Chapter: Two

REVIEW OF LITERATURE

The financing of higher education in India fits well in the overall development strategy and economic policy of the country. India's higher education sector evolved and grew with the strong support of public funds during the period called Nehruvian model of development. By and large, this model of development was applied across all the Indian states. In fact, governments owned, established and operated educational institutions everywhere. These institutes were funded by the government and charged very nil or low fees and funds from the students. The scenario has changed drastically during the last about a decade and half. As a result, the whole gamut of financing higher education has changed in India, which gave a central role for the private sector. Indeed, it had happened under the nose of new economic policy initiated since the 1990s. Numerous studies are available about the financing of education in the country both during the pre- and post-reforms periods. It highlights the issues related to the various aspects of educational financing such as the problems faced by educational loan aspirants and financiers, role of Governments, educational institutions etc. However, literature reviewed here are grouped into two different categories i.e., studies related to India and studies related countries other than India.

Studies Related to India

The cost of education has attracted researchers' attention at the very early stage. These studies deal with the national education sector as well as that of the individual states of the country.

Ravi F. H., (1960)¹ had examined the pattern of expenditure on higher education against the backdrop of economic development and opined that the proportion for total expenditure allocated to higher education was much
below the expected level of investment and concluded that under financing create burden to the government and higher education beneficiary groups.

Pillai and Nair (1962)² made an attempt to study the history and problems of educational finance in Kerala state. The study suggested that additional public resources should be generated on large scale in order to finance the continuously rising demands for the education in the state at all levels. Even, the Education Commission (1964-66) had strongly argued for devoting 6 per cent of GNP to the education sector by taking into account the numerous parameters like cost of education, teacher-student ratio, educational requirements of the country and financing policies adopted in other countries.

Panchamukhi’s (1965)³ study estimated the total cost of education for the period 1950-51 to 1959-60 and concluded that total cost of education constituted 6.2 per cent of GNP in 1959-60. The study also calculated the various components of private and institutional costs of education, foregone earnings for males and females, village and town pupil separately. The study estimated that foregone earnings constituted major proportion of total factor cost of education. The total cost of education was found to be between 5 per cent and 6.5 per cent of national income in 1960-61.

Pandit (1969)⁴ measured the unit cost of education and efficiency of educational expenditure. The study illustrated the total cost of education into three categories such as institutional cost, students' cost and opportunity cost. In the study conducted by Shah (1969)⁵ analyzed the unit cost of higher education. The study has divided the cost of education into two main components: (a) social cost, (b) opportunity cost. Social cost is again divided into student cost and institutional cost. In student cost, there is a possibility of double counting in fee and scholarship because at one time it is the income of the institution and at the same time it is also the part of institutional cost. Further, it is also found that there is different unit cost of education of hostellers and day-scholars. Institutional cost can be divided into two parts,
recurring cost and non-recurring cost. In non-recurring cost, the main components of cost are capital (land on rent and building) and equipment and in recurring cost they are divisible and non-divisible. The study also suggests that the recurring cost and expenditure should be done very carefully.

**Rao** (1969) discussed the economic aspect of the education. In order to study the cost of education, he adopted several approaches. In one approach, the main component was the cost borne by the students. In other approach, it has divided into three parts: (i) institutional cost, (ii) student's cost and (iii) opportunity cost.

**Kulkarni**'s study (1969) also estimated the unit cost of education from the period 1962-66 at current prices. It showed that the change in pupil-teacher ratio affects the unit cost of education. The decline in pupil-teacher ratio increases the workload of the teachers in turn leads to higher teacher turnover ratio.

**Dutt** (1969) measured the source of financing of 28 colleges of Haryana which includes four state colleges and 24 private colleges categorized under three headings as the state colleges, private women colleges and other private colleges. The various sources of financing of higher education was found to be: (i) fee income; (ii) government grants (State, UGC, and local bodies); (iii) other sources (fines, sale of prospectus, etc.); and (iv) funds given by the governing bodies. In all colleges, sources of income were very much different. In the state colleges, the main contributor was the state government. The private women colleges depend mainly upon state grants-in-aids, and other private colleges depend upon the fees and funds and the UGC grants, if any. After the government grants, among the private sources, the major contributor was fees and funds paid by the students.

**Sharma** (1969) highlighted the significance of unit costs in the educational planning process. The study considered the nature and different types of unit costs required at different levels of education with special reference to Indian
conditions, the nature of available statistics, their coverage gap and their limitations. A method has been developed to measure the cost per student at different levels. Various suggestions were available for improvements in the methodology for the estimation of costs.

**Mathur (1974)**\(^{10}\), in his study on Kerala University during 1970-71, found that the receipts from examination, which was initially a source of income, later became a major item of heavy expenditure of the university. The expenditure on science departments was nearly double than that of the funds spent on the humanities. The expenditure on administration head alone was 19 per cent in 1970-71. And, over the time period, overall expenditure of university increased by 17 per cent per year.

**Jha (1974)**\(^{11}\) while studying the financial behavior of the Patna University concluded that government grants is the main source of finance. The study also noted that in 1964-65, the state government itself had faced a deficit of funds due to the lack weak tax collections. This situation reduced the flow of funds to the coffers of university. The study also highlighted failure of the finance committee to function properly due to the lack of financial rules.

**Nigam (1975)**\(^{12}\) examined the main source of finance of University of Rajasthan and their relative importance. The study also dealt with adequacy of finance, expenditure incurred under different heads, and difficulties faced by the university due to lack of finance. The study found that per capita availability of educational facilities, in real terms, does not fall either due to rise in enrollment ratio or inflation, which affects the facilities of the supply of laboratories or libraries. It recommended the creation of state level body like the UGC to settle financial issues in order to stabilize per capita educational facilities in real terms.

**Nanjundappa (1975)**\(^{13}\) described the Karnataka University's finances with special reference to growth of revenue and behavior of various revenue components during 1972-73. It was found that the state government financed up to 54 per cent and income from fees and funds collected from students
contributed up to 35 per cent. Moreover, per capita expenditure of state on education was just ₹ 80 in 1949-50 and rose to ₹ 3,306 in 1972-73. At the university level, there was enormous increase in the expenditure, especially in the academic departments, but still the grants of teaching staff were only 13 per cent. He reported a continuously rising gap between the cost of higher education and fees charged in Karnataka University. In order to eliminate this gap, Nanjundappa suggested (i) state grants must be increased in higher education; (ii) a rise in fees and funds from beneficiaries; (iii) introduction of indirect methods of financing such as student loans, which would be beneficial for both students as well as society.

Mukerjee’s (1976) study attempted to throw the light on the pattern of income and expenditure of the Calcutta University. He found that the administrative expenditures of the Calcutta University alone constituted about 30 per cent between 1948-49 and 1969-70. The salaries to teachers cornered between 13.12 per cent and 18.76 per cent of expenditure. The study illustrated that organization of trust and endowments funds to finance university expenditure are the best option in the long run to sustain finances.

Mathew (1980) showed a detailed analysis of the receipts and expenditures of Kerala University for the year 1974-85. Out of total revenue of ₹ 192.2 lakh, ₹ 95.5 lakh (50 per cent) were accounted by the examination fee and ₹ 80.8 lakh (42 per cent) by the public grants. Further, the bulk of public grants (80 per cent) came from the state government. Out of total expenditure of ₹ 229.1 lakh, 25.6 per cent were incurred on general administration, ₹ 53.1 lakh (32.2 per cent) on the examination work and ₹ 42.1 lakh (18.3 per cent) on the departments for study and research. Faculty-wise, the humanities spent, on the average, ₹ 1.3 lakh per department and science departments ₹ 2.7 lakh.

Subrahmanyan (1982) studied the financing pattern of the Andhra University and found that its major sources of income (60 per cent) were the internal sources. However, across the non-academic income sources, major contributors were the press, publications, and interest on corpus fund.
Further, on the expenditure side, major proportion of funds was consumed by the teaching departments (40 per cent to 69 per cent).

Azad (1984) critically analyzed the pattern of grants to the higher education sector in Andhra Pradesh. The major sources of grants were the government grants, followed by the revenue generated through fees and funds. It divides the pattern of state grants into the general and professional education. In general education, major heads of grants were the maintenance, building and equipment grants; while in professional education, the maintenance and building grants constitute the major component.

Mridula (1985) analyzed the sources of financing universities' maintenance grants. The study based on a large number of state universities found that the main source of financing maintenance expenditure was the UGC's grants and the majority of these grants were in the form of the block grants.

Mathew (1991) analyzed, in detail, the source of funds of private colleges in Kerala for the period 1972-86. The analysis was made on the basis of sample data collected from 25 arts and science colleges spread over the state. The study found that, among the institutional sources of finance, grants from the state constituted more than 90 per cent. However, of the non-institutional sources of finance, donations emerged as the most important component of finance of private colleges in Kerala. The study called for strengthening of the finances of colleges in the private sector.

Varghese (1991), in his research work illustrated that the cost-recovery from beneficiaries implies a reduction in the public subsidies to higher education sector. This could be done by shifting the incidence of financial burden either to the beneficiaries (students) or to their users (employers). Student loans, graduate tax and enhancing fees were other suggestions in this regard.
Jadhyala B.G Tilak (1992)\textsuperscript{21} described the details of the student loan scheme prescribed in India, its strengths and weaknesses, and also suggested some marginal improvements for the betterment of educational loans.

The study carried out by Sharma (1992)\textsuperscript{22} illustrated the major sources of funding of university education in India. These sources are the central government, the state governments, the University Grants Commission (UGC), the Indian Council of Agriculture Research (ICAR) and other public and private agencies. The funds are in the form of grants-in-aid, development assistance from the UGC and ICAR, fees and funds, income from moveable and immovable property, and sale of university publications and farm produce. The endowment funds were the sources of finance of university institutions. Further, grants-in-aid made by the central, state and other authorities to an institution to run their activities in order to improve them and to start new programme for further development and growth. These grants were given to the university institution in the form of (i) matching share of development grant by UGC; (ii) grants in the form of committed expenditure under the non-plan heads by either of the system, namely, the deficit grants or block grants.

Tilak and Varghese (1992)\textsuperscript{23} studied the student loan scheme in India and considered some of its problems. They made a detailed comparison between loan and other alternatives methods of funding higher education in India.

Punnayya Committee (1993)\textsuperscript{24} highlighted many diversified and new ways of funding of universities in the country. For instance, it recommended: (i) maintenance grants, dearness allowance, etc., to be provided by the government; (ii) subsidies on many items of the maintenance grants to be reduced and maintenance grants to be stabilized at a certain acceptable level; (iii) maintenance grants to be based on unit costs; (iv) universities to mobilize funds - at least 15 per cent of the total recurring expenditure at the end of the first five years and 25 per cent at the end of next ten years; (v) creation of corpus funds to meet infrastructure development; (vi) increase in student fee
keeping in view the rate of inflation; (vii) scholarships to at least 20 per cent of students; and (viii) soft loans and scholarships from the nationalized banks. The commission advises simplifying the process of federal student aid as one program, which includes the three aspects of grants, loans and work-study. This program should guarantee equal aid to all students. Further, it is suggested that the low-income students should be given more grants and high-income students more loans. At the same time, at state level, the commission warns against the implementation of high tuition fee and low aid system.

Swaminadhan Committee (AICTE, 1994) looked into the possibilities of resource mobilization in the case of technical education, essentially through cost-recovery modes either from students or from elsewhere. The Committee’s recommendation includes: (i) the creation of corpus funds in the institutions; (ii) establishment of an Educational Development Bank of India (EDBI) with an initial capital of ₹ 3000 crore; (iii) reducing the share of salaries in the recurring expenditure from the present level of 80 per cent to 60 per cent; and (iv) enhancing fees to recover at least 20 per cent of the recurring expenditure.

Natrajan (1995) analyzed the source of finance of university education and also the use of funds. The analysis shows that the major sources of finance of universities were the government grants, followed by fee income, and other sources. Development grants were found to be spending both on capital and recurring items. Academic costs absorbed the major proportion of total expenditure of the university. Among academic fee income, examination related work entails major proportion of total expenditure. At the same time, income from the endowments is decreasing. The study provides the purpose-wise classification of income of the universities and suggests ways and means to overcome the shortage of finance.

The research done by Dutt (1995), while estimating the various source of financing of higher education for the period 1960-61 to 1976-77, showed that
the government funds (central, state, UGC, etc.) was the major source of finance. These funds constituted 75 per cent of the total cost per student, followed by 13 per cent by the fees. However, endowments and other sources cornered low share of 12 per cent. Further, source-wise income per student at the university level, subsidy to education at various levels, and recovery rates at different level of education has also been evaluated. The analysis of 12 colleges of Delhi University shows that fee accounted for only 5 per cent of total cost per student and the balance of 95 per cent was contributed by the government/UGC and some receipts from the private trusts. The subsidy per student was estimated to be equal to ₹ 4,744.

Salim (1997) enquired about the extent of government subsidization of higher education in Kerala state with special reference to students' socio-economic background. He found that all students, particularly the PG engineering students, received a considerable amount of money by way of subsidies. The overwhelming burden of financing of higher education has fallen on the state government. Interestingly, government subsidization is high in the case of technical education. The burden of government has been increasing year after year. And, no successful attempt has been made by the government to enhance the tuition fees or to tap additional resources for financing the mounting expenditure on higher education.

Majumdar Committee (1999), while analyzing the fiscal implications, came to the conclusion that enhancing the share of investment to 6 per cent of the GNP would be sufficient to provide adequate resources at all levels of the education system.

Joy Job Kulavelil (2000) has analyzed the objectives and nature of higher education and resources mobility through funding diversification in Kerala private colleges and made a comparison with some of the public colleges in Kerala. He criticized the idea of financing higher education which is financed out of indirect taxes paid by the disadvantaged group.
Raman Pillai T.N (2000)\textsuperscript{31} criticized the wrong financial management practices, the manner in which grants are sanctioned and utilized, its allocation, release, admissibility, non-admissibility and other related matters to sublimate government support. It is suggested that the crisis can be eliminated with the participation from various supportive and related industries, financial institution, or private agencies.

Varghese (2000)\textsuperscript{32}, advocates that the case for enhancing individuals’ contributions to the rising costs of education and cautions against the use of marketing mechanisms for raising educational resources due to their adverse implications on equity. The principles on which public provision on higher education rests include its public good nature having strong externalities and its merit good nature, as well as consideration of equity and equality of opportunity.

Chauhar C.P.S (2000)\textsuperscript{33} has studied the extent of public and private funding. Most of the money to maintain Universities at present is provided by the government from public funds. He argued that the fee should be increased so as to cover at least 50 per cent of the cost of general education.

P. Geetha Rani (2000)\textsuperscript{34} has made an analysis with a sample of around 40 Universities. There have been modest to steep increases in students’ fees of various types such as, tuition fees, examination fees, admission fees, registration fees, entrance examination, hostel and miscellaneous services like application forms, brochures and so on. Government grants to the Universities have declined or remained stagnant in real prices, and sometimes even in current prices. In case of cost recovering measures, particularly in fees, are increasingly resorted to in Universities. However, she highlighted that majority of the Universities (as many as 20 Universities) have already increased their fees which covered more than 20 per cent of their recurring income.

Harilal (2003)\textsuperscript{35}, argued that while the state should pursue the policy goal of sustainable and equitable development; it should also be looking for
innovative forms of intervention. The profit oriented private sectors (and the local self - government institutions) should also play important roles in promoting higher education, but should keep in mind the need to promote social goals.

According to Sukumaran Nair (2003)\textsuperscript{36} the privatization of education would replace the civilizing mission of education with the spirit of commercialization. The state of Kerala, therefore, has to be vigilant against the unbridled free play of market forces so that they do not become detrimental to egalitarianism and social welfare.

Regarding funding of higher education in India, Kumar's (2004)\textsuperscript{37} study observed that major source of financing of private cost is the income of households (wages and salaries, agricultural income, income from business, interest, dividends, etc.) and other sources such as the scholarships and loans. He conducted a study based on data collected from well-chosen sample of students in MBBS, BDS, B.Sc. Nursing and B. Pham courses from five government medical colleges in the State of Kerala (at the time of study, Kerala did not have any private medical colleges). The study clearly showed that admission to medical courses in Kerala is largely restricted to that elite group in terms of financial as well as social background. Students from the large majority of households face definite handicaps due to the lack of capacity to meet the high private cost of attending these courses. Students from Government schools and rural areas find it difficult to secure admission to these much sought after courses, especially MBBS and BDS. The first generation students whose parent's education is not up to the mark have only marginal representation in these courses. Children of agriculturists and self-employed persons also find it difficult to get admission. Thus, the medical education system leaves very little scope for social and occupational mobility.

Tilak (2004)\textsuperscript{38} found that public subsidization of many social and economic services is a common feature of most countries of the world. However, with increasingly budgetary constraints, many have started raising questions on
the rationale of government subsidies to higher education. The study shows that all level of education is important and they are dependent upon each other. It may not be logical to withdraw subsidies from one level of education and allocate in favor of the other, as all level of education in India are severely under-financed. Regarding the recent trends in public expenditure on education during 1990's, the study found that public expenditure on education has declined from above 4 per cent of income in the late 1980s to 3.6 per cent in the late 1990s. Higher education suffered more severely in terms of public expenditure. Per student public expenditure had declined nearly by 25 per cent. Thus, on the whole, elementary education is nearly totally financed by the state. The government subsidies in higher education are being reduced as many universities are experimenting with the cost recovery measures, generating resources from student fees, and other non-government sources. The study also estimates the rates of subsidy and the cost recovery. It provides the distribution of some specific subsidies in education such as free education, fee exemptions, text books, noon meals, etc. Some of the important issue on, for example, the size of the subsidy, targeting vs universalism and method of cost recovery are also briefly discussed. It has been shown that the levels of subsidies to education sector in India are not very high, nor is the rate of cost recovery. It has also been found that some of the specific subsidies in education are fairly progressively distributed. He also suggested that the best method of financing education, including the higher education, is the state fund through its tax and non-tax revenues.

**CABE** (2005) argued that the governments -union and the states- must make a firm commitment to sustain funding of higher education institutions in such a way that basic teaching, research and extension activities are not affected in terms of their quality and quantum due to paucity of financial resources. The state funding for higher education out of tax and non-tax revenues should be the only sustainable way of financing higher and technical education in India.
A report of the UGC (2005) shows that in the UK, higher education is primarily in the public sector or financed through the public grants. Faced with problems of deteriorating standard due to inadequacy of funds and failing accountability, a number of innovative ways in financing of higher education, such as the performance-based funding for teaching and research, portable students' aid, etc., were introduced during the last decade. This has helped the UK higher education to regain its place as one of the best systems of higher education in the world. In a politically sensitive and tough decision, the UK government has now allowed the universities to compete for students and charge variable fees. It results in the end to the regulated fee regime in the UK.

Narayana M.R. (2005) has made an empirical analysis about the role of commercial banks in financing the budgetary subsidy to general collegiate education by government and private aided colleges in Karnataka state in India. He concluded that the current model schemes of student loan and subsidies should be encouraged and be made equally supportive to the changing needs of the students pursuing studies in India and abroad.

Varghese (2005), in his paper on reforming the education financing has pointed out that Indian government finds it difficult to cope with the ever increasing financial requirements of an expanding system. For this, the study suggested two major propositions: (i) improving efficiency in the functioning of the public institutions on the one hand; and (ii) mobilizing resources from non-governmental sources on the other. It is held that the country needs to invest more resources both at primary and tertiary levels of education. Ultimately, these reforms lead to the shifting of the burden of cost from the public to private and household domains.

The study done by Sanyal and Martin (2006) held that the reforms in higher education of China were initiated along with other economic reforms. Prior to that higher education in China was in the public sector. There was no tuition fee. Since then the system of higher education in China has radically
changed. The concepts of cost-sharing and cost-recovery were introduced in the early years of reforms. Tuition fee have now been made compulsory. The higher education institutions in China were expected to diversify their revenue sources and, therefore, they were allowed to have affiliated enterprises. Further, they identified the seven key factors that affect the new funding trends for higher education: (i) the massive expansion of student enrollment; (ii) the incapacity of the state to fund such an expansion; (iii) the vigorous emergence of the private higher education; (iv) the tendency to cost sharing by students and their parents; (v) the importance of accountability; (vi) the emergence of new providers; and (vii) the need for funding by the states to reduce growing inequalities in access.

**FICCI (2006)** study analyzed all relevant parameters like interest rate, borrowing limit, payback period, collateral security etc. related to educational loan. It is observed that the important factors taken in to consideration on providing educational loan in India are dependency status of student, Total cost of education, Type of education, Level of performance, payback period etc.

**Hauptman (2006)** points out that funding process of higher education followed in India continues to be on the basis of historical allocation. He suggested a shift to policy-driven funding by introducing policy variables into funding process or performance-based funding that recognize outputs rather than just inputs (as in UK).

According to **Johnston (2006)**, cost sharing is now a worldwide phenomenon. This takes the form of either tuition fees or ‘user charges’ to cover the living cost of students. This should be seen as shifting of financial burden of higher education attendance from the general taxpayers to the students and their parents. In the face of financial crisis faced by higher education systems worldwide, cost-sharing is no more an option, but an imperative.
On the other side, Choudhury and Mahajan (2006) suggested that the subsidization of which certainly has an anomaly in a resource poor country like ours, could be corrected in several ways like an increase in tuition fees for the students belonged to better part of the society and low interest loans can be initiated for economically squeezed students, along with various forms of scholarships to finance their higher education.

The report of National Knowledge Commission (2006) also recommended the various public and private sources of financing of higher education and also feels that it should be the collective responsibility of both the public and private sectors. The various possible source of financing identified by the study are: government support; better asset management; rationalization of fees; philanthropic contributions; private investment; public-private partnerships and international students have been recommended.

P.N. Nair and P.R. Gopinathan Nair (2008) has analyzed the cost of higher education between self-financing Institution and public federal Institution in Kerala and stressed that the cost of higher education is far high in self-financing institution than public funding institution. He also advocates that the self-financing institutions should accommodate the student from low income groups by arranging loan sand scholarships from external agencies. Even, the Yash Pal Committee (2009) recommended state funding as a major source of financing of higher education, however, student loan at low interest rates and free education for poor students will also move side by side.

Pandit (1972), in his study, described the social and private cost of the resources used in the educational process. This was the first study in India where the capital cost of education has been measured by calculating the stock of physical capital. The study also analyzed the share of direct cost and opportunity cost in the total private cost, and found that the share of direct cost (tuition and non-tuition) in the total private cost had declined, while the share of opportunity (income foregone) cost had risen. It shows that the students' contribution is becoming more and more prominent in the private
cost of education. As far as institutional cost is concerned, per unit current cost had risen while the capital cost remained constant. Thus, increase in the social cost and that of the share of private cost in the social cost indicated the increasing participation of private sector in education.

Kamat (1973) made a detailed study of arts, science, commerce and technical education. It also compares the unit recurring cost of education at various levels in the University of Poona and found that unit recurring cost of science education is more than the arts and commerce education. In commerce, arts and science degree courses the unit costs were about ₹ 1200, ₹ 1500 and ₹ 1800 respectively. The cost of science courses was higher due to the cost of laboratories and equipments. Similarly, cost of PG courses was four or five times more than degree courses. The cost of technical and professional education like the engineering and medicine at the degree level was four or five times higher than that of the general higher education. Kamat made a very good attempt of comparing the cost of general, higher and professional education. This is one of the best analyses of the unit recurring cost of higher education.

Chalam (1978) analyzed the cost of education in colleges of Andhra University. The study calculated the institutional and private cost in the colleges. And, it was observed that institutional cost per student was almost double in the science faculty as compared to the arts. The comparative study of cost in both faculties has proved that major component of costs in science faculty was related with the common services. In arts, however, the teaching cost was the major component of unit cost. Similarly, private cost of former is less and social cost is more and private expenditure of the students was mostly influenced by socio-economic background of the students.

Prakash (1978) has developed a detailed methodology for the calculation of the unit cost of education. Moreover, he has developed input-output models of education with an application to the Indian data. He has tried to develop the educational deflators by using various inputs and their prices over the
time. In the case of education, no separate educational deflators are available and most of the time the consumer price index or income implicit deflators are used. He identified various determinates of cost of education and developed the cost of education function. Among others, the major determinants were the academic costs, particularly the salary level, structure of providing basic instructions, research guidance and supervision. The availability of public resources helps in reduction of educational costs by the process of subsidization of institutional cost of service providers.

**Ramanujan (1979)**, while making a comparative study of the per student cost in the institution of Jammu and Kashmir found that more than 80 per cent of the total expenditure of university is consumed by salaries and very less was spent on library and laboratories.

**Tilak (1979)** on the basis of data on higher education in India relating to the year 1975-76, computed the unit cost of education by various components for the different states/union territories in India. The wide differences have been found in unit cost of different type of higher education such as general, professional and other types. Similar differences are also found in the analysis of component-wise unit cost among different states/union territories as well as for different types of education. In the general education, the average salary of the teacher varies between ₹ 19,546 in Lakshadweep and ₹ 975.64 in Tamil Nadu. The student-teacher ratio ranges from 61 in U.P. to 6 in Sikkim and Pondicherry. The size of institution varies between 64 in Tamil Nadu and 2,387 in U.P. Similar picture emerged in the case of professional education. The average salary of the teacher in Chandigarh was more than ₹ 30,000 and ₹ 3,871 in Mizoram. The student-teacher ratio varies between 6 in Mizoram and Pondicherry compared to 35 in Meghalaya. In West Bengal, average salary of the teacher was ₹ 1990.50 while ₹ 716 in Manipal.

**Sharma (1980)** in order to assess the cost and efficiency in Indian university system, made a unit cost study of the universities located in Delhi. The study also compared per unit cost of general and professional courses for the
period 1974-75 to 1976-77. Per unit current cost was estimated under the four heads: teaching; student welfare; supporting services; and examination, and the capital cost were classified into four categories: buildings; equipments; libraries; and others. The study concluded that operating cost per student in affiliating universities was higher compared to that of residential universities.

Subrahmanyam (1982)\(^5^7\) by studying the expenditure and financing pattern of Andhra University, shows that on the expenditure side, major proportion was consumed by the teaching departments (between 40 per cent and 69 per cent). Further, in per pupil cost, larger differences were found in the non-tuition components of the cost (general administration 20 per cent to 30 per cent, library 2.58 per cent to 9.12 per cent) rather than in the tuition cost among the students belonging to the different income status of the society.

The study done by George (1982)\(^5^8\) measured the private and social costs of higher education in Tamil Nadu for the period 1960-76. He found that private expenditure on professional education was higher than that of general education. He also points out that the poor communities lagged behind than the urban based families who were enjoying the maximum benefits of higher education.

Gupta (1982) and Shah (1987)\(^5^9\) estimated private costs of college education and found that among the main components of private cost, fee consisted of a very small proportion of the total private cost.

Garg (1985)\(^6^0\) argued that the unit cost is most often expressed in terms of per student enrolled, but these can be expressed in other definable units such as per student graduated. The main classification of educational costs by the incidence of burden was (a) institutional costs which is sum of (i) current or recurring or operating costs and (ii) capital costs; (b) household or private costs which include (i) net tuition costs, i.e. fee paid minus financial aid received by a student and (ii) non-tuition costs; (c) social costs which is sum of (i) institutional costs (current costs and capital costs), (ii) private costs (non-tuition costs) and (iii) earning foregone. The major components of
recurring costs in the study were: teachers' cost, non-teaching cost, consumable material cost, scholarships, and maintenance cost of infrastructure (playgrounds, repair and maintenance of capital assets, durables, unspecified items or miscellaneous) and organization of literary activities, recreation and cultural activities. The components of capital costs were the buildings and other capital installation, equipments apparatus, teaching aids, library books, periodicals, newspapers, etc. However, the private costs consisted of the tuition cost, non-tuition cost (it includes: additional cost of living in hostels, uniform cost, transport cost) and opportunity cost. This was the first study which calculated per unit cost of higher education both at the institutional and private levels in Punjab. The main conclusions of study were: (i) unit cost of education both at current and capital level had shown an upward trend; (ii) science departments had higher unit cost than that of others; (iii) salary component constituted the major proportion of recurring cost in each department; (iv) subsidization of unit costs from public funds had increased over a periods of time; (v) economic status of university students was better than that of affiliated colleges; and (vi) demand for higher education was high from the households belonged to the administrative and professional services.

Todaro (1985) discussed the issues of demand for and supply of education and concluded that private costs of education are inversely related to the demand for education. Private costs are high at low level of education because of the low government subsidies. Nair (1990), in his study, described the various types of costs and their return in the case of higher education. In the case of private cost of education, the study estimated the average per year expenditure on higher education in Kerala and showed that tuition fees accounted for minor proportion in the postgraduate courses during 1985-86.

Rajkumari (1986) presents the vital points in the theoretical reconstruction of cost and benefit analysis of college education. In cost analysis, the three main components were student cost, institutional cost and opportunity cost.
In the institutional cost (excluding value of college buildings), mainly three headings were undertaken. They were: (i) maintenance expenditure; (ii) non-recurring expenditure; and (iii) students-fund expenditure. After detailed analysis of cost of college education, it was noted that average cost of all the three attributes were different. The behavior of cost per institution for all the colleges on different attributes was also in different order. Taking all colleges together, the institutional cost has increased by 47 per cent during the study period. The study also shows that among the total cost, opportunity cost has made a big contribution, followed by student cost, and institutional cost.

**Ramachandran (1987)** attempted to analyze the problems of higher education in India with special reference to the Kerala state for the period 1952-75. The study revealed huge growth in students' enrollment, number of institutions and expenditures during the study period. But the growth of expenditure was found to be higher as compared to enrolment and institutions. While analyzing the cost of education in Kerala, the bulk of public expenditure on higher education was spent on development and maintenance of arts and science colleges, and the salary constituted the largest component in the total cost of education.

**Kiranmayi (1989)** studied the role of organizational structure, financial management and their weaknesses in the universities. It discussed the pattern of income and expenditure of the universities and suggested that there was an urgent need to evaluate their financial management.

**Ramamurthy (1989)**, in his study, tried to analyze the case of Delhi University’s impact of introducing computer system on its financial management. For this, the study take into account the financial performance, resource allocation, per student cost of different departments and percentage of expenditure of different heads. It highlighted the possibility of better cost management in the university system.

**Sharma (1992)** gives the state-wise detailed analysis of recurring and nonrecurring expenditure of the central, deemed and state universities for
higher general institutions from the period 1982-85. The study reveals the income pattern, budgeting, accounting and finances of the university level institutions in India. And, he suggested following recommendations: (i) the universities should be given financial autonomy; (ii), the heads of departments should be delegated adequate financial powers; and (iii) the universities must prepare an accounts for themselves.

Dutt (1995) analyzed the cost of education of 12 colleges affiliated to the Delhi University for the period 1976-77 and 1987-88. It was found that educational expenditure as a proportion to income has risen from 1.26 per cent in 1950-51 to 3.30 per cent in 1992-93, but in total plan outlay, it declined from 7.8 per cent in the First Five Year Plan (1951-56) to 4.5 per cent during the Sixth Five Year Plan (1980-85), while the plan-wise expenditure on the university education rose from 9 per cent in the First Five Year Plan to 19 per cent in Sixth Five Year Plan (1980-85). The average cost per student was worked out to be ₹4,994.

Christo's study (1996) found that the cost of medical education in a self-financing college, without any government subsidy, was about ₹ 2.25 lakh per annum. Similarly, the average cost of medical education at the Manipal Academy of Higher Education, for the year 1993-94 to 1996-97, was about ₹ 1.60 lakh per annum for the post-graduate degrees and diplomas.

Heggade (1998) studied the resource allocation and pattern of expenditure on education in Karnataka state during 1981-90. It also measured the institutional cost of higher education and studied the management as well organizational problem of higher education in the state.

Geetha Rani, P.(2000) studied the recent policy direction in India to recover the full cost from student including hike in fees. The study concluded that indeed, there seems to be a nexus between the present student loan scheme and full cost recovery.
In his study, **Kumar (2004)** measures the private cost of MBBS course in Kerala in 2000. It showed that pre-admission expenditure was ₹ 8,817 per student and the average post-admission annual private expenditure was ₹ 13,703 including the hostel expenses. Further, the study shows that, the share of private cost was just 12.3 per cent in the total cost. However, institutional cost shares a whooping proportion of 87.70 per cent. The study also shows that major section of the students comes from the high income strata. And fees charged from students form only a minor component of private educational expenses of medical and Para-medical courses in Kerala. Nearly, 90 per cent of the cost was incurred on non-fee expenses.

**Sreekantaradhya, B.S. (2004)**, in his study highlights that the bank loans are extremely useful for meeting household expenditure on education. He examines the importance of institutional finance by commercial banks and the recent efforts by the commercial banks to improve the scheme of educational loan. He concluded that the banks should treat educational loans as a normal banking activity with kind and friendly favor of the borrowers.

**Deresh Kapu and Pratap Bhanu (2004)** has discussed about enrolment of student in and outside the state, management structure of engineering and medical college, public expenditure on higher education, share of GDP and total educational expenditure, and with given guidelines by Ponnaia committee for the development of education.

Another significant study prepared by **Ghuman, Singh and Brar (2005)** shows that there has been a strong growth of private initiative in higher education particularly in the professional higher education. It found that overall per unit recurring cost in the case of general higher education was ₹ 13,508 during 2004-05. Per unit recurring cost was higher in the urban areas colleges (₹ 13,506) compared to the rural areas colleges (₹ 10,118). However, ownership-wise, its level was the highest in the aided private colleges (₹ 14,600), followed by the government colleges (₹12,053), and the lowest in the unaided private colleges (₹ 10,118). Component-wise, teachers’ cost
dominates across the ownership and vocational categories. However, administrative cost was the second highest component of recurring cost, where it constituted between 18.16 per cent and 33.22 per cent of unit recurring cost. In professional education, per unit overall recurring cost was ₹1,755. Out of this, teachers' cost was ₹56,967 (48.50 per cent) and other costs ₹60,488 (51.49 per cent). The analysis of cost recovery of general and professional education in Punjab shows that its level was quite higher in the professional education than that of the general education. The share of total receipts in recurring cost was 95.72 per cent in general education, and 134.27 per cent in professional education. Moreover, fees and funds alone constituted 77.38 per cent of recurring cost of general education, and 97.34 per cent in professional education.

Studies Related to Other Countries

The higher education sector witnessed a considerable expansion among world countries immediately after the end of World War II, i.e. the 1950s onwards. And, the financing issues emerged as the most important topic of debate and drew the attention of policy planners and academia across all the countries of world. In this section, the most important research studies in the field of financing higher education have been reviewed.

Rogers Daniel (1972) has analyzed student loan interest and subsidy variations in Latin America, Mexico and Peru during 1970. According to his evaluation the interest rates of student loan in Mexico and Peru, vary from 2 to 8 per cent, and estimated subsidy was between 14 cent and 61 percent.

Dominguez, (1973) has conducted a study on student loan institutions during 1960’s and 1970’s based on survey of student loan institutions in developing countries, and endorsed the idea of national credit institution exclusively for educational needs in almost all developing countries.

Jallade Jean- Pierre (1973) examined the extent of subsidy of student loans. Students are subsidized in various considerations, both in term of the amount
of tuition fees and the interest payable on loan, and concluded that the majority of students of private Universities in Kenya, Nigeria, Colombia, and in many African countries have been considered with respect to the student’s income level because of the payment made by the employer regularly.

William.P (1974)\textsuperscript{78} examined the introduction of student loans in Africa and Ghana, and the reasons for failure. One of the first schemes in the Ghana University student’s loans scheme which was introduced in 1971 was abandoned within a year due to political opposition. The initial failure of loans in Ghana is often cited as evidence for the impracticable student loans institution.

Inter-American Development Bank (1978)\textsuperscript{79} has conducted a study on financing education in Latin America and concluded that the higher income students were to pay the entire cost of their secondary and higher education irrespective of their studies in the public or private institution. Hence, the fiscal resources released by the adoption of such a measure should compensate the present volume of public expenditure on education.

Congressional Budget office (1980)\textsuperscript{80} criticized the USA’s GSLP (Guaranteed Student Loan Programme) which is administered by commercial banks and other lending institutions and compared the policy measures with the alternative government and other federal lenders of providing loans to students, and concluded that the government was better than the other federal lenders on administration of student loan in USA.

Council of Minister of Education, Canada (1980)\textsuperscript{81} studied the problem of student loan defaulters and concluded that, if the student is made known clearly about interest charges and repayment policies and if the government change the policies on repayment and non-repayment, the problem can be reduced to a large extend.

On the other side, Carnegie Commission on Higher Education (1982)\textsuperscript{82} reviewed the financial problems faced by the system of higher education in
United States. The report commented that, during the present century, the cost of colleges owned by the public sector was rising at a very high speed. This increase is largely due to the growing proportion of students in public institutions, particularly in the expanding community college sector since the World War II. Further, the commission added that, 'as a steadily rising proportion of the nations choose to go to the college, the public cost of higher education grows much more rapidly than the national income'. In the last, the Commission recommended that the tuition fee charges should be based on the economic strata of the students. It also stressed that the institutions should initiate a careful study of tuition fee to be charged from students in the private colleges and universities so that tuition fee was relatively low for the lower division students, slightly higher for upper division students and substantially higher for the graduate and professional students.

Maureen Woodhall (1983) has opined that the student loans are feasible in developing countries and suggested that the Student loans should be flexible, and can be used to provide incentives for particular groups of students. He illustrates it as significant source of financing for higher education, and argued for cost reduction as it is mainly meant for weaker section.

Psacharopoulos (1985) found that in most developing countries, largely the taxpayers’ money rather than the individual student finance the direct costs of education. It was further held that the tuition fees are substantial high in certain cases.

On the other hand, Woodhall (1991) suggested a reduction in the subsidies to the higher education sector and recommended that the student loans, graduate tax and enhancing fees and funds should be adopted to finance the rising cost of higher education.

World Bank (2002) study indicates that more differentiated systems, including private and non-university institutions can help to meet growing demand and make higher education more responsive to labor market needs. Successful higher education systems found in Australia and New Zealand,
other than US is a good example. It also noted that European countries are undergoing a series of policy debates on financing higher education focusing on the extent and degree of cost recovery for enabling the transition from elite to mass oriented higher education.

A study conducted by the OECD (2003) found that percentage share of GDP spent on the tertiary education in 2000 was 1.7 per cent. The UK was below this, at the one per cent level of GDP. This percentage was lower than the other country, except Germany and Italy. It suggested that overall support should be available to the students regarding the financing of higher education and for this, either it should be in the form of grants or loans or both.

Bruce Johnstone (2003) has studied the cost sharing on higher education by student’s parents and by the governments, or by the taxpayers on portion of the costs. The study concluded that, even though there is indirect contribution by the government as well as other tax payers, the parental contribution is much important for facilitating the students to meet higher portion of cost of education.

Hong Shen wealite (2003) analysed the difficulties in providing student loan scheme such as GCSLS (General Commercial Student Loan Scheme); GSSL (Government Subsidized Student Loan), GSSLS (Government Subsidized Student Loans Scheme, SLS (Student Loans Scheme) in China and attempts to provide corresponding suggestion on policy reform and also analysed the causes of difficulties in concluding the GSSLS with respect to the responsibilities of government as well bankers

Anna Kim Young Lee (2003) carried out a study on the functioning of government sponsored student loans schemes in Asia and critically examined the main features of the student loans in the Republic Korea. He concludes that the Korean student loan scheme has been financially sound with low administrative costs and default rate, and with a well developed bank system. Moreover, the burden on repayment of loans by students is
tolerable. And also he suggests the coverage of the loans scheme should be expanded considering the social demand from the poor.

**Yue ping Chung** (2003)\(^1\) has studied student loans, and its experience in different countries. The student loans in different countries show that government is the most important sources of student loan. It is also found that the commercial banking sector is an emerging source of student loan in developing countries.

**Adrian Ziderman** (2003)\(^2\) has carried a series of in depth studies on the functioning of government sponsored student loan schemes in Asia. The schemes were under taken by the Bangkok based UNESCO ASIA and pacific Regional Bureau for education in Association with the (11EP). It also covered China, the Republic of Korea, Hongkong, Philippines, Thailand and SAR. The study concludes with highlighting the relative importance of student grants and scholarship in Thailand.

**Irena Macerinskiene, Birute Vaiksnoraite** (2006)\(^3\) argued that average earnings of individuals are closely related to their educational attainment. Higher wages for all workers in areas with bigger share of highly educated labor force and the nations, which have experienced fast economic growth and increased wealth, have consequently been able to invest more in education.

**Anca Gabriela Ilie, Dan Dunitriu, Rodica Milena Zaharia, Oana Artonia and Colibasaru** (2009)\(^4\) had studied about the public expenditure on higher education in Romanian Universities. Then compared both quantitative and qualitative indicators assessing their position on the Romanian education market and finally concluded that setting up of a framework for the resource allocation priorities helps to the quality indicators and for improvement of higher Education.
Research gap

The financing of higher education has always been a matter of debate across the countries. In fact, within the education sector, higher education demands more resources on per unit basis because of its special requirements and higher level of specialization. There has also been a debate about the generation of social return of higher education in relation to private returns to the education acquirer. The beneficiaries of subsidies parked in this sector may not always be from the deprived sections of the society. However, a reduction in state resources creates its own problem like the exclusion and undersupply of human capital in the state. The linking of subsidies to the income of students too involves many practical problems, particularly in the developing countries where informal sector and size of black economy is too large. Further, the privatization of education results in the commercialization because of the least enforcement of rules and regulations. Thus, the study on educational loans provided by commercial banks in India becomes more important in order to comprehend the situation in a better way.

The foregoing review of available literature reveals that the most of studies revolve around the estimation of recurring cost of education. Adequate attention is not given to the estimation of capital costs in the education, which forms an extremely important component in the overall institutional cost of education. Similarly, the estimation of private cost of education is one of the areas, which remained as most neglected in the studies of educational costing. In most of the studies, it is also evident that even with regard to the estimation of recurring expenditure, maximum attention was paid to salary (teaching and non-teaching), stationary, consumables, repair and maintenance, communication, sports, etc. However, certain items like the cost of examination, scholarship and stipends, fee concession and publicity, etc., were excluded from the calculation of cost. Similarly, in private cost main focus of the studies was on the tuition cost, however, non-tuition components of private cost of education are still waiting for proper attention. This
statement is true not only for the various states, but also in all India contexts as well. Overall, no full-fledged study is available which discuss the total cost of education and education loans by commercial banks in a comprehensive manner. As far as financing of higher education is concerned, mixed approaches have been adopted and recommended by these studies. Few studies favor withdrawal of public subsidization and suggest fee hike and student loans to finance higher education. On the other hand, many studies do not favor withdrawal of public support to higher education. In the context of India, where public subsidy is one of the most important elements of educational financing, not much attempts have been made to measure the extent of subsidization, or to evaluate the benefits flowing from it. Even if there are different kind of subsidies and public participation in higher education, educational cost is very high and cannot affordable by the middle and lower class students. Therefore, their major source of finance is the education loans provided by commercial banks. Thus present study makes serious attempt to measure the performance of commercial banks with respect their operations relating to the issue of education loans.
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