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Education

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**Discriminatory Pricing in  
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## DISCRIMINATORY PRICING IN EDUCATION

### Abstract

The attempt of the paper is to explore the possibilities of moulding the fee as a potential instrument of (a) mobilisation of additional resources, and (b) preventing perverse effects of the public subsidising system. It is argued in the paper that a system of discriminatory fee structure can achieve the twin objectives. The suggested model of discriminatory pricing system is based on sound principles of taxation in public finance. Specifically, the argument of the present authors is based on (a) cost of education, (b) paying capacity of the direct beneficiaries of education and (c) the rewarding pattern. The cost of education is an increasing function over the years, and the fee level remaining more or less unchanged, the cost-fee disparity has been widening over the years. Secondly, the paying capacity of the beneficiaries has increased over-time, and more importantly it varies significantly among the beneficiaries. Further, the benefits of education also vary among the beneficiaries. Hence keeping a uniform fee structure that too at lower level will result in under-optimum level of resources for education on the one hand, and in regressive system of public subsidisation of education on the other. It is shown in this paper that by restructuring the fee system according to the principle of ability to pay, under the present circumstances it will be more rational and logical. And a model of discriminatory fee is advocated for such a rational system of pricing education.

It has been empirically shown that even if we exempt 50% of the total students belonging to relatively less better-off families from paying fees, the total fee contribution in higher education sector in India will be several times higher under discriminatory pricing system than under a non-discriminatory system. Together with discriminatory pricing, a discriminatory system of incentives has also been advocated so as to ensure (a) merit is rewarded, and (b) less privileged are benefited. The virtue of the suggested model is that it not only generates more resources for education but also more importantly it makes the educational system less regressive, if not progressive. It is also argued that this is better than other alternatives generally suggested, viz., steep rise in fee uniformly for all and the repayable loan scholarship system.

## DISCRIMINATORY PRICING IN EDUCATION

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### 1. Introduction

Multi-source funding pattern of education is quite common in most economies of the modern world. Education in India is funded by the state, the private individuals and the community, which are commonly grouped into two sources of funding, government and private. The government sources include central government, state government, and local bodies. Private contributions to education can be divided into two categories: the voluntary contributions and non-voluntary or compulsory payments. The donations and endowments are a familiar part of private voluntary contributions. The other less familiar source of voluntary contributions includes households which meet maintenance expenditure of the pupils. Fee on the other hand, is a compulsory payment.

A glance at the trends in the shares of these respective sources during the post independence period reveals that the terms of trade in terms of financial burden is systematically shifted towards the government sector; and correspondingly the shares of other sources declined. And the decline was more sharp in the case of private voluntary contributions. Starting from a  $\frac{2}{3}$  share of the state (including local governments) in the total educational finances at the beginning of the planned efforts in India, its share has increased to more than  $\frac{4}{5}$  by 1980-81. The private voluntary contributions showed a declining share from  $\frac{1}{9}$  to  $\frac{1}{3}$ . And the fees, on the other hand, showed a least declining trend from  $\frac{1}{5}$  to  $\frac{1}{8}$ .

The efficiency of the government sector to contribute further is doubtful and under such conditions of resource constraints, exploration of ways and means of mobilising additional resources becomes one of the important tasks. In this context, there have been arguments to mobilise additional resources from non-governmental sources. It is generally argued that fee can be used as an effective source of mobilisation of additional resources.

Fee is a price for education, however nominal may be, never being equivalent to the average or marginal cost of education. The common argument is for a general rise in fees. At the sametime, it is also feared that such a general rise in fees may be against egalitarian

objectives of the welfare state. Since there exists inequality in access to education, it is not justifiable to treat the beneficiaries of education equally. In fact, equal treatment of unequals is an insidious way of perpetuating inequality. In this sense, the indiscriminate subsidies given to education in the form of low fees, as at present, in reality means unfavourable discrimination. It discriminates against the less privileged. To reduce the perverse effects of such a system of public subsidy, we in this paper argue for an alternative rational system of pricing education - a system of discriminatory pricing based on the cost of education on the one hand and the levels of income of the beneficiaries on the other. It is also shown in the paper that such a system of a discriminatory pricing in education serves the twin objectives of making education less regressive and mobilising additional resources.

The paper is organised as follows. The following section discusses conflicting approaches to pricing education under different economic systems. Then we describe in Section 3, the gradual evolution of financing pattern of education in India in general and the fee in particular. In Section 4, the rationale and operational significance of discriminatory pricing will be discussed. In the analysis it will be shown that such an alternative model of pricing education system in India would provide more resources for education, besides being more equitable in nature. Under discriminatory pricing system the distribution of incentives namely the scholarships should also be discriminatory in nature. We outline such a discriminatory scholarship system in Section 5. The last section sums up the implications of the analysis.

## **2. Pricing Education: Towards a General Approach**

Fee is a price for education. The determination of this price depends on the general approach towards education. Consequently, the price of education varies among different economic systems following varying political set-ups.

In centrally planned or socialist economies, education is financed and controlled by the state. In these economies education is a social necessity and a form of social investment. Therefore, it is the social benefit calculations and economic necessities in terms of trained manpower that determine the amount of education to be provided. Since education, like the other productive sectors, is wholly funded by the state, the price of education, if any, is primarily meant for social accounting and its implications for the



individual who receives education are less. As a result, the issue of fees either as a funding source or as a price of education finds a relatively less significant place in these economies.

On the other hand, in purely competitive market based free enterprise economies, education becomes a commodity to be sold and purchased in the market. Profit being the motivating factor, education should be priced so as to cover the full cost of production, inclusive of normal profits. The amount of education purchased by the individuals depends on their estimation of the future benefits that may accrue from education to them on the one hand, and their purchasing power on the other. According to this view, in contrast to the earlier one, the demand for education, especially at higher levels, is based more on individual desire than on social necessity. This individual desire is guided by the profitability calculations. In other words, demand for education in these economies depends on the purchasing capacity of the individual on the one hand and the alternative channels of investment on the other. Individuals demand education, only if investment in education brings more benefits than those from other forms of investment. The argument, in short, is that since individual profits are the guiding force in seeking education, expenditure on it should be considered as a personal investment and following from this the individuals should be charged the full cost of providing educational services.

One may find, rightfully too, that this is just an extreme view.<sup>1</sup> A more common pattern which exists in all non-socialist economies is characterised by the co-existence of both private and public sectors in the financing and management of education. In some cases, the state funds the education system, but a substantial proportion of the institutions are managed by the private agencies. In some other cases, education is provided simultaneously in the economy both by the private and public sectors, each sector taking the full responsibility of both finances and management. One can generalise that in all models of financing education in non-socialist economies of the modern period the finances are necessarily shared by the public and private sectors. And in these economies, the pricing of education namely the determination of fees assumes much significance. Unlike in the socialist economies, a fee is charged; but unlike in the purely competitive economies, it is less than the full cost of education. The extent to which the price is fixed varies, on the whole, inversely with the level of central planning and control that can be exercised by the state on the one hand and the approach towards education on the other.

Education by nature is a public merit good (Musgrave, 1959) more so in mixed economies or atleast a 'quasi public good', particularly as far as higher education is concerned (Blaug, 1970: 107), and therefore, it cannot be left entirely to the profit motivated private sectors. State intervention in the educational sector is absolutely essential, as market mechanism does not succeed in the provision of education due to (a) 'public goods', (b) consumer ignorance, (c) technical economies of scale, (d) externalities in production/consumption, and (e) inherent imperfections in the market (Blaug & Mace, 1983; see also Psacharopoulos, 1984). The state intervenes in the system primarily to redirect and facilitate the functioning of market mechanism towards goals that society values more than economic efficiency (Waltenbrger, 1971). For instance, equality is one of the considerations of the modern welfare societies. Therefore, the state should use education as a tool to break the cycle of poverty and, in this context, education should not be seen as a commodity to be sold in the market for those who can pay for it. On the other hand, education should be priced in such a way as to make it accessible to the poorer sections of society. Since state is considered to be an agency which has more power and freedom to perceive long run benefits of education including the equity considerations, her intervention is all the more important and essential.

Because of the 'publicness' and thereby the state intervention, education in these economies is provided under the administered market or to some extent state controlled markets. This by its very nature necessitates administered prices rather than prices based on profit motivations. Therefore, the thus determined prices will be positive but less than the demand supply determined market prices. In other words, fees in these economies will be less than the average cost of providing education.

State intervention and price determination accordingly is possible in the educational sector because of the unique nature of investment in education. What we characterise as total investment in education is infact composed of investment made at two domains namely the institutional domain which sells the educational services and the individual domain which purchases education (Mujumdar, 1983). And in the absence of investment from either source there is likely to be under-allocation of resources for education (Panchamukhi, 1977-b). Afterall, a system of education which allows mixed private and public financing generates more support by the community for education than full private or public financing (Stubblebine, 1965).

In these economies, expenditure on education is a social as well as individual investment. It is a social investment because the future benefits are received by society at large. On the other hand, it is a private investment also because, those who are educated earn, during their life time, more than those who are not. Because of this very nature there is always a case for changing terms of trade between the state and the individuals to decide their relative shares of contribution to education. But the fact of the matter is that both parties, though reluctantly, are willing to pay for education. Actually it was partly due to this willingness resulting from the realisation regarding the future benefits that accrue, the private funding or purchasing of education came into existence. One may go a step forward to add that perhaps it was the penetration of profit motivated capitalist ideology in the educational field that marked the beginning of private investment in education. This also coincided with the development of capitalism in all other sectors of the economy. The emergence of private financing in education in India amply testifies this case.

### **3. Financing of Education in India: Evolution of Fees**

Education in India in the earlier period was confined to some specific high castes and was free of financial burdens. The indigenous type of education which existed before the arrival of the British was also free but for the opportunity costs of the students. But this does not mean that education was not elitist in nature. But this eliticism was largely caste based and in consonance with the caste hierarchy.

The missionary education, which sowed the seeds of modern English education, was also free for the individuals who sought it. Many a time incentives were given to attract students to the missionary schools. At the same time, these were not provided by the State, but by the private voluntary organisations. The reasons for such spending on the part of the missionaries and other voluntary organisations were not necessarily the immediate gains, but the future political, religious and thereby long-run economic gains. However, missionary education cut across the caste hierarchy. And therefore it was not caste elitist in nature. On the other hand, the thus provided education was based on the misconception that the missions could do for India what the churches did for the poor in England (Naik & Nurullah, 1945: 121).

Private financing in modern Indian education started along with state funding. It was the Charter Act of 1813 that initiated a control on the missionary education and made a provision for financing education from the funds of the East India Company.<sup>2</sup> It may be noted that East India Company at this time was a state agreed private enterprise.

However, fee as a price for education, however nominal it might be, was introduced only by that 1844 Order. The reasons for introducing fee were not economic but purely political. For instance, the 1844 Order of the Government of Bengal observed: ".....all boys who may come for instruction to these schools should be compelled to pay a monthly sum, however small, for their tuition ..... The necessity for payment tends to induce more respectable classes to send their children to government schools which would otherwise be attended by those of the lowest order".<sup>3</sup> The immediate objective was to make education elitist who would form a politically supportive group for the British, which proved to have been realised in the following years.

Later, the Woods Despatch also advocated fees, but attributed altogether different reasons for it: ".....an entirely gratuitous education (is) valued far less by those who receive it than one for which some payment, however small is made .....(further, it) induces a more regular attendance and greater exertion on the part of the pupils"<sup>4</sup> (words in parentheses added).

Another, perhaps most important, change that took place with the Woods Despatch was that it made a provision that grant in-aid would be given only to those schools which charged a monthly fee to all their students and that local community had to pay a part of the costs of education. By doing this (i) the British Government was able to stop financial assistance to all indigenous schools; and in fact many of these schools disappeared subsequently which gave the British a better control on the educational system; (ii) the financial burden of the government was reduced, and (iii) the elitist character was maintained. As Carnoy (1974) noted, this provision in fact "was in part a reflection of capitalist ideology (British influence) that the state should not take the whole responsibility for education."

All this had far reaching implications as we have experienced, so far as the emergence of the pattern of funding and management of education in India was concerned. We have already noted that the share of the state sector in educational finances has reached as high

as 85%, and the share of the private sector has been rapidly declining (see Tilak, 1980 and 1983). One could have justified this phenomenon in India, in terms of the prescribed socialistic pattern of society, if the management of the educational institutions was also increasing in proportion to the increase in governmental share in the finances. But what is happening in India is that an increase in the share of financing of education by the government is going along with the phenomenon of increase in the number of educational institutions under private management. In a democratic political set-up and which is also a mixed economy in character, through the influence of political partners and through the influence of corporate sectors particularly in capitalist economies many a government is succumbed to such pressures. The unbalanced role of the government in management and financing of education reflects "primarily the failure to separate sharply the question what activities it is appropriate for government to finance from the question what activities it is appropriate for government to administer -- a distinction that is important in other areas of government activity as well" (Friedman, 1955). Therefore, our plea is that the increasing governmental expenditure on and increasing private management of education in India should be seen in this broader world-wide phenomenon.

Given the empirical reality that governmental share in total educational budget is increasing, the more important questions that can be posed are: is this pattern of partnership desirable? if not, what should be the sharing pattern? and finally how can the desired pattern be achieved? The nature and level of financial partnership and management of institutions depend on the ideological orientation and political compulsions of the state. In a system oriented towards socialistic pattern, the desirable pattern requires the government to assume more responsibility both in finances and control or management. The latter without the former is desirable but not possible in mixed-economies. On the other hand, the former without the latter though not desirable is more possible and has been perhaps more probable in countries like India. A more desirable pattern, however, is an increase in the share of the state in management together with an increase the share of the private sector in finances.

As we have seen earlier private contributions have two components of which voluntary contribution is very often a wishful thinking. Therefore, the only option left is to seek the desirability and possibility of increasing the share of the compulsory component, namely the fee. And now we will turn our attention to this question, firstly, by analysing the present contribution from fees, and

secondly, by discussing the desirability or non-desirability of altering the existing fee structure.

### Contribution of Fees in India

The total 'fees' consists of (a) tuition fee, and (b) other fees which includes special fees, examination fees, laboratory fee, eligibility fee, transfer fee, convocation fee etc. All compulsory payments made by the students to the school/college/university against which a specific educational good/service is received can be called fees. Throughout this paper we refer to the total fee, and not just to the tuition fee.

Eventhough potentially fee can substantially contribute to the funds for education, practically speaking, the empirical evidence is totally the other way. It hardly constitutes 10% of the total expenditure on education in most countries of the world. Even in an advanced country like France fee formed as less as 0.2% of the total expenditure on education around 1960. In Federal Republic of Germany the corresponding figure was 1.2%, and in Japan it was 4.4%. It was, however, 10.8% in Mexico, 15% in Australia and 27% in Canada. And in several other countries higher education is totally or almost free.<sup>5</sup>

In India the importance of fee in the overall resources for education declined overtime. From 1881 to 1946-47 fees contributed 20% - 30% of the total income for education sector (Misra, 1962). Since independence, however the relative share in resources from fees declined steadily the relative share falling from 20% in 1950-51 to 12% in 1980-81 as given in Table 1.<sup>6</sup> However, if we examine the trend in the contribution of fees per pupil, we notice that it was doubled during 1950-51 to 1970-71 (the latest year for which detailed data are available) from Rs. 9.11 to Rs. 17.38. But this gives only a partial picture. If we adjust the fee income for scholarships and stipends etc., it, i.e., the net fees per pupil has not increased significantly.

Table No.1

## Source-wise Contribution of Resources to Education in India

	(Percent)			
	1950-51	1960-61	1970-71	1980-81
<b>Government Sector</b>				
Central and State Governments	57.1	68.0	75.6	80.0
Local Governments (Zila Parishads, Municipalities, Panchayats)	10.9	6.5	5.7	5.0
<b>Private Sector</b>				
Fees	20.4	11.2	12.8	12.0
Endowments etc.	11.6	8.3	5.9	3.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: **Education in India** Vol. 1 (Various Years); and Planning Commission for 1980-81.

As shown in Table 2 the net fee constituted 11.3% of total educational expenditure in 1960-61 and it came down to 8.2% by 1970-71; and in per pupil terms it increased from Rs. 8 in 1960-61 to Rs. 11.16 in 1970-71.<sup>7</sup> Now let us look at the contribution of fees by levels of education in India. Fee obviously is an increasing function of the level of education, both in terms of per pupil, and as a proportion of total direct expenditure. Table 3 shows that at high/higher secondary level it constituted 19% of the total direct expenditure in 1970-71; and corresponding ratio for college (general) level was 39%. But the contribution of fee income to higher professional education constituted only 11%. The interesting point, contrary to the general belief that emerges, is that fee income constitutes a smaller part of total direct expenditure in the professional colleges than in the universities and in the general colleges and than even in the secondary schools.<sup>8</sup>

Table No.2

## Contribution of Fees to Educational Finance in India

	Fees	Scholarships	Net fees (2) - (3)
1	2	3	4
<b>Rs. in millions</b>			
1950-51	233.3 (20.4)	543.0 (47.5)	-309.7 (27.1)
1960-61	590.3 (17.2)	200.2 (5.8)	390.1 (11.33)
1970-71	1432.4 (12.8)	512.1 (4.6)	920.3 (8.2)
<b>Rs. per-pupil</b>			
1950-51	9.11	21.21	-12.10
1960-61	12.31	4.17	8.13
1970-71	17.38	6.21	11.16

Note : Percentage of total educational expenditure is given in ( ).  
Source: Education in India Vol. 1 (various Years)

Table No.3

## Fees in Indian Education, 1970-71

	Total Fees (Rs. in million)	Fees per Pupil (Rs.)	Fees as % of Total Direct Expenditure
Primary	47.1	1.14	2.01
Middle	68.2	3.39	3.99
High/higher/Secondary	500.0	31.21	18.52
Colleges (General)	368.4	164.91	39.12
Colleges (Professional)	101.0	132.03	11.18
Universities	155.2	857.46	29.07

Source: Based on Education in India 1970-71



Since elementary education is any how expected to be totally free<sup>9</sup> and in high/higher secondary education the fee income per pupil already forms about 20% of the instructional cost, if at all there exists any scope for raising the fee income it is only in the higher education sector. Hence let us concentrate on higher education sector.

Data on the higher education sector are available under three categories: universities, colleges (general) and colleges (professional). The average fee per pupil is the highest in the universities, Rs. 356 in 1970-71, while it is Rs. 165 in the general colleges and Rs. 132 in the professional colleges. Thus, in general, the college education is much cheaper than the university education; and the professional education quite contrary to the general belief, is much more cheaper than general education (see also Azad, 1975: 98-102). The fee per pupil as a proportion of instructional cost is however, the highest in the general colleges and the lowest in the professional colleges.<sup>10</sup> At the university level the average fee per pupil constituted 29% of the instructional costs while the corresponding proportions for the general colleges and professional colleges are 39% and 11% respectively. On the other hand, the rewarding system in terms of wage structure favours the professional candidates the most.<sup>11</sup> This brings out the regressive nature of the fee structure and hence calls for a closer scrutiny.

#### 4. Discriminatory Pricing

From the above analysis, it is clear that the contribution of fees is very low in India like in several other countries. There is also a general consensus in favour of raising the fee levels rather substantially (e.g., Kothari, 1978). This is based on several grounds, the most important of which is as follows:

The fee in Indian higher education system is being not only kept uniformly at low levels, but is also being left unaltered for several years. On the other hand, costs of education continued to increase, thus giving rise to an increasing cost-fee disparity (Table 4). Studies (e.g., Azad, 1975: 90; and AIU, 1978) have shown that in some universities in India only 2.3% of the total instructional cost is met from the student fee component. It should be noted here that the fee receipts as revealed conceals the scholarships, stipends and free studentships provided to the students. Therefore, the actual burden of fees is less than the nominal burden as shown by the data earlier

in Table 2 for the whole educational system. Therefore, there is a strong feeling that there should be some relationship (of-course, not equality) between what a student pays and what is spent on him (Singh, 1981: 219).<sup>12</sup>

Table No. 4

**Fees as a Proportion of Instructional Cost in Indian Education  
1970-71**

	Instructional Cost* per- Pupil (Rs.)	Fees per- pupil (Rs.)	Fees as Percentage Proportion of Instructional Cost
Primary	57.00	1.14	2.01
Middle	84.85	3.39	3.99
High/Higher Secondary	168.56	31.21	18.52
Colleges (General)	421.54	164.89	39.11
Colleges (Professional)	1180.83	132.06	14.18
Universities	2942.67	855.57	29.07

\* Direct Expenditure

Source: Based on Education in India Vol. 1, 1970-71

In support of this, it is also argued that demand for higher education is relatively inelastic to fee structure (Turner, 1959, and Handa, 1972). Further, it is also argued that in every economy, earnings of the educated have been increasing, but this is not reflected in the price paid by private individuals for education. Therefore, to commensurate for the increasing levels of earnings, let the individuals pay more for their education.

While we do agree with this widely held opinion, we feel, and try to argue here, that a general uniform rise in fee level will have serious adverse implications. Since fee is after all, "the most regressive form of taxation.....which falls more heavily on the poorer classes of society and....(is) an anti-egalitarian force" (Education Commission, 1966: 111-2), any reform on the fee structure should be very carefully thought of. The implications of the reform particularly on equity should be of the prime concern of the educational planner in a welfare state. Accordingly we argue here for

a system of discriminatory pricing or differential fee structure, wherein fee will be discriminately charged and implemented incrementally and determined on the basis of a reasonable percentage of the cost of education and on the basis of the ability to pay of the individuals who seek education.

In India, higher education is even now a favourite sector of the privileged groups of the society. Education Commission (1966) in their analysis has shown how Indian higher education system is skewed in favour of the better-off. This is more so in the case of professional education. Nevertheless, the 'better-offs' do not form a homogenous group. The levels of ability to pay vary between different groups of students. Table 5 shows that a good proportion of the students in professional education are from high income households. It is ironical to note that the per student fee in these very institutions shows a trend in the reverse order. This points to the scope that exists to alter the fee structure in favour of a discriminatory system.

Second, discriminatory pricing is advocated to prevent the perverse effects of public subsidisation of education. Indiscriminate public subsidisation of education is inequitable because its benefits accrue primarily to the wealthy, thus further widening the gap between the privileged few and the masses. Countries which are characterised by great inequalities in income and in which access to (higher) education is limited to a small proportion of population the existing pattern of indiscriminate public subsidisation tends to expand the education and economic gaps between the haves and the have nots (Adrian, 1983: 456). Therefore, discriminatory pricing is advocated to make the existing educational subsidies more equitable. This equity consideration is based on the principle "that equal subsidies in the world of unequal incomes cannot plausibly contribute to improve the distribution of income" (Jallade, 1978: 318).

Table No. 5

### Distribution of Students in Higher Education by Family Income

#### A. Distribution of 1954 Graduates in India by Family Income (per cent)

Family Income (Rs. per annum)	0 - 2400	2400 - 6000+	6000	Total
Graduates	29.1	45.7	23.3	100*

\* includes 1.96 whose family income is not known.

Source: Blaug et al (1969: 131).

#### B. Distribution of Graduates of Baroda and Gujarat Universities by Household Income (per cent)

Income Group Rs. Per Annum	Baroda University (1961-75)	Gujarat University (1970)
0 - 5000	40.8	39.0
5001 - 10000	32.2	35.0
10000 +	27.0	26.0
Total	100.0	100.0

Source: Lakdawala & Shah (1969), as given in Shah & Srikanthiah (1984).

#### C. Distribution of Graduates in India by faculties, by Family Income (percent)

Annual Income of the family (Rs.)	All faculties	Arts	Medicine	Management
0 - 1000	19.5	28.6	6.5	-
2400 - 3600	39.5	36.9	20.6	12.0
6000 - 9000	25.7	21.8	32.4	24.0
12000 - +	25.3	12.7	40.5	64.0
Total	100.0	100.0	100.0	100.0

Source: Dhar et al (1976).

Table No. 5 (Contd....)

**D. Composition of Students in Arts & Science Colleges in Poona and Bombay by Family Income (per cent)**

Annual Income group	Poona	Bombay
0 - 1200	13.4	3.5
1201 - 3000	14.1	5.2
3001 - 6000	12.2	17.6
6001 - 9000	24.9	20.6
9001 +	35.4	53.1

Source: Panchamukhi (1977-a: 155).

In an inequitable society indiscriminatory fee structure by its very nature is regressive. That is to say, if unequals partake in the educational process, equal subsidies will result in inequity in distribution of outputs. Therefore, equity in output can be expected only through unequal inputs. In other words, a discriminatory fee structure involving unequal contribution is advocated for equitable distribution. Thus it suggests the need for pricing of education on a more rational way. And this rationality, in our case, based on economic background will attempt to achieve the principle of equity in a specific sector like education.

However, it is to be noted that this will not eliminate the inequitable nature of the whole society. On the other hand, we limit ourselves to argue that when the economic system as well as education's rewarding system are inequitable, it is illogical to keep an equal payment system, if one has any consideration for equity. Hence we argue that an indiscriminate subsidy to education is dangerous and therefore, it should be replaced by an alternative system where public subsidies should be inversely related to incomes (Jallade, 1978: 318) and we feel that a discriminatory pricing system in education would be a better alternative.

Third, on the basis of the reward system one reaffirms the necessity of a discriminatory fee policy. An analysis of the employment pattern of graduates shows that people with professional qualifications are in an advantageous position compared to those with general education (Varghese, 1983). On the other hand, these vary

persons pay the fee which is relatively less in per pupil terms. The same idea in a different form is clear if one analyses the unemployment pattern. Table 6 presents the distribution of unemployment which shows that economically weaker sections are also the same group more affected by unemployment, i. e., the unemployment period for the better privileged is considerably less.

Now, if we compare this with the system of fee payment, the picture that emerges is that those who have the ability to pay more but pay less are the same persons who are rewarded more. That is to say the better privileged in our country not only grab the best opportunities of higher education (that too at a low cost) but also the best opportunities in the labour market (Varghese, 1983). Therefore, an introduction of a discriminatory fee structure is desirable not only from the point of view of those 'who receive higher education' but also from the point of view of those 'who benefit from higher education.' In other words, from the benefits point of view as well, it is irrational to follow a non-discriminatory and non-differential fee structure as benefits of higher education are unequally distributed.

Table No. 6

**Incidence of Unemployment among Households with different Levels of Income in Greater Bombay, 1971**

Household Income (Rs. per month)	Incidence of Unemployment			
	Male		Female	
	Crude	Standardised	Crude	Standardised
0 - 100	11.23	38.49	-	-
101 - 200	8.42	7.41	6.41	4.98
201 - 300	5.48	9.54	31.05	31.82
301 - 400	6.13	5.01	11.39	9.85
401 - 500	5.12	3.89	15.94	12.27
501 - 750	4.44	3.08	10.27	6.37
751 - 1000	3.00	1.82	2.88	2.77
1001 - 1500	3.90	5.19	3.55	5.60
1500 +	-	-	-	-
All	5.69	5.69	9.65	9.65

Source: Bhagwati (1973: 31).

Under a discriminatory pricing system, the educational services are available to all - to those who have the ability to pay through a payment system as well as to those who have not through a non-payment system. Again, since the abilities of all those who have are not the same, the pricing system should follow a pattern of multiple prices for more and less better-offs.

In the discriminatory fee structure, students in the same level and type of education will be paying fees, differentially. In other words, this is an attempt to raise the resources for education based on the principle that those who are able to pay should pay more than those who are not. Since the ability principle is brought to the forefront, the income of the households of the students becomes the key factor in determining the fee structure. In other words, unlike the existing indiscriminatory fee structure what is argued here is for a discriminatory fee structure based on the family/household income.

Adoption of discriminatory pricing system in education thus would ensure more equity and more resources for education sector. In other words, the discriminatory pricing mechanism can be seen as a device to raise more resources with more redistributive justice. Another added advantage with this system is that, if education is made costly to the rich, the existing 'baby sitting' role of higher education will come down, as the students and their parents when confronted with high cost prices, they "make decisions about whether to go to college..... in full recognition of the real resource cost-implications of their choice. This should lead to a more efficient allocation of resources" (Hansen & Weisbrod, 1974: 119). However, the total enrolment need not necessarily get affected, because of the existence of large unmet social demand.

It also needs to be noted that such a system of discriminatory pricing will not have any adverse effects on the quality of education, as discrimination that we argue here is based only on family income, and no concession is advocated on the eligibility criteria for admission alongwith discriminatory pricing, as suggested by a few others (e.g., Azad, 1975: 304-6), nor we argue that varying quantities of education should be furnished to the pupils under the system discriminatory pricing as argued by some others (e.g., see Stubblebine, 1965: 19).

## Discriminatory Pricing at the Empirical Level

At the operational level this strategy may not lead to much problems. Since this strategy does not anticipate any structural change, the admission to higher education can continue in the same pattern. The admissions will not be restricted on the basis of economic grounds. The method will be to workout a slab system based on family income for fee collection.<sup>13</sup> The slab to be followed can be in line with that of the income-tax slabs. A tentative outline of such a discriminatory pricing model is presented hereunder.

Let us first look at the composition of the student enrolment in higher education in India. A quick analysis of the available data in Table 5 indicates that (i) atleast one-fourth of the students belong to families of high economic stratum; (ii) in the professional faculties such as medicine and management this proportion goes upto as high as two-third; (iii) students belonging to low income groups constitute hardly 20% of the total; and (iv) over a time period of about two decades these ratios have not significantly changed.

Second, let us note that in a few universities in India the fee income constitutes about 75% of the total recurring income of the university (AIU, 1978). We feel that this should be the highest proportion for any student to pay and any attempt to raise this proportion further may not be justified.

On the basis of the above, one can suggest that the students belonging to the top income strata in professional education may be required to pay a fee which would cover 75% of the instructional cost per pupil; and the middle income group about 50%. For the lower income group it should not exceed about 25% of the instructional costs.<sup>14</sup> Such a differential fee structure, further supported by a large scheme of specific subsidies<sup>15</sup> confined to the lower income group only, undoubtedly would be progressive in nature. Further, it may add substantially to the resources of the higher education system, as we show later with an illustration.

If the top and the middle income groups, who constitute not less than 50% of the total enrolment in higher education, are required to meet 50% - 75% of the instructional costs, the resource generation might even reach such a level that the low income group can as well be exempted from the payment of fees altogether. However those receiving scholarships among the low income group, may be required to pay a fee equivalent to 25% of the instructional costs.<sup>16</sup>



Let us take an illustration with the 1970-71 data on Indian higher education. The instructional cost per pupil on average in the professional colleges was Rs. 1180.83; and the enrolment was 765 thousand. The gross fee income from these students was of the order of Rs. 101 million, i.e., Rs. 132 per pupil on average. Instead of the then existing structure, which is, in all probability continuing, suppose a discriminatory fee structure was adopted, as we argued, i.e., if 25% of the total number of students pay 75% of the instructional cost as fee, another 25% of the students pay 50% of the instructional cost, and even assuming that fee is not charged at all for the remaining 50%, we find that the total fee income would have been Rs. 285 million, 2.8 times the actually realised gross fee income. In other words, while the actual fee income constituted 11.18% of the total instructional cost, the corresponding figure would have been 31.5%, had the discriminatory fee policy been adopted. It can be easily noted that in this case 60% of the total fee income comes from the top 25% of the students and the remaining 40% from the next income quartile. We feel that such a model works in the case of other types/levels of education as well and that they can be easily worked out.

It is not the intention of the present authors that fee structure should be uniform for the given level of education in all the universities/colleges of the country. In fact, the model should allow for flexibility and variation in fixing the fee rates. The fee rates should be determined by the cost of provision of education in the given university or college and the composition of the students by income levels. Since both these factors vary across the several universities/colleges, the fee rates should also be allowed obviously to vary.<sup>17</sup>

To sum up, though a uniform fee rate need not be followed throughout the country, the criterion to decide the fee amount should be the same. Based on our earlier arguments it is clear that the instructional cost should form the basis for deciding the amount of total fees and family income of the student should form the basis for determining the individual fee rates or amounts.

##### **5. Incentives under Discriminatory Pricing System**

Under discriminatory pricing system the distribution of incentives like scholarships also should be discriminatory. By definition, those who are paying high fees are from better-off

families and therefore, they do not require any financial assistance. This gives a clear provision for diverting the scholarships and fellowships to those belonging to the lower economic stratum. One probable adverse argument for shifting all scholarships to the lower income groups is that the meritorious students are not rewarded. To take into consideration this meritocracy aspect, we advocate the following system for distribution of scholarships.

The available scholarships<sup>18</sup> may be divided into two categories: (a) Merit; and (b) Merit-cum-Means (MCM) scholarships.<sup>19</sup> The ratio in which the scholarships between these two categories are to be divided is tentative. But we propose that the probable ratio can be 50-50. The MCM scholarships are awarded only to the students from lower economic status, and the merit scholarships only to those students who are really meritorious, irrespective of their family background. In case students from low socio-economic background get pure merit scholarships his claim for other scholarship is cancelled. Thus at any point of time the number of scholarships enjoyed by the students from low economic status families will not be less than 50% (their allotment). Any number of scholarships above this allotted number is because of the merit of the students which one should not deny. All this ensures that at least 50% of the scholarships go to the students of low socio-economic background.

Our system, to sum up, will look into the following: (i) all those who are from the low socio-economic background are exempted from fees; (ii) at least 50% of the total scholarships and fellowships will be allocated to students from low socio-economic background; and (iii) 50% of the scholarships will be allocated based on merit only. The actual distribution of scholarships in a particular year between the students of low and higher socio-economic strata will depend upon the relative merit positions from the upper and lower socio-economic status. Higher the proportion of the meritorious students in the low socio-economic groups, lower will be the number of scholarships available to people from high economic status.

We may finally add one more clause to this suggested system: those who are getting either of these scholarships even among the students of lower socio-economic group, should be required to pay fees. This means that higher the proportion of students from low socio-economic group getting scholarships, higher will be the additional fee income. However, it is to be noted that the fee per pupil paid by these groups will not exceed 25% of the instructional cost per pupil, which is in consonance with the differential pricing.

Together with this we also argue that the number of scholarships be increased. Since the government gets more money from fee income, atleast a share of the additional resources can be utilised for additional scholarships.

## 6. Conclusions

The attempt of the paper is to explore the possibilities of reforming the fee structure as a potential instrument of (a) mobilisation of additional resources, and (b) preventing perverse effects of the public subsidising system. It is argued in the paper that a system of discriminatory fee structure can achieve the twin objectives.

The suggested model of discriminatory pricing system is based on sound principles of taxation in public finance. Specifically, our argument is based on (a) cost of education, (b) paying capacity of the direct beneficiaries of education, and (c) the rewarding pattern. The cost of education is an increasing function over the years, and the fee level remaining more or less unchanged, the cost-fee disparity has been widening over the years. Secondly, the paying capacity of the beneficiaries has increased overtime, and more importantly it varies significantly among the beneficiaries. Further, the benefits of education also vary among the beneficiaries. Hence keeping a uniform fee structure, that too at a lower level will result in an under-optimum level of resources for education on the one hand and in regressive system of public subsidisation of education on the other. It is shown in this paper that restructuring the fee system according to the principle of ability to pay, under the present circumstances is more rational and logical. And a model of discriminatory fee is advocated for such a rational system of pricing education.

When differential fee structure is generally suggested it asks for selective admissions based on the family income. The capitation fee is a case in point. We in our model do not subscribe to any discrimination in admissions against anybody on economic grounds. Admissions continue to be as of the present. The question of differential fees comes only after admissions are over. Again under the suggested system persons attending the same course in the same institutions may be paying different fees. This is to guard against discrimination in the quality of education. Moreover the amounts of fees charged from students of the same socio-economic background may vary from institutions to institutions, from type to type and from place to place, depending on the cost of education. According to our

calculations, we have shown that even if we exempt 50% of the total students belonging to relatively less better-off families from paying fees, the total fee contribution will be several times higher under discriminatory pricing system than under a non-discriminatory system. Together with discriminatory pricing, we have also advocated discriminatory system of incentives, so as to ensure: (a) merit is rewarded; and (b) less privileged are benefited.

It is necessary to stress that while each of the two proposals viz., discriminatory pricing system and discriminatory incentive system can be adopted advantageously independent of the other, it would be far more advantageous if both the proposals are adopted. However, neither of the two proposals can be adopted partially, as each proposal is an indivisible package.

It may be argued that the alternative system of pricing that we suggested here is relatively superior to at least two proposals that are generally being made in similar contexts, viz., (a) a steep rise in fee levels uniformly for all students and (b) repayable loan scholarship system. It can be easily understood that both these proposals would be highly regressive in effect. The former accentuates the perverse effects of the existing public subsidisation system. The latter also does the same because the loan scholarships are given to the poorer students and only those very students will be required at later stages to meet the full costs of education in the form of repayment, while rich students who receive the highly subsidised education are exempted from it. The virtue of our model is that it not only generates more resources for education, but also more importantly it makes the educational system less regressive, if not progressive.

At the operational level, the model requires ascertaining the income of the households of the students. This may create difficulties because of the lack of well developed system of reporting/estimating actual income, especially of those engaged in activities in the unorganised sectors. Methods are to be evolved to check the dishonesty in the reporting of incomes. However, this difficulty should not deter the planners in accepting a rational policy of pricing education.

At the political domain it needs will and efficiency on the part of the government. Very often fees is a political question. And this is a popular weapon in the hands of the government. Moreover, higher education benefits the influential groups in society who are more

vocal and nearer to the decision making process. Therefore the government may be reluctant to take up this issue and implement it.

Lastly, the efficacy of our proposal depends on the trade off between the discomforts that may cause during the stages of implementation and the potential benefits of the proposal. After-all, like any other reform, it also requires strong political will.

## NOTES

1. For an elaborate discussion on full public financing versus full private financing of education, see Stubblebine (1965).
2. The provision was to set aside one lakh rupees for education. For details, see Naik & Nurullah (1945).
3. As quoted in Panchamukhi (1977-a : 108).
4. Ibid.
5. See Report of the Education Commission: Supplementary Volume II, 1970 (Table XXIV). See also Azad (1975: 199) and Blaug and Woodhall (1978) for some recent evidence on European countries.
6. At the sametime it is to be noted that in 1950-51, the value of scholarships/stipends etc., exceeded that of the fee contribution, i.e., the 'net' fee income is negative.
7. It may be noted that this may not necessarily be the correct estimate of 'net fee' as the number of fee-paying students and the number of beneficiaries of scholarships may not be the same. It would have been better, had the data been available, to work out the per student share separately for each item taking the actual number of students in each case. It is also to be noted that all these figures are in current prices. It was shown earlier (Panchamukhi, 1977-a) that the per student fee burden hardly increased by 5% in real terms (if we convert them into constant prices) during the first 15 years since the inception of planning in the country.
8. See also Blaug et al (1969). Based upon recent evidence on a few countries of the world, Psacharopoulos (1984) concluded that "fees cover only a small proportion of social cost of education and they decrease by ascending educational level" (emphasis added).
9. It is to be noted that fee is not altogether zero at primary or elementary levels of education in India, as shown in Table 3.
10. Blaug et al (1969) show that the net fee is also less in professional colleges than in Arts & Science colleges. See also Panchamukhi (1977-a) for similar evidence.

11. As the universities in general provide post-graduate education, while the colleges provide graduate level education, we can attribute the differences in the fee to some extent to the different levels of higher education.
12. Other important arguments include that greater the public subsidisation of education, particularly at higher level, that too non-discriminatory in nature, greater is the inequality in education (Psacharopoulos, 1977 and 1984; and Thobani, 1984). See Ram (1982) for some evidence to the contrary.
13. It is interesting to note that what we are arguing here is not totally new. Panchamukhi (1977-a) cited the example of Rajasthan where a differential fee structure is adopted in higher secondary education by income levels. Variations in tuition fee by income levels can also be noticed in the universities in Rajasthan. The recommendation of CAUCC (1965) in Canada is also more or less the same.
14. It is to be noted that for all students in general the existing proportions are 39% in general colleges, 11% in professional colleges and 29% in universities.
15. It may be noted that a good number of studies (e.g., Shah and Srikantiah, 1984) support such a system of specific subsidies, instead of general subsidies. See also West (1974).
16. See Section 5 for details.
17. One may tend to extend the argument to imply that richer regions (or universities with economically richer students) receive higher fees compared with poorer regions in the country. Accordingly, the difference should be taken into account in the mechanism of devolution of resources from centre to the states, perhaps with the help of a special education equalisation system.
18. This excludes the incentives and scholarships given to the backward castes like Scheduled Castes and Scheduled Tribes. This can also be included into our scheme, but for the bunch of problems such a proposal creates which need to be discussed in detail. Hence, we keep it outside the framework of this paper.

19. The amounts of each of these two scholarships per pupil may be decided based upon certain rational criteria. We are, however, not discussing them here.

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