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Access to Higher Education in India: An Exploration of its Antecedents

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Access to Higher Education in India: An Exploration of its Antecedents¹ Rakesh Basant² Gitanjali Sen³

I. Introduction

The policy of affirmative action has been in place in the government services in India for a long time. Still, issues relating this policy resurface in the public policy discourse very frequently. At times the debate focuses on the choice of the subset of population to be brought under this action, and at others on the timeframe of continuation of such benefits. The discussion has also explored the possibility of bringing the private sector under the ambit of policies of affirmative action. The debate surrounding these issues actions have resurfaced again with the inclusion of Other Backward Classes (OBC) for affirmative action in Indian higher education. However, in our last paper (Basant and Sen, 2010), using the 61st round Employment-Unemployment data of the National Sample Survey Organization, we argue that an appropriate measure of 'deficits' in participation among different 'socio-religious groups' should inform the nature and scope of affirmative action. The paper suggests that 'deficits' in participation of higher education (HE) among some of the marginalized groups are not significant enough to suggest affirmative action in higher education. Following the same work, this study explores the same empirical model and extends it to an analysis of three rounds of NSS data, so that a comparable picture emerges and we are able to test the robustness of our earlier argument.

The rest of the paper is organized in five sections. Section II provides a very brief historical account of the affirmative action policies in India. Section III discusses the relevant literature

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that provides the context to the empirical exploration in this paper. Section IV focuses on the research question of the present paper, along with the econometric model, research methodology and the data used. The empirical results and the key findings are presented in Section V. Finally, section VI concludes with a discussion of the policy implications of our empirical results.

II. History of Affirmative Action in India

As we all know that India bears the legacy of extending privileges to the socially backwards castes from the very beginning of the states' formation, the history of affirmative action in this region is not that new. Following the Hunter Commission's report (1882) on under representation of Muslims, then British-Indian government implemented policies of reservations for them in certain places and educational institutions. During the pre-independence movement, some concessions were extended to Dalits for bringing them into mainstream, through the so called 'Pune pact' between Mahatma Gandhi and Dr B R Ambedkar, which came into operation through the Govt. of India Act, 1935 and later, became a part of the Indian constitution.

Along with the effort of the Indian government through its constitutional power, the southern states started making their own lists of backward classes for further upliftment of socially, educationally and economically backwards classes. The composite Madras state had a list of its own, which was followed by the state of Andhra Pradesh, after its formation. The same tradition was followed in Karnataka and then, extended to Bihar, Gujarat and other northern states much later. However, the methodology used by the Karnataka government for listing of backwards castes was quite new in the then Indian context. The Karnataka Backward Classes Commission decided that for being listed as educationally backward community, the average number of people per thousand populations, completing the Secondary School Learning Certificate Examination in April 1972, had to be below the state average.

Educational supports through scholarship schemes to the socially disadvantaged students have been in place from the beginning of five year plans. More emphasis was given to SC students in the ninth plan through expansion of 'post-matric scholarships'. The increase in total outlay in Indian Rupees for the OBCs, as found in the 10th five-year plan document, has been as large as 46 times during 1963-64 to 2002, as compared to 24 times during 1952-52 to 1963-64 (Challam,

2007:70). For SCs, the outlay went up by 153 times in during 1963-64 to 2002, as against 36 times during 1952-52 to 1963-64. For STs, the increase in outlay in the ninth and tenth plan period was even larger, that was, 351 times during 1963-64 to 2002, as against only 5.7 times during 1952-52 to 1963-64. These being the estimates as the central level, several state governments, such as Andhra Pradesh, Tamil Nadu had specific scholarship schemes for them as well.

Along with the expansion of scholarship schemes to SCs STs and OBCs in the ninth plan, the tenth plan also started extending assistance in higher education to SC, ST and OBC candidates through relaxation of cut-off percentages in admission to central universities, technical institutions and colleges; and through remedial coaching classes to SCs and STs after getting admission into Indian Institute Technologies. Also, there are schemes for SCs for providing coaching to enhance linguistic skills and to help them prepare for competitive exams, but the presence of such schemes is extremely inadequate, and it needs to widen the coverage throughout the country (GoI 2002-07, 10th Plan document:5-8). One primary reason being state governments' inability to utilize the funds received through central assistance, the states need to be more proactive in implementing the schemes.

III. A Brief Review of Available Studies

The participation in higher education being strongly linked to completion of elementary, secondary and post-secondary education, a host of studies (NCERT: 1998, PROBE:1999, Pridmore:2007) discussing the educational gap at different levels lead us to the primary reasons behind educational deficits among socially disadvantageous groups at the college level. Sedwal and Kamat (2008) discuss the heterogeneous nature of the SCs and STs across states of India; the difference in intrinsic value of education among them, leading to lower participation at elementary level; and the issues of growing demand in some parts along with issues of access to education. With some experiments done among school children through a test to compete for financial awards, Hanna and Linden (2007) indicate that another reason of lower participation among socially disadvantageous could be discrimination in grading by school teachers. However, in the context of higher education, the lower participation emerges both from the lack of demand arising from the facts discussed above, along with the presence of supply side

constraints existing in Indian Higher Education (GoI: 2006 and 2007, Agarwal: 2006, Kaul: 2006).

The present work is an extension of Basant and Sen (2010), where the authors establish the fact that different measures of deficits do change the hierarchy of participation among different socio religious groups. Using the 61st round of Unemployment and employment survey data, probit estimates of participation of both the stock and flow measures (see discussion below), indicated that an appropriate measure of deficit may change the debate around affirmative action towards the issue of supply side constraints (Basant and Sen, 2010). We extend the same model to two more rounds of the National Sample Survey (NSS) data sets for a comparison of participation across socio religious groups over a period of about a decade.

As we state in our earlier work, due to the paucity of panel data from a countrywide survey like the NSS, there are very few studies trying to compare education participation of socially disadvantageous groups over time. The one in our knowledge by Azam and Blom (2008) compares the National Sample Survey data of rounds between 1993 to 2005, through statistical estimates of educational attainment, access, and transition to higher education across socially and economically disadvantaged groups. One interesting conclusion of their statistical analysis is that the variation across states in enrolment is largely due to variations in completion of higher secondary education. Moreover, deficits in transition rates between genders, between social groups, or between religious groups are much smaller than deficits in enrolment. The probit estimate of participation also supports the same results. However, the stock versus flow analysis done in our work for urban and rural areas separately tries to fill in the gaps in existing literature, where hierarchy participation in higher education is barely discussed.

IV. Methodology and Data

The basic premise of this paper derives from the analysis contained in Basant and Sen (2010) and extends that to three rounds of NSS data sets spanning over a decade, so that one could reestablish the importance of 'measures of deficits' over the years. In order to explore the robustness of the hierarchy of participation in HE among different socio religious groups, this work does a maximum likelihood estimate of a binary model of participation with both the stock

and flow measures, where the dependent variable assumes a value of one if someone participates in HE, else it takes a value of zero. The stock measures being a historical concept, we estimate the current generation stock (CGS) model of participation, where the model includes all people between age 22 to 35 years, who have completed education of graduate and above level. Another estimate of the Current generation Flow (CGF) model includes all people of the age group 17-29 that are currently attending degree or diploma courses or above. We do check the participation rate among people with the All Generation Stock (AGS) definition too, where, the participation includes all persons above 20 years of age having completed education of graduate and above level. However, to avoid complexities, our maximum likelihood estimation of the next step includes the CGS and CGF definitions only.

We estimate the probit models of participation on socio religious status of individuals, where we combine the caste status and religious status together to form seven socio religious categories (SRCs) that are, Hindu SC, Hindu ST, Hindu OBC, Hindu UC, Muslim OBC, Muslim General, and Other Minorities. In order to take care of the individual level, household level or location specific factors that could also influence participation in HE, the probit regression include few more explanatory variables. To control for individual level factors, we include age and sex of the person; for household level controls, we include household size and monthly household expenditure per capita. We also control for the state of residence to take care of location specific factors. Since, the states of Jharkhand, Chhattisgarh, and Uttaranchal were created from the states of Bihar, Madhya Pradesh, and Uttar Pradesh, respectively in the year 2000 onwards, we keep the former three states with the parents state only for comparison across years. Assuming distribution of the error terms to be different between urban and rural areas, as well between full sample and sample including eligible population only, we estimate both stock and flow models separately among rural and urban people and among full and eligible sample. The eligibility is determined by whether the person has crossed the 'threshold' of school education by completing a higher secondary or having an equivalent qualification. Thus, we estimate a total of eight specifications.

This study uses three rounds of Employment-Unemployment survey of the NSS data that are, the 55th round collected in 1999-00, the 61st round collected in 2004-05, and the 66th round collected

in 2009-10. All the data sets are household level survey data with detailed information on each member's demographic information such as age, sex, education, household size, and household level monthly expenditures. Details of employment related information, such as details of their primary and secondary activities, and all different types of remuneration for each individual member are also available.

V. Empirical Findings

An initial estimate of participation among each of the seven SRCs, following the AGS, CGS and CGF definitions is presented in Table 1. All different definitions of participation of the full sample indicate that, the participation increased in the year 2010 as compared to the 1999 for all SRCs. A more interesting result emerges from the eligible sample, where participation goes down for all SRCs in both stock definitions, but goes up for all SRCs by CGF definitions, except for the Hindu ST. So the flow definition of participation indicates that completion of higher secondary education is even more important policy tool for expansion of higher education. However, the decline in participation among SRCs following the stock definitions may be due to the base effect of increase in overall eligible population over the years as compared to the expansion of access to higher education.

Table 1 here

Participation in HE: Broad Trends

Using data from the three rounds of National Sample Survey data, estimates of participation have been generated for three years covering the periods 1999-2000, 2004-05, and 2009-10. Here, participation in HE includes all students currently attending any regular degree or diploma course at the undergraduate and above level. Since, the NSSO data on currently participating population includes only students up to the age of 29 years; we have included the currently participating population of age between 15 to 29 years. The figures 1a, 1b and 1c indicate that the percentage of participation in higher education has increased consistently among all age groups over the last decade. As expected, the highest incremental supply in graduate courses has originated from the 18-24 age group, followed by the 25-29 age group.

Figures 1a, 1b and 1c here

Participation in Education at Different Levels and Transition to Eligibility for HE

Tables2a, 2b, 2c provide a comparative analysis of participation in education at different age groups and changing in them over time. It also provides estimates of the percentage of population progressing to HE during the decade of 1999-2010 in India. These estimates help us compare the change in participation over years for different age groups at different levels of education. Here, while one can notice overall incremental participation in education for all age groups over the years, the highest increase can be seen for age group 7-14, probably an effect of the countrywide Sarva Siksha Abhiyan Programme (Education for all). There has been some increase in out of school population of age 25-29 between 2004-2010, primarily due to a drop in participation in secondary, higher secondary or HE of the 15-17 and 18-24 age groups between 2004 and 2010. However, the HE participation of age group 25-29 years has increased consistently during this period, along with total participation of all age groups together.

Tables 2a, 2b and 2c here

Participation in Education by Socio-Religious Categories (SRCs)

Table 3 provides a comparative picture of inequality among different socio religious categories in India in terms of their participation at different levels of education. Overall, the out of school children has consistently declined between the period 1999 and 2010 for all SRCs. The percentage of out of school children reached its peak among Muslim OBC in the year 1999, but declined thereafter. The participation of Hindu OBC in graduate and above level of study (combining degree and diploma courses) has increased sharply between 1999 and 2010, along with almost all other SRCs, except for Muslim general. The latter's participation in HE has increased at a much slower rate.

Table 3 here

Some Other Correlates of HE

Table 4 provides estimates of eligible population for HE with respect to different individual and household characteristics. Each row of the table represents the percentage among respective group of population above 17 years age, who completed higher secondary education. The

estimates indicate that the supply of eligible population for higher education has increased over the years for both the genders, all SRCs, and among both rural and urban people. While the increase in participation seem to be different among SRCs over years, but as one is not very sure about the growth of population share among these SRCs during this period, one cannot read much about the within group distribution of eligible from this table. The interesting fact to note here is mostly a drop in participation among all income groups over years. But it is expected to arise from the construction of these groups. The definition of poverty line used to construct these groups follow the amount calculated from the 55th round of national sample survey data in 1999. The same standard has been used for all other years while dividing households to different income groups, hence it may not be able to capture the actual change in participation among equivalent income groups over years. One could create equivalent income groups by considering the change in price indices. However, looking at the purpose of creating this categorical variable to control the effect of household income, we avoided further complications.

Table 4 here

Antecedents of Participation in HE: Results of the Econometric Analysis

The probability of completing higher education for most SRCs, in comparison to the Hindu SCs, as shown in Table 5a, does not change much in full sample of urban areas over the years, except for both the Muslim groups. For Muslim general, the marginal effects were not significant in the first two years, but there is as high as eight percent lower chance of participation among them as compared to Hindu SC in the year 2009-10 data. For Muslim OBC, the probability of participation has always been lower than Hindu SC, but that difference seems to have increased more over the years. However, it is not clear whether that higher difference is due to improvement of participation of Hindu SC at a much higher rate than Muslim OBC between this period.

Among the eligible people of urban areas, the marginal effects are statistically insignificant in all the years among Hindu ST, Hindu OBC, and Other minorities. It is for Hindu UC, whose marginal effects have always been significant and the chances of participation increased between initial two years of reference as compared to Hindu SC among eligible persons in urban areas.

However, in the most recent year of 2009-10, the increase in probability of participation of Hindu UC with respect to Hindu SC has gone down. A little promising picture emerges for Muslim OBC among the urban eligible population, where even if the marginal effects are negative throughout the years, the statistical significance goes away after the initial year of 1999. But Muslim general seems to have an eleven percent lower chance of participation in the most recent year, where as it did not seem to have a statistically significant difference in initial years.

Summing up both the urban models, Hindu ST never had any significant difference in chances of participation with Hindu SC in urban areas of either sample. Hindu UC always maintained a higher chance of participation than Hindu SC, but that advantage seem to fade away over the years among eligible population. For others, the change in chances of participation in comparison to Hindu SC turns out to be statistically insignificant over time among eligible population. Particularly, for the Muslim general, even if the differences with Hindu SC in chances of participation seem to be increasing in full sample, the differences become insignificant in all the years of eligible sample. Hence, the over time changes do not seem to be as important as much as the difference between eligible and ineligible in urban areas.

If we compare the full sample of rural areas with urban areas, the difference in chances of participation with Hindu SC is much less for almost all SRCs in rural areas, and that difference reduces over time. The signs of marginal effects for both the Muslim groups turn out to be positive in the most recent years from its earlier negative signs, which seem to be a good indication of better participation of Muslims in rural areas in recent times. The chances of participation of Hindu UC being always higher than Hindu SC, the difference has gone down in the latest data. Hindu OBC and Other minorities never had any significant difference with Hindu SC in chances of participation among full sample of rural areas. Hindu ST had about one percent lower chances in initial two rounds of data, which became negligible in 2009-10.

In rural eligible sample, the chances of participation for Hindu ST, Hindu OBC and Other minorities seemed to be lower than Hindu SC in 1999 data, but that difference becomes statistically insignificant over the years. Interestingly, both the Muslim groups do not seem to have any change in chances of participation in comparison to Hindu SC in rural areas in any

year, once they become eligible for HE. The same applies to Hindu UC, who with its positive marginal effects does not provide enough evidence of any difference in participation with Hindu SC in any of the years due to the statistically insignificant marginal effects.

Overall, the intergroup differences in present generation stock measure seem to be less in rural areas as compared to urban areas. The differences do not seem to change much over the years in full sample of urban population, but seem to get obliterated almost completely over the years in rural areas or among eligible population.

If we look at the change in probability of current participation or enrolment in full sample population of urban areas of Table 5b, the marginal effects are much less as compared to the stock models. For the Muslim OBCs, in both rural and urban areas of full sample, there is an increasing trend of chances of participation to be higher than Hindu SC over the years. All the Hindu groups, including Hindu ST, and other minorities seem to have a higher probability of participation as compared to Hindu SC over the years.

Among the eligible people in urban areas, the change in probability for all SRCs, as compared to Hindu SC, seem to lose statistical significance in recent years. One running trend in the urban areas of flow model emerging from above discussion is that most marginal effects among eligible population are negative indicating the fact that eligible Hindu SCs might be doing comparatively better than most of the other groups in current enrolment.

In rural areas, the difference of most of the groups as compared to Hindu SC in terms of chances of participation has increased with time. For some, it has been on the positive side- like Hindu OBC, Hindu UC, Other minorities; for others like Hindu ST and Muslim groups, the change has been in the negative side. Just like the stock model, the chances of current enrolment too show very limited inter-group differences in rural areas as compared to urban areas.

Among the rural eligible population, most of the groups, including the Hindu UC, seem to have a lower probability of current enrolment in HE as compared to Hindu SC. Moreover, that trend seems to have gone up, except for the Muslim OBCs! The fact, which could explain this

phenomenon is probably increase in current enrolment of eligible Hindu SC in rural areas in recent times at a much faster rate than all other groups. Facts from Table 1, although produced for whole population corroborates the story to some extent. The percentage of current enrolment among Hindu ST in eligible population of 17-29 years, as represented in table 1 was 42.81 in 2009-10, as against 32.29 in 1999-00. This is slightly higher change than the total population taken together, which was 40.42 in 2009-10, as against, 32.97 in 1999-00.

Overall, as expected, Hindu STs seem to have a lower participation in rural areas as compared to Hindu SC, and that trend been even higher for eligible population. But, in urban areas, Hindu ST does not have such disadvantage. Hindu OBCs show higher participation in both urban and rural areas as compared to Hindu SC, if full sample is considered. However, among eligible population, their chances of participation as compared to Hindu SC seem to be marginally lower in 2009-10, which is an improvement from earlier years. The difference in chances of current enrolment of Hindu SC with Other minorities is much less in rural areas as compared to urban areas and become negligible among eligible people. However, the trend does not change much over years. Both the Muslim groups seem to have a lower chance of enrolment than Hindu SC-with Muslim OBCs being in slightly better position than Muslim general, and more so in rural areas. Most alarming result is probably a much lower chance of enrolment of Muslim general population among rural eligible as, compared to Hindu SC, which has gone up steeply in most recent data.

As we rank the SRCs according to their marginal effects and irrespective of the statistical significance, we noticed a general trend in tables 6a and 6b. That is, for full sample population, there is a clear trend of relative positions remaining almost same over the years, except for HSC in urban and Muslims in rural areas. However for eligible sample population, it is difficult to find any such trend, rather, in some cases the marginalized groups perform better. For example, the inter-SRC rankings in rural eligible of both the stock and flow models change significantly over years. Hence, reservation in HE does not get much ground over the need for access to secondary and higher secondary education probably, as eligibility remains the prevalent issue.

Exploring the Role of Supply Side variables

The results above show that once any group crosses the eligibility barrier and one controls for other explanatory variables, there is not much difference among the SRCs as such. In order to check the access to schools issue that might affect eligibility, we have used the 64.25th round of NSS data, which is a detailed household level survey on educational expenditures and related issues. Along with household level and individual level details used in this present study, the 64.25th round of data also includes details on distance to schools and educational expenditures. Hence, closest proxy that we could use from data is access to secondary education, which is provided by the distance to secondary school. Specification 1 of all models remaining same as earlier, we include the dummy variable equals to zero if distance to secondary school is less than 2 kms and equal to one if it is more than 2 kms in specification 2 of all models. Hence we expect a negative sign for the marginal effects of this variable if distance to secondary school has any effect on HE. The results of tables 7a and 7b provides us the same sign, except for the fact that the variable has a role in all generation stock measure of participation only, but no significant effect on current enrolment in HE. A clearer picture about access could emerge if we one could directly account for access to institutes of higher education, instead of higher secondary school, which comes with a time lag.

VI. Some Concluding Observations

A few issues emerged from our earlier analysis of the National Sample Survey (2004-05) data (Basant and Sen, 2010). One related to the linkage between affirmative action as practiced by policies of reservation in India and the levels of participation in HE. We had asked the question if such action should it be linked to deficits of respective groups? And if yes, what type of deficits one should go by? For example, our data showed that the deficits for Hindu OBC are not very high, particularly when one looks at the currently studying or eligible population. This has been substantiated by additional data from two more rounds. Moreover, econometric analysis of the data showed that once other factors are controlled for, while inter-SRC differences decline dramatically and the 'hierarchy of deprivation' is not entirely clear empirically. The results of this paper have further corroborated that finding. And this adds to the argument that a better understanding of the 'hierarchy of deprivation' may be critical for a more nuanced policy of affirmative action, including reservation.

Secondly, our earlier results raised questions about how in the discussion on higher education, should one deal with the issue of eligibility. Deficits for the under-privileged were found to be significantly lower among the eligible population, even after we control for a variety of other factors. Thus, once persons from under privileged groups cross the school threshold, the chances of their going to college are quite high. Once again, the results of data from other rounds corroborate these empirical conclusions. Clearly, a better understanding of the constraints on school education is critical if participation in higher education is to be enhanced. Therefore, should the higher education policy also focus on ensuring that the threshold is crossed, even when one is thinking about participation in higher education? Arguably, reservation in higher education is an incentive to cross the threshold. Similarly, one can argue that job reservation can enhance the incentives to participate in higher education. Are these adequate? To what extent have these worked? Do we have better options for affirmative action? Do the reservation policies need to be revised frequently along with being more dynamic to reflect the change in participation among eligible underprivileged?

Thirdly, the results reported here once again raise questions about the efficacy of socio-religious affiliation to be the sole focus of affirmative action. Since many other factors, other than socio-religious affiliation also influence participation in higher education in a significant manner, an exclusive focus on such affiliation for affirmative action seems inappropriate. The importance of economic background as well as that of location highlights the role of the supply side factors in affecting the participation of various groups in higher education. Unfortunately, we were not ale to explore the role of supply side factors here. The data limitations constrained our analysis but it may be useful in subsequent analyses to further explore the interaction effects between socio-religious affiliation and other explanatory factors, including the availability of schools and HE institutions in the vicinity.

Reference

Agarwal, P (2006): *Higher education in India: The need for change*. New Delhi, Indian Council for Research on International Economic Relations, working paper no. 180.

Azam, Mehtabul and Andreas Blom (2008): "Progress in Participation in Tertiary Education in India from 1983 to 2004," *Policy Research Working Paper 4793*, The World Bank, South Asia Region, Human Development Department, December.

Basant, Rakesh and Gitanjali Sen (2010): "Who Participates in Higher Education in India? Rethinking the Role of Affirmative Action," *Economic and Political Weekly*, Vol xlv no. 39, Sep.

Chalam, K C (2007): *Caste Based Reservations and Human Development in India*, Sage Publication, New Delhi.

Government of India (2002-07): *Tenth Five Year Plan Document*, Planning Commission, Vol. 2, Chapter 4.1: 5-8.

Government of India (2006): *Recommendations of the National Knowledge Commission*, A High Level Advisory Body to the Prime Minister of India, Chaired by Sam Pitroda.

Government of India (2007): *Draft Report of Working Group on Higher Education for the XI Plan*, The Planning Commission.

Hanna, Rema, and Leigh Linden (2009): "Measuring Discrimination in Education," *NBER* Working Paper 15057, Cambridge, MA.

Kaul, Sanat (2006): "Higher education in India: Seizing the Opportunity," *ICRIER Working paper No. 179*, May.

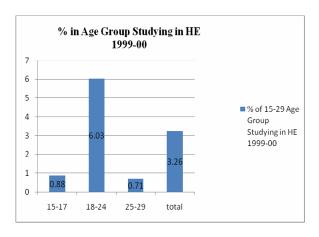
NCERT [National Council of Educational Research and Training] (1998): *Sixth All India Educational Survey*. New Delhi: NCERT.

Pridmore, P. (2007): *The Impact of Health on Education Access and Attainment: A Cross-National Review of the Research Evidence*. CREATE Pathways to Access Research Monograph No 2. London: CREATE and Institute of Education, University of London. PROBE (1999): *Public Report on Basic Education in India*. New Delhi: Oxford University Press.

Sedwal. Mona, & Sangeeta Kamat (2008): "Education and Social Equity With a Special Focus on Scheduled Castes and Scheduled Tribes in Elementary Education," *Create Pathways to Access, Research Monograph No. 19*, NUEPA, May.

Table 1: Share of Population in the Relevant Age Group Participating in Higher Education for Each Socio Religious Category

		AGS	AGS(20+ years)			CGS(22-35)			CGF(17-29)(18-25)
	1999-00	2004-05	2009-10	00-6661	2004-05	2009-10	1999-00	2004-05	2009-10
H-SC	2.46	2.47	3.94	3.61	3.74	5.57	2.48 (3.28)	3.59 (4.52)	6.43 (8.73)
H-ST	1.71	1.65	2.67	2.11	2.34	3.53	2.97 (4.06)	3.42 (4.41)	4.23 (5.83)
H-OBC	3.65	4.39	6.37	5.22	6.39	9.62	3.49 (4.53)	5.00 (6.49)	10.38 (13.98)
H-UC	14.16	15.25	18.49	17.69	19.29	24.42	9.58 (13.0)	11.24 (15.28)	18.15 (24.75)
M-OBC	2.30	2.48	4.04	2.97	3.26	5.42	2.12 (2.70)	3.92 (5.03)	6.15 (8.02)
M-G	3.79	4.14	4.25	4.80	5.09	4.97	3.05 (3.93)	4.09 (5.28)	6.26 (8.49)
MO	9.46	9.03	11.78	12.40	11.89	16.12	8.04 (10.76)	8.00 (10.48)	13.64 (18.04)
Total	6.46	09.9	8.53	8.25	8.62	11.42	5.03 (6.65)	6.07 (7.88)	10.44 (14.06)
		AGS: Eligible (20+	le (20+ yrs))	CGS: Eligible(22-35 yrs)	e(22-35 yrs)		CGF: Eligible(17-29 years)(18-25 years)	years)(18-25 years)
H-SC	50.61	39.85	45.24	52.81	43.67	49.1	32.29 (40.03)	32.25 (38.64)	42.81 (50.89)
H-ST	41.27	37.67	34.96	39.17	40.56	35.95	40.42 (47.88)	41.71 (46.41)	33.56 (42.81)
H-OBC	50.19	42.18	44.47	50.62	44.88	48.41	29.91 (37.25)	28.86 (35.67)	40.11 (48.34)
H-UC	63.90	56.68	57.01	64.65	58.50	59.4	33.80 (43.66)	31.55 (41.34)	41.05 (50.76)
M-OBC	47.96	37.70	45.59	48.89	40.94	48.36	29.20 (33.77)	36.09 (41.43)	40.55 (45.70)
M-G	53.15	49.07	42.05	54.66	51.17	44.58	32.88 (40.31)	35.40 (41.99)	43.46 (51.35)
MO	62.24	46.42	50.19	61.53	46.62	52.06	35.12 (42.95)	27.89 (35.70)	36.81 (44.70)
Total	58.54	49.33	50.13	58.68	51.04	52.71	32.97 (41.56	31.13 (39.07)	40.42 (49.07)



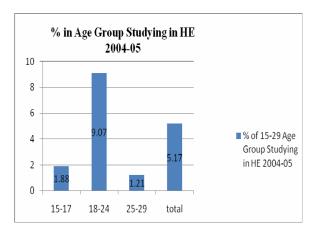


Figure 1b

Figure1a

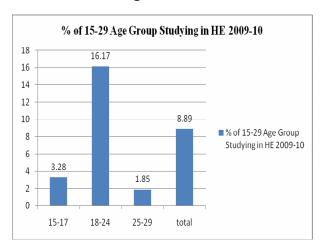


Figure 1c

Table 2a: Share of population below 30 years at different levels (studying or out of school) - by age groups: 1999-00

Among all population below 30 years	0-6	7-14	15-17	18-24	25-29	Total
EGS/NFEC/AEC/TLC	0.38		0.07	0.07	0.05	0.11
Pre-primary (nursery, Kindergarten)	10.47	0.18	0.39	0.07	0.03	0.15
Primary (class I to IV / V)	12.15	9.15	1.88	0.2	0.08	0.4
Middle	0.18	39.77	10.87	0.76	0.14	0.43
Secondary and higher secondary	0.01	23.14	36.11	6.72	0.29	0.74
Graduate & above		4.85	0.98	6.21	0.76	0.64
Diploma/certificate: below/above graduate		4.63	0.47	2.17	0.39	0.27
Total in school	23.19	77.09	50.77	16.21	1.75	2.74
Total Out of school	76.8	22.91	49.23	83.79	98.25	97.26
Total	100	100	100	100	100	100

Table 2b: Share of population below 30 years at different levels (studying or out of school) - by age groups: 2004-05

Among all population below 30 years	0-6	7-14	15-17	18-24	25-29	Total
EGS/NFEC/AEC/TLC	0.45	0.16	0.04	0.01	0	0.17
Pre-primary (nursery, Kindergarten)	9.09	0.94	0.01	0.01	0.01	2.58
Primary (class I to IV / V)	19.38	50.16	1.67	0.1	0.12	20.51
Middle	0.14	26.53	9.51	0.54	0.06	9.24
Secondary and higher secondary	0	8.15	41.63	6.3	0.21	7.93
Graduate & above	0	0	1.73	7.94	0.80	1.96
Diploma/certificate: below graduate	0	0	0.68	1.59	0.23	0.44
Diploma/certificate: graduate & above	0	0	0.15	1.13	0.42	0.31
Total in school	29.06	85.94	55.42	17.62	1.85	43.14
Total Out of school	70.94	14.06	44.58	82.38	98.15	56.86
Total	100	100	100	100	100	100

Table 2c: Share of population below 30 years at different levels (studying or out of school) - by age groups: 2009-10

Among population between 7 to 29 years	7-14	15-17	18-24	25-29	Total
EGS/NFEC/AEC/TLC	0.11	0.04	0.02	0.00	0.04
Pre-primary (nursery, Kindergarten)	1.05	0.02	0.00	0.03	042
Primary (class I to IV / V)	48.6	1.08	0.14	0.08	19.11
Middle	30.39	6.72	0.40	0.24	12.91
Secondary	11.43	30.15	1.60	0.15	9.08
Higher secondary	0.37	26.58	5.75	0.19	5.49
Graduate & above	0	3.04	13.93	1.30	4.65
Diploma/certificate: below graduate	0	0.24	2.25	0.54	0.79
Diploma/certificate: graduate & above	0	0.47	1.95	0.16	0.65
Total in school	91.95	68.34	26.04	2.69	53.14
Total Out of school	8.05	31.66	73.96	97.31	46.86
Total	100	100	100	100	100

Note: The current education question in this data has been asked to people between 5 and 29 years of age. Hence we removed the first age group to maintain consistency across years.

Table 3: Percentage of currently studying population at different levels by SRC

Year	Currently Studying or not: Age 18-	HSC	HST	HOBC	HUC	MOBC	MGEN	OM
	24							
1999	Not attending	88.79	89.66	87.52	73.23	92	87.78	76.08
-00	EGS/NFEC/AEC/TLC	1	0.09	0.07	0.02	0.02	0.1	0.03
	Pre-primary (nursery, Kindergarten)	0.06	0.07	0.09	0.02	0.01	0.18	0.05
	Primary (class I to IV / V)	0.17	0.04	0.19	0.33	0.04	0.19	0.11
	Middle	0.88	0.55	0.68	0.69	0.8	1.05	1.01
	Secondary and higher secondary	5.68	4.38	5.62	9.81	3.4	5.69	8.87
	Graduate & above	3.16	4.23	4.31	11.95	2.51	3.45	9.67
	Diploma/certificate: below & above	1.17	0.99	1.51	3.93	1.2	1.57	4.17
	graduate							
2004	Not attending	87.35	88.5	84.49	71.63	88.51	85.6	76
-05	EGS/NFEC/AEC/TLC	0.01	0	0	0.03	0.08	0.01	0
	Pre-primary (nursery, Kindergarten)	0.03	0	0.01	0	0.02	0	0
	Primary (class I to IV / V)	0.16	0.12	0.06	0.06	0.26	0.2	0.08
	Middle	0.66	0.59	0.45	0.48	0.47	0.67	0.66
	Secondary and higher secondary	5.43	4.88	5.97	7.9	3.91	6.61	8.53
	Graduate & above	4.36	4.75	6.63	15.21	5.16	5.44	10.1
	Diploma/certificate: below graduate	1.19	0.74	1.53	2.44	0.99	0.76	2.95
	Diploma/certificate: graduate & above	0.81	0.42	0.86	2.25	0.6	0.68	1.69
2009	Not attending	81.35	84.03	73.71	61.34	82.79	81.42	64.94
-10	EGS/NFEC/AEC/TLC	0.00		0.01	0.00	0.00	0.11	0
	Pre-primary (nursery, Kindergarten)	0.00		0.01	0.00	0.01	0.00	0.01
	Primary (class I to IV / V)	0.19	0.02	0.09	0.17	0.27	0.26	0.01
	Middle	0.47	0.54	0.45	0.07	0.36	0.76	0.43
	Secondary	2.00	1.5	1.64	1.23	1.64	1.52	1.61
	Higher Secondary	4.70	5.54	5.89	6.38	4.76	5.17	8.23
	Graduate and above	9.10	6.42	14.49	23.24	7.56	8.39	16.33
	Diploma/certificate: below graduate	1.06	0.49	1.8	4.82	1.11	1.42	3.71
	Diploma/certificate: graduate & above	1.13	1.46	1.91	2.75	1.50	0.95	4.73

Table 4: Share of higher secondary completed above 17 years age among each group -Individual and Family Characteristics

Among the following sample of above 17 years age	Percentage Secondary	Completed	l Higher
Individual Characteristics	1999-00	2004-05	2009-10
Male	14.63	17.37	21.75
Female	7.46	9.63	13.39
Hindu SC		6.49	9.44
Hindu SC Hindu ST	4.93	4.64	7.98
Hindu OBC	4.35	10.69	15.27
Hindu UC	7.47	26.99	32.83
Muslim OBC	21.99		9.41
	4.92	6.89 8.5	10.63
Muslim general	7.12		
Other minorities	15.50	19.56	24.08
Rural	6.03	7.86	10.71
Urban	24.69	28.49	34.36
Family Characteristics			
Occupations of Head			
Professional, technical related workers	68.05	39.92	36.60
Administrative, executive managerial	32.85	35.87	64.34
Clerical and related workers	50.60	40.79	69.37
Sales workers	18.80	18.28	63.57
Service workers	7.81	11.28	22.37
Farmers, fishermen, hunters, loggers	3.50	6.09	10.62
Production, equipment operators, labor	6.39	5.25	6.2
Workers not classified by occupations	11.26	2.41	6.91
Not Working	12.05	14.62	19.7
Very Poor	5.08	5.00	5.15
Vulnerable	12.96	4.14	7.75
Middle Class	29.61	3.89	16.63
High Income	52.52	14.94	43.89
Total	11.09	13.54	17.62

Table 5a: Marginal Effects (p-values in paren	nal Effect	s (p-values		ses) in St	theses) in Stock Model-	- Probability		of Completing Graduate	uate Degree/l	Diploma:	Age Group 22-35	22-35
	Stock Url	Stock Urban Full Sample	ıple	Stock Urb	oan Eligible	Sample	Stock Rur	al Full Sam	ple	Stock Ru	ral Eligible	Sample
Variables	1999-00	2004-05	2009-10	1999-00	2004-05	2009-10	1999-00	2004-05	2009-10	1999-00	2004-05	2009-10
Age	0.00	-0.00	0.00	0.01	-0.00	0.00	0.00	-0.00	0.00	0.01	0.00	0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.85)	(0.04)	(0.00)	(0.00)	(0.00)	(0.00)	(0.08)	(66.0)
Hindu ST	0.02	0.03	0.00	-0.02	0.02	-0.04	-0.01	-0.01	0.00	-0.16	-0.04	-0.13
	(0.17)	(0.14)	(0.91)	(0.65)	(0.71)	(0.49)	(0.00)	(0.03)	(0.47)	(0.00)	(0.29)	(0.99)
Hindu OBC	0.03	0.04	0.02	-0.02	0.01	-0.03	0.00	-0.00	0.00	-0.10	-0.04	-0.03
	(0.00)	(0.00)	(0.07)	(0.48)	(98.0)	(0.28)	(0.07)	(0.79)	(0.01)	(0.00)	(0.07)	(0.38)
Hindu UC	0.15	0.14	0.13	90.0	60.0	0.04	0.02	0.02	0.01	0.00	0.03	0.02
	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.97)	(0.27)	(0.59)
Mus OBC	90.0-	-0.05	-0.09	-0.11	-0.01	-0.08	-0.01	-0.01	0.01	-0.07	-0.07	0.02
	(0.00)	(0.01)	(0.00)	(0.02)	(0.77)	(0.12)	(0.00)	(0.00)	(0.05)	(0.26)	(0.16)	(0.74)
Mus Gen	0.00	0.01	-0.08	-0.03	0.02	-0.11	-0.01	-0.01	0.00	-0.02	0.00	-0.03
	(0.88)	(0.33)	(0.00)	(0.31)	(0.56)	(0.01)	(0.05)	(0.00)	(0.12)	(0.62)	(0.98)	(0.61)
OM	0.14	0.11	0.13	0.04	0.05	0.04	0.00	0.00	0.01	-0.09	-0.04	-0.05
	(0.00)	(0.00)	(0.00)	(0.16)	(0.17)	(0.19)	(0.25)	(0.54)	(0.31)	(0.03)	(0.30)	(0.23)
Male	0.05	0.03	0.02	0.02	-0.04	-0.02	0.03	0.03	0.00	90.0	0.04	0.01
	(0.00)	(0.00)	(0.04)	(0.25)	(0.00)	(0.08)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.78)
Log MPCE	0.27	0.26	0.33	0.24	0.21	0.25	0.05	90.0	0.00	0.16	0.19	0.14
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Hh Size	0.01	-0.03	0.02	0.01	-0.03	0.02	0.00	-0.01	0.00	0.00	-0.02	0.01
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.04)	(0.00)	(0.01)
Observed P	0.19	0.20	0.25	29.0	0.59	0.62	0.04	0.04	90.0	0.48	0.41	0.41
Predicted P	0.13	0.14	0.19	89.0	09.0	0.63	0.02	0.02	0.03	0.48	0.41	0.41
No. of Obs	55601	50102	43967	17347	15711	17282	84428	89911	64785	9254	13703	13483
Waldchi2(36)	4613.9	2366.7	2291	620.2	409.1	581.0	2634.4	3089.3	1717.2	356.8	327.2	221.4
Prob > chi2	0	0	0	0	0	0	0	0	0	0	0	0
Log Pseudo L	-20833	-19171	-18803	-10329	-10059	-10573	-11805	-13060	-11676	-6044	8068-	-8750
Pseudo R2	0.24	0.23	0.24	90.0	0.05	80.0	0.18	0.18	0.17	90.0	0.04	0.04

-7105.4 1160.9 14986 (0.00)(0.00)(0.12)-0.05 0.00 (0.99) (0.00)(0.61)0.10 (0.00) 0.02(0.00)-0.13 -0.04 -0.02 Flow Rural Eligible Sample 0.18 0.40 0.34 Table 5b: Marginal Effects (p-values in parentheses) in Flow Model- Probability of Studying Grad and above Level: Age Group 17-29 2004-05 -6751.4 158.6 (0.16) 0.06(0.00)(0.00) -0.0214361 (0.01)(0.01)(0.21) -0.01(0.81)(0.00)(0.00)(90.0)-0.06 -0.04 0.05 0.06 0.11 0.29 0.22 0.21 1999-00 (0.41)(0.00)(0.45)(0.00)(0.00)(0.00)(0.00)(0.00)(0.56)(0.35)-0.07 -0.01 -0.12 -0.03 0.09 9638 0.02 0.13 0.01 0.29 0.23 2009-10 -12918 61974 (0.00)(0.00)(0.00)(0.06)(0.00)(0.00)(0.00)(0.03)(0.00)(0.00)1942.] -0.01 -0.02 -0.02 0.03 0.02 0.00 0.07 0.01 0.01 0.04 0.07 Flow Rural Full Sample 2004-05 -119491692.7 86965 (0.00)(0.00)(0.00)(0.00)(0.02)(0.63)(0.02)(0.83)(0.38)(0.00)-0.01 -0.00 -0.010.00 0.00 0.04 0.04 0.01 0.01 0.01 1999-0080356 (0.00) 0.00(0.00)(0.08) 0.01(0.00)(0.00)(0.00)(0.00)(0.13)(0.17)-0.01 (0.00)0.00 0.00 0.01 0.03 0.01 0.01 0.03 0.01 2009-10 -8224.7 Flow Urban Eligible Sample 17256 (0.00)(0.72)(0.79)(0.76)(0.25)(0.76)(0.94)(0.00)(0.00)(0.21)-0.05 -0.01 -0.01 0.02 0.01 0.00 0.05 0.13 0.00 98.0 0.41 2004-05 448.6 15613 -7302.. (0.00)(0.52)(0.34)(0.62)(0.55)(0.09)(0.58)(0.00)(0.00)(0.00)-0.02 -0.03-0.03 -0.03 -0.05 -0.01 0.03 90.0 0.12 0.27 0.33 0.27 1999-00 2140.2 17295 (0.00)(0.01)(0.00)(0.00)(0.48)-8292 (0.00)(0.33)(0.02)(0.05)(0.01)-0.05 -0.12 -0.08 -0.08 90.0 0.10 0.15 0.00 0.37 0.27 2009-10 -15214 0.6281 41630 (80.0)(0.00)(88.0)0.000.05) 0.020.00(0.01)0.12) (0.00)0.04 0.02 0.04 0.02 90.0 0.05 0.01 0.15 0.00 0.17 0.12 0.21 Flow Urban Full Sample 2004-05 -13933 1986.4 48419 (0.01)(0.04)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.02)(0.27)0.05 -0.02 0.05 -0.01 0.10 0.04 0.03 0.01 0.12 0.07 0.01 1999-00-14938 (0.00)(0.00)(0.00)(0.18)(0.00)(0.00)(0.00)(0.28)(0.05)(0.00)-0.04 -0.010.00 0.05 0.04 90.0 0.01 0.01 0.11 0.01 0.11 Log Pseudo L Waldchi2(36) Log MPCE Prob > chi2 Observed P Predicted P Hindu OBC No. of Obs Pseudo R2 Hindu UC Mus OBC Variables Hindu ST Mus Gen Hh Size Male Age OM

Table 6a: Probability of **Participation** in HE: Tentative Rankings of SRCs

Stock Urban Full	Sample		Stock Urban Elig	ible Sample	
1999-00	2004-05	2009-10	1999-00	2004-05	2009-10
H-UC (1)	H-UC (1)	H-UC (1)	H-UC (1)	H-UC (1)	H-UC (1)
OM (2)	OM (2)	OM (1)	OM (2)	OM (2)	OM (1)
H-OBC (3)	$H ext{-}OBC(3)$	H-OBC (2)	H-OBC (4)	$H ext{-}OBC(5)$	H-OBC (3)
H-ST (4)	H-ST (3)	H-ST (3)	H-ST (4)	H-ST (4)	H-ST (4)
M-G (5)	M-G(4)	M-G(4)	M-G (5)	M-G(3)	M-G (6)
H-SC (6)	H-SC (5)	H-SC (3)	H-SC (3)	H-SC (6)	H-SC (2)
M-OBC (7)	M-OBC (6)	$M ext{-}OBC(4)$	M-OBC (6)	M-OBC (7)	$M ext{-}OBC(5)$
Stock Rural Full	Sample		Stock Rural Eligi	ble Sample	
H-UC (1)	H-UC (1)	H-UC (1)	H-UC (1)	H-UC (1)	H-UC (1)
OM (2)	OM (2)	OM (2)	OM (5)	OM (4)	OM (4)
H-SC (3)	H-SC (3)	H-SC (2)	H-SC (2)	H-SC (3)	H-SC (2)
H-OBC (2)	$H ext{-}OBC(4)$	H-OBC (2)	H-OBC (6)	$H ext{-}OBC$ (4)	H-OBC (3)
H-ST (4)	H-ST (5)	H-ST (2)	H-ST (7)	H-ST (4)	H-ST (5)
M-G (4)	M-G(5)	M-G(2)	M-G (3)	M-G(2)	M-G (3)
M-OBC (4)	M-OBC (6)	M-OBC (1)	M-OBC (4)	M-OBC (5)	M-OBC (1)

Table 6b: Probability of **Current Enrolment** in HE: Tentative Rankings of SRCs

Flow Urban Full	Sample		Flow Urban Elig	gible Sample	
1999-00	2004-05	2009-10	1999-00	2004-05	2009-10
H-UC (1)	H-UC (2)	H-UC (1)	H-UC (2)	H-UC (3)	H-UC (2)
OM (2)	OM (3)	OM (2)	OM (4)	OM (4)	OM (3)
H-OBC (3)	H-OBC (4)	H-OBC (4)	H-OBC (3)	H-OBC (5)	H-OBC (4)
H-ST (3)	H-ST (1)	H-ST (3)	H-ST (2)	H-ST (1)	H-ST (1)
M-G (5)	M-G (6)	M-G(6)	M-G (4)	M-G (6)	M-G (4)
H-SC (4)	H-SC (5)	H-SC (5)	H-SC (1)	H-SC (2)	H-SC (3)
M-OBC (6)	M-OBC (7)	$M ext{-}OBC(7)$	M-OBC (5)	$M ext{-}OBC(5)$	M-OBC (5)
Flow Rural Full	Sample		Flow Rural Eligi	ible Sample	
H-UC (1)	H-UC (1)	H-UC (1)	H-UC (4)	H-UC (7)	H-UC (4)
OM (1)	OM (2)	OM (2)	OM (2)	OM (5)	OM (2)
H-SC (3)	H-SC (3)	H-SC (3)	H-SC (3)	H-SC (4)	H-SC (1)
H-OBC (2)	H-OBC (2)	H-OBC (2)	H-OBC (6)	H-OBC (6)	H-OBC (3)
H-ST (1)	H-ST (1)	H-ST (4)	H-ST (1)	H-ST (1)	H-ST (5)
M-G (2)	M-G (4)	M-G(5)	M-G (5)	M-G(2)	M-G (6)
M-OBC (4)	M-OBC (5)	M-OBC (5)	M-OBC (7)	M-OBC (3)	M-OBC (1)

Table 7a: **Stock Model of 64.25th Round:** Probability of Current Participation – Probit Estimates Controlling for Access

Controlling for Completed graduate or		effects (dF/	dx): Urbaı	n	Marginal	effects (dF/d	dx): Rural	
not	Full Sam	ınle	Eligible	Sample	Full Sam	nle	Eligible	Sample
Variables	Spec1	Spec 2	Spec1	Spec 2	Spec1	Spec 2	Spec1	Spec 2
Age	0.00	0.00	0.00	0.00	0.00	0.00	-0.07	0.00
7150	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Hindu ST	0.02	0.02	0.04	0.04	0.00	0.00	0.05	0.01
	(0.33)	(0.30)	(0.44)	(0.44)	(0.35)	(0.80)	(0.17)	(0.89)
Hindu OBC	0.03	0.03	0.01	0.01	0.00	0.00	-0.01	0.00
	(0.00)	(0.00)	(0.58)	(0.58)	(0.04)	(0.02)	(0.51)	(0.99)
Hindu UC	0.14	0.14	0.10	0.10	0.04	0.04	-0.04	0.05
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.09)	(0.04)
Mus OBC	-0.07	-0.07	-0.04	-0.04	-0.02	-0.02	-0.05	-0.03
	(0.00)	(0.00)	(0.31)	(0.31)	(0.00)	(0.00)	(0.21)	(0.51)
Mus Gen	-0.03	-0.03	0.00	0.00	-0.01	-0.01	0.00	0.04
	(0.01)	(0.01)	(0.96)	(0.96)	(0.05)	(0.05)	(0.94)	(0.35)
OM	0.08	0.08	0.02	0.02	0.00	0.00	0.02	-0.04
	(0.00)	(0.00)	(0.50)	(0.50)	(0.60)	(0.48)	(0.65)	(0.24)
Male	0.02	0.02	-0.05	-0.05	0.02	0.02	0.05	0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.02)	(0.00)	(0.00)	(0.94)
Log MPCE	0.29	0.29	0.24	0.24	0.06	0.06	0.15	0.18
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Hh Size	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.01
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.74)	(0.01)
Dist School		-0.02		-0.02		-0.01		-0.04
		(0.04)		(0.41)		(0.00)		(0.01)
Observed P	0.21	0.21	0.61	0.61	0.05	0.05	0.31	0.42
Predicted P	0.16	0.16	0.62	0.62	0.03	0.03	0.26	0.41
No. of Obs	42215	42141	14460	14436	70773	70382	8018	8060
Waldchi2(36)	3275	3277.73	593.6	597.44	1904.9	2069.53	807.6	292.01
Prob > chi2	0	0	0	0	0	0	0	0
Log Pseudo L	-16866	-16831.5	-8986	-8969.88	-11014	-10909.1	-4012	-5249.99
Pseudo R2	0.22	0.22	0.07	0.07	0.16	0.16	0.19	0.04

Table 7b: **Flow Model of 64.25**th **Round:** Probability of Participation – Probit Estimates Controlling for Access

Current Participation	Marginal e	effects (dF/dx): Urban		Marginal ef	fects (dF/dx)	: Rural	
	Full Samp	le	Eligible Sa	ample	Full Sample	2	Eligible S	ample
Variables	Spec1	Spec 2	Spec1	Spec 2	Spec1	Spec 2	Spec1	Spec 2
Age	-0.02	-0.02	-0.09	-0.09	-0.01	-0.01	-0.07	-0.07
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Hindu ST	0.00	0.00	-0.05	-0.05	0.00	0.00	0.05	0.05
	(0.74)	(0.75)	(0.35)	(0.35)	(0.30)	(0.47)	(0.17)	(0.17)
Hindu OBC	0.00	0.00	-0.06	-0.06	0.00	0.00	-0.01	-0.01
	(0.74)	(0.74)	(0.02)	(0.02)	(0.24)	(0.20)	(0.51)	(0.51)
Hindu UC	0.03	0.03	-0.04	-0.04	0.02	0.02	-0.04	-0.04
	(0.00)	(0.00)	(0.10)	(0.10)	(0.00)	(0.00)	(0.09)	(0.09)
Mus OBC	-0.05	-0.05	-0.09	-0.09	-0.01	-0.01	-0.05	-0.05
	(0.00)	(0.00)	(0.02)	(0.02)	(0.00)	(0.00)	(0.21)	(0.21)
Mus Gen	-0.03	-0.03	-0.04	-0.04	-0.01	-0.01	0.00	0.00
	(0.00)	(0.00)	(0.20)	(0.20)	(0.01)	(0.01)	(0.94)	(0.94)
OM	0.02	0.02	-0.02	-0.02	0.00	0.00	0.02	0.02
	(0.09)	(0.10)	(0.52)	(0.51)	(0.26)	(0.24)	(0.65)	(0.65)
Male	-0.01	-0.01	0.02	0.02	0.01	0.01	0.05	0.05
	(0.11)	(0.10)	(0.24)	(0.25)	(0.00)	(0.00)	(0.00)	(0.00)
Log MPCE	0.11	0.11	0.11	0.11	0.05	0.05	0.15	0.15
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Hh Size	0.00	0.00	-0.01	-0.01	0.00	0.00	0.00	0.00
	(0.88)	(0.90)	(0.02)	(0.02)	(0.00)	(0.00)	(0.74)	(0.74)
Dist School		-0.01		-0.01		0.00		0.00
		(0.11)		(0.62)		(0.00)		(0.99)
Observed P	0.12	0.12	0.35	0.35	0.04	0.04	0.31	0.31
Predicted P	0.08	0.08	0.29	0.29	0.02	0.02	0.26	0.26
No. of Obs	36420	36364	12209	12194	60782	60569	8018	8004
Waldchi2(36)	1807.0	1815.93	1364.8	1365.65	1443.11	1454.32	807.6	809.41
Prob > chi2	0	0	0	0	0	0	0	0
Log Pseudo L	-11089	-11066.4	-5861	-5853.83	-9168	-9127.48	-4012	-4006.72
Pseudo R2	0.18	0.18	0.26	0.26	0.17	0.17	0.19	0.19