

PRIVATE EXPENDITURE ON EDUCATION

Introduction

Private costs of education are known as private because they are borne by students themselves or by their families. Burden of such costs falls on them as they finance them. Little information is available on private costs other than tuition cost (i.e., tuition fees, examination fees and other fees) incurred by private persons on education.

There are four components of private costs of education (i) Tuition cost i.e., tuition fee, Examination fee and other fees. (ii) Non-tuition cost of education such as books, stationary, transport cost, recreation, lodging and boarding charges etc (iii) Earnings forgone or the opportunity cost of education, (iv) Interest foregone, had the household not spend on non-tuition expenses of children going to schools, the amount would have been saved and the interest earned on it. Information about private cost, especially non-tuition costs, earnings foregone and interest foregone is rarely available in the published form. In the past also except some notable exceptions hardly any systematic attempt is made to estimate the private cost of education.¹ Thus, we were left with no choice but to conduct a sample survey to collect information about this cost.

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In case of non-tuition costs we have conducted a survey to get some idea of the magnitude of the first two components of private costs of education. The survey was conducted in the year 1986-87. We decided to contact 5 per cent of the enrolled students of the Faculty of Commerce, M.S. University of Baroda. All the respondents were personally contacted in their class rooms in a group. For analysis purpose the information contained in 300 forms was used as the remaining forms did not contain all the information. Students were asked questions to furnish the following information :

- (1) Tuition and non-tuition expenditure incurred on education by respondents' families.
- (2) Sources and the amount of aid, if any, received towards meeting expenditure on education.
- (3) Information regarding the age and earnings of the head of the family was also collected.

There are a few limitations of our survey, the major ones are :

- (i) Ours was purely a case study rather than a nation-wide representative sample.
- (ii) Our field of inquiry was one faculty of one university of a state in the country.
- (iii) Most of the students for whom the data were collected belonged to general stream rather than vocational/professional education. Cost structure

of general education is bound to be different than that of professional/vocational education.

(iv) Composition of students in our study is more in favour of students coming from comparatively better economic position.

(v) Most of the students belonged to urban areas.

The third component of private cost is earnings foregone. In the resource cost of education it is a major component. Earnings foregone constitute a very significant part of the private costs of education. It ranges from 50 per cent to 60 per cent of the total private cost of education. In the United States of America earnings foregone by Secondary and College students accounts for about 3/5th of the total factor cost of education in 1956.² The fourth component is the interest income foregone by a student.

Our main objective is to estimate the stock of human capital for the year 1950-51, 1960-61, 1970-71 and 1979-80. But data on non-tuition private cost of education (based on our survey) are available only for the year 1986-87. So to find out the non-tuition cost for each bench mark year we have worked out multiple factors for four bench mark years. The derivation of the multiple factor is given below.*

The all India consumer price index was 360 in 1979-80 and 401 in 1980-81. By the year 1985-86 it rose to 620 and

* The methodology followed here is based on the methodology used by JBG Tilak in his book, "The Economics of Inequalities in Education - 1987".

4 was 674 in the year 1986-87. (RBI Report on Currency and Finance 1986-87). Biannual average has been taken in both cases and CPI in 1979-80 was less than the 1986-87 index by 41.19. Accordingly the private costs is deflated by multiplying it with a factor 0.5881 (i.e. 100.00 41.10) for arriving at the private cost for the year 1979-80. Same way multiple factors have been found out for the years 1950-51, 1960-61 and 1970-71.

$$\text{Multiple Factor} = \frac{\text{Biannual CPI for the current year} - \text{Biannual CPI for the past year}}{\text{Average CPI for the current year}} \times 100$$

$$\frac{647 - 381}{647} \times 100 = 41.19$$

$$= 0.5881$$

Multiple factors for the year

1950-51	=	0.1584
1960-61	=	0.1940
1970-71	=	0.2921
1979-80	=	0.5881

I

Private Tuition Cost

In Table 4.I, we present the recorded tuition cost per pupil by level of education for the period 1950-51 to 1979-80. It is the net tuition cost per pupil that gives an idea of the burden of educational cost on private individuals. We have, therefore, deducted the subsidies and other financial concessions from the total tuition cost to arrive at the net tuition cost.

Table : 4.I

Recorded Private Tuition Cost of Education -
Total and Per Pupil by Level of Education, 1950-51 - 1979-80

Year	Elementary			Secondary			Higher			
	Total Private Tuition Cost Rs. Million	Cost per Pupil (Rs.)	Ratio	Total Private Tuition Cost Rs. Million	Cost per Pupil (Rs.)	Ratio	Net Tuition Total Cost Rs. Million	Private Tuition Total Cost Rs. Million	Cost Per Pupil (Rs.)	Ratio
1	2	3	4	5	6	7	8	9	10	
1950-51	41	2.00	1:00	122	24.0	1:12	76	189.0	1:94	
1960-61	56	2.00	1:00	216	22.0	1:11	164	167.0	1:83.5	
1970-71	138	3.00	1:00	472	28.0	1:9.3	492	164.0	1:54.6	
1979-80	417	4.00	1:00	981	38.0	1:9.5	1303	260.0	1:65	

Note : + Private tuition cost comprises - Tuition, Examination and other fees.
It is calculated by deducting Scholarships, Stipends and other Financial Concessions received by the students.

Source : "Education in India" Vol. I & II for the years 1950-51 to 1979-80.

At the elementary level of education tuition fee per pupil in 1950-51 and 1960-61 remained unchanged at Rs.2/-. In 1970-71, it increased to Rs. 3/- which was higher at Rs.4/- in 1979-80.

At the other two levels of education i.e., Secondary and Higher levels, we observe the following trend in tuition cost per pupil. In 1950-51 the tuition cost per pupil at secondary level was Rs.24/- which has continuously increased except in the year 1960-61, where it was Rs.22/- per pupil. In 1970-71 it rose to Rs.28/- and in 1979-80 it was Rs.38/- per pupil. Similar is the case with higher level of education. In 1950-51 it was Rs.189/- per pupil. It had fallen to Rs.167 and Rs.164/- for the years 1960-61 and 1970-71 respectively. In 1979-80 it again increased to Rs.260/- per pupil.

It has been observed that at the two higher levels, i.e. secondary and higher, the tuition cost is heavily subsidized. This can be seen from the behaviour of the tuition cost ratios at three levels of education. Taking average tuition cost of elementary schooling as the base we find the ratio (Table 4.I) of tuition cost at the secondary level of education which was 1:12 in 1950-51 came down to 1:9 in 1979-80, and at the higher level of education it came down from 1:94 in 1950-51 to 1:65 in 1979-80.

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It is apt here to compare tuition cost per pupil in our survey of the students of the M.S. University of Baroda with all India figures. Surprisingly, the average tuition cost at the elementary level of education in our survey (Rs. 294) is 13 per cent more than the tuition cost per pupil of Rs. 260/- at the higher level of education in India as a whole. Tuition cost per pupil of Rs.294 is 75 times the all-India average of Rs.4/- at the elementary education i.e., preference of the urban people for fee charging private schools which are believed to be qualitatively better than the government school.*

II

In Table 4.II non-tuition private cost of education estimated by different scholars is given.

Comparative tuition cost at each level
of education per pupil per annum (1979-80) Rs.

Level of Education	All India [†]	Urban India [†]	Sample [*] Survey
Elementary	4	9	294
Secondary	38	50	120
Higher	260	296	266

Source + Education in India Vols. I & II, 1979-80.

* Sample survey of the students of Faculty of Commerce, M.S. University of Baroda.

Table : 4.II

Non-Tuition Private Cost of Education Per Pupil

Per Annum by Level of Education

Level of Education	V.N.Kothari		K.R. Shah		JBG Tilak		Baroda	
	Cost per Pupil (Rs.)	Ratio	Cost per Pupil (Rs.)	Ratio	Cost per Pupil (Rs.)	Ratio	Survey (1986-87) Cost per Pupil (Rs.)	Ratio
1	2	3	4	5	6	7	8	9
Elementary	12	1:00	69	1:0	207	1:0	503	1:0
Secondary	25	1:2	82	1:1.8	238	1:1.14	1108	1:2.20
Higher	70	1:5.8	307	1:4.5	1417	1:6.8	2100	1:4.17

- Source : Col. No. 2 : V.N. Kothari Factor Cost of Education in India. Indian Economic Journal Vol. XIII No.5, April-June, 1966.
- Col. No. 4 : K.R. Shah Outlay on Education and its Financing in India (1950-51 to 1960-61) Unpublished Ph.D. Thesis 1968, M.S. University of Baroda
- Col. No. 6 : J.B.G. Tilak. The Economics of Inequality in Education 1987 Sage Publications, New Delhi.
- Col. No. 8 : Baroda Survey : Sample Survey of the Students of Faculty of Commerce, M.S. University of Baroda, 1986

On the basis of Shah's study, non-tuition private cost per pupil by level of education was Rs. 69, Rs. 82 and Rs. 307, for the elementary, secondary and higher levels of education respectively. Taking non-tuition private cost of education per pupil of elementary education as base, non-tuition private cost of education per pupil at the secondary level of education was 1:1.88 whereas that at the higher level of education it was 1:4.5. In our study, on the other hand, the respective costs per pupil are Rs. 503, Rs.1108 and Rs.2100 at the elementary, secondary and higher levels of education respectively. Here also taking non-tuition private cost of elementary education as base, such costs at the secondary and higher levels of education are in the ratios of 1:2.2 and 1:4.17 respectively. In Shah's study the households spent more than four times on higher education than what they spent on elementary level of education. Our study also leads to the same conclusion.

The comparison shows that during this intervening period the cost at each level has increased substantially in nominal terms. At the elementary level of education we roughly observe the increase of seven times, whereas in case of secondary level of education it was 14 times and at higher level of education it has increased by approximately seven times. Thus at all levels of education the nominal increase in non-tuition private cost

of education seems to have increased at a rate higher than the rate of inflation* which means in real terms also the non-tuition private cost must have increased.

The reasons for the peculiar behaviour of non-tuition private cost of education are not far to seek. (i) The snob value of education has become entrenched in the minds of parents over a period of time. So they prefer to send their children more to qualitatively better private schools. (ii) The practice of private coaching has become wide spread at all levels of education with the passage of time. The proportion of expenditure on private coaching at the elementary level of education works out to around 1/4th of the total cost of education. Private households can afford to spend so much on private coaching simply because higher level of education has become heavily subsidized. (iii) At the secondary level of education it is the structural factors that explains the faster increase in the non-tuition private cost of education. The introduction of 10+2+3 pattern of education is relevant here. The admission to the higher level of education (College and University and especially in professional courses like Engineering and Medicine) - being dependent on the performance of the student at 10+2 stage, parents spend more on non-tuition cost. At this stage the proportion of expenditure incurred on

* All India Consumer Price Index was 102 in 1960-61, rose to 674 in the year 1986-87. (Base 1960-100) Prices rose by 6.5 times approximately.

Source : Economic Survey 1986-87.

1 private coaching is as high as 52 per cent of the total non-tuition cost.

A recent study on inter and intra occupational differences in incomes and levels of living also brings out that the expenditure on private coaching accounts for about 2/5th of the total private expenditure on education sepecially at the secondary and higher education levels.^{3,4}

Non-Tuition Private Cost : Sex-wise

The table 4.III provides the information on the non-tuition cost of education borne by male and female students. At each level of education we find that a male student spends more on non-tuition cost than a female student. The difference gets widened as we climb up the ladder of education. At primary level of education a male student spends 17 per cent more than a female student whereas at secondary level of education a male student spends 42 per cent more and at higher level approximately he spends 40 per cent more.

The fact that private expenditure on women's education is less than that of on men's education can be explained by several factors. First, the few women who receive some education, due to prevailing social customs and values had to stay at home and continue their education upto the level that was available in their own villages and towns, thus avoiding expenditure on items which would otherwise be incurred had they moved out of their homes and stayed in hostels or rented houses in cities and towns. Second, women has less extra curricular activities, purchase of non-college books, which result on the whole in lowering the expenditure on their education. Lastly, the parents or households tend to invest less in the education of women than on men in anticipation that they may not participate in the labour force in future for a variety of socio-economic and cultural factors. This also proves the dominance of males in the Indian society. This will also be reflected in the total stock of human capital embodied in men and women and the stock of human capital is bound to be less in case of women than in case of men.

Non-Tuition Cost ; Region-wise

The information on non-tuition cost of education of urban areas and rural areas is available from Table No. 4.III.

At the outset we want to make it clear that we do not have ready made information on non-tuition cost for rural areas as such. Our survey provides the information for only urban area, since majority of our respondents were urban dwellers. Few students were coming from the rural areas and they are not going to influence our results in any significant manner. From the detailed information on private non-tuition cost of urban students we have derived the cost per pupil for rural area by making certain reasonable assumptions. Our assumptions are based on the logic that the expenditure pattern of rural and urban people is not similar and so is also reflected in the expenditure on education.*

1. The expenditure on books by the students is same in both rural and urban areas.
2. The expenditure on stationary in rural areas is less and we have assumed it to be 25 per cent less than urban areas.
3. Expenditure on local transport is nil in case of students in rural areas.
4. Recreation and other expenditure on socialization process is nil in rural areas.

* For this part of the analysis we are grateful to Professor V.N. Kothari for his valuable suggestions. However, limitations are ours.

5. Long distance travel expenditure in case of high school and college/university students is to be fully considered in rural areas.
6. Expenditure on private coaching is 50 per cent less in rural areas than what it is in urban areas.

The behaviour of non-tuition cost of rural-urban student is similar to that of a non-tuition private cost per pupil of male/female student i.e. per pupil cost in rural area at each level of education is less than the cost per pupil in urban area. At the elementary level of education the expenditure incurred by rural household per pupil is 42 per cent less than what is spent by a urban household at that level. For secondary level the difference is about 44 per cent and at the higher level of education this difference comes to about 37 per cent. This again will strengthen our argument that there exist inequality in the stock of human capital between regions i.e. rural/urban areas. The similar pattern is also observed in case of per pupil non-tuition cost by caste.

Private non-tuition cost of education of non-SC/ST student at all the levels of education is higher than that of an SC/ST student. However, the degree of variation in average private non-tuition cost by caste at each level of education is higher than that observed by sex as well as by region i.e., at the elementary level of schooling

Table : 4.III

Year	Level of Education	Derived Private Non-Tuition Cost of Education by Sex, Region and Caste						
		By Sex		By Region				
		Elementary	Secondary	Elementary	Secondary			
1950-51	Male	94	225	416	Rural	47	99	210
	Female	70	130	253	Urban	80	176	333
1960-61	Male	115	275	509	Rural	57	121	257
	Female	85	159	310	Urban	98	215	407
1970-71	Male	174	414	767	Rural	86	182	386
	Female	129	240	466	Urban	147	324	613
1979-80	Male	350	835	1544	Rural	173	366	778
	Female	259	483	939	Urban	296	652	1235

contd...

Table : 4.III contd ...

	By Caste			All levels		
	Elementary	Secondary	Higher	Elementary	Secondary	Higher
1	8	9	10	11	12	13
SC/ST	41	68	160	80	176	333
Non SC/ST	98	178	349			
SC/ST	50	83	196	98	215	407
Non SC/ST	120	217	428			
SC/ST	76	125	295	147	324	613
Non SC/ST	181	327	644			
SC/ST	153	252	594	296	652	1235
Non SC/ST	365	659	1297			

Note : Private Non-Tuition cost given in the Table is based on the information contained in our sample survey conducted in the year 1986-87. This cost figures, then are for the year 1986-87. In order to estimate private Non-Tuition cost for the bench mark years 1950-51, 1960-61, 1970-71 and 1979-80 corresponding to our reference period for the measurement of the stock of educational capital we deflated the cost figures for that year (1986-87) by deriving the appropriate deflators from the all India consumer Price index number. The methodology followed in estimating costs this way is as explained in the Introduction of this chapter.

Source : Baroda Survey

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the variation is of the order of 2.4 times as against 1.35 times and 1.7 times in case of male/female and rural/urban students. The same pattern is observed at other two levels of education. The tendency of the SC/ST castes to spend less on education can be easily understood in terms of their relatively weaker economic position.

The analysis of private non-tuition cost of education shows a clear bias towards male, urban and non-SC/ST population. This in a sense, is a reflection of the inbuilt social and economic biases in our society.

III

Earnings Foregone or Opportunity Cost of Education

Earnings foregone occupies a very prominent place in the total cost of education. Its consideration is based on the assumption that alternative to schooling is gainful work. Those students who choose to go to school, beyond compulsory education forego earnings and in a country like India where child labour is widely prevalent, and proportion of population living below poverty line is quite high, families are compelled to send their children to work. So elementary school going children also forego earnings. One argument is made that in a situation of unemployment can we consider earnings foregone as an

important part of the cost of education? In our economy general as well as educated unemployment has become inbuilt and it has grown over a period of time. But the answer is affirmative.

Incidents and duration of unemployment is less in case of educated persons than in case of less educated persons. Probability of getting a job is high among educated persons than among less educated persons. Most of the educated unemployed are new entrants to the job market searching for the first job. Naturally they come across frictional unemployment. According to search theory during the initial period after completion of their studies whatever time and money they spend on job search is investment expenditure. So they are not unemployed in the strict economic sense of the term. In a poor country unemployment is a luxury. They can not remain without work for a long time even then one has to make an allowance for the factor of unemployment in calculating the stock of human capital. The reasons are that the number of educated unemployed proportionately increased over a period of time, the average waiting period also increased and the average age of educated unemployed has also increased. Whatever amount of human capital in money terms is absorbed by educated unemployed is to be subtracted from the total stock of human capital.

In India number of studies on educational capital or human capital has given due consideration to earnings

foregone. Two different approaches were used by the scholars for its calculation. One : The age-education earnings profiles and second actual earnings of the persons with a given level of education. The first approach was followed by Blaug Pandit⁵ where they estimated earnings profiles derived from the survey of National Council of Applied Economic Research 1960-65. Tilak^{6,4} has calculated earnings foregone on the basis of age earnings profiles prepared from the survey data of West Godavari district in Andhra Pradesh.

The second approach is followed by V.N. Kothari^{7,5}, R.K. Amin, Mahesh ~~Shett~~^{Pathak 6,8}, P.P. George^{7,9} etc. Professor Kothari's estimates were based on the actual earnings of certain categories of people in the labour force. In order to prove this he has made some reasonable assumptions regarding age of entry into the labour force by the rural/urban population, work participation rates of males and females and the number of days worked by the workers. In the absence of age, qualification specific data the following earnings equivalent were assumed by Professor V.N. Kothari.

- (1) A College student is foregoing earnings of a high school teacher.
- (2) High school student foregoes earnings of a primary school teacher.
- (3) Primary student foregoes earnings of rural agricultural labourer and half of the earnings of industrial worker.

We have followed Professor Kothari's methodology but with certain modifications. We have taken the actual earnings of the people in the labour force assuming that they possess required educational qualifications.

(1) Earnings foregone at Elementary level of Education.

The students who undergo the schooling at elementary level, forego the wage of an agricultural child labourer, in rural areas and in urban areas forego the wage of a child labourer in an unorganised sector in urban area. At elementary level the students who are enrolled belong to the age group 6 to 14 years and hence do not constitute the part of the labour force. If at all they work instead of going to school they work as child labourers. And also child labour is widely prevalent. It is also suggested that poor parents should be compensated for the loss of income earned by their children if they had not gone to school.⁺

(2) Earnings Foregone at Secondary level of Education

The students at this level belong to age group 15+. They forego mean earning of (i) elementary school teachers,

(ii) class IV employees of the service sector as a whole and

⁺ Challenge of Education, Ministry of Education - a Policy perspective, Government of India, New Delhi, August, 1985. ~~Page 4, 10.~~

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(iii) the workers in the manufacturing sector. Why do we take the earnings of the above categories of workers? The answer is based on the following facts.

(a) Employment in the Private organised sector has not increased fast, its share has remained constant at 10 per cent throughout plan period, the employment has expanded relatively more in the unorganised sector and particularly in the service sector.

(b) Incidents of unemployment among matriculates has increased. The upgradation of educational qualifications for the jobs has made persons with educational attainment upto matriculation to accept jobs earlier performed by persons with elementary schooling.

(3) Earnings Foregone at Higher level of Education

The students at this level of education belong to the age group 18+. They forego mean earnings of

- (i) Secondary school teachers and (ii) Class III (Jr. Grade) employees in the organised sector both

public and private.* The reasons are :

- (i) The minimum qualification for a Senior Clerk in nationalized banks is matriculation or Higher Secondary School Certificate examination
- (ii) A Secondary grade school teacher or a Junior Accountant also have this minimum qualification.
- (iii) The minimum qualifications for a Junior Clerk in Railways is also Secondary School Certificate Examination.

Probably nobody has considered the interest foregone by the households, if they had invested the amount spent on education, in the interest yielding securities. This also is the opportunity cost of education in the same sense as the earnings foregone.

* Even as late as 1961, the majority of the matriculates were employed in service sector. We can quote from the Report of the Education Commission - 1966. "Broadly speaking, there were 5.2 million workers with qualification equivalent to matriculation and above, two third of them were in urban areas and rest in rural areas. Over half of these were employed in other services (Public Administration, Education, etc.), about one in five of them were graduates and these were even more heavily concentrated in the service occupation."

Table : 4.IV

Earnings Foregone by the students at
Different Levels of Education

Average Annual Earnings

(Rs.)

Year/Level	Elementary	Secondary ⁽⁺⁾	Higher ⁽⁻⁾
1950-51	238	820	1406
1960-61	303	1157	2112
1970-71	399	2239	3334
1979-80	1052	5443	8141

Note : Earnings foregone by Elementary School going Children is mean wage of rural and urban child labour.

- Source :
1. Jose A.Y. Agricultural Wages in India, Economic and Political Weekly, June, 25th, 1988. Vol. No.
 2. George K.N. Child Labour
 3. Deshpande L.K. Bombay Labour Market 1985.
 4. Shah P.M., Saiyad S.A. "Urban Informal Sector : A Case Study of Baroda, 1985."
 5. Shah P.M., "Child Labour in Unorganised Sector" Unpublished paper 1988-89.

+ Earnings foregone by Secondary school students is mean wage of Primary School Teachers of Class IV Employees of Private and Public Sectors and Industrial Workers in the manufacturing sector.

- Source :
- (1) Statistical Abstract of India, Government of India Publication 1984.
 - (2) India year Labour Book, Labour Bureau, Government of India, 1986.

- (3) S.Srikantiah and Shah K.R., "Relative Earnings of School Teachers and Industrial Workers" Indian Journal of Industrial Relations - Vol.II, Oct, 1975.
- (4) Kothari V.N., "Disparities in Relative Earnings Among Different Countries", Economic Journal, Vol. Lxxx September, 1970
- (5) Report of the Study group on Wages, Incomes and Prices, Government of India, May 1978.

Earnings Foregone by students of higher education - Mean Income of Salaries of High School Teachers (Secondary) and Wages of Class III employees in Service Sector.

- Source :
- (1) All India Industrial Tribunal Ministry of Labour - Government of India. 1956.
 - (2) Report of the Study Group on Wages Incomes and Prices, Government of India, May 1978.
 - (3) Sundaram R.M., Growth and Income Distribution in India. Sage Publication, 1987
 - (4) Kothari, V.N., Factor Cost of Education in India, Economic Journal, June, 1966.

The relative importance of tuition cost as a proportion of private cost has reduced at all the levels of education. Similarly, the share of non-tuition private cost has also reduced at all levels of education. Whereas the importance of earnings foregone and the interest foregone has increased. In 1979-80, tuition cost as a proportion of total private cost was less than one per cent both at the elementary and secondary levels of education. At the higher level of education it was roughly 3 per cent. The non-tuition private cost on the other hand accounted for 1/10th to 1/15 of the total private cost. The major component of private cost of education at all levels of education is earnings foregone. At the elementary level its share was 3/4th whereas, at the other two levels of education it was more than 4/5th. Of the four components of private costs of education, tuition cost does not seem to be of any relevance in influencing the formation of human capital. (Refer Appendix Tables A-1, A-2, A-3).

Conclusions

- (1) Tuition cost at different levels of education constitutes a small proportion of total factor cost. At the elementary level of education it was very small proportion of total factor cost. It was Rs.2/- in 1950-51 and was Rs.4/- in 1979-80. At the other two levels it was Rs.24238 and Rs.1896^{Rs.260/-} in 1950-51 and 1979-80 respectively. Taking average tuition cost of elementary education as the base we find that the ratio of tuition cost at the secondary level of education was 1:12 in 1950-51 came down to 1:9 in 1979-80, and at the higher level of education it came down from 1:94 in 1950-51 to 1:65 in 1979.80. It means that the burden of tuition cost on private individuals has reduced which amounting to the increased subsidization of education.
- (2) The nominal non-tuition private cost per pupil has increased during the period 1950-51 to 1979-80. At the elementary level of education we observe a seven times increase whereas the increase at the secondary level of education works out to fourteen times and at the higher level of education it shows

an increase of seven times. During this period consumer price index has moved to 674 (1960-61 =100), indicating a rise of approximately 6 times. It means the non-tuition private cost of education has increased at a rate higher than the rate of inflation.

- (3) It has been observed that the male student spends more on non-tuition cost of education than a female student at each level of education. The difference between two at the elementary level is 17 per cent, at the secondary level it is 42 per cent and at the higher level it is 40 per cent. A household spending less on female student than on a male student reflects the dominance of males in the Indian society. This will also influence the quality of the stock of human capital embodied in males and females.
- (4) SC/ST households as well rural households relative to non SC/ST households and urban households on average spend less on non-tuition component of cost of education. Thus, they invest less on education of their wards influencing in turn, the quality of human capital stock.
- (5) The relative importance of tuition cost as a proportion of total private cost has reduced at all the levels of education. Similarly, the share of

non-tuition private cost has also reduced at all levels of education. Whereas the importance of earnings foregone and the interest foregone has increased. The major component of private cost of education at all levels of education is earnings foregone. At the elementary level its share was 3/4th, whereas, at the other two levels of education it was more than 4/5th. Of the four components of private cost of education, tuition cost does not seem to be ^{of} any relevance in influencing the formation of human capital.

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References

1. Shah K.R. Outlay on Education and Its Financing in India (1950-51 - 1960-61) unpublished Ph.D. Thesis. M. S. University of Baroda, 1968.
2. Schultz. T.W. The Economic Value of Education. Columbia University Press, New York, 1963. p. 28.
3. Mahabendu Chattopadhyaya, R. Mukherjee and Ashok Rudra : "Intra and Inter Occupational Differences in Income and Levels of Living." Economic and Political Weekly. Vol. XXIV. October, 28th, 1989.
4. Tilak J.B.G. : The Economics of Inequality in Education. Sage Publications. New Delhi.1987.
5. Kothari V.N. Factor Cost of Education in India. Indian Economic Journal Vol. XII No.5 April-June, 1966.
6. Amin R.K., Pathak Mahesh. Cost of Education in Certain Faculties of Sardar Vallabhai Vidhyapeeth, Economics Department. Vallabh Vidyanagar, 1965.
7. George P.P. Economics of Higher Education in Tamil Nadu. Centre for Research on New International Economic Order. No. 1. First Street Haddows Road, Nangambakkam, Madras 1984.