).

If the price of schooling is too high or household income is too low then children might not be sent to school. Households incur expenditure on education irrespective of whether their child goes to a public school or a private school. In the data set, the average

expenditure on educating a child in public or local body schools is Rs. 336 per annum[ii] and the coefficient of variation is 1.36. There exists considerable variation in the cost of education across the states of India (Table 1).

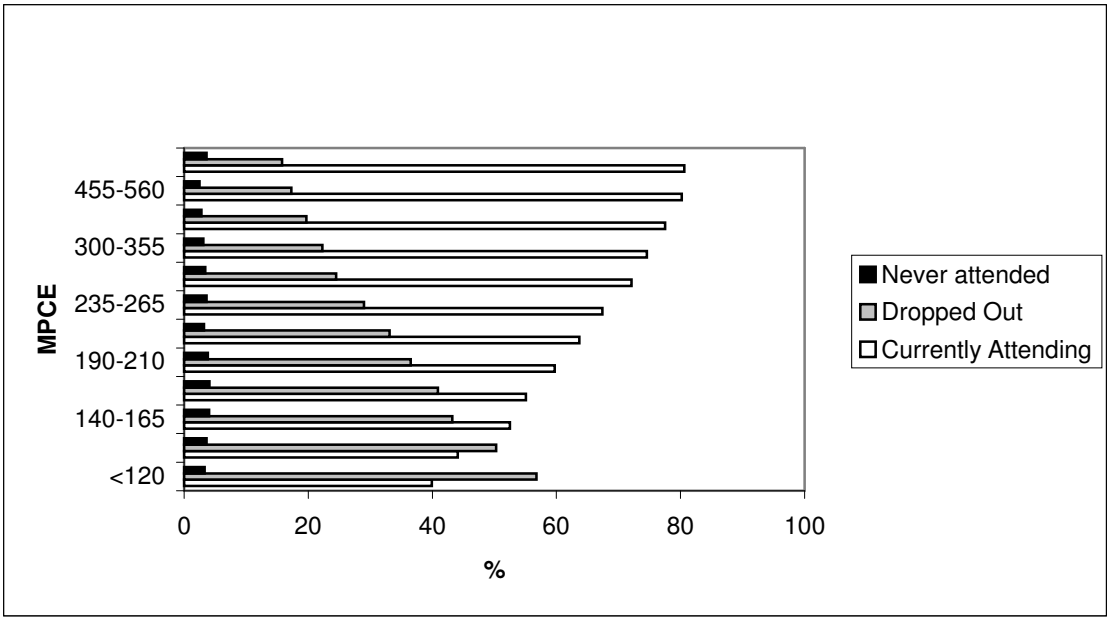
We find that there is not much variation in the percentage of children who never attended school across the different monthly per capita expenditure (MPCE) groups (Figure 3). It is also evident that children from richer households are less likely to drop out of school as compared to children from poorer households. The percentage of children dropping out is lower for households which have higher MPCE and higher for households with low MPCE. Again, the percentage of children attending is higher for households with higher MPCE and lower for households with low MPCE.

Table 1: Average Expenditure (Rs.) Per Student Pursuing Primary Education in Rural India, by State

State / Union Territory	Rupees	State / Union Territory	Rupees
Andaman & Nicobar Islands	623	Lakshwadeep	228
Andhra Pradesh	234	Madhya Pradesh	193
Arunachal Pradesh	483	Maharashtra	266
Assam	199	Manipur	625
Bihar	230	Meghalaya	753
Chandigarh	635	Mizoram	639
Dadra & Nagar Haveli	1863	Nagaland	1210
Daman & Diu	1523	Orissa	199
Delhi	702	Pondicherry	529
Goa	550	Punjab	890
Gujarat	172	Rajasthan	316
Haryana	687	Sikkim	686
Himachal Pradesh	501	Tamil Nadu	267
Jammu & Kashmir	721	Tripura	456
Karnataka	132	Uttar Pradesh	320
Kerala	658	West Bengal	245

Source: NSSO (1998)

Figure 3: Distribution of Children by Status of Attendance & Household Monthly Per Capita Expenditure (MPCE)



Source: NSSO 1998

We find evidence in favour of a gender bias with regard to household chores across all social groups. Girls are more likely to stay home to attend to household chores instead of boys. For instance, in the case of scheduled tribe households, less than 3 per cent of the boys stay at home to attend to household chores while slightly over 5 per cent of the girls stay at home on account of this fact. This phenomenon is true for the other social groups also (Figure 4).

Figure 4: Percentage of Households having a Child not Attending School Reporting Domestic Duties as Hindrance to Attending School, by Social Group

Source: NSSO 1998

3 Empirical Analysis

A survey of literature suggests that the decision on whether a child is enrolled depends on: child characteristics, parental characteristics, household demographic and economic characteristics, cost of schooling, school quality, wage and employment opportunities for children (which we call competing opportunities) and village and district level characteristics. The summary statistics of the variables used in the analysis are presented in Table 2.

School Attendance: We have information on whether a child is attending school, enrolled but not attending (dropout) or whether the child has never enrolled.

For our analysis we group the latter two categories. The reason we group the two categories is because we do not have information on the characteristics of the household when the decision to drop out was taken. Hence our dependent variable is binary (0 being not attending and 1 being attending school).

Child Characteristics: The age and sex of the child affect the likelihood of going to school. In India there is evidence of discrimination against the girl child. Girls are likely to be pulled out of school and asked to help in domestic chores and to look after their younger siblings[iii]. The age of the child is important. Grooteart and Patrinos (1999) argue that the older the child the more likely that he or she would work for wages or within the household. However in our case we are focusing only on primary school and hence children might start school late. But there might be an age beyond which the child might never enrol in school. Hence, we also include the square of the child's age. The longer the delay in enrolling the child in school, the lower would be the likelihood of attendance.

Table 2: Descriptive Statistics

		Mean	SD
Scheduled Tribe	1 if child belongs to a household from scheduled tribe else 0	0.16	0.38
Scheduled Caste	1 if child belongs to a household from scheduled caste else 0	0.19	0.39
Head Female	1 if household head is female else 0	0.06	0.24
Head Literate	1 if household head is literate, 0 otherwise	0.52	0.50
#Children < Age 5	No of children below the age of 5 in the household	0.76	1.00
#People > Age 60	No of people over the age of 60 in the household	3.17	1.85
Non Food Expenditure	Logarithm of the sum of household's annual expenditure on non food items.	8.00	0.65
Age	Age of child	8.75	2.30
Age Squared	Square of age of child	81.94	40.17
Distance	1 if distance to nearest primary school is less than 2 kilometers else 0	0.95	0.23
Telephone	1 if telephone facility is available within the village else 0	0.35	0.48
AW Road	1 if villagers have access to all weather road	0.60	0.49
Bus Service	1 if there is a bus road passing through the village \ through its boundary and there is a bus stop for the village else 0	0.46	0.50
TLC	1 if village was covered under Total Literacy Campaign else 0	0.48	0.50
Midday Meal	1 if village has at least one school offering the mid-day meal program else 0	0.35	0.48
lncostv1	Logarithm of the sum of costs incurred on tuition, books, exam fees, stationery and other fees	4.71	0.82
lncostv2	Logarithm of the sum of costs incurred on tuition, books, exam fees, uniform, stationery and other fees	5.16	0.90
lncostv3	Logarithm of the sum of costs incurred on tuition, books, exam fees, uniform, stationery, transport and other fees	5.16	0.91

Characteristics of the Household Head: The sex of the household head and whether the household head is literate or illiterate influences the schooling decision. Educated parents or household heads are more likely to send their children to school. The literature suggests that mother's education improves girl child's schooling outc omes. We use two variables to capture household head characteristics: sex and literacy[iv].

Household Characteristics: The social group, size and composition of the household greatly influence schooling decisions. Our data consists of households belonging to three social groups: scheduled caste, scheduled tribe and other groups. We control for household size and composition by constructing two variables: the number of children in the household below the age of five and the number of people in the household above the age of 60. The higher the number of children below the age of five, the lower would be the probability of a girl child going to school. This variable should not affect the probability of a boy going to school. The presence of members over the age of 60 is often interpreted as a drag on household resources. However, our interpretation is markedly different. In the Indian rural society, it is common for the grandparents to stay with the rest of the family. In our opinion, the elderly contribute to the household in one of two ways -- they could be supplementing the income of the household and could be helping out in household chores including taking care of children below age 5.

Household Wealth: Since we do not have information on ownership of assets, we control for household economic characteristics by constructing a proxy for wealth. Other studies have used principal component analysis to construct an index of well being of the household (Filmer and Pritchett 2001). Our variable is derived by summing the household's annual expenditure[v] on non food items. As an explanatory variable we

include dummy variables representing the (wealth) quartile that the household falls in. We believe that this measure is a good proxy for assets and is not endogenous (like income), thereby not biasing our estimates. Households with higher levels of non-food expenditure are relatively better off than households spending little on non-food items. The average annual expenditure on non food items across all households is Rs 3,768.

Measuring the Cost of Education: The cost of schooling is a major determinant of the likelihood of the child going to school. We, however, do not have information on what the direct cost would have been for the children who do not go to school. The standard way to tackle this problem is to construct average expenditure across households over a geographical unit (village or district). This is the approach adopted in such situations (Ilahi 2001, Grooteart et al. 1999, Mason et al. 1997). We construct an exogenous measure of cost (by social group) in the following manner. We utilize the breakdown of academic costs incurred by a student going to a government or a local body school, according to the following categories; expenditure on tuition, examination, other fees, books, stationery, uniform, transport, private coaching and other academic expenditure. It is reasonable to argue that the average expenditures incurred under the first five categories for a child going to a public school are exogenous[vi]. At the same time constructing this average (according to social group thus taking account of subsidies provided to scheduled castes and scheduled tribes) for those going to public school gives us the basic cost that needs to be incurred over a geographical region. We construct the cost measure at the village level. If there aren't sufficient observations for any particular village, we impute the cost at the district level. We take the logarithm of the sum of the costs under the first five categories.

The average cost of schooling across all social groups is Rs. 148 and the coefficient of variation is 0.80. Notice the large decline in the coefficient of variation compared to that of the total cost reported earlier. The average cost of education in case of scheduled tribe and scheduled caste children are respectively Rs. 150 and Rs. 126. For children from all other social groups, the cost is Rs. 155. We also construct two more cost variables: one including transport cost and another including transport cost and the expenditure on uniforms, as a robustness check.

School Availability & Quality: We have limited information on other measures of school quality. Dreze and Kingdon (2001) interpret the provision of a mid-day meal as one aspect of school quality. A school is said to have a mid-day meal if it regularly provides standard food to all or some students as mid-day meal, tiffin, etc., free or subsidized. We reconstruct the mid-day meal variable at the village level. We construct a dummy variable, which takes the value of 1 if there exists at least one school in the village offering mid-day meal and 0 otherwise. This would mean that children who go to schools not providing a mid-day meal are assigned a value of 1 if there exists another school in the village, which provides a mid-day meal.

The mid-day meal scheme was introduced only in 1995-96. In the initial phases (and to date), there were (are) substantial differences in how the scheme worked across the states of India. Given this, we are not sure the extent to which this variable will explain school attendance decisions in our analysis. It is precisely for this reason that we opt to treat mid-day meal as a village level variable rather than a school variable.

Competing Opportunities: We follow Grootaert et al. (1999) who partially capture the indirect cost of school attendance by using a dummy for distance to school. We also

capture the indirect cost of school attendance by using a dummy for distance (over two kilometres or less than that) to school.

Employment opportunities available to the children and the wages paid to children are important determinants of schooling decisions. However, we do not have information on these variables. Hence we are not able to control for this.

Village and District Characteristics: In India, under the National Literacy Mission, the Total Literacy Campaign (TLC) was organized in many parts of the country. The goal of the National Literacy Mission was to attain full literacy, and it sought to achieve this goal by imparting functional literacy to illiterates in the 15-35 age group. In substance, the TLC offers these individuals a second chance, in case they missed the opportunity or were denied access to mainstream formal education. If a village was covered under TLC during the five years before the survey then the dummy variable took the value 1, else 0. This variable will pick up the effect of TLC on child schooling decisions.

In order to capture variations across villages we use the following variables in the regression: presence of an all weather road, availability of telephone facilities and bus services in the village. These variables would capture the extent of integration of the village with adjoining regions including market centres and towns.

As a proxy for other differences we could have included a state level dummy variable. However this would not pick up intrastate differences. Hence we use the classification used by NSSO, dividing each state (the small states are not divided) into distinct geographical divisions. We use the geographical demarcations used by the NSSO for constructing the region dummies.

4 The Empirical Model

Dreze and Kingdon (1999) provide a theoretical model of schooling decisions in the cost-benefit framework. Let the fixed cost of schooling be c. This, in our case will include the minimum expenditure required to go to a public school. This cost is assumed to be the same across households in the same village, but can differ across villages and district. A household is assumed to choose an option such that it is

$$\text{Max}\{B(x; w, z) + U(Y - c - x; w), U(Y, w)\}$$

where **w** is a vector of household characteristics, **z** is a vector of school characteristics, Y is income, U is utility from current consumption and B represents the perceived benefits of education. The functions U(.) and B(.) are household-invariant, but x (expenditure on the education of a particular child), Y, **w** and **z** are household-specific (though superscripts denoting households are omitted, for clarity). B(.) and U(.) are assumed to be increasing and concave in x and current consumption, respectively. B(.) is also assumed to be increasing in **z**, the components of which may be thought of as indicators of 'school quality'.

Let $x^*(Y,\mathbf{w},\mathbf{z})$ be the solution of the problem if the child is enrolled and $V(Y,\mathbf{w},\mathbf{z})$ the maximum value function. Then the natural criterion for enrolling the child is:

$$\text{Enrol if } V(Y,\mathbf{w},\mathbf{z},\mathbf{c}) - U(Y;\mathbf{w}) > 0.$$

This simple model leads to several predictions. We concentrate on the one we are interested in. Differentiating the left hand side of the above inequality with respect to c we get $-U_1(Y-c-x^*,w)$ where U_1 is the derivative w.r.t to current consumption level. Thus school enrolment is decreasing in the fixed cost of education.

Next, we consider income effects. Applying the envelope theorem , the derivative of the left-hand side of the inequality with respect to Y is

$$U_1(Y-c-x^*;\mathbf{w}) - U_1(Y;\mathbf{w})$$

Since U(.) is concave, this expression is positive. Hence richer households would attend school more than poorer households.

Our empirical model is based on the above discussion. We estimate a probit model and correct the standard errors for heteroscedasticity. We now discuss the results (Table 3) based on the probit estimates (marginal effects). We also run separate regressions according to the non food expenditure quartiles, for boys and for girls. The results for the analysis based on the social groups are reported in the appendix (Tables 7 - 9).

Social Group: We find that the probability of children from scheduled caste households going to school is lower by 4 percentage points as compared to others (Table 3). For children from scheduled tribe households it is even lower: over 16 percentage points (Table 3).

The marked difference in the coefficients between the scheduled caste households and scheduled tribe households needs some elaboration. We briefly addressed this issue in an earlier section; i.e., the parents' and the child's attitude towards education differs across the scheduled caste and scheduled tribe households. For the scheduled tribe households in our data set, in case of those children who do not go to school, over 52 percent of the respondents do not seem to appreciate the benefits (no tradition in community, education not considered useful and parents not interested) of education.

Here we draw upon the contributions of a series of studies undertaken by the National Council of Educational Research and Training (NCERT 1995a, 1995b, 1995c, 1995d) and Rath (1995) carried out under the District Primary Education Programme (DPEP) research programme. As mentioned earlier, the scheduled tribes live in isolation, do not interact with others and exhibit economic backwardness. Existing studies have documented that quite a few tribal communities, especially those who have been in greater contact situations with the non-tribal communities, have shown interest in education of their children as motivation exists in such a situation. On the other hand the tribes living in isolation might not appreciate the value of education.

Literature documenting the specific learning problems of tribal children (as perceived by the teachers) suggests the following impediments: low learner motivation, poor parent participation in the education of children, illiterate family background, irregular attendance and uninteresting curriculum. A large number of tribal parents have no formal education themselves. It is probably true that the success of programs for universal primary education is correlated with parents' education.

Sex and Literacy of Household Head: The sex of the household head and his or her educational attainment affect school attendance. We find that the probability of a child going to school from a household headed by a literate person is higher by over 24 percentage points as compared to children from households headed by an illiterate (Table 3). A similar result emerges when we run the regressions separately according to expenditure quartiles (Table 4). We find that having a woman as head of the household does contribute to better child outcomes and especially for girls (Table 3).

Child's Age: In line with findings in the literature, we find that the older the child the higher the probability of going to school. The marginal effect on the age squared variable is negative (Table 3). We find a similar result when we run the regression separately according to expenditure quartiles (Table 4), according to expenditure quartiles for boys (Table 5) and according to expenditure quartiles for girls (Table 6).

Household Characteristics: The presence of children below the age of 5 reduces the probability of the girl child going to school by over 3 percentage points (Table 3). On the other hand the presence of people over the age of 60 increases the likelihood of children (boys and girls) going to school (Table 3). This is consistent with our conjecture that elderly people participate in household economic and non economic activities, thereby not requiring children to partake in such activities.

Gender Bias: We find a clear evidence in favour of a gender bias. In our analysis, using data on all social groups, compared to boys, the probability of a girl going to primary school is lower by 16.4 percentage points (Table 3). Once again, the gender bias is evident when we run the regression according to the non food expenditure quartiles (Table 4). The gender bias can be traced to the perception that returns to educating the male child are higher as compared to the girl child (NCERT 1995e, Dreze and Sen 1995).

Wealth: Existing studies have found a positive relationship between the per capita household expenditure and schooling outcomes. Higher levels of per capita household expenditure and the enrolment of girls are related. One study found that the enrolment rate for girls and boys equalizes when the average per capita household expenditure is Rs. 225 per month (NCERT 1995e). We find that the probability of a child from a household in the top non food expenditure quartile going to school is higher by over 11 percentage

points compared to a child from the bottom wealth quartile (Table 3). For the girl child the corresponding figure is over 16 percentage points (Table 3). The NCERT study also documented that better economic condition of the household, parental ability to pay extra tuition costs, provide books, stationery, clothes, create space and time for studies at home contributes to continuation of schooling for girls.

Table 3: Determinants of School Attendance (All India) Marginal Effects

ALL GROUPS	ALL	BOY	GIRL
Scheduled Caste	**-0.04*** **	**-0.037** **	**-0.045** **
	0.015	*0.017*	*0.020*
Scheduled Tribe	**-0.163*** **	**-0.147*** **	**-0.184*** **
	0.020	*0.025*	*0.028*
Age	**0.435*** **	**0.415*** **	**0.441*** **
	0.016	*0.020*	*0.026*
Age Square	**-0.024*** **	**-0.022*** **	**-0.025*** **
	0.001	*0.001*	*0.001*
Female Head	**0.093*** **	**0.071*** **	**0.127*** **
	0.021	*0.023*	*0.030*
Literate Head	**0.243*** **	**0.208*** **	**0.282*** **
	0.011	*0.013*	*0.015*
# Children Below Age 5	**-0.025*** **	**-0.018*** **	**-0.034*** **
	0.006	*0.007*	*0.008*
# People Over Age 60	**0.019*** **	**0.014*** **	**0.025*** **
	0.004	*0.004*	*0.005*
Girl	**-0.164*** **		
	0.009		
Non Food Exp Quartile =2	**0.055*** **	**0.036** **	**0.081*** **
	0.014	*0.016*	*0.020*
Non Food Exp Quartile =3	**0.071*** **	**0.046** **	**0.099*** **
	0.016	*0.019*	*0.021*
Non Food Exp Quartile =4	**0.117*** **	**0.082*** **	**0.164*** **
	0.017	*0.020*	*0.023*
Log of Cost Variable1	**-0.039*** **	**-0.035*** **	**-0.043*** **
	0.008	*0.010*	*0.012*
Distance to School	**0.127*** **	**0.105*** **	**0.159*** **
	0.027	*0.037*	*0.039*
Telephone	**0.044*** **	**0.036** **	**0.05*** **
	0.014	*0.016*	*0.019*
Total Literacy Campaign	**0.018**	**0.02**	**0.012**
	-0.014	*-0.016*	*-0.018*

Mid Day Meal	**0.05*** **	**0.053*** **	**0.045** **
	0.014	*0.017*	*0.019*
All Weather Road	**0.025***	**0.011**	**0.038***
	0.014	*-0.016*	*0.020*
Bus Service	**0.012**	**0.006**	**0.022**
	-0.016	*-0.018*	*-0.021*
# Observations	46430	24898	21511

Robust standard errors reported below the coefficient (marginal effects)

** significant at 10%; ** significant at 5%; *** significant at 1%*

Table 4: Determinants of School Attendance - Marginal Effects
(All India – According to Non Food Expenditure Quartiles)

	Quartile 1	Quartile 2	Quartile 3	Quartile 4
Scheduled Caste	**-0.03**	**-0.041**	**-0.013**	**-0.064***
	0.03	*0.026*	*0.026*	*0.026*
Scheduled Tribe	**-0.174****	**-0.122****	**-0.209****	**-0.138****
	0.034	*0.034*	*0.039*	*0.041*
Age	**0.425****	**0.440****	**0.448****	**0.375****
	0.033	0.029	0.031	0.026
Age Square	**-0.023****	**-0.024****	**-0.024****	**-0.020****
	0.002	*0.002*	*0.002*	*0.001*
Female Head	**0.064**	**0.149****	**0.131****	**0.024**
	0.04	*0.035*	*0.029*	*0.047*
Literate Head	**0.284****	**0.239****	**0.257****	**0.169****
	0.027	*0.018*	*0.02*	*0.019*
# Children Below Age 5	**-0.031***	**-0.02**	**-0.028****	**-0.017***
	0.014	*0.012*	*0.01*	*0.007*
# People Over Age 60	**0.022***	**0.024****	**0.007**	**0.017****
	0.011	*0.008*	*0.006*	*0.004*
Girl	**-0.210****	**-0.150****	**-0.165****	**-0.110****
	0.018	*0.017*	*0.017*	*0.015*
Log of Cost Variable1	**-0.061****	**-0.033***	**-0.032***	**-0.021**
	0.016	*0.015*	*0.015*	*0.015*
Distance to School	**0.155****	**0.069**	**0.229****	**0.033**
	0.054	*0.037*	*0.052*	*0.039*
Telephone	**0.04**	**0.076****	**0.012**	**0.044***
	0.027	*0.028*	*0.023*	*0.021*
Total Literacy Campaign	**0.026**	**0.014**	**0.002**	**0.032**
	0.026	*0.028*	*0.023*	*0.021*
Mid Day Meal	**0.037**	**0.015**	**0.049***	**0.085****
	0.034	*0.025*	*0.023*	*0.021*
All Weather Road	**0.01**	**0.048**	**-0.009**	**0.055***
	0.028	*0.026*	*0.026*	*0.025*
Bus Service	**0.046**	**-0.009**	**0.031**	**-0.025**
	0.03	*0.03*	*0.027*	*0.024*
# Observations	11586	11598	11685	11476

Robust standard errors reported below the coefficient (marginal effects)
** significant at 10%; ** significant at 5%; *** significant at 1%*

Table 5: Determinants of School Attendance - Marginal Effects
(All India Boys – According to Non Food Expenditure Quartiles)

	Quartile 1	Quartile 2	Quartile 3	Quartile 4
Scheduled Caste	**0.012**	**-0.065***	**-0.027**	**-0.084***
	0.036	*0.03*	*0.03*	*0.033*
Scheduled Tribe	**-0.129****	**-0.153****	**-0.184****	**-0.073**
	0.045	*0.044*	*0.048*	*0.05*
Age	**0.474****	**0.397****	**0.408****	**0.307****
	0.044	*0.037*	*0.037*	*0.03*
Age Square	**-0.025****	**-0.021****	**-0.022****	**-0.016****
	0.003	*0.002*	*0.002*	*0.002*
Female Head	**0.082**	**0.102****	**0.075***	**-0.009**
	0.047	*0.036*	*0.033*	*0.057*
Literate Head	**0.272****	**0.202****	**0.205****	**0.123****
	0.034	*0.021*	*0.023*	*0.021*
# Children Below Age 5	**-0.022**	**-0.031***	**-0.022**	**-0.005**
	0.018	*0.014*	*0.012*	*0.008*
# People Over Age 60	**0.016**	**0.024***	**-0.006**	**0.015****
	0.012	*0.009*	*0.007*	*0.005*
Log of Cost Variable1	**-0.057****	**-0.024**	**-0.024**	**-0.022**
	0.02	*0.016*	*0.018*	*0.016*
Distance to School	**0.106**	**0.005**	**0.266****	**0.001**
	0.059	*0.052*	*0.068*	*0.033*
Telephone	**0.044**	**0.081***	**-0.011**	**0.042**
	0.032	*0.033*	*0.025*	*0.022*
Total Literacy Campaign	**0.038**	**0.011**	**-0.005**	**0.026**
	0.032	*0.031*	*0.027*	*0.025*
Mid Day Meal	**0.008**	**0.058***	**0.065****	**0.060****
	0.039	*0.029*	*0.025*	*0.022*
All Weather Road	**0.008**	**0.022**	**-0.011**	**0.023**
	0.033	*0.028*	*0.027*	*0.026*
Bus Service	**0.018**	**0.015**	**-0.002**	**-0.007**
	0.034	*0.032*	*0.031*	*0.027*
# Observations	6368	6145	6203	6042

Robust standard errors reported below the coefficient (marginal effects)
** significant at 10%; ** significant at 5%; *** significant at 1%*

Table 6: Determinants of School Attendance - Marginal Effects
(All India Girls– According to Non Food Expenditure Quartiles)

	Quartile 1	Quartile 2	Quartile 3	Quartile 4
Scheduled Caste	**-0.089***	**-0.019**	**0.006**	**-0.028**
	0.037	*0.034*	*0.038*	*0.035*
Scheduled Tribe	**-0.213****	**-0.07**	**-0.242****	**-0.234****
	0.039	*0.046*	*0.06*	*0.069*
Age	**0.352****	**0.485****	**0.476****	**0.431****
	0.05	*0.043*	*0.049*	*0.043*
Age Square	**-0.020****	**-0.027****	**-0.026****	**-0.024****
	0.003	*0.002*	*0.003*	*0.002*
Female Head	**0.062**	**0.221****	**0.204****	**0.087**
	0.053	*0.051*	*0.041*	*0.046*
Literate Head	**0.300****	**0.292****	**0.314****	**0.223****
	0.029	*0.027*	*0.028*	*0.027*
# Children Below Age 5	**-0.040***	**-0.009**	**-0.036***	**-0.037****
	0.016	*0.016*	*0.015*	*0.01*
# People Over Age 60	**0.036***	**0.025***	**0.023****	**0.018****
	0.014	*0.011*	*0.009*	*0.006*
Log of Cost Variable1	**-0.065****	**-0.040***	**-0.042**	**-0.02**
	0.02	*0.02*	*0.022*	*0.022*
Distance to School	**0.201****	**0.196****	**0.209****	**0.072**
	0.064	*0.071*	*0.064*	*0.068*
Telephone	**0.028**	**0.072***	**0.052**	**0.054**
	0.036	*0.036*	*0.034*	*0.03*
Total Literacy Campaign	**0.009**	**0.01**	**0.016**	**0.043**
	0.031	*0.038*	*0.033*	*0.03*
Mid Day Meal	**0.07**	**-0.049**	**0.037**	**0.118****
	0.038	*0.036*	*0.037*	*0.032*
All Weather Road	**0.014**	**0.062**	**-0.004**	**0.083***
	0.037	*0.036*	*0.04*	*0.036*
Bus Service	**0.082***	**-0.024**	**0.075***	**-0.037**
	0.038	*0.041*	*0.038*	*0.033*
# Observations	5191	5412	5445	5377

Robust standard errors reported below the coefficient (marginal effects)
** significant at 10%; ** significant at 5%; *** significant at 1%*

Cost of Education: We now focus our attention on the financial aspect of schooling, in particular the cost of schooling. Recall that the cost variable has been constructed so as to reflect the exogenous cost of attending school (this is a direct cost). If households are indeed financially constrained, the cost of schooling should have a significant impact on attendance decisions. Our analyses suggest that it is indeed so. We find that the cost of schooling can adversely affect the attendance decision (Table 3). A unit change around the mean of the logarithm of cost of education (Rs. 190) lowers the probability of attending school by nearly 4 percentage points.

If the cost is indeed a significant factor, one should further expect this constraint to bind more for the economically backward sections of society. To further investigate if this is indeed the case, we analyse each non food expenditure quartile separately (Table 4). The results show that while schooling costs bind for all wealth groups (cost variables have a negative coefficient for each wealth quartile), the effect is the largest for households in the lower wealth groups (the cost variable is significant for the first three wealth quartiles). Thus, even though the government has a large number of educational programs that subsidize poorer people, our analyses suggest that it may still be an important reason why children don't attend school .

It is generally recognized in India that backward social classes are particularly disadvantaged and that policies should be directed to them. In this regard, the government has targeted the scheduled castes and tribes. If cost subsidization programs have targeted disadvantaged social groups effectively, schooling costs should not play a big role in attendance decisions. We analyse the attendance decision of each social group separately (Appendix Tables 7-9). For scheduled castes, we find that an increase in basic schooling cost of Rs. 164 reduces the probability of attending school by over 4

percentage points (Appendix Table 7). We find a similar result for schedule tribe households (Appendix Table 8)[vii]. But a closer look reveals that the other costs of schooling are significant (the government only partially subsidizes other essentials like books and stationery). Thus variation in the costs of these other essential (and what we claim are exogenous) costs[viii] may explain some of variation in the attendance rates.

As mentioned earlier there is a systematic gender bias. Do costs of schooling have different effects for girls and boys? An all India analysis of girls and boys separately shows that schooling costs bind for both girls and boys (Tables 3 and 4). The costs seem to bind more for girls[ix]. One of the main reasons advanced for discontinuance of education of girls is the inability of parents to provide books, stationery, clothes, extra tuition costs (NCERT 1996e). While cost of schooling is a deterrent for boys in the first non food expenditure quartile (Table 5) , it is a deterrent for girls in the first and second quartile (Table 6). Thus the girl child seems to be affected by a cost across a larger economic section.

School Quality[x], Availability and Competing Opportunities: In the existing literature, based on survey data, it has been observed that the breakdown or absence of a government village school affects girls more than boys. Boys are sent to study in other villages or private schools. On the other hand, parents are not only not inclined to let their daughters travel far distance, they do not want to pay for their fees to secure admission in the neighbourhood private school (Dreze and Sen 1995, Dreze and Gazdar 1996). We find that the coefficient of the distance to the nearest primary school (farther the school higher the indirect cost of attending school) is significant. The closer the school, the higher are the chances of the child going to school (with the exception of scheduled tribe girls). The magnitudes are higher in the case of the girl child. (TABLE 4)

An important incentive to make children attend school are mid-day meals. Presence of a school with the mid-day meal scheme in the village increases the likelihood of going to school only in certain regressions. We, however, do not want to emphasize this point as the mid-day meal scheme had not been fully implemented during the survey period.

Village Level Characteristics: We find that the coefficient associated with the TLC is statistically insignificant. This can possibly be traced back to widespread differences across the states. For instance in Uttar Pradesh, very little interest was taken in the TLC and hence nothing has been gained from it in contrast to states like Kerala. Ghosh et al. (1994) attribute the poor response in Uttar Pradesh to a "low political commitment to the eradication of illiteracy" (p. 39). The availability of bus services, all weather roads and accessibility to communication facilities (telephone) does not affect the likelihood of attendance.

5 Conclusion

This paper is a part of growing literature which points out that financial constraints play a crucial role in primary schooling attendance decisions. Using NSS data from rural India, we test for the importance of financial constraints and find that they do play a part in poor attendance rates. Financial constraints are the second largest reason for non attendance as reported in the NSS. To control for other factors, which may lead to spurious correlation, we conduct a probit analysis. Our results confirm the importance of a household's economic status in children's attendance decision. We find t hat the probability of a child from a household in the top non food expenditure quartile going to school is higher by over 11 percentage points as compared to a child from the bottom wealth quartile

Many developing countries have recognized the importance of financial constraints and have subsidized education. The Government of India has provided subsidies to achieve its target of free primary education for all. However many studies have hinted that in India, free primary education is a myth. We show that despite government policies aimed at subsidizing the costs of primary education, direct costs of schooling deter positive educational outcomes[xi]. The poorer households do not have the ability to pay the lump sum annual expenditure of over Rs. 250 on education. Nor are they able to produce cash up front in order to meet the needs of school going children. An increase of Rs. 190 in the cost of primary schooling, (measured by cost of tuition, examination, other fees, books and stationery) reduces the likelihood of going to school by 3 percentage points. This finding is robust across different measures of cost. We note that the cost of schooling binds for the first three wealth quartiles of the population. Thus costs play a significant role for a lot of rural households. Moreover, we find that the cost of schooling deters attendance for girls more than for boys. While the cost binds for the first quartile for boys, it binds for the first and second quartile for girls. This suggests the need for further subsidy targeted especially towards girls. The government does give free tuition for primary education but there are other significant costs, for example those on books and stationery. We show that these costs can deter attendance, especially for girls.

In addition, there is recognition in the development literature that there may be different forces at work in different minority communities. We shed light on differences between a subset of minorities: the scheduled caste households and scheduled tribe households. We find that the probability of children from scheduled caste households going to school is lower by 4 percentage points as compared to other classes. For children from scheduled tribe households it is even lower: 16.3 percentage points. For the

scheduled tribe households in our data set, in case of those children who do not go to school, over 52 percent of the respondents do not seem to appreciate the benefits (no tradition in community, education not considered useful and parents not interested) of education. This is in contrast to scheduled castes where financial constraints play a bigger role. Our results suggest that there is a need for examining the efficacy of existing policies towards the minorities.

Our work brings out a need for a better study of how subsidies are to be delivered to different communities. Is there a need for greater decentralization to better target subsidies to different communities? This is a topic for future research.

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[i] Educational institutions are classified according to the type of management by which the institution is run. All schools run by the state, central government, public sector undertakings or autonomous organizations completely financed by the government are treated as government institutions. All institutions run by municipal corporations, municipal committees, notified area committees, zilla parishads, panchayat samitis, cantonment boards, etc. are treated as local body institutions. Private aided institutions are those, which are run by an individual or a private organization and receive a maintenance grant from a government or local body. Private unaided institutions are managed by an individual or a private organization and do not receive a maintenance grant either from a government or local body.

[ii] The average cost in case of scheduled caste and scheduled tribe households are Rs. 253.50 and Rs. 341.53, respectively. For other social groups (which includes other backward classes too) this figure is Rs. 357.39.

[iii] Beyond the issue relating to gender bias, we do not focus on issues relating to which child goes to school because of lack of data. Using a different data set, Leclercq (2001a) finds evidence of sibling rivalry in nuclear households.

[iv] While we have information on the level of education attained by the household head we decided against going into this. The incremental benefit from such finer classification is at best minimal. The nature of employment of the household head matters since households with an erratic income stream are more likely to pull their children out of school. Since we do not have data on the usual activity of the household head we are unable to control for this.

[v] Alternatively, we could have constructed a measure of how poor the household is in relation to the poverty line by using the information on household expenditure.

[vi] To ensure that the cost variable we construct is exogenous we exclude expenditure incurred by children going to private schools.

[vii] We find that for girls from scheduled tribe households schooling costs do not matter (Appendix Table 2). What seems to matter for them, among other individual specific variables (age), is the literacy of the head of the household, the number of children in the household under age five, the number of people over the age 60, and the presence of all weather roads. These results are slightly puzzling and hint that there are other social issues at play that do not conform to other social groups. It is recognized that the schedule tribes are different in that they are more isolated from the mainstream economy than scheduled castes. That the cost of schooling is not significant does not mean it is not a factor in the context of girls from scheduled tribe households. All that this analysis shows is that there are other considerations that are more important which do not have to do with cost. And while there should be further subsidization, attention also needs to be paid to the awareness issues borne out of isolation.

[viii] One could instead claim that these costs are non-essential and are thus endogenous to a household. We have conducted the exercise with various, what we believe are essential, components of schooling costs and our results are robust across all our specifications.

[ix] Girls are useful for household work. If one were to impute a value to such work, financial costs (direct and indirect) of schooling would only be higher and thus affect the probability of going to school. So the direct and indirect cost of schooling seems to affect girls more than boys (Table 4-5).

[x] One can also control for school quality by using the number of teachers per school at the district level as an independent variable. This variable can be interpreted as an outcome of the level of spending by the state governments on education over the years. Using data from the All India Education Survey we reran the regressions including teachers per school in a district as an explanatory variables. We have information for all states except Rajasthan. The coefficient on this variable is significant at the 1 % level in the all India regressions as well as in the all India regression by social group.

[xi] So, how much would it cost for the government if it wanted to get all children to school? As noted in the World Development Report (2004), arriving at a figure is not easy. "For universal primary education completion, does "costing" mean putting a price tag on enrolling all primary-age children in public schools? With more than 100 million children of primary school age not in school, multiplying the number in each country by average public spending per primary student yields a total "cost" of about $10 billion. But this number overlooks a simple point: children not in school might be harder to induce to come to school, so the marginal cost of enrolling a child could be higher than the average cost. These children might have higher opportunity costs, so it might require a larger subsidy to get them into school. Or they might live in remote areas, where it would cost more to build schools or to compensate them for travelling to more central locations. In addition, this approach implicitly assumes that spending on a particular target can be earmarked separately from other spending in the sector. Though that is possible, it is not easy" (p. 41).

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Appendix: Tables

Table 7: Determinants of School Attendance - Marginal Effects
(All India – Scheduled Caste)

	ALL	BOY	GIRL
Age	**0.451*** **	**0.478*** **	**0.414*** **
	0.033	*0.044*	*0.053*
Age Square	**-0.024*** **	**-0.025*** **	**-0.023*** **
	0.002	*0.003*	*0.003*
Female Head	**0.128*** **	**0.119** **	**0.154*** **
	0.045	*0.053*	*0.057*
Literate Head	**0.219*** **	**0.191*** **	**0.249*** **
	0.023	*0.029*	*0.030*
# Children Below Age 5	**-0.025** **	**-0.025***	**-0.026**
	0.012	*0.015*	*-0.019*
# People Over Age 60	**0.029*** **	**0.026*** **	**0.036*** **
	0.008	*0.010*	*0.012*
Girl	**-0.176*** **		
	0.019		
Quartile =2	**0.064** **	**0.049**	**0.092** **
	0.031	*-0.04*	*0.041*
Quartile =3	**0.086*** **	**0.047**	**0.146*** **
	0.032	*-0.04*	*0.044*
Quartile =4	**0.084** **	**0.014**	**0.172*** **
	0.035	*-0.046*	*0.048*
Log of Cost Variable1	**-0.044*** **	**-0.032***	**-0.061*** **
	0.014	*0.018*	*0.021*
Distance to School	**0.234*** **	**0.141***	**0.337*** **
	0.070	*0.084*	*0.084*
Telephone	**0.057** **	**0.071** **	**0.048**
	0.028	*0.032*	*-0.04*
Total Literacy Campaign	**0.007**	**0.024**	**-0.02**
	-0.025	*-0.029*	*-0.036*
Mid Day Meal	**0.032**	**0.019**	**0.029**
	-0.029	*-0.036*	*-0.042*
All Weather Road	**0.026**	**0.026**	**0.026**
	-0.029	*-0.035*	*-0.041*
Bus Service	**0.028**	**0.027**	**0.036**
	-0.03	*-0.034*	*-0.041*
# Observations	8819	4689	4101

Robust standard errors reported below the coefficient (marginal effects)

** significant at 10%; ** significant at 5%; *** significant at 1%*

Table 8: Determinants of School Attendance - Marginal Effects
(All India – Scheduled Tribes)

	ALL	BOY	GIRL
Age	**0.438*** **	**0.494*** **	**0.396*** **
	0.046	*0.064*	*0.060*
Age Square	**-0.024*** **	**-0.026*** **	**-0.022*** **
	0.003	*0.004*	*0.003*
Female Head	**0.094**	**0.16** **	**0.028**
	-0.058	*0.064*	*-0.086*
Literate Head	**0.315*** **	**0.332*** **	**0.323*** **
	0.031	*0.035*	*0.039*
# Children Below Age 5	**-0.033***	**-0.02**	**-0.046** **
	0.017	*-0.024*	*0.020*
# People Over Age 60	**0.016**	**-0.004**	**0.042*** **
	-0.012	*-0.015*	*0.013*
Girl	**-0.202*** **		
	0.026		
Quartile =2	**0.059**	**0.037**	**0.09***
	-0.039	*-0.048*	*0.049*
Quartile =3	**0.048**	**0.037**	**0.023**
	-0.041	*-0.051*	*-0.054*
Quartile =4	**0.133** **	**0.201*** **	**0.045**
	0.054	*0.062*	*-0.063*
Log of Cost Variable1	**-0.037***	**-0.039***	**-0.026**
	0.019	*0.024*	*-0.023*
Distance to School	**0.147***	**0.224** **	**0.052**
	0.080	*0.102*	*-0.072*
Telephone	**0.044**	**0.038**	**0.033**
	-0.038	*-0.05*	*-0.046*
Total Literacy Campaign	**0.006**	**0.028**	**-0.02**
	-0.035	*-0.045*	*-0.04*
Mid Day Meal	**0.121*** **	**0.165*** **	**0.063**
	0.036	*0.048*	*-0.042*
All Weather Road	**0.06**	**0.032**	**0.084***
	-0.039	*-0.049*	*0.050*
Bus Service	**0.019**	**0.039**	**-0.01**
	-0.043	*-0.057*	*-0.052*
# Observations	7469	4028	3425

Robust standard errors reported below the coefficient (marginal effects), * ** *** significant at 10%; 5%; at 1%

** significant at 10%; ** significant at 5%; *** significant at 1%*

Table 9: Determinants of School Attendance - Marginal Effects
(All India – Other Groups)

	ALL	BOY	GIRL
Age	**0.422*** **	**0.382*** **	**0.449*** **
	0.019	*0.023*	*0.030*
Age Square	**-0.023*** **	**-0.02*** **	**-0.025*** **
	0.001	*0.001*	*0.002*
Female Head	**0.081*** **	**0.052** **	**0.122*** **
	0.023	*0.024*	*0.033*
Literate Head	**0.234*** **	**0.189*** **	**0.284*** **
	0.013	*0.016*	*0.017*
# Children Below Age 5	**-0.025*** **	**-0.015***	**-0.038*** **
	0.006	*0.008*	*0.009*
# People Over Age 60	**0.017*** **	**0.012** **	**0.022*** **
	0.004	*0.005*	*0.005*
Girl	**-0.153*** **		
	0.011		
Quartile=2	**0.065*** **	**0.062*** **	**0.073*** **
	0.017	*0.018*	*0.024*
Quartile=3	**0.077*** **	**0.06*** **	**0.095*** **
	0.018	*0.020*	*0.025*
Quartile=4	**0.128*** **	**0.097*** **	**0.168*** **
	0.020	*0.022*	*0.026*
Log of Cost Variable1	**-0.043*** **	**-0.037*** **	**-0.048*** **
	0.011	*0.012*	*0.015*
Distance to School	**0.086*** **	**0.061***	**0.115*** **
	0.027	*0.036*	*0.040*
Telephone	**0.035** **	**0.027**	**0.045***
	0.017	*-0.018*	*0.023*
Total Literacy Campaign	**0.024**	**0.021**	**0.027**
	-0.017	*-0.019*	*-0.023*
Mid Day Meal	**0.042** **	**0.047** **	**0.036**
	0.017	*0.020*	*-0.022*
All Weather Road	**0.023**	**0.004**	**0.045***
	-0.016	*-0.018*	*0.024*
Bus Service	**0.005**	**-0.004**	**0.02**
	-0.019	*-0.021*	*-0.026*
# Observations	30028	16101	13919

Robust standard errors reported below the coefficient (marginal effects), * ** *** significant at 10%; 5%; at 1%