Exploring Alternative Sources of Financing Higher Education

Higher education holds the key to "inclusive growth" and to lead in the world of knowledge production. The mode of financing higher education is crucial for understanding how higher education is provided to society and at what price. Despite recent increases in budgetary allocation for higher education, the importance of exploring alternative sources of financing higher education remains. This paper reviews literature on government intervention in education and discusses the pros and cons of some alternative sources of financing higher education from the point of view of social justice and efficiency in allocation of resources. It argues that keeping in mind India's imperatives, the government has to continue to play a leading role in the provision of higher education. Among the measures suggested, fee enhancement and education loans are of limited significance in a country like India.

Saumen Chattopadhyay

The mode of financing higher education in the public sector is central to higher education policymaking because it reflects how education is provided to society and at what price. It also, therefore, indicates the policy stance of the government towards higher education. In the present context, the issue of financing assumes importance as the government realises the importance of higher education to consolidate India's strength in the world economy and to ensure social mobility and social cohesion. To attain this, the centre is gearing up to double enrolment in higher education. However, higher education policy is being formulated against the backdrop of the ongoing fiscal reform as evident in the sincerity of the government to honour the Fiscal Responsibility and Budget Management (FRBM) Act. As a result, the centre is still grappling with tension and the dilemma to fulfil its social commitment to ensure access to higher education to all those who are willing to pursue higher education on one hand, and the tendency to view higher education as a private individualised commodity (or service), whose provision can be subject to market forces, and the financing of which should primarily rest with the household sector on the other hand. The increasing dominance of neoliberal ideology is very much evident in policymaking.

The issue of financing and other related aspects deserve attention in the present context as the mode of financing would determine the emerging contour of the higher education system in India. However, in view of a steady increase in the demand for select areas of higher education, notably market-oriented courses, responses forthcoming from private providers have been positive. Concomitantly, public support to higher education has been suboptimal in real per capita terms. The question is how best the government can tap various sources of financing higher education based on international experiences. Though the union government has raised budgetary allocation for higher education in the budget for 2007-08, the question of looking for other sources of financing remains in view of the rising demand and fiscal constraints being faced by the states, in particular, under the ongoing fiscal reform programme. There is a trend the world over for governments to explore options for raising more resources from higher education with the main objective of pruning the extent of subsidies accruing to those who do not deserve by the government. Further, under the General Agreement on Trade in Services, there is an attempt to create space for international providers as well. Globalisation of higher education, therefore, further complicates the evolving scenario.

This paper focuses on the options that are being tried out the world over to raise more resources from higher education and feasibility of trying out some of these options for a country like India. This paper is divided into five sections. In Section I, we deal with the question of economic value of education as it has been viewed in different strands in literature. In the next section we take up an issue, which is fundamental to address the issue of mode of financing higher education. We distinguish between the concepts of public goods, mixed goods and merit goods with reference to higher education. Associated with this, in Section II, we also discuss the rationale behind public support for higher education. In Section III, we give some evidence of public support to higher education, both for India as well as for other countries. In the next section, we discuss the pros and cons of different sources of financing higher education and their feasibility in a developing country like India. In the concluding section, Section V, we raise certain questions, which are to be addressed while designing policy that determines the mode of financing higher education in India. The paper ends with a direction towards which future financial reform of higher education may be carried out.

I
Economic Value of Education

Education has been conceived of in various ways in several strands of economic theories. Each characterisation implies different emphases. The characterisations may be summarised as follows [Gradstein et al 2005]:

(i) Education as a human capital approach, which emphasises on learning skills to raise productivity;

(ii) Education as a screening device, which identifies ability;
(iii) Education fosters the building up of social capital by inculcating socially acceptable norms of behaviour, and;
(iv) Education is valued for its intrinsic value, which is synonymous with viewing it as a consumption good.

The human capital approach views expenditure on education primarily as an investment, which earns a net positive rate of return for the investor (who happens to be a student in this context) in terms of a future stream of higher earnings than what would have been otherwise possible exceeding costs of education comprising explicit as well as implicit costs. This approach [Schultz 1961; Becker 1993] underlies much of the literature on theoretical and empirical evidence on convergence and endogenous growth theory. Based on this, it is argued that higher education should be primarily funded by the investor as the private rate of return exceeds the social rate of return narrowly defined[1] [Psacharopoulos and Patrinos 2004]. However, there is a rationale for public support for higher education if the social rate of return is broadly defined with the inclusion of positive externalities which eventually exceeds private returns. In this approach, the rate of return is used for guiding the allocation of resources within the education sector as well as at the macro level.[2]

Endogenous growth models [Romer 1986; Lucas 1988] assume increasing returns to scale, which imply a positive rate of growth in the steady state. In such models, the factors behind growth are determined within the system, i e, endogenously as compared to Solow's model, which assumes constant returns to scale and views growth as the result of exogenous technological progress, which is determined residually. Human capital features prominently in endogenous growth models primarily to overcome the diminishing marginal productivity of capital exhibited under the constant returns to scale production function a la Solow's model of growth. Studies indicate that higher education has substantial potential for fostering technological development[3] and it is crucial for building a knowledge society to gain a competitive edge in the world economy.

Education as a screening device acts as a signal to employers about the potential productivity of their prospective employees. It calls into question the efficacy of public support to education as private returns tend to be greater than social returns because of the decisions of less able individuals to pursue education generate negative spillovers for others by making them appear less productive.

The social returns or positive externalities arising out of higher education are often non-economic advantages, which accrue to society as a whole. The valuation of such externalities remain problematic as markets are found "missing" to value these externalities. Some of the benefits, as discussed in the literature, are instilling patriotic values, inhibiting anti-social behaviour and corruption, compliance with cultural norms, smooth functioning of the institutions and upholding the principles of democracy [Drèze and Sen 1996; McMahon 2004].[4] Majumdar (2005) argues that learning enables an individual to envisage a higher goal through transition from one set of rankings to another set of rankings of priorities transcending a materialistic approach to human life. Drèze and Sen (1996) concur that education, and in particular, primary education, should be valued essentially for its intrinsic property effecting transformation in the manner in which we exercise our choices and enjoy our freedom. This view dispenses with the use of rate of returns as a guide for policymaking and it supports public subsidisation of education irrespective of our remorseless obsession with rate of return estimates.

Stiglitz (1998, 2003) has reaffirmed the importance of education in economic development and argued that the acquisition of knowledge as the most important determinant of growth.[5] Stiglitz argues that the role of education has to be considered not only as an instrument of development but also as a broader objective [Stiglitz 1998]. However, for Stiglitz, the rationale behind government intervention in provision of education is based on the notion of human capital and its relationship with growth [Fine and Rose 2001].

II
Public, Mixed or Merit Good?

Based on the above analysis, it follows that the issue we need to address is how to identify higher education as a good (or service) before we deal with the question of the mode of financing higher education. The pricing of higher education and the associated question of the extent of subsidisation is based on our understanding of this very basic question. Is higher education a public, mixed, quasi-public or even a merit good? In order for higher education to qualify to be a pure public good, two important characteristics need to be satisfied – that of non-rivalry in consumption and non-excludability. Higher education fails to satisfy both these criteria. Often eligibility requirements are needed to be complied with for admission to institutes of higher learning and credential certificates are given to successful candidates who pass the examination and comply with the norms of the institutions for being considered as successful candidates. Therefore, there is rivalry in admission and the exclusion principle is also applicable to higher education. Higher education or training for skill development is not exactly akin to a private service either, which can be bought and sold in the market. Paying for the service does not entitle the student to the degree. It has to be earned or acquired [Majumdar 1983].[6]

A merit good is defined as a good preferred by the community as a whole and it is meant for societal benefit without any reference to the individual choice [Musgrave and Musgrave 1989; Creedy 1995] and it is more a matter of paternalistic choice implying that the government knows better than the individuals what is good for them. However, the merit good as defined by Srivastava et al (1997) is a non-public good with positive externalities[7]. It is disconcerting to note that higher education was identified to be a non-merit good as it defies the entire body of empirical evidence and the endogenous growth theory that higher education generates substantial externalities and influences growth.

Higher education is argued to be a mixed or quasi-public good as it combines the features of a private and public good. It is demanded privately as benefits accrue to the students who pursue higher education in terms of higher future stream of earnings and at the same time, it shares the feature of a public good with positive externalities accruing to the society [Musgrave and Musgrave 1989] as discussed above. Higher education is demanded by individuals who are adult enough to be considered as decision-making agents. It is therefore appropriate to consider higher education as a mixed or quasi-public good, i e, essentially a private good with positive externalities.

Categorising different streams of higher education such as technical and non-technical education as merit and non-merit goods respectively [Srivastava and Rao 2004] foments further debate on the essential characteristics of higher education. However, in the report submitted in 2004, *Central Government Subsidies in India* by the ministry of finance, education other than elementary was described as a "merit-II good", the extent of subsidisation for which is advocated to be at a lower level than that of a "merit-I good". This classification is tantamount to the admission that non-technical education has limited positive externalities compared to that of technical education. This is in sharp contradiction with an umpteen number of empirical studies that higher education as a whole generates significant positive externalities, albeit with varying degrees as mentioned above. It is intriguing that technical education, and, in particular, scientific research being classified as merit goods and are subsidised, whereas humanities and social sciences are identified as non-merit goods and hence, are not subsidised (see the table). This reflects a lack of social science perspective and a partial understanding of the linkages between science and society, and disregard for art, culture and society as a whole. This technocratic view has adverse implications for the entire society and eventually, for the future of higher education. It would distort the choice of courses and would send a wrong signal to society and furthermore, foster alienation of an individual from society.[8]

Rationale for Public Support towards Higher Education

Economic theory tells us that investment in higher education is likely to be suboptimal because of positive externalities, and market failure also on account of long gestation periods, risk and uncertainty and information asymmetry. Markets may be "missing" or they are afflicted with information asymmetry failing thereby to assign true values to higher education more often than not as education brings about transformation in human life. Olssen (1996) has discussed some of the inherent problems with market solutions for social sector activities like education. All these calls for public support for higher education as a market, in general, fail. While the world over, higher education is supported by the government, the issue therefore is one of, ascertaining the extent of subsidisation. The imperfect nature of the credit market for education loans is another reason for not being able to entirely impose the burden of financing higher education on the household sector [Lleras 2005].

Public support for higher education is possibly the most dignified way to achieve socio-economic equity as higher education promotes social mobility by making the acquisition of skills and training accessible to the economically challenged section of society. This is, however, contested because students from well-off sections also stand to gain possibly more than the poor ones.

Financing Higher Education: Critiquing Neoliberal Ideology

In the dominant neoliberal ideology, higher education is viewed as essentially a private, individualised commodity, which is in sync with the World Bank approach as well [Jones 1997]. The Bank as a promoter of an integrated world economy outlines its approach as follows: (i) to recover the public cost of higher education and reallocating government expenditure towards primary level with higher social returns; (ii) to promote education loans through the development of a credit market with selective scholarships, especially in higher education; and (iii) to decentralise the management of public education and encourage the expansion of non-government and community supported schools.

The overall thrust is therefore, to recover the public cost of higher education through exploration of alternative sources of financing including development of a credit market for education and increased emphasis on better governance of institutions of higher learning. This is expected to release resources for the purpose of reallocation towards lower levels with higher social returns and at the same time explore alternative sources of financing higher education. To support their arguments, they emphasise the regressive nature of public support to higher education as benefits are argued to be appropriated mainly by the privileged section of society, inequitable participation patterns, unrealistic curriculum orientation and elitist functions (ibid).

George Psacharopoulos (1973) showed that the return to primary education is more than that of higher education, arguing in favour of reducing the extent of subsidisation as one climbs up the education ladder. But in a knowledge driven society, it is being realised that higher education is crucial for determining the competitive edge of an economy in the global market as it fosters innovation and development and dissemination of technology. In the process, it sets the stage for building up a knowledge society. In the evolution of the concept of human capital, over the decades, the stress was more on productivity gain in the first wave of human capital theory [Marginson 1997].

Moreover, counter-posing primary education with higher education is fallacious [Kumar 2004; Majumdar 1997]. Higher education provides inputs to primary and secondary education in terms of teachers and administrators. On the other hand, with the fall in the drop-out rate and increase in the enrolment ratio, the entry to higher education is expected to increase. Further, one should not ignore the adverse implications that funding of higher education would have on employment prospects in the education sector [Khadria 2004]. Therefore, investment in different stages of education is sequential in nature and need not be viewed in isolation. Using the rate of return to determine investment decisions in education has been extensively critiqued by Majumdar (1983) from a social choice perspective. Further, the theory of human capital ignores any understanding of the educational processes and historical and social specificity of a country. The methodology, which is applied to assess the future stream of costs and benefits of education could also be applied to any other factor with economic effects, thereby denying the specific characteristics education as a whole is associated with [Fine and Rose 2001].

Market Failure: Imperfect Capital Markets

Potential for market failure is as much in primary education as in higher education. In the former, even parents who emerge as decision-makers for these school-going students are not always in a position to fully comprehend the benefits of education. However, investments in education continue to be risky [Lleras 2005; Hillman 2003] from the perspective of an individual on account of the following factors.

Students may not be able to assess the likely benefits of higher education in terms of a higher pay package and other non-monetary benefits. While uncertainty associated with the future stream of earnings is true for any investment, the problem is accentuated for a developing economy with limited job prospects and more for students from economically challenged backgrounds. The drop-out rates may also be on the higher side because of long gestation periods and other uncertainties. Skill obsolescence, a need for sustained reinvestment due to changing skill requirements in the job market and continuous technological development, individuals are required to reinvest in education to remain competitive in the market.

The other problem is that of illiquid investment. This problem arises because human capital cannot be construed as collateral as it is not tradeable unlike in housing and car financing since the student cannot dispose off the present value of future incomes. This leads to the problem of absence of collateral in education loans.

From the perspective of a lender, asymmetric information and difficulty in collection of payments may be deterring. The problem of asymmetric information arises because lenders may know little about the ability of students seeking loans, their ambitions and intended career paths. This leads to the associated problem of adverse selection because it discriminates against students from economically challenged sections of society. If premiums are charged, mediocre students may hesitate as some students with confidence and potential take the plunge. As the possibility of getting good jobs decline for mediocre students, the failure rate rises, forcing lenders to charge a still higher premium. High mobility of students, particularly for those going abroad, poses as a difficulty for lenders to trace defaulters and ensure recovery. All this put together makes the lender wary of giving loans to students irrespective of their socio-economic background and choice of streams.

III
Public Support for Higher Education: Evidence

Though, theoretically there is a strong case for public support to higher education and this is indeed corroborated by statistics from the developed world,[9] the issue of the extent of subsidisation has become debatable as it is an important policy question in view of a policy trade-off between enhancing enrolment and ensuring equity and equal access in the context of fiscal constraints. Some of the options that are being explored the world over are deregulation of fees, education vouchers, education loans, income contingent loans (ICL), graduate tax, and own resource generation [Greenaway and Haynes 2004; Tilak 2004].

In the past, there have been attempts by the government to usher in changes in the higher education system towards a system where the government's role is substantially curbed and space is created for the private sector to occupy and operate. The National Democratic Alliance government tried to revive the Private Universities (Establishment and Regulation) Bill, which was introduced in the Rajya Sabha in August 1995. The bill made it clear that private universities will be self-financing without being dependent on the government for financial support. To facilitate this, the universities will be offering courses in emerging areas of science and technology. The bill is still pending in the Parliament because some of the clauses attached to it [Sharma 2005] such as a permanent endowment of Rs 10 crore, 30 per cent full freeships and government control and monitoring may have made it unpalatable for the private sector. The University Grants Commission (UGC) issued a concept paper in October 2003 declaring one of its major objectives be to the mobilisation of financial resources to become self-sufficient. The paper also advocated nurturing commercial and corporate culture for better and efficient governance of universities.

Declining Public Support to Higher Education in India

The share of development expenditure in the total expenditure of the states declined in the aftermath of the reforms and out of that, the share of education along with health declined [Kumar et al 2005]. The development expenditure in terms of GDP has declined more for the centre than for the states. For education, the share has declined if we consider the centre and states together since 1990-91. However, public support for higher education by the centre has begun to inch up only recently and the entire scenario is not yet clear.

The government expenditure on higher education in India has been subject to the vagaries of budget making compounded by the shifting priorities of the government towards education. The share of total expenditure on higher education by the union government fell to 16.7 per cent in 1996-97 from 20.6 per cent in 1990-91, which climbed up to 26 per cent in 1998-99 to decline again to 19 per cent in 2003-04. As a percentage of GDP, the government expenditure on higher education declined to 0.37 in 2003-04 from 0.46 in 1990-91 [Sharma 2005]. However, public support towards technical education did not suffer much fluctuation during the 1990s. What is alarming is the fall in the expenditure per student from Rs 7,676 in 1990-91 to Rs 5,522 in 2002-03 (in 1993-94 prices) [CABE Report 2005]. Public expenditure on scholarships has also suffered. Expenditure on scholarships as a percentage of total expenditure on higher education was barely 0.49 in 1990-91 and 0.32 in 2003-04 and it is budgeted to go up to 1.26 during 2007-08.[10] The same trend is applicable for technical education as well. If one looks at the plan expenditure on higher and technical education, the same saga unfolds. As a percentage of total expenditure on education, allocation for higher education reached an all time high of 27.9 per cent during the Fourth Plan (1969-74), which subsequently declined to 9.2 per cent during the Ninth Plan (1997-02) (ibid). For technical education, the ratio seems to have remained virtually unchanged during the same period.

However, a gradual shift towards higher education is observed in the union budget for 2007-08. The expenditure on education is budgeted to go up by 33 per cent over the revised estimate for 2006-07. For higher education, expenditure is budgeted to go up by nearly 29 per cent compared to a rise of 22 per cent for the previous year. Out of this, the budget for universities will rise by 38 per cent. In view of the earlier secular decline in real and per capita expenditure on higher education and a rise in the intake of students for the academic year 2007-08, the allocation may turn out to be inadequate.

Extent of Public Support to Higher Education: International Experience

The share of the public sector in education is predominant the world over. Among the industrialised countries that comprise the Organisation of Economic Cooperation and Development (OECD), the average share of public funding in primary, secondary, and post-secondary non-tertiary education was around 90 per cent in 1998. For developing countries, the share is lower but substantial [Gradstein et al 2005]. In terms of GDP, OCED countries spend around 6 per cent and 13 per cent of government expenditure. The share of public funding in total tertiary sector education expenditure is around 79 per cent for OECD countries. However, the share of private sector spending is rising. Despite this, for certain countries, the share of public funding did not decline. In a number of OECD countries, private spending soared by more than 30 per cent between 1995 and 1999.

IV
Exploring Options for Financing Higher Education

The pros and cons of alternative sources of financing higher education are to be assessed keeping in mind the socio-economic context and fiscal compulsions the state is confronted with. Due to a prolonged inadequate infusion of funds in the higher education system, which in a way reflects the government's apathy towards higher education, the entire academic community seems demoralised. There is an apparent lack of dynamism in colleges and universities [Kumar 2004]. It is time that the system is revitalised with active support from the government. The constitution of the Knowledge Commission [Government of India 2007] may be considered a step in the right direction. However, the agenda of the commission and the recommendations of the report pertaining to financing are dealt with only in brief. We discuss some of the options that are being tried out in some developed countries and examine their feasibility in the Indian context.

Deregulation of Fees

The idea is to deregulate the fee structure so that it tends to reflect the per capita cost of education to the extent possible as students move up the ladder of education. The basic fee structure has remained virtually stagnant in Indian universities over the last several decades. The Punnaya Committee (1993) suggested increasing fees so as to partly recover the cost of education.[11] The National Knowledge Commission suggested an upward revision in the fee structure so as to recover 20 per cent of the expenditure of universities. A draft legislation entitled 'The Private Professional Educational Institutions – Regulation and Fixation of Fee Act 2005' is under consideration by the United Progressive Alliance (UPA) government. It states that the determination of the fees would be based on location of the institute, nature of the course and cost of land and the building. A provision of a reasonable surplus has also been accommodated.[12] Proper accounting procedures should be followed like valuation of revenues forgone due to waiver of fees to the students of socially and economically backward sections, expenditure on administration and maintenance. There has been an attempt to link fee structure to the cost of education albeit to a limited extent in the recent past. In a small sample of 39 universities, Tilak (2004) argues that more than half a dozen universities raised fees in such a way that they could recover more than 50 per cent of theit recurring income and another 13 universities could generate more than 20 per cent. In many developed countries, revenues from fees would constitute merely 15-20 per cent of the costs of higher education [Tilak 2004]. But broadly speaking, this attempt has remained largely unsuccessful for majority of the universities. The student protest has deterred the government from doing so. It is also argued that the universities are reluctant to raise resources as the present system of providing grants-in-aid deduct the extent of own resource generation [Government of India 2007].

However, there is an emerging trend of practising differential fee structures for different courses as new market-oriented courses are being offered at higher fees to overcome financial crunches and to become financially viable in the long run. This tends to aggravate inequity in the society as only students from the privileged section of society can afford these courses, which presumably promise higher stream of future income for students. To safeguard equal access to higher education and the role it plays in equalising opportunities for students coming from different strata of society, there is indeed a need for more scholarships and financial aid to students. There was a proposal mooted by the ex-vice chancellor of Delhi University that the last fee paid by students in the previous class should be treated as a benchmark for determining the college and university fee to be paid. While this resolves the problem of finding out the affordability of the student, albeit partially,[13] the problem with this approach is that it distorts the choice of the parents at the school level as government schools charge lower fees than privately funded schools. Overcoming this problem entails mitigating differential quality at the school level between government and private schools. There is, in fact, a scope for raising fees only to a limited extent as even a semblance of cost recovery will lead to an astronomical jump in the fee structure.[14]

Allowance for making a reasonable surplus would mean that colleges and universities may function more like profit maximising entities. This may have serious implications for quality. As Majumdar (1983) explains, the concept of input, output and an input-output relationship are fuzzy for academic institutions. Inputs are students who themselves are, in fact, decision-makers.[15] Valuation of output is a tricky business with teaching and research being carried out together. How does one assign market values to the number of students passing out of the institutions? In fact, there is no input-output relationship, which can be subject to an optimisation exercise. It can be argued that cutting costs or maximisation of output may involve compromise with quality and equity unless adequate safeguard measures are adopted.

The fee structure at the Indian Institute of Technology (IITs) and Indian Institute of Management (IIMs) is at a much higher level, which is closer to the cost of provision, relatively speaking. There is little protest over it as these courses are job-oriented. The safeguard that exists for students coming from the underprivileged sections of society is not an issue because, one, there are few takers from that section of the society; and two, these courses are job-oriented and, therefore, even commercial banks come forward to provide loans to needy students.

Direct subsidies can have a valuable redistributive role. But this notion is challenged because students who pursue higher education and succeed are often from well-off sections. A cut in tuition fees across the board is tantamount to giving a subsidy to students who do not need it, at the taxpayers' expense. This may actually lead to redistribution from the poor to the rich, given that there is a strong correlation between income earning ability and the ability to benefit from higher education [Creedy 1995]. However, there is a case for an increase in fees while taking adequate measures to ensure equal access through the provision of scholarships, irrespective of discipline. The scholarship amount matters as it determines whether the student should pursue higher studies or opt for the job market. In order to attract the best talent, scholarship amounts should be as close as possible to entry level salaries of teaching at the graduate and postgraduate levels. The absorptive capacity of the market varies for research students. The recent initiative by the government to give scholarship to the rank holders and MPhil/PhD students in central universities is laudable. But the majority of the student community from other universities not covered under this scheme should also be brought under its purview over time.

Education Loans

Since students are argued to be the primary beneficiaries of higher education, they are encouraged to opt for loans to finance their education. The capital market for such loans is inherently imperfect [Hillman 2003; Lleras 2005]. The imperfections may arise out of information asymmetry and adverse selection among other factors as discussed above. As mentioned above, human capital is not collaterisable. In India, the government is trying to promote education loans and this has gained acceptance among a select group of students. This is evident in the union budget for 2007-08 as a change has been mooted to allow deductions of interest payments on loans taken for higher education for assessing taxable income. Notwithstanding recent policy initiatives by banks to overcome imperfections of the education loan market, cases of discrimination with regard to courses to be pursued (with market-oriented courses being given a favourable treatment), and in-built discrimination with regard to socio-economic background and region are coming to the fore. Assessing a student's financial status in a large country like India with a substantial informal economy would be difficult as Srivastava (2007) points out. Recently, it has been reported in newspapers that there has been an increase in the instances of defaulters. Unfortunately a majority of those have gone abroad.

On account of the inherent imperfections of the market and discrimination practised by banks (overtly or covertly), education loans cannot be a solution for students willing to pursue higher education. The uncertain nature of the job market complicates this by subjecting both students as well as lenders to uncertainty. There is an emerging consensus that the government has to find ways to make education loans softer and more student-friendly.[16]

Human Capital Contract

Human capital contracts (HCC) entail students to commit a part of their future income for a predetermined period of time in lieu of capital to finance their education [Lleras 2005].[17] It was originally Friedman's proposal [Friedman 1962] to create a financial instrument that would enable the investor to claim a stake in a part of a student's future income. Investment in professional or vocational schooling is a form of investment analogous to investment in physical capital. However, it came to be effected in a manner where it became akin to loans rather than buying equities what was referred to as income contingent repayment schemes (ICRS).

HCCs are argued to have advantages over the ICRS. The pricing of the HCCs when they are traded will indicate a stream-wise valuation of education, and market expectation from the investment. In the process, information with regard to the rankings of universities and courses would become transparent. This may lead to competition among universities, which may encourage adoption of quality improvement measures. It is also argued that some of the courses in arts and philosophy need to be subsidised as markets may fail to assign true values to these disciplines [Lleras 2004]. There is also a possibility of redistribution of incomes as successful candidates end up paying more than the less successful ones who would pay smaller payments. The other advantage is circumvention of the illiquidity problem as students are allowed to sell a part of their investment. The investor is argued to have a sustained interest in investing in continuous retraining so that the value of human capital does not depreciate. In the absence of debt, students may also have the inclination to undertake entrepreneurial risks and use their knowledge. The argument that HCCs offer equal access to education irrespective of their background may sound encouraging but in a developing country with the prevailing uncertainty of getting a job associated with acute disparity, social acceptability of such a scheme is highly unlikely. Since the market comes to play a prominent role in influencing a student's decision to pursue a career in a university of her choice, certain important streams (or courses), which are not highly valued in the market, would face extinction. This might lead to the social choice problem [Majumdar 1983] where micro and macro aspects would not be in consonance with one another. The individual preference for a particular career path would, at the macro level, make it unattractive if supply exceeds demand in the job market. However, the feasibility of such a scheme is very much in doubt for a country like India. Financial

Table: Classification of Merit and Non-Merit Goods and Services

Merit Goods and Services	Non-Merit Goods and Services
Elementary education	Education, sports, arts and culture (other than elementary education)
Public health	Medical and family welfare
Sewerage and sanitation	Water supply and sanitation
Welfare of SCs, STs and OBCs	Housing
Labour	Urban development
Social welfare	Social security and welfare
Nutrition	Other social services
Soil and water conservation	Agriculture and allied activities
Environmental forestry and wildlife	Cooperation
Agriculture research and education	Rural development
Flood control and drainage	Special area programmes
Roads and bridges	Irrigation
Space and oceanographic research	Power
	Industries
Other scientific research	Transport
Ecology and environment	Civil supplies
Meteorology	Other economic services

Source: Srivastava and Rao (2004).

market development and all the disadvantages of education loans are equally valid for this scheme. The countries where this scheme has been successful are very different from our system.

Income Contingent Loans

Income contingent loans (ICLs) have turned out to be successful in some developed countries [Greenaway and Haynes 2004] since job market uncertainty, the major deterrent for opting for loans is substantially reduced as loans are required to be paid only if income exceeds a certain threshold limit. However, this requires a proactive role to be played by the government instead of commercial banks. The other advantage is that this scheme does not require any upfront payment. Designing ICLs poses several tricky issues such as (i) the income level on which contingent payments would be based and percentage to be paid out of it; (ii) the period over which repayment is to be made; (iii) interest rate; and (iv) collection method and "buyout" features. Barr and Crawford (1998) have discussed how this could be implemented without hurting access and avoiding revenue leakages.

Graduate Tax

Graduate tax is a tax in addition to the general income tax, which is imposed on graduates. Like any other tax it needs to be paid only if income exceeds a certain threshold limit. It achieves the same objective of delinking loans with job prospect. However, it has many demerits. It distorts the tax structure and may add to the costs of tax administration and tax compliance mitigating the benefits of tax reforms. This scheme is not flexible and does not encourage competition. The payment to be made by the student remains independent of costs of education [Greenaway and Haynes 2004]. Creedy (1995) shows in a model, which recognises the budget constraint of the government, an unconditional grant to all may entail a rise in the tax rate in future. Grants are argued to be just like deferred fees. This however may not be tenable if we dispense with the notion of honouring the budget constraint of the government in an inter-temporal framework. As GDP grows, the budget allocation can also grow, even in real terms. It is, after all, a question of prioritisation. In case graduates obtained their degrees from privately-aided institutions with little or no financial support from the government, justification of imposing such a tax would be weaker on these graduates.

Education Vouchers

The objective of popularising education vouchers by giving entitlements directly to students instead of to institutions is argued to foster competition among institutions to achieve efficiency (or X-efficiency) as students exercise a greater freedom of choice [Glennerster 1991]. The value of the entitlements may be allowed to vary with respect to the cost of the course, socio-economic background, and encourage participation in particular courses. This is expected to encourage competition not only within publicly-funded education but between public and privately-funded education as well. This scheme ensures targeting and transparency. Students are allowed to top up their entitlements if needed and this is the only way to generate more revenues out of this system [Greenaway and Haynes 2004]. In the presence of quality differences between government-funded and private-funded institutions, the one with inferior quality will gradually be eliminated from the market. This is generally tried for school level education and may not work well for higher education as costs of higher education are generally much higher than that of school education. Also, there are possibilities of leakages and administration costs.

Self-financing Market Determined Courses

It has already been noted that there has been an explicit attempt to encourage colleges and universities to offer courses, which are largely self-financing, opening thereby the possibility of cross-subsidisation. This can be implemented if the courses are in high demand in the market. For example, Guru Govind Singh Indraprashtha University offer courses, which are in demand and the university can give affiliations to self-financing private colleges. This generates more resources for universities but at the same time, stepmotherly treatment of other disciplines may undermine academic ambience.

Own resource generation through commercial funding of research projects by universities may lead to the domination of the market over research agenda. However, this can be overcome through government funding of basic research facilities.

Better Governance: Reducing Cost Per Student

It is argued that running colleges and universities should ensure efficient functioning, similar to that of a firm trying to maximise profit. It is argued that the costs can be decreased substantially if the salary structure of the teachers is delinked from that of civil service employees. Class size may be increased wherever possible with increasing the number of shifts of the staff. It is maintained that these steps would release resources for primary education. As discussed above, the application of the efficiency principle may ultimately be achieved at the expense of quality and equity, sooner or later. What is, however, undeniable is to improve governance, better utilisation of funds, democratic decision-making and ensuring compliance with the norms through participation of the stakeholders like students. Only this would ensure the delivery of quality services and best utilisation of existing facilities. Therefore, a change in management and leadership can bring about major improvements. This is important keeping in mind that education is, after all, a service with a difference. Private colleges with the objective of generating reasonable surplus, hire teachers on a contract basis with substantially lower salaries. As a result, quality suffers.

One major focus of fiscal reform is now on governance. The institutions of higher education in the public sector are afflicted with problems similar to that of the government. To ensure better delivery of services, the time has come to think of reforming the management of public sector institutions. The institutions, which can compete with the rest of the world also happen to be in the government sector. The issue is how to replicate this creation of excellence in other institutions as well.

Tax Financing

The imposition of an additional cess in the budget would ensure a substantial increase in the allocation for secondary and higher education. Asking the taxpayers to foot the bill to a large extent

may be a good idea keeping in mind that the government has to continue its support for primary education and compliance with the FRBM Act. However, it can be argued that tinkering with the tax rate is not a good idea as it raises the distortionary effect of a higher tax rate. Imposing a cess is what the government can possibly think of under the compelling circumstances. The majority of the universities are funded, to a large extent, by the states and the resource crunch at the state level would hinder the overall increase in the budget for higher education.

V
Concluding Remarks: Issues in Financing

This paper takes a critical look at some of the sources being proposed and implemented to raise funding for higher education. The paper argued that the government has to play an important role in the higher education system in view of India's growing need for skilled manpower, to consolidate India's competitive edge in knowledge generation in a global economy and above all to achieve social cohesion. Since technology is the prime mover of growth, strengthening the higher education system is of utmost importance today. Raising expenditure on higher education to 1 per cent of GDP would prove to be insufficient. However, in view of this need for expansion in higher education, the government has to explore perforce the feasibility of trying different sources of financing higher education.

Not only has the expenditure on higher education been suboptimal, the composition of it has stifled quality growth. At present, the composition of expenditure is tilted heavily in favour of maintenance expenditure with nearly 75 per cent being dedicated for wages and salaries, 15 per cent for other pre-emptive expenditures and only 10 per cent being meant for development and that too with difficulty [Government of India 2007].

Since, costs of higher education are on the higher side, deregulation of fees or raising them to cover 20 per cent of total cost would prove to be of limited efficacy. However, a limited enhancement in the fee structure with adequate safeguards for ensuring equal access for all may be tried with freedom being given to universities to retain the additional revenue mobilised. There is a greater need for an increased allocation for scholarships based on merit as well as other socio-economic criteria. The equity concern should be given utmost importance because after all, any new measure that we may think of should conform to the two acceptable norms of the economy-efficiency and equity. Public support to education should primarily be given to institutions for the sake of administrative convenience and education vouchers would not be a good idea at this higher level of education. The argument that the government is not in a position to spend more on higher education because of a fiscal constraint and that there is a greater need for spending more on elementary education are not tenable. The robust growth of the economy, a rise in the tax base as a share in GDP and growing income inequity indicates that the government could do better on tax reforms.[18] Recent measures notwithstanding, the size of the black economy is around 40 per cent of GDP [Kumar 1999]. Education loans because of inherent weaknesses of the credit market may cater to only a narrow section of the student community depending on their choice of courses and socio-economic background. The possibility of introducing a graduate tax or income contingent loans may be explored. However, in the presence of numerous interlinkages between efficiency and equity in the Indian education system, it is likely that the education system may suffer on both counts [Majumdar 2005a]. The suggestion mooted by the National Knowledge Commission to utilise land resources of universities will not only be able to garner sufficient resources for setting up new universities, it may vitiate the sanctity of academic ambience of institutions of higher learning. The other suggestion to explore the possibility of philanthropic contributions might also prove to be inadequate. Whatever the means of funding higher education the government seeks to explore in the context of historical and socio-economic specificity, budgetary support for higher education has to increase. Otherwise, achieving equity and provision of quality education would be seriously compromised. EPW

Email: saumen@mail.jnu.ac.in

Notes

1 Psacharopoulos and Patrinos (2004) distinguish between narrow social rate of return and wide social rate of return. Narrow social rate of return is lower as costs include total resource costs to the society of higher education by adding the extent of public subsidisation with private costs whereas social benefits are ignored. Wide social rate of return exceeds private rate of return as it includes positive externalities accruing to the society.

2 Psacharopoulos and Patrinos (2004) argue that for developing countries, priority should be given to achieve universal primary education, while, concomitantly, innovative means of financing lifelong earnings for those who are employed should top the policy agenda. However, the use of the rate of return approach for guiding investment decisions in education has been subject to criticism [Majumdar 1983]. Investment in education is sequential in character as students pass from one stage to another stage. Furthermore, investment in education need not be compared with investments in other sectors like transport and power because benefits of education cut across sectoral boundaries and it is important for its intrinsic values.

3 The new growth theories of the endogenous variety assign a new role to the human capital theory as compared to the first wave human capital theory of the 1960s [Marginson 1997].

4 There are umpteen number of studies which highlight positive externalities emanating from higher education. McMahon (2004) provides a comprehensive survey.

5 J E Stiglitz has argued for public intervention in education and health in view of market failure in these two sectors. Stiglitz (2003) provides a comprehensive review of his contributions revolving around the importance of the concept of information in economics.

6 However, owing to the universal nature of primary education, it can be treated as a public good or better, as a merit good. Because of the enormous benefits that are associated with primary education for any society, developed or developing and its intrinsic importance for building human capability, there is a general agreement the world over that primary education should be made universal and therefore, funded by the government.

7 It is echoed in the *Discussion Paper on Government Subsidies in India* (1996) published by the government of India.

8 Even at the Indian Institutes of Technology, social sciences are taught because after all we are all accountable to society and are expected to behave in a socially responsible manner.

9 OECD statistics cited in Gradstein et al (2005).

10 As per the budget estimate for 2007-08 for the centre, the expenditure on scholarships and university students is budgeted to be Rs 115.61 crore out of a total budget for higher education pitched at Rs 9,209.50 crore.

11 However, the committee challenged a misconception that higher education in developed countries is largely self-sufficient, citing statistics on sources of financing universities from developed countries.

12 The use of this term is instead of using the word profit [Sharma 2005] for educational institutions.

13 Parental income may come down as students climb up the ladder of higher education.
14 The norm is to recover to the tune of 20 per cent of expenditure.
15 The cost of choosing the right combination of inputs for profit maximisation does not arise strictly speaking.
16 The need for collateral may be dispensed with [Government of India 2007]. The CABE report has suggested setting up a Higher Education Finance Corporation, pooling resources from the corporate sector and the government to coordinate loan schemes being operated by banks.
17 The human capital option is a variant of the HCC in which "the underlying asset is the value of the earnings that an individual receives as a result of his productive efforts during a given period of time" [Lleras 2005]. The owner has a right to buy or sell a asset.
18 Recently, Tapas Majumdar Committee has also referred to this.

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