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CESS-RSEPPG Monograph Series #1

Expenditure on Education in India

Public and Private Household Spending Trends

Venkatanarayana Motkuri and E. Revathi

CENTRE FOR ECONOMIC AND SOCIAL STUDIES

(Planning Dept, Govt. of Telangana & ICSSR - Ministry of Education, Govt. of India)

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Foreword

The present monograph, authored by Venkatanarayana Motkuri and E. Revathi, is an outcome of studies on public expenditure on education by the State (Government of India, as well as States) and private expenditure by households. The trends in expenditure on education have been examined over the past seven decades in post-independent India a special focus with on higher education. The study assumes importance as India envisages a GER in higher education at 50% by 2035. Findings show that public expenditure has remained stagnant at 4% of GDP over the years while private expenditure has been on the rise. The rising demand for higher education has resulted in increased household expenditure on education, as it is perceived as an effective pathway for socio-economic mobility. The share of education and health cess in the union tax revenue receipts has been on the rise, mainly used to fund central educational institutions at the cost of state institutions, which are languishing for financial support. A notable development in the last decade is the rise of privatization in higher education and its concomitant effects on household expenditures. The study also sheds light on methodological issues involved in capturing the public expenditures on education. The monograph is a valuable addition to the literature on in a holistic manner public and private expenditures on education in India and their implications. I trust the monograph would be useful to academicians and scholars working in this area of research and to policymakers in taking forward the suggestions in address to the related challenges to make quality higher education affordable to poorer segments of the population, thereby narrowing education and income inequalities.

E.Revathi
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Abstract

This study has examined the private and public expenditure on education in India. The analysis is based on public expenditure on education compiled by the Ministry of Education, Govt of India (the ABEE report), including expenditure incurred by the education department and by all other departments on education and training-related programmes and activities. Private expenditure on education is based on the Private Final Consumption Expenditure (PFCE) on education as estimated by the National Accounts Statistics (NAS). It also analysed private expenditure on education based on NSSO-CES and SCE survey estimates published in respective rounds of NSSO survey reports.

Education as a public good necessitates state expenditure/investment, especially in developing countries like India. Further, in a federal polity of the constitutional framework, education in India is listed as a concurrent subject that requires co-sharing on financial, regulatory and development fronts. It is observed from the analysis that India is spending around 4% of GDP on education as public expenditure and around 2.8% of GDP as private expenditure (Private Final Consumption Expenditure on Education, as estimated by NAS); together, it is spending around 6.8% of GDP on education.

What is also evident from the analysis of public expenditure on education is that only 1% of GDP is borne by the Centre – Union Government - while the remaining 3% is borne by States together. Of the country's total public expenditure on education, the Centre's contribution is less than one-quarter (20 to 25%), and state governments spend the remaining three quarters. As a percentage of their total budget expenditure, the Centre spends less than 8%, and the states spend more than 20% on education. The long pending rise in the public spending on education, equivalent to 6% of the country's GDP, as proposed in the Kothari Commission and reiterated in the NEP 2020, needs to be equally shared by both the Centre and States lest the development of education remains a lofty ideal.

Using constitutional provisions, the Union Government is imposing and collecting education cess, mobilising additional resources to meet, or finance its elementary and secondary education initiatives, particularly the SSA, MDM and RMSA (now subsumed

under Samagra Shiksha). Nearly half of the expenditure incurred by the Ministry of Education, Government of India, is met with additional resources mobilised through education cess. The last two years' budget estimates indicate that the education cess is more than the allocations made to three flagship schemes, Samagra Shiksha, MDM and RUSA, for which the education cess is meant.

Despite the availability of such leverage of education cess, the Union Government could not increase its share in the country's total public expenditure on education. There is mounting pressure on the limited resources of the state governments. Replacing the Planning Commission (PC) with NITI Ayog has resulted in state governments losing grants-in-aid. Finance Commission's award increasing the state share in divisible pool tax revenues also could not compensate for the losses in the state governments' resource realisation. Given their resources and pressures of competing priorities related to various welfare and developmental initiatives, state governments are constrained in bearing the burden of increasing the public expenditure on education, which is equivalent to 6% of GDP. The NEP 2020 is, in fact, silent on the Union Government's contribution to increasing the public expenditure on education.

As a result of inadequacy in public investment, despite the fact that the 'Public Good' nature of education desires more of it, there is a growing trend in private expenditure on education in India. A notable trend over the past three decades is that growth in private expenditure on education is higher than that of public expenditure. The ratio of public to private expenditure on education declined during this period. Such a trend reflects the increasing privatisation of education in India and that has far-reaching policy implications.

The analysis also reveals that the percentage of private expenditure on education in GDP and total Household Consumption Expenditure (HCE) is increasing, which shows that household expenditure on education is growing faster than the total HCE and GDP. A positive association exists between income level and expenditure on education and its share in total HCE. However, it is growing faster among the bottom economic stratum, particularly in their per capita expenditure on education and its share in their total HCE. Therefore, the ratio of the top 10% of the population to the bottom 10% in terms of per capita expenditure on education is high but shows a declining trend during the period of analysis. It shows the increasing prioritisation of education, even among poor households.

The study also examined and analysed the trend in expenditure on higher education in India and reflected on its private expenditure in the country. It is observed that while nearly 4% of GDP is the total public expenditure on education in general, public expenditure on higher education constitutes 1% of GDP. Education, in general, accounts for around 20% of total budget expenditure in India, whereas higher education constitutes around 5%. The share of higher education in the total expenditure on education is around 30%. While the Centre spends nearly 35% to 40% of its education expenditure on higher education, states spend less than 30%. The share of the Centre in total expenditure on higher education is more than its share in total expenditure on education. Most of the Centre's expenditure on higher education is on Central Institutions, resulting in very meagre funds being provided towards 'transfers to states'. Increasing privatisation of higher education has implications for growing private expenditure and further expansion of higher education.

The immediate effect of the inadequacy of public expenditure on education and inefficient use is that the quality of education delivered in public institutions is compromised, resulting in a shortage of human resources and other necessary infrastructure and facilities. The difference in the quality of education delivered in public and private institutions perpetuates educational inequality. It affects the employability of graduates, based on differential levels of knowledge, skills and competence.

Key Words: Education, Expenditure on Education, Public Expenditure, India, Private Expenditure on Education.

- - -

1 Introduction

1.1 Context

Education is a critical factor for economic growth as well as socio-economic development. Education is instrumental in transforming the future workforce into skilled ones and increasing individuals' labour productivity and earning capacities (Shultz, 1961; Dennison, 1967; Barro, 1997). It is also critical in breaking the cycle of intergenerational transmission of poverty (World Bank, 2018; UNESCO, 2020). Given its importance in human and economic development, particularly through human capital, and human rights perspective, expenditure on education is considered crucial, and within the economic framework seen as an investment (Shultz, 1961&1964; Becker, 1994; Barro 1997; Barro and Sala-i-Martin, 2004; Motkuri, 2016). Moreover, education is considered a public good, so public investment is largely advocated (Tilak, 2002; 2012; Locatelli, 2018). Experience of developed countries, especially Western Europe and North America, has shown such a trend of equating educational development in the country with public investment (UNESCO, 2020).

Experience of developing countries, especially that of India, shows growing private expenditure on education with growing demand for education (UNESCO, 2020). Inadequacy of public expenditure on education has resulted in growing private expenditure, which has far-reaching implications in terms of its affordability and access (James, 1993a&b; Bray, 1998; Weisbrod, 1975&1977). Emerging social and economic circumstances and conditions have resulted in the growing demand for education in India: expanding infrastructure, transportation and communication facilities, leading to mobility of people and penetration of markets; expanding base of the middle class and emerging neo-middle classes; structural changes in labour market, and; urbanisation. These have contributed to rise in perceived values of education and to the growing demand for education. Due to inadequacy of public funding and non-fulfilment of the public education system in meeting the growing demand, education in the private sector is expanding, and private expenditure on education has been increasing. The recent National Education Policy 2020, the third in a series, adds further impetus to privatising education.

It is well established and amply witnessed in the developed country context that public investment, above the private one, is necessary and essential for the country's educational development considering education as a ***public good***. However, in the federal context, the role and contribution of the Union and Provincial governments concerning financial allocations for education have been a matter of discussion and debate. The Constitution of India, in its framework, initially placed education on the State list, giving state governments complete responsibility for education. However, based on the recommendations of the *Committee on inserting Fundamental Duties in the Constitution* (chaired by Sardar Swaran Singh), education was transferred to the Concurrent list following the provision under the Constitution (42) Amendment Act enacted in December 1976. It made both the Union and Provincial (State) governments equally responsible for educational development in the state and at the national level. However, the vertical distribution of educational investment obligations between the centres and states still lies with state governments.

1.2 Public Investment in Education and Educational Development in India

The foundation for the modern education system in India was laid during the Colonial regime when the British directly or indirectly ruled large parts of the country/sub-continent. Selective initiatives in this regard began with the activities of the missionaries of the time. Subsequently, the British East India Company, followed by the Crown regime, took some initiatives in India after their policy debate and discussion on establishment and educational expansions in the British territory. It was concerned with how it serves their interest in the country. It began with the ***Charter Act of 1813*** in the first half of the 19th century and was followed by the ***English Education Act of 1835*** (by William Bentinck based on the *Macaulay Minutes)* and Henry Hardinge's ***Declaration in 1944***, reserving public employment to the English educated (Nurullah and Naik, 1974). Subsequent important policy initiatives include the Woods Dispatch 1854, the Indian Education (Hunter) Commission 1882, Curzon Policy 1904, the Gokhale Bill 1913, the Hartog Commission 1928, the Wardha Scheme of Basic Education 1937 and Sargent Plan 1944 (Nurullah and Naik, 1974; Naik, 1978; Mondal, 2017). At a slower pace and to a limited extent, the modern education system in the country evolved over a period and gradually expanded during the pre-independence period.

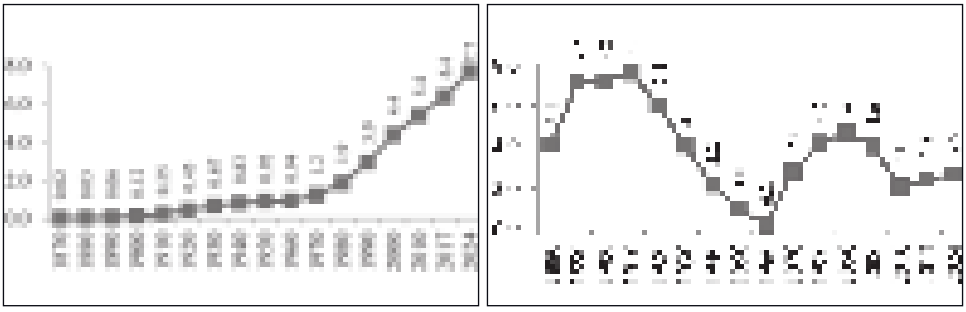
One of the constraints for expansion in the education system during the pre-independence period was the inadequate allocation of financial resources (Nurullah and Naik, 1974; Naik, 1978). Since the British initiatives began, the allocation of financial resources required for educational development has been discussed repeatedly. Other

than public subscription /financing, although there were such initiatives of private or parental financing of children's education, they were minimal[1]. There were some *charity*-based or *philanthropic* initiatives and community-based contributions in financing education. Education was, however, largely financed through public funding via media of grants-in-aid. Mobilisation of resources for education was a political and policy question then, and it continues to be so now. The Colonial Government facilitated the local governments in meeting the finances of education from its local revenue (land) taxes, which was the government's major source of tax revenue. Slow progress in education was partly due to the inadequacy of the financial resources.

The historical trend in average years of schooling among the adult population in India as estimated[2] indicates that it was below one year of schooling till independence, and it is so for two decades even after independence (until the 1960s), it was 0.9 in 1960 and was 1.2 years in 1970 (Figure1.1a). There was a momentum during the 1970s, which continued thereafter. From the base in 1970, the average number of years of schooling among the adult population in the country increased by three times during the next two-decade period. In other words, since 1970, the average of years of schooling among the adult population in India increased by one year for every decade; it was 1.9 in 1980, 3.0 in 1990, 4.4 in 2000, 5.4 in 2010 and 6.4 in 2017. However, the rate of growth in average years of schooling was higher during the pre-independence period (peak at 7.6% during the decade 1900-10), because it was possible at a low base (Figure-1.1b). Post-independence, there is momentum in the growth rate after introduction of the first National Policy on Education during the late 1960s; the peak growth rate was observed during the 1980s when the second Education Policy for the country was introduced.

Figure-1.1: Historical Trend in Average Years of Schooling (AYS) in Adult Population in India

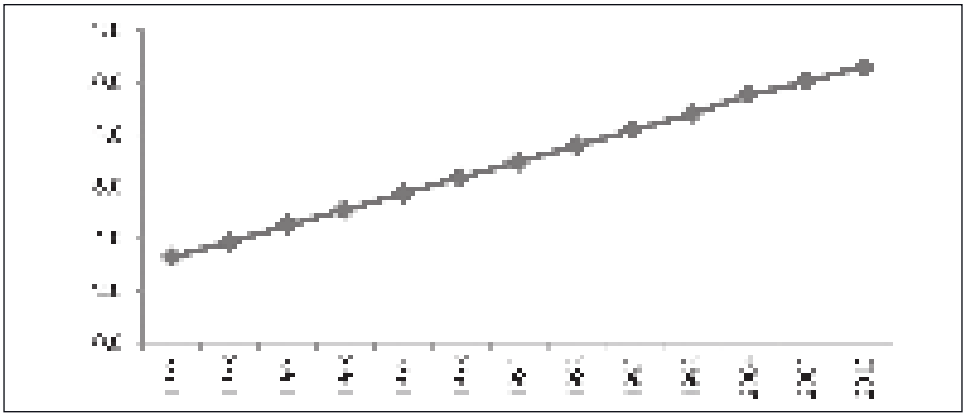
a) Average Years of Schooling ***b) Rate of Growth (% per annum) in AYS***



Source*: Lee-Lee (2016); Barro-Lee (2018) and UNDP HDR (2018); latest year (2024) AYS is estimated using PLFS-7 (2024)*

The trend in average years of schooling across birth cohort[3] in India is very promising and progressive (Figure-1.2). While every succeeding birth cohort has a higher number of years of schooling than their immediate preceding cohort, the younger birth-cohorts in India have far more years of schooling than the older ones. The recent birth cohorts have more than 10 years of schooling.

Figure-1.2: Estimated Average Years of Schooling across Birth-Cohorts in India



Note: *Years on the X-axis are the terminal years of the five-year interval of the respective birth-cohorts.*

Source: *Authors' estimates using PLFS-7 (2023-24)*

Undoubtedly, remarkable progress has been witnessed in educational development in India since independence, particularly during the last three decades (Figure 1.1&1.2). At present, more than 95% of children aged 6-14 years and 83% of 15-17 years age are attending school (Table-1.1). Rural-urban and gender gaps are narrowed down. Universal attendance among children in 6-14 years of age is a constitutional mandate, and attendance among children 6-17 years old is the global norm. Around 92% of 6-17-year-olds are attending schools, leaving an eight percentage points-gap for universalising school education in this age group. Rural-urban and gender disparities in the current attendance rates of school-age (6-17 years) are reduced to negligible, but persist in the college-age. However, a very low attendance rate for pre-primary education is a cause of concern; only one-third of the pre-primary age cohort (3-5 years) in India are currently attending such level of education. Universalisation of pre-primary education is another goal the country needs to achieve and a herculean task to address. The current attendance rate among college-age (18-23 years) is 40% which is low compared to the global average and attendance rate in developed countries.

Table-1.1: Current Attendance Rate (CAR) among School and College age Population in India by Sector and Gender, 2023-24

Age Cohort	Rural-Urban Combined			Rural			Urban		
	All	Male	Female	All	Male	Female	All	Male	Female
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
3-5	42.0	41.0	43.1	38.1	37.3	39.1	54.3	53.3	55.4
6-14	97.9	98.1	97.7	98.1	98.3	97.8	97.6	97.5	97.7
15-17	85.7	86.5	84.9	84.7	85.9	83.3	88.7	88.1	89.4
6-17	*94.8*	*95.1*	*94.4*	*94.6*	*95.1*	*94.1*	*95.2*	*94.9*	*95.5*
18-23	39.6	42.2	36.8	35.9	39.5	32.1	48.4	48.5	48.3

***Notes**: CAR in percentage.*

***Source**: Authors' estimates using unit record data of PLFS-7 (2023-24).*

Post-independence, the Government of India laid down specific initiatives by recognising the importance of education in nation-building and increasing the capacity of skilled and professional human resources for administration and industry and thereby for its social and economic development. A series of studies have been taken up by various committees and commissions in India to understand the system of education inherited, and is continuing, while making their policy recommendations: the University Education (Radhakrishnan) Commission 1948, Secondary Education (Mudaliar) Commission 1952, Education (Kothari) Commission of India (1964-66), National Policy of Education 1969 and 1986, Ramamurthy Committee 1990 and CABE (Janardhan Reddy) Committee 1992, Programme of Action (POA) 1992. Specific policy initiatives were also made: OBB 1986, National Literacy Mission 1988, DPEP 1994, and SSA 2001.

Mobilisation of resources, especially financial, was the constraint inflicted on educational development in India during the post-independence period. The Central Advisory Board of Education's (CABE) Committee of 1944, in its report on ***Post-War Educational Development in India*** (also known as *the Sargent Report*), envisaged mobilising resources and realising compulsory primary/ elementary education during the next 40 years. However, post-independence policymaking had felt at the All India Education Conference held in 1948 with regard to evolving a national education system, that 40 years would be a long to wait for universal compulsory education to be realized. Accordingly, CABE appointed a Committee (Chaired by **B. G. Kher**) in 1948 to ***examine existing financial resources and suggest ways and means of raising the requisite finances*** for the different stages of a comprehensive system of education

(GoI, 1951)., The **Kher Committee** envisaged achievement of universal compulsory elementary education within a time span of the next sixteen years in three plan phases: extending the compulsory elementary education programme for 40% of 6-11 years age children in the first-five-year phase; for the remaining 60% in the second-five-year phase; and it would be expanded to all the 6-14 years-age children in the third-phase, over a six-years-span. Meanwhile, the Constituent Assembly made it in the directive principles of the state that universal school attendance among school-age (6-14 years) children should be achieved during the next ten years. The importance of the **Kher Committee**, however, is that it has recommended indicative financial responsibilities and contributions of Union and State Governments to achieve universal compulsory elementary education in the states and in the country. *It envisaged and recommended that while state governments contribute 70% of the resources required, the Union government would bear the other 30%*.

Subsequent reviews on progress in education in the post-independence plan-era, particularly at the end of the second five-year plan and during the third five-year plan, noted the Indian state's failure to achieve the set targets for education. The **Education Commission** (*Chaired by D.S. Kothari*) of **1964-66** was set up to comprehensively review the progress and structure of the education system and recommend a policy for accelerating the country's educational and human resource development. Among its recommendations, along with change in the structure of the education system (10+2+3) and the critical role of teachers, their adequacy and need for their training, a crucial aspect was regarding the ***financial implications*** of educational development in the country (Tilak, 2006; 2007). The ***Education (Kothari) Commission*** (1964-66) had recommended public expenditure on education, an amount equivalent to *6% of the country's Gross Domestic Product* (GDP). Union Government of India, in its first National Education Policy (NEP) in 1968, which was based on the recommendation of the Kothari Committee, had accepted the financial implications at 6% of GDP. The same was emphasised in the second National Education Policy (NEP) of 1986 and the Programme/Plan of Action in 1992. The recent third NEP-2020 has also made such intent. However, this financial commitment has not been fulfilled during the last seven decades.

Further, as part of economic reforms initiated in the Indian economy during the early 1990s, the education sector was opened to private sector initiatives, both at the school and higher education levels, including technical and professional ones. While there were some private initiatives before the 1990s, they were limited in number, and most

were public as they received Government aid (so they are Private by management but Government aid in funding). Since the early 1990s, the number of institutions and enrolment in these institutions has increased phenomenally. Consequentially, the private expenditure on education across different levels of education (primary to higher and technical) also increased. The public education system in the country has suffered from inadequate funding, which in turn has had an impact on the quality of education delivered in public institutions. Further, the quantitative expansion of the education system in the country during the last three decades appeared to compromise the quality of education.

Efforts in this direction need to go beyond universalising attendance among children aged 6-17 years on par with those of pre-primary age and focus on the quality of education delivered in educational institutions. The poor quality of education provided is indicated by Pratham's (national level survey estimates) Annual Status of Education Report (ASER) where *conditions of foundational literacy and numeracy* among rural children were noted to be at alarmingly low levels (ASER, 2022). Similarly, the NCERT's National Achievement Survey (NAS) estimates also indicate low learning achievements of the children with reference to the learning outcomes expected (NCERT, 2022). Further, World Bank estimates and reports on human capital bases across countries indicate that India is one of those countries that have achieved less than 50% of their potential (World Bank, 2020). Quantitative expansion of educational facilities, improving access, and bringing most of the children on board into the education system, although remarkable achievements, have compromised the quality of education in the process. Now, it is time to focus on quality. Implementing RTE of 2009 requires not simple access but access to quality education. While improving the quality of education, institutions need to be strengthened with proper infrastructure and human resources, particularly teachers.

Progress in higher education in India is better in the post-independence period than before, most of which has been achieved during the last two decades. The GER of higher education in India has increased from less than 1% in 1950 to 8% by the end of the 1990s. During the last two decades, with a remarkable expansion and progress in higher education, GER has increased to 28% in 2021-22, as per the AISHE latest report. Higher education in India has transformed from one limited to elite classes to one that is more broad-based and accessible to the masses, hence its *massification* (Motkuri and Revathi, 2024). However, the GER of higher education in India is far lower than that of many developed countries including those of Asia[4].

Along with slow progress, higher education system in India is inflicted with certain issues and challenges associated with the quality of education delivered in higher education institutions. The employability of graduates is a cause of concern all around the world, but more so in India. It is evident from the annual series of India Skill Reports since 2014 that less than 50% of graduates from higher education institutions in India are employable. Resource constraints, both financial and human, along with institution-level infrastructure and facilities are the prominent issues associated with governance of the higher education system at the country and at the institution levels. The shortage of dedicated, qualified, professional human resources for teaching echoes across both central and state-managed institutions. All that is required is financial resources and this necessitates enhanced public investment in education.

1.3 Financing Education - Public Vs Private Expenditure: A Review of Certain Theoretical Underpinning

Human capital theory justifies public investment in education. Empirical evidence has shown that along with private returns on education, there are social returns as well (Psacharopoulos, 1994&2006 Psacharopoulos and Patrinos, 2004). While the experience of developed countries indicates that their educational development is catered largely by public institutions and public expenditure on education, developing countries have to rely on the educational institutions of private sector and household private expenditure (UNESCO, 2020). Extensive research has been conducted on public investment in education (GoI, 1966; Mazumdar, 1983; Panchamukhi, 1989; Tilak, 1993; 1997; 2002; 2006; 2007; Mukherji, 2013; Bhakta, 2014; De and Endow, 2018). Most of the studies on public expenditure on education in India inferred that as education is viewed as a public good, public investment in education is necessary but is found to be insufficient and falls short of requirement. Also, various aspects, including determinants of private expenditure on education, are explored (Sarkar, 2017; Chandrasekhar *et al.*, 2019; Geetharani, 2021). In this context, growing private expenditure on education is a cause of concern.

Privatisation and Private Expenditure on Education

Privatisation in education is a process that indicates the direction of change in three dimensions: *ownership*, *financing* and *control* (Bray, 1998). The private, otherwise meaning non-government, encompasses a variety of operators/entities, including those of commercial entrepreneurship and non-profit organisations, trusts and communities (*ibid*). The process of privatisation is possible in four different scenarios (or strategies) or a combination of them: a) change in ownership of institutions (public to private);

b) relatively faster growth of private over that of the public in expanding base of the education system or else slower rate of decline of private in the scenario of education system contraction; c) increasing government financial support for institutions under private control (not necessarily financing the private institution but financing the students through vouchers); or d) the increasing private financing of institutions under government control (Bray, 1998). Among the private sector, the philanthropy of non-profit or not-for-profit organisations (NPOs) has a long history of delivering public services, including education (Weisbrod, 1975; 1977; James, 1986; 1987; 1993a&b; Bray, 1998; Valentinov, 2006). One is not sure about the motto of emerging private education sector in India being in line with the philosophy of philanthropy and social service.

Private Serving Excess and/or Differentiated Demand

Privatisation in education can be explained through neoclassical economics framework of ***excess demand*** and/or ***differentiated demand*** (James, 1993a&b; Bray, 1998). Burton A. Weisbrod was the earliest one to formulate *the excess demand hypothesis*. It is so, especially in the context of public goods wherein the effective demand for the same exceeding the limited public supply is referred to as excess demand, which is served by emerging voluntary non-profit private organisations (Weisbrod, 1975; 1977). The public good nature of education requires the government to supply such services, but with the effective demand for the same being over and above the limited public supply, private sector is to serve such *excess demand*. The public sector is superior but paradoxically limited in its ability to supply, which inescapably excludes the demand of some aspirants. Although parents of eligible students prefer public institutions for their children's education, they cannot get a place due to the limited supply of public (in terms of the number of institutions and their intake capacities) that is constrained by public financing. Therefore, they are involuntarily pushed out of the ambit of the public sector and hence resort to private, which is there to provide similar services (James, 1987; 1993a&b).

As mentioned above, the non-government or private service-providing entities encompass commercial enterprises, donative non-profit organisations, including philanthropy-based trusts and communities, along with religious organisations, associations or institutions. Private provision of education, in fact, initially began with voluntary non-profit organisations, which are financed by donations of concerned citizens. Some institutions of such nature are supplemented with public funds (government-aided) in education. The extent of subsidised service provision or cost-recovery of these non-

profit organisations, however, depends on their donations base and vision and mission. Willingness and ability to pay for education are what matters in cost recovery and for commercial entities.

Again, the increasing private sector is also due to *differentiated demand* for private education (James, 1987). This means that parents of eligible students prefer private education for various reasons. It can be due to actual or perceived quality differentiation in private and public education or post-completion services like placement. Product differentiation is his rationale behind the increasing returns and downward sloping demand curve, among two important elements of Pierra Sraffa's contribution to the theory of imperfect competition in 1926 (Sraffa, 1926). The concept was further elaborated by Harold Hotelling in 1929 and Edward Chamberlin in 1933 (Hotelling, 1929; Chamberlin, 1933). Hotelling's spatial competition or linear model consists of two types of product/service differentiation: vertical one based on quality and horizontal one based on variety (Hotelling, 1929). Chamberlin's differentiation[5] in his monopolistic competition model relaxes the assumptions of product homogeneity and perfect substitutability of products. Non-price factors consist of various characteristics of a general class of products produced or sold by different producers/agents, which creates a preference for one over the other. Consumer preferences and perceptions are key to such product differentiation, especially according to Chamberlin's theory.

In line with the above theoretical underpinnings, otherwise predominantly provided by government monopoly, education across countries has a significant presence in private sectors. Latter's presence while serving the excess demand is partly due to differentiated demand (James, 1993; 1987). The quality and variety of education provided/delivered in private institutions might be different from that of public ones, differentiating the educational services provided in institutions under these two different managements. Given the diverse tastes and preferences of parents for their children's education, the delivery of the same in institutions of two different (private and public) managements would lose their perfect substitutability (James, 1993).

Non-Profit Vs For-Profit Organisations: Producing and Supplying Public Good

Within the private sector, especially for educational services, non-profit or not-for-profit organisations (NPOs) are the most preferred ones across the globe in delivering such services. Non-profit organisations are reliable in contract failures and market failures due to information asymmetry, given the *non-distribution constraint* (NDC) factor in these organisations (Weisbrod, 1975; Hansmann, 1980; Valentinov, 2006). In other words, the non-profit organisation does not have space for distributing its profits or dividends

to its members, and it cannot sell off its stocks for capital gains (James, 1993; 1987). The non-distribution constraint (NDC) of not-for-profit organisations, refrains them from not distributing profits even if they are made (Hansmann, 1980). Any profits are to be ploughed back into expanding the services or improving the quality of the service. Further, this is a legal requirement of non-profit entities for tax exemptions, including those managing education institutions across countries. Many times, governments have been providing certain financial assistance for certain institutions as required.

Interlocking of Managements: Abuse of Non-Profit and Philanthropy

Although most private entrepreneurial education institutions, especially in India, are under the category of non-profit or not-for-profit organisations, there is space for misuse of such social service platforms. An opportunity for abuse is, however, presented with the *interlocking of management* of non-profit and for-profit organisations. Steering business from non-profit activity to for-profit activity and accounting manipulations are two important abuses of interlocking managements. Hence, Weisbrod recommends prohibition (Weisbrod, 1975).

All the above theoretical underpinnings indicate that growth of private sector is either largely meeting the excess demand or differentiated demand. It, in turn, indicates a deficiency in public investment. Societal demand for education is over and above that accommodated in educational institutions under public management. Further, parental perceptions regarding the quality and variety of education delivered in such institutions are not so satisfactory, thereby raising preferences for educational programs in institutions under private management. The growing private sector in education has implications in the sense of an increase in private costs and, hence, the problem of affordability. Further, although most private educational institutions are registered as non-profit or not-for-profit organisations (NPOs), there is enough space for possible interlocking of management and, thereby, abuse of philosophy and intention. In this context it can be said that the welfare state's objectives, obligations, and distributional aspects would be better served by public investment in education than by leaving it to the private sector.

1.4 Objective, Data Source and the Structure

In the above context, the main objective of the present exercise is to examine and analyse the trend in private and public expenditure on education in India. The analysis of public expenditure on education focuses on financial responsibilities born by the federal (centre) and provincial (state) governments in financing education through

their budget expenditure. It also analyses the education cess and its utilisation by the Ministry of Education. Further, private expenditures based on the estimates of large-scale household surveys on consumption expenditure and social consumption on education are analysed. Analysis also focuses on public and private expenditure in India on its higher education.

The analysis is based on public expenditure on education compiled by the Ministry of Education, Govt. of India, which includes expenditure incurred by the education department as well as all other departments on education and training-related programmes and activities. Data on private expenditure on education is based on the Private Final Consumption Expenditure (PFCE) on education as estimated by the National Accounts Statistics (NAS) as well as estimates using national large-scale household surveys: NSSO Consumption Expenditure Survey (CES) and Social Consumption-Education (SCE).

Structure of the Monograph

Section 1 of the monograph presents an introduction, followed by a presentation of the analysis of public expenditure on education while focussing on financial responsibilities born by the federal (centre) and provincial (state) governments in financing education through their budget expenditure in **Section 2**. The analysis of public expenditure on education is based on a comprehensive measurement following international standards. Conventionally, *public expenditure on education is considered to be the expenditure incurred or spent by the education department* as well as *other departments concerned with various dimensions or levels of education and training*. For instance, the medical and health department is usually concerned with medical education, while its expenditure and educational programme in agriculture sciences is the concern of the agriculture department. A considerably large portion of scholarships are distributed through various Welfare (Social/Tribal) Departments. It is an International standard and practice to include all the expenditure on education and training incurred or spent by any departments other than the Education Department in gauging the total public expenditure on education.

Section 3 analyses the education cess and its utilisation by the Ministry of Education, Government of India. Since the early 2000s, an education cess has been imposed on selected taxes to mobilise additional resources to finance some of India's flagship initiatives/programmes like SSA, RMSA, and RUSA. The analysis of education cess attempts to bring state governments' perspective on Centre's contribution to education expenditure.

Section 4 examines and analyses the public and private expenditure on education. The analysis of private expenditure is based on the Private Final Consumption Expenditure (PFCE) of National Accounts Statistics (NAS). There has not been any effort so far to analyse the education component of PFCE, which is in fact, a very useful measure of private expenditure on education in a life-cycle framework as it covers not only the education of children but also adult education and training. In fact, covering both children's and adults' education and training by the education department and other departments offers a more comprehensive measure of public expenditure on education and training.

Section 5 presents the analysis of private expenditure based on estimates from large-scale household surveys on consumption expenditure and education. The Consumer Expenditure Survey (CES), and the Social Consumption (Education) (SCE) survey analyses are presented here. Both are periodic surveys conducted by the National Sample Survey Organisation (NSSO). While the frequency of CES is quinquennial, SCE is usually decadal. In this section, estimates of both categories of surveys are used for the analysis of private expenditure.

Section 6 discusses the public and private expenditure in India on higher education. The analysis in this section is based on the budget expenditure of central and state governments and the estimates of the NSSO Social Consumption (Education) survey. Finally, the concluding remarks follow.

* * *

Endnotes

1 For example, the 'Rate Schools' system was initiated in 1852 by G.N. Taylor, the District Collector in the Godavari district of Madras Presidency. It was, in fact, based on local community contribution, not exactly payment per child. Such a system continued for a decade and dissipated thereafter (Mangamma, 1973).

2 By Lee-Lee (2016), Barro and Lee (2018) and UNDP HDR (2018). See: at http://www.barrolee.com/Lee_Lee_LRdata_dn.htm; http://www.barrolee.com/data/yrsch2.htm; and http://hdr.undp.org/en/indicators/103006

3 Estimates are drawn using a national-level large-scale household survey concerned with labour and employment, i.e. PLFS-7 (2023-34). More than one lakh sample households all over the country, consisting of four lakh population across all age groups, are covered in the survey. While using this single point-of-time cross-section survey data, birth cohorts are derived based on the age of the person and assigned an age-corresponding year of birth, taking the survey reference year as the base.

4 For instance, as per the World Bank estimates, South Korea along with Greece and Australia have GER in higher education more than 100%. Singapore, along with the Netherlands and Finland, have a GER of more than 90%. Along with Hongkong, the USA, Austria, Norway, Sweden, and Denmark have such GER more than 80%. It is above 70% in New Zealand, Canada, Germany and it is nearly 70% in Saudi Arabia, UK, France and Italy. Countries that have GER above 60% are Switzerland, Israel and Kuwait. While China has 58% of the same, the countries having GER above 50% are Brazil and UAE. Malaysia and Thailand have GERs of around 42% and Cuba at 47%. The average of high income countries is 79%, upper middle income countries is 58%, middle income countries 38%, lower middle income 27%, and low income countries is around 9%. Other countries, which have GER of higher education lower than that of India, are mostly African ones along with Bangladesh, Srilanka and Pakistan from Asia.

5 According to Chamberlin "A general class of product is differentiated if any significant basis exists for distinguishing the goods (or service) of one seller from those of another. Such a basis may be real or fancied, so long as it is of any importance whatever to buyers, and leads to a preference for one variety of the product over another. Where such differentiation exists, even though it be slight, buyers will be paired with sellers, not by chance and at random (as under pure competition), but according to their preferences. Differentiation may be based upon certain characteristics of the product itself, such as exclusive patented features; trade-marks, trade names; peculiarities of the package or container, if any; or singularity in quality, design, color, or style. It may also exists with respect to the conditions surrounding its sale" (Chamberlin, 1933:56).

2. Public Expenditure on Education in India: Methodological Issues and Contributions of Centre and State Governments during the last three Decades[1]

2.1 Context

The nature of education as a Public Good desires and demands public finances or expenditure for educational development in a country or state. However, inadequacy or insufficient budget allocation, along with inefficiency in public expenditure on education, is a well-established fact in developing (middle and low-income) countries like India. Such an under-investment in education keeps educational development in these countries at a lower level than expected or desired. Moreover, in a federal political structure like India, the financial relations between the union and the states and their contributions to expenditure on education development have also been a cause for concern, especially in higher education. The National Education Policy (NEP) 2020 of India proposes to raise allocation to education from 4% to 6% but is silent about how the Centre and States should bear it.

Against this backdrop, this section examines the situation of public expenditure on education in India and carries a time-trend analysis for the past three decades. The section focuses on the Centre-State contributions to financing education in the country. Primary sources of data for the analysis are: Budget documents of the Union Government, Reserve Bank of India's (RBI) State Finances, and the Ministry of Education's (MoE, Government of India) Analysis of Budgeted Expenditure on Education (ABEE).

2.2 Public Expenditure on Education: Methodological issues

Public expenditure on education in India consists of budgeted expenditures of the Union Government and the respective State Governments. Further, although Education Ministries and Departments at the Centre and in the States are major sources of expenditure on education in India, other Ministries and Departments have also increasingly varied spending on education. Other departments like the welfare departments (of SCs/STs/OBCs and Minority) also incur a specific part of their expenditure on education-related programmes and activities, especially in terms of scholarships and school buildings and hostels. Also, health and agriculture ministries or departments spend money on medical and agricultural science education.

Budget Accounts or Estimates of both the Centre and the State governments classify expenditure on education under the ***Major Heads*** with codes 2202 & 2203 (revenue) and 4202 & 6202 (capital & loan) – these cover expenditure on education, including the sports and youth services and art and culture. Although this ***Budget Major Head*** (BMH) covers the educational expenditure of the education department and a few others, it does not cover many other departments that spend specific amounts on education-related programmes and activities.

To rectify such under-coverage of actual expenditure on education, the Government of India's Ministry of Education has undertaken an annual exercise to compile all the expenditures incurred on educational programmes and activities by various other Ministries and Departments at the Centre and the State level and made it available for public use, research and policy purposes. It was published as *Analysis of Budgeted Expenditure on Education* (ABEE) and provides a comprehensive coverage of expenditure on education. The exercise of publishing the annual budget expenditure on education MoE, Govt of India, began long ago and still continues. Although the time series of total public expenditure as compiled by MoE has been available for as long back as the 1950s, the detailed components of state and centre expenditure are available only since the late 1990s.

For illustrative purposes, Table-2.1 presents the expenditure on education by the reporting sources or accounts: Education Department, Budget Major Head (2202, 2203, 4203 and 6202) and the ABEE data as reported by MoE, Government of India, covering expenditure on education. The expenditure on education, as reported by the Education Department, is less than what is reported under the Budget Major Head classification on education, which covers a few other departments but is still not comprehensive. Both these reporting sources have expenditures on education considerably lower than the expenditures of the Education Department combined with the Other Department as reported by MoE. Such differences are explicit in the absolute amount of expenditure on education and observable for education expenditure as a percentage of GDP as seen in the table-2.1. Expenditure on education by the Budget Major Head (BMH) as a percentage of GDP hovered a little above 3%, whereas the combined expenditure on education by Education and Other Departments was nearly 4%. These two reporting figures have nearly a 0.6 to 0.8 percentage-point difference.

Table-2.1:Public Expenditure on Education in India

Year	Education Department			Budget Major Head			Education and Other Depts.		
	States	Centre	All	States	Centre	All	States	Centre	All
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
Rupees in Crores									
2011-12	209831.0	60260.8	270091.8	220724.2	61702.0	282426.2	247855.9	86074.5	333930.4
2012-13	233124.9	66087.6	299212.5	251211.6	68118.0	319329.6	278375.3	89757.6	368132.9
2013-14	261737.1	71494.8	333231.9	280897.4	74492.0	355389.4	318249.8	112629.0	430878.8
2014-15	318267.7	70555.0	388822.7	324212.6	70865.5	395078.1	386798.2	113330.2	500128.3
As a percentage of GDP									
2011-12	2.4	0.7	3.1	2.5	0.7	3.2	2.8	1.0	3.8
2012-13	2.3	0.7	3.0	2.5	0.7	3.2	2.8	0.9	3.7
2013-14	2.3	0.6	3.0	2.5	0.7	3.2	2.8	1.0	3.8
2014-15	2.6	0.6	3.1	2.6	0.6	3.2	3.1	0.9	4.0

***Notes**: Current Prices; Budget Major Head 2202, 2203, 4202 and 6202 under revenue and capital account covers education, sports and youth services, and art and culture; GDP of 2011-12 Series.*

***Sources**: RBI and MoE, Govt of India.*

Data inconsistency matters when analysing public expenditure on education as it has implications for the final expenditure figures, which researchers and policymakers have often debated. A comprehensive account of all the expenditure on education in the country across Ministries and Departments at the Centre and in the States helps in this context. Similarly, analysing public expenditure based on revenue and/or capital account classifications is also important. Further, the series of GDP estimates also matters when deriving the percentage of expenditure, as the new series would result in a lower figure vis-à-vis the older series.

This section's analysis utilises data from the Reserve Bank of India (RBI) and the Ministry of Education (MoE) and is anchored to the 2011-12 GDP series. The RBI compiles the state budgets and builds the time-series values. The state-level public expenditure on education in all states by the budget major head (BMH) is sourced from the RBI. The Union Government's expenditure on education for this BMH is compiled from its budget documents. ABEE annual series is used to obtain expenditure on education by the Education Department and Other Departments.

To examine the situation and make a trend analysis of the last three decades, the RBI compiled budget major head (BMH) based expenditure on education from 1990-91 to the latest (2021-22) has been used. The MoE's compilation of more comprehensive

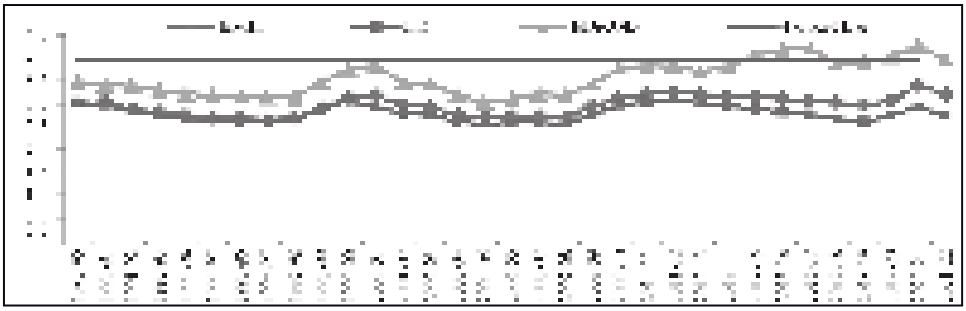
coverage of expenditure on education is not available for all the sectors (states and the centre combined) from *1951-52* to *2021-22*. It is available from 1999-2000 to the latest 2021-22. This later series is extended backwards to the early 1990s, for which RBI data for state sector BMH is available. It is done with a linear estimation using RBI's BMH-based data points/values and MoE's combined values of the state and the centre, which are available since the 1950s, to make separate comparable series for the state and central sectors. The following analysis covers the last three decades (1990-91 to 2021-22).

2.3 Public Expenditure on Education in India: Trend

It is evident from the Figure-2.1, that the comprehensive nature of expenditure on education made by the Education as well as Other Departments, as a percentage of GDP is in the range of 3% to 3.5% during the previous two decades (the 1990s and 2000s) and is in the range of 3.5% to 4% for the present decade starting from 2010 (Figure-2.1). The expenditure on education based on BMH as a percentage of GDP is considerably lower compared to the MoE (GoI) compiled education expenditure, which covers more broadly all education-related expenses. The difference in the percentage of GDP between education department expenditure and the combined one has increased in the recent past.

The expenditure on education solely by the Education Department as a percentage of GDP is far below that of comprehensive expenditure and lower than that of BMH. The differences observed in this respect between BMH and the Education Department are on two accounts. First, the BMH-based account covers education expenditure on sports, youth services, and art and culture. Strictly speaking, they may not represent education, especially in art and culture. However, expenditure on Music education is part of this category, so it must be part of education. The expenditure on art and culture is minimal. Second, BMH on education covers beyond the education department but does not cover expenditures by all other ministries and departments, which also spend a part of their budgets on educational programmes or activities. Despite these differences, all three reporting sources or accounts have, unsurprisingly, followed similar trends during the last three decades. The differences between these three sources has been increasing during the last decade.

Figure 2.1: Trend in as percentage of its GDP the Total Expenditure on Education (States and Centre together) in India



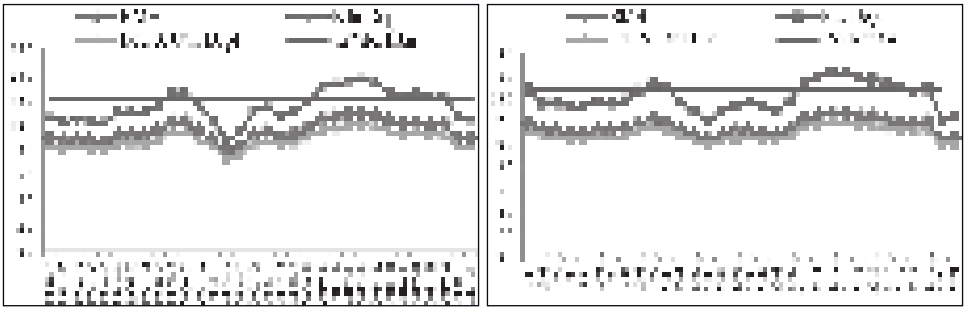
Notes: *Expenditure on Education of States and Centre combined;* ***BMH*** *– Budget Major Heads (2202, 2203, 4202 & 6202);* ***EDs*** *– Education Departments;* ***EDs & ODs*** *– Education and Other Departments together.*

Source: *Authors' estimates based on RBI and MoE (Govt of India) data.*

The trend in country's total expenditure on education as a percentage of its total budgeted expenditure (of both Centre and State combined) is presented in Figure-2.2. It was 10% to 12% of total budgeted expenditure, of revenue and capital combined, during the previous decades (1990s and 2000s) and increased to 12% or above till the middle of the last decade, 2010s (Figure-2.2a). The share of education in the total budget expenditure is higher in the revenue account when compared to its share in the total revenue and capital expenditure. In the Revenue Account expenditure, the education share was less than 14% during the previous two decades; it increased to 15% or above (Figure 2.2 b). However, there was a drastic reduction during the post-COVID-19 period in the share of education in the total (revenue and capital combined) and the revenue expenditure of the country (centre and the states together).

Figure 2.2: Share (%) of Expenditure on Education in the Total Budgeted Expenditure in India: State and Centre Combined

a) % in Revenue and Capital Account **b) % in Revenue Account**



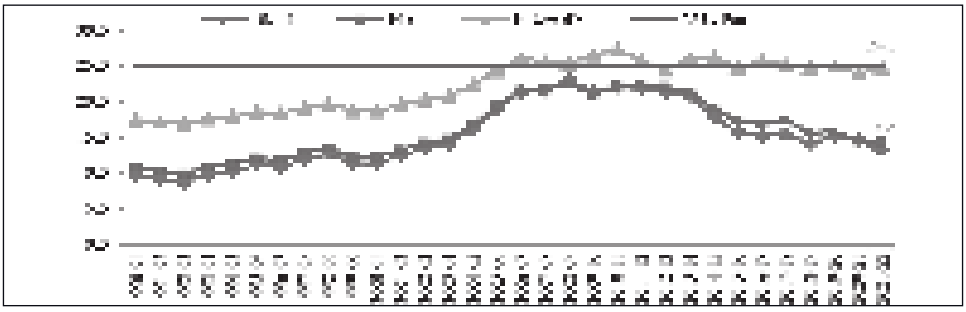
Notes: *Expenditure on Education of States and Centre combined;* ***BMH*** *– Budget Major Heads (2202, 2203, 4202 & 6202);* ***EDs*** *– Education Departments;* ***EDs&ODs*** *– Education and Other Departments together.*

Source: *Authors' estimates based on RBI and MoE (Govt of India) data.*

2.4 Contribution of Union Budget to Public Expenditure on Education in India

Further, it is interesting to know the share of the Centre (Union Government) in the total public expenditure on education in India given the fact that education is listed as a concurrent subject in the Constitution of India, which implicates equal responsibility of both the Centre and the States in educational development in the country. The share of the Centre in all three reporting sources or accounts on expenditure on education shows that it increased throughout the previous two decades (the 1990s and 2000s) from 10% to 15% (varied by reporting sources or account) to its peak of 20% to 25% at the end of the first decade of this century (Figure-2.3). Thereafter, a marginally declining trend is observed[2] in the Centre's share in the combined expenditure of the Education and Other Departments. A similar trend is found in the Education Department and the BMH expenditure on education. But the Centre's share in these shows a drastically declining trend during the last decade (Figure-2.3). The Centre's share in Education Department expenditure declined to 13.3% in 2021-22. The increasing differences between the share of the education department and the combined one in the total Union Budget could be attributed to the increasing expenditure of the central government on professional education and skill development programmes through other Ministries and Departments.

Figure 2.3: Share (%) of Centre in the Total Expenditure on Education (States and Centre together) in India



***Notes**: Share of Centre is taken in Expenditure on Education of States and Centre combined; **BMH** – Budget Major Heads (2202, 2203, 4202 & 6202); **EDs** – Education Departments; **EDs &ODs** – Education and Other Departments together.*

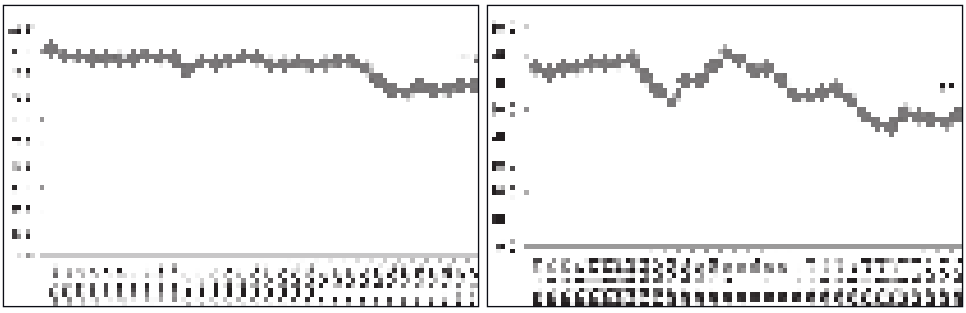
***Source:** Authors' estimates based on RBI and MoE (Govt of India) data.*

Again, what is the expenditure made by the Education Department (i.e. MoE, Govt of India) as a percentage of the total public expenditure on education? The expenditure made by the Education Department under the Central Government is hovering around 60% to 70% (Figure-2.4b), while the same for state governments is around 85% till the last decade (Figure-2.4a). That means, between 30% to 40% of the total

public expenditure on education of the Central Government is incurred by Ministries and Departments other than the Education (MoE, Govt of India) Department. Due to the combined expenditure of education and other departments, the share of the Centre constitutes a higher percentage of the total public expenditure on education. (Figure-2.4).

Figure-2.4: Percentage of Education Department in the total Public Expenditure on Education in India

a) Budget of All States *b) Budget Union Government*

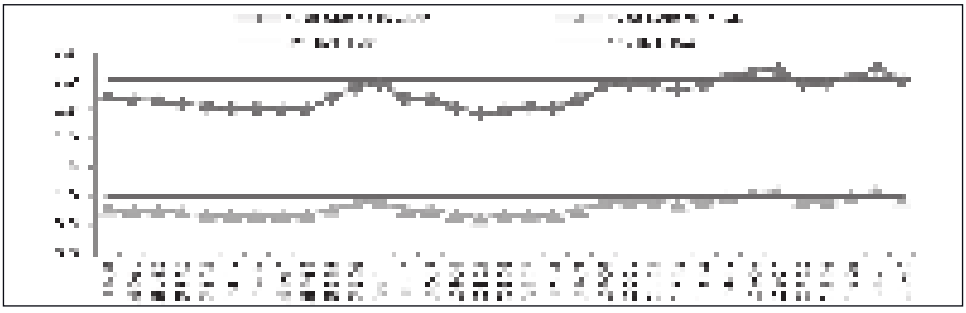


***Notes**: Numerator is expenditure of Education Department; Denominator is Expenditure on Education that is combined expenditures of Education and Other Departments; Separately for expenditure on education in All the States and that in the Union Government.*

***Source:** Authors' estimates based on RBI and MoE (Govt of India) data.*

The public expenditure of the Centre and the States on education as a percentage of GDP shows startling findings. The Central Government expenditure on education is well below or around 1%, whereas the State Government's stake is in the range of 2% to 3%. It is appropriate to mention here that the Central Government expenditure on education as a percentage of GDP has consistently been around 0.5% till the mid-2000s and reached 1% during the 2010s (Figure 2.5).

Figure-2.5: Total Expenditure on Education (by Education and Other Departments) by States and Centre in India as percentage of GDP



***Notes:** Expenditure on Education by Education and Other Departments combined as a percentage of GDP;*

***Source:** Authors' estimates based on RBI and MoE (Govt of India) data.*

It is also important to look into expenditure by the Centre and States (of education and other departments combined) on education as a percentage of their total budget expenditures. State expenditure on education as a percentage of their total budget expenditure (revenue and capital combined) is in the range of 15% to 20% (Figure 2.6a). The Centre's expenditure on education as a percentage of its total budget expenditure has steadily increased from 3% to its peak of 7.5% in 2012-13, but thereafter, it began declining; it is less than five per cent in 2021-22 (Figure-2.6b).

Figure-2.6: Expenditure on Education as a percentage of Total Budgeted Expenditure (Revenue and Capital combined) of Union Government and States

a) Budgets of All States **b) Union Budget**

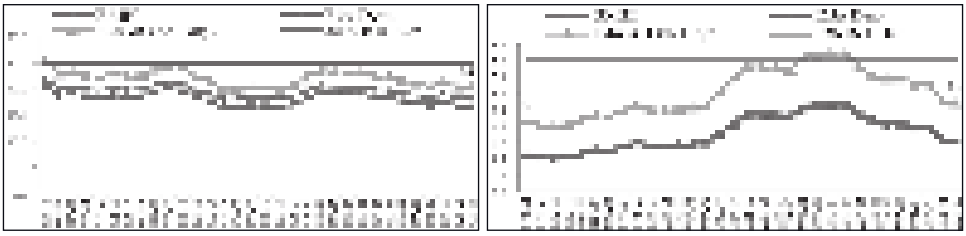
***Notes**: **BMH** – Budget Major Heads (2202, 2203, 4202 & 6202); **EDs** – Education Departments; **EDs&ODs** – Education and Other Departments together.*

***Source**: Authors' estimates based on RBI and MoE (Govt of India) data.*

As more than 98% of the total expenditure on education is incurred through the revenue account, it would be appropriate to consider expenditure on education as a percentage of total budgeted expenditure in the revenue account. Figure-2.7 illustrates that all the states' expenditure on education (of Education and other departments combined) as a percentage of their total budget expenditure in revenue account has remained at more than 20% all through the three decades, despite a declining trend during the last decade. Furthermore, the BMH-based expenditure for states is also hovering around 20% all through the analysis period (Figure-2.7a).

Figure 2.7: Expenditure on Education as a percentage of Total Budgeted Expenditure in Revenue Account of Union Government and States

a) Budgets of All States ***b) Union Budget***



***Notes**: **BMH** – Budget Major Heads (2202, 2203, 4202 & 6202); **EDs** – Education Departments; **EDs&ODs** – Education and Other Departments together.*

***Source**: Authors' estimates based on RBI and MoE (Govt of India) data.*

The Central government's expenditure on education as a percentage of its total budget expenditure in the revenue account has increased from 4% in the early 1990s to 8% by the early years of the second decade of this century (Figure-2.7). Thereafter, it began declining; for the latest year, it was around 5%. It is to be noted that, in fact, the ABEE of MoE (Govt of India) accounted for all the expenditure on centrally sponsored schemes related to education in the Centre's expenditure on education. Despite that, centre's expenditure on education in its total Union Budget is very meagre.

Overall, the Indian state spends 15% of its total budget (public) on education, which is equivalent to 4% of its GDP. While the expenditure on education of all the state governments together is equivalent to 3% of GDP, the Union government spends around 1%. All the state governments spend more than 15% of their total budget on education (revenue and capital accounts together) and 20% of their budget expenditures on revenue accounts. The central government spends less than 8% of its union budget expenditure. The Centre's contribution to the total public expenditure on education in the country (Centre and States together) is between 20% and 25%; the rest is borne by the State governments. The Kher Committee has recommended a 70:30 ratio[3] for education expenditure by the states and the Central government. It was so when education was on the state's list of constitutional responsibilities. One would expect the Centre's responsibility, including financial, to increase as education moves to a concurrent list. However, the Kher Committee's ratio has not been met so far, and the Centre's contribution is far below the recommended ratio. States are bearing the burden. Such a trend has financial implications on both the Centre and State finances. When NEP-2020 aims to increase the expenditure on education by 6% of GDP, the question of who will bear the additional burden? will loom large.

2.5 Concluding Remarks

Public expenditure on education is critical for educational development in a country or state, especially in the context of education being viewed as a public-good. In a federal structure of polity, the governments at the Centre and at the State level play a key role in the educational development of the nation and are the main stakeholders in financing the educational development of the country. In India, education has moved from state to a concurrent subject in the constitutional framework. The central government, besides the states, also has a key role in deciding priorities and direction and bearing the responsibility of allocating resources, especially financial ones. However, it is evident from the above analysis that the Central Government is spending far less than what states have been bearing. It could not meet the norm that the Kher Committee had

recommended (70:30 ratio) immediately after independence, much before education moved to be a concurrent subject. It is proving that the union government has a lesser commitment to public education than its sub-national governments.

The National Educational Policy (NEP) 2020 reiterated long-pending policy action to increase the expenditure on education to 6% of GDP, which at present is around 4%. However, whether the Centre is going to bear the additional increase in education budget is a matter of concern. One would expect the Centre and the states to proportionately share the expenditure on education. Otherwise states are already burdened with spending considerable proportion of their expenditure on education against other competing demands on their development agenda. With a lower commitment of financial resources Central Government would be playing a predominant role in the direction and regulation of the education sector which is apparent from the NEP 2020. This could give rise to conflict and friction between the state and central governments given that some propositions of the NEP may not be in consonance with the goals of the state governments. The central government has to improve its stake in policy by making adequate resources available to the states so that the financial burden of the policy shift is borne equally by the states and the centre.

* * *

Endnotes

1 This section of the Monograph published as research paper in the Journal of Development Policy and Practice (JDPP of Sage), Vol. 8(1), 2023. See Motkuri and Revathi (2023b).

2 The trend shows that share of Central Government in expenditure on education grew consistently from 1990s to 2010-11 during which period it increased from 15% to a peak of 27.5%! It declined from 26.3% in 2014-15 to 22.2% in 2019-20. The declining trend is prominent in the recent past.

3 As referred in the section one of this monograph.

3. Education Cess of Union Government and its Utilisation[1]

This section presents the analysis of trends and contributions in the education budget, of *education cess* levied by the Union Government and discusses its implications for the state governments.

3.1 Background

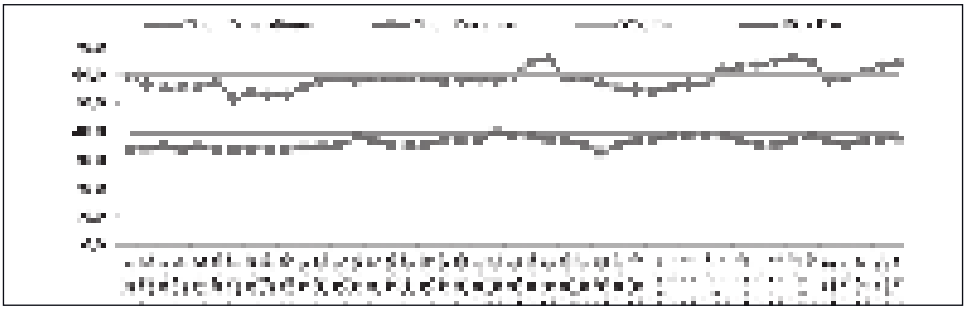
In the constitutional framework of federally structured Indian polity there is intrinsically some scope for a vertical imbalance in Union-Provincial or Centre-State relations, especially financial ones. While two-thirds of tax revenue accrues to the Union government, the remaining one-third is realised by a combination of all the state governments in the country. On the other hand, while more than 60% of public expenditure commitments or responsibilities for the development and welfare of people in the country are to be made by the state governments, less than 40% of the same is augmented by the Union government (Figure-3.1). However, the Indian Constitution has also made certain other provisions redressing such vertical imbalance in tax revenue accrual and expenditure responsibilities between the Centre and states. It is done by transferring a part of the central tax revenues to the states. Article 270 specifies that all the proceeds of taxes and duties in the Union list shall be distributed between the centre and the states. Certain exemption provisions are made to the Centre for the surcharges and cesses on taxes and duties (271) it levies for specific purposes. Besides, exemptions are made for those items referred to in Articles 268 and 269. However, proceeds of certain categories of taxes that were exempted till then have been made part of the divisible pool and hence to be shared with the states, as per the 80th Constitution (Amendment) Act of 2000. While demarcating the divisible pool out of the gross tax revenue of the Centre, the proceeds of Centre taxes are to be shared with states.

Article 280 provides for the creation of a Finance Commission (FC) for vertical (centre-states) and horizontal (across states) distribution of such tax proceeds. The Finance Commission, during its five-year term, recommends the distribution/apportionment of tax proceeds of a divisible pool between the Centre and state government and also across states for the subsequent five years. It also recommends principles for the Union Government's grants-in-aid to states and sectors based on assessment of revenue shortage of the states. These (central tax devolution and grants) are states entitlements provisioned in the Constitutional framework.

It is, however, to be noted that Central tax transfers are not part of the Union government budget expenditure but the Central grants to states. In the state budget accounts, Central tax transfers are shown as tax revenue receipts of the state and Central grants as non-tax revenue receipts.

It is generally contested that vertical imbalance continues as the Union government makes use of certain other constitutional provisions, such as levying *cesses and surcharges* and mobilising more resources at its disposal, which is not mandatory/obligatory as per constitution to be shared with the states. The evidence presented below indicates such a trend in India. Education cess is one such instrument/provision that the Union Government is leveraging to cover Union Government expenditure on education.

Figure-3.1: State Governments' share in Tax Revenues and Budget Expenditure/ Disbursements in India



***Source**: RBI*

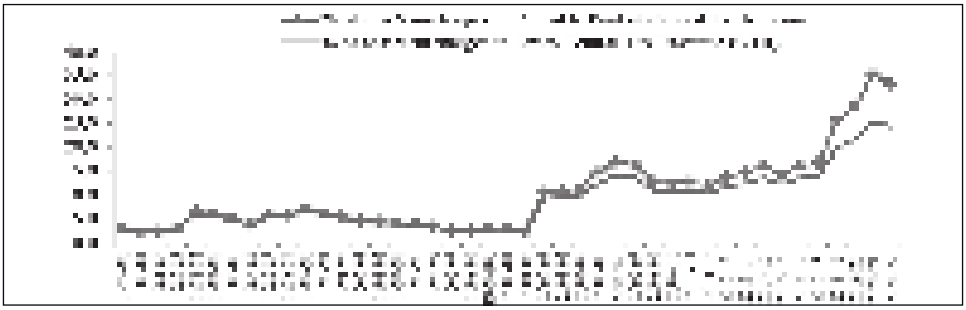
Against the above backdrop, the current section examines and analyses the trend in education cess and its coverage in the Centre's education expenditure. As a prelude, it examines the trend in the volume of various cesses and surcharges levied by the Union Government, its share in gross tax revenue and the growth. The analysis is based on Union budget documents and Finance Commission (FC) reports. It has already been discussed in other studies and mentioned in the previous sections of the current report that the Union Government expenditure on education is less than one-fourth of the total public expenditure on education (States-centre) in India (Motkuri and Revathi, 2023). As shown in this section, nearly half of the Union government expenditure on education is raised through education cess.

3.2 Growth of Surcharges and Cess and its share in Gross Tax Revenue

As one can observe, the share (%) of proceeds of the *cesses and surcharges* (CS) levied and collected/realised to the gross tax revenue (GTR) of the Union Government of India has increased phenomenally during the last forty years from less than 5% in the early 1980s to more than 20% in the recent past. Their percentage to the divisible

pool of tax revenue is even higher; it increased from less than 5% to more than 35% in the recent past. A decisively sharp shift in the share of proceeds of various cesses and surcharges has been observed since the turn of the 21st Century. Also, the GST era further increased the share of proceeds of various cesses and surcharges during the last four years. As evident below, growth in such revenue accrued to the Union government has accelerated significantly in the recent past.

Figure-3.2: % of Proceeds of Surcharges and Cesses in Gross Tax Revenue (GTR) and Divisible Pool of Central Tax Revenue



***Source**: Compilation and Calculations based on Budget documents and Finance Commission Reports*

The annual rate of growth in nominal GDP (in current prices) between 2014-15 and 2021-22 is 8.6% per annum, which is 5.6 percentage points less than what it was between 2004-05 and 2013-14. Two-thirds (67%) of such decline in rate of growth in nominal GDP after 2014, as compared to that of one before, is due to decelerated growth in prices (controlled inflation) after 2014. The rate of growth in prices (GDP deflator) was 7.8% per annum before 2014, and 4.1% thereafter, and hence the annual rate of growth in real GDP at constant prices (2011-2) is 6.4% and 4.5%, respectively, representing the two periods. While the controlled inflation is appreciable, the rate of growth in the latter period is affected by the Covid-19 lockdown and disruptions.

The rate of growth in *total tax revenue* of the country, including that accrued to centre and state governments (i.e. combined of gross tax revenue to centre and states' own tax revenue), was 14.6% per annum between 2004-05 and 2013-14 and it is 8.7% between 2014-15 and 2021-22 (in current prices). The decline in the rate of growth in *total tax revenue* of the country during the latter period is 5.9 percentage points. Although decelerated, it has not been less than the annual growth of nominal GDP. Therefore, the ***tax-buoyancy*** (change in tax revenue to that of change in GDP) of the country appears to be optimal, and the elasticity of tax revenue to GDP is still greater than zero (positive) in both periods. The average proportion of total tax revenue in GDP after 2014 is 16.8%, whereas it was a little lower at 16.5% in the period before. It illustrates

that total tax revenue realised in India is buoyant with the growth of its GDP, and its share in GDP has not declined. Rather, there is a marginal improvement in the latter period.

Between 2004-05 and 2013-14, while the Gross Tax Revenue (GTR) accrued to the central government had grown at 14.1% per annum, the *central transfers of shareable tax revenue devolution* to states from the divisible pool of GTR had grown one percentage points higher at 15.4% during the period. Nonetheless, it was affected by a slowed down or decelerated growth in GDP and consequently in total tax revenue; the rate of growth between 2014-15 and 2021-22 in both the GTR and ***central tax revenue transfers to states*** has declined, respectively, to 8.4% and 7.4%. The rate of growth in GTR is decelerated by 5.7 percentage points, whereas it is 8.1 percentage points for the *central tax revenue devolution transfers to states*. Its effect is observed in the rate of growth in the ***states' tax revenue receipts***; it was 15.5% and decelerated by 6.8 percentage points to 8.7% during the corresponding periods. The rate of growth in ***the divisible pool***, which is the source of central tax transfers to states, has declined by 10.9 percentage points from 14.5% to 4.6% between the periods.

Table-3.1: Rate of Growth (%) in GDP and Various Components of Tax Revenues in India

Tax Revenue Indicators		2004-05 to 2013-14	2014-15 to 2021-22	Change
1	GDP Current prices	14.2	8.6	(-)5.6
2	GDP Constant Prices	6.4	4.5	(-)1.9
3	GDP Deflator(Prices)	7.8	4.1	(-)3.8
4	Total Tax Revenue of the Country	14.6	8.7	(-)5.9
5	Gross Tax Revenue (GTR) of the Centre	14.1	8.4	(-)5.7
6	Centre's Tax Revenue Transfers to States	15.4	7.4	(-)8.1
7	Centre's Tax Revenue (Chunk of GTR retained)	13.6	8.9	(-)4.7
8	States' Tax Revenue (incl. Centre Tax Rev. transfers)	15.5	8.7	(-)6.8
9	Centre's Grants to States	13.8	14.7	(+)0.9
10	Divisible pool (net of shareable)	14.5	4.6	(-)10.9
11	Non-Divisible Tax Revenue of the Centre	11.2	16.0	(+)4.8
12	Cesses and Surcharges	13.7	18.4	(+)4.7

***Note**: Growth rates of All the tax indicators are nominal (in current prices).*

***Source**: Author's Calculations based on RBI data.*

The other component of GTR, which is retained by the Union government as *tax revenue receipts of the Centre* at its disposal, has grown at 13.6% between 2004-05 and 2013-14 and decelerated by 4.7 percentage points to 8.9% in the latter period, between 2014-15 and 2020-21. The Gross Tax Revenue (GTR) of the Centre consists of a divisible pool and non-divisible tax revenue. The latter consists of *cesses and surcharges* levied, raised, and to be retained by the Centre. Therefore, the ***tax revenue receipts of the Centre*** contain its share in the divisible pool and its revenue from non-divisible tax proceeds, particularly ***cesses and surcharges***. The rate of growth in such *non-divisible central tax revenues* has accelerated by 4.8 percentage points from 11.2% to 16.0% for the periods specified above. Further, the rate of growth in tax revenue from *cesses and surcharges* was 13.7% in the period between 2004-05 and 2013-14 and accelerated by 4.7 percentage points to 18.4% in the latter period between 2014-15 and 2020-21. A higher rate of growth in *central tax revenue receipts* retained with the Union government than that of central tax devolution transfers to states is due to accelerated growth in *non-divisible central tax revenue*, particularly that of *cesses and surcharges*. Mobilising additional resources by levying *cesses* and *surcharges,* the Union government has been recouping the major portion of tax devolution transfers made to states.

All the above illustrates that the rates of growth in the country's total tax revenue and GTR of the Centre are correspondingly equal to the rate of growth registered for GDP. But the rate of growth in *central tax revenue devolution transfers to states*, which was higher in the previous regime (between 2004-05 and 2013-14) as compared to rates of growth in all the other indicators mentioned above, has, in fact, declined by higher percentage points to below that of all the others (GDP, total tax revenue, GTR) during the period, between 2014-15 and 2020-21. Perhaps Central tax transfers to states could have grown more than the rate for the other indicators owing to the level change effect of Fourteenth Finance Commission (FFC) recommendations increasing the share of states from 32% to 42% since 2015-16 in the divisible pool. In the previous regime as well, the FFC-recommended states' share in the divisible pool increased from 29.5% in 2004-05 to 32% in 2010-11. It is in fact, reflected in both periods as the rate of growth in *central tax transfers to states* is higher than that of the *divisible pool* of the GTR. The rate of growth decelerated is higher for *the divisible pool* than for GTR, which is influenced by the accelerated growth in the Centre's non-divisible tax revenue. The level change effect of FFC recommended that a rise in the share of states could compensate, to a certain extent, the drastically decelerated growth in *the divisible pool*. Still, it has left an adverse effect on *central tax transfers to states*. Union government *tax revenue receipt* (retained) has also been, in fact, affected by a drastic decline in the growth of

the divisible pool and its shrinking share in the same. But the accelerated growth in the non-divisible segment, including *cesses and surcharges* has pegged its tax revenues. The source of the much-contended issue of vertical imbalance therefore, lies here.

The concern about the drastic deceleration in the growth rate of the divisible pool is more than that of the total tax revenue of the country and GTR of the Centre. Such a deceleration has been witnessed in the era wherein both the *tax base* and *tax efficiency* using IT tools have been improving. One may have to look into whether there could be cuts and exemptions in normal tax categories under the Union Government.

3.3 Education Cess and its Trend

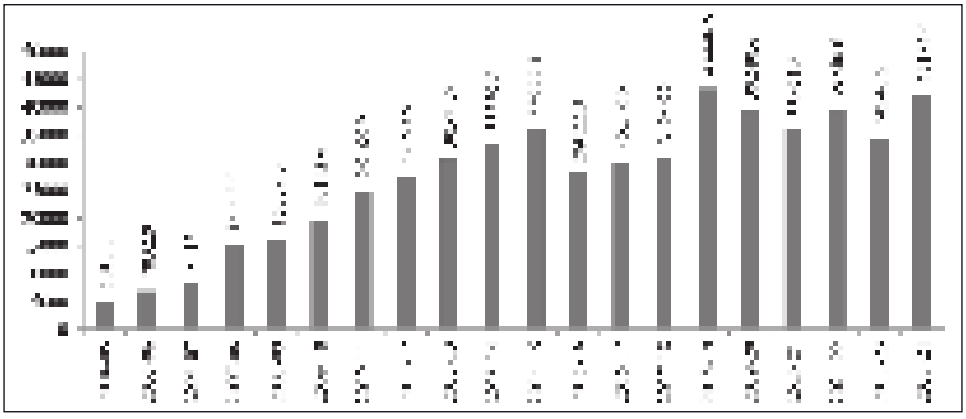
Although the levy of Cess has a long history in the Indian tax system, ***education cess*** is a 21st-century phenomenon. The India ***Finance Act 2004*** made provisions for the Union Government to levy ***education cess***. Accordingly, ***Education Cess*** @2% was imposed in *the Union Budget 2004-05* on excise and import duties and taxable services along with income and corporation taxes. It was to mobilise additional resources to implement Government of India's flagship programmes for elementary education, i.e. ***Sarva Shiksha Abhiyan*** (SSA) introduced in 2000 and ***Mid-Day-Meal*** (MDM) scheme initiated in 1995. Subsequently, Prarambhik Shiksha Kosh (PSK), as a non-lapsable reserve fund, was created on 11/2005 to credit all the *education cess* proceeds that were realised annually. Initially, the education cess proceeds estimated at Rs. 8746 crores for the year 2006-07 were credited to PSK. The idea was that after exhausting gross budgetary support made to these programmes (SSA&MDM) by the Department/ Ministry of Education, the gap in requirements of the same is to be met from the fund (PSK).

The government of India introduced another flagship programme for secondary education, ***Rashtriya Madhyamik Shiksha Abhiyan*** (RMSA), in 2007 and accordingly India ***Finance Act 2007*** and concomitantly, the *Union Budget 2007-08* made provision to mobilise required additional resources by levying ***Secondary and Higher Education Cess (SHEC)***. In addition to the ***education cess*** @2% imposed previously, the ***SHEC*** @1% of the aggregate duties of customs and excise and that of the taxable services along with that of income tax was imposed. The ***education cess*** and ***secondary and higher education cess*** were cumulatively 3%, comprising of tax amount of selected tax categories: income tax, excise and import duties, and taxable services. The government of India also introduced its flagship programme meant for higher education, Rashtriya Uchaatar Shiksha Abhiyan (RUSA), in 2013. SHEC will meet the additional resources required for the same as well.

In the recent past, the India ***Finance Act 2018*** and concomitantly, its *Union Budget 2018-19* have subsumed both the ***Education Cess*** and ***Secondary and Higher Education Cess*** into one single ***Health and Education Cess***. Also, the Government of India has subsumed SSA and RMSA into a single flagship programme, ***Samagra Shiksha***, for school education. The ***Health and Education Cess*** is imposed to the tune of 4% of the tax amounts of selected categories of taxes, including Corporation and Income tax. In the GST regime, since 2020-21, ***Education Cess*** has not been collected on excise and import duties along with taxes on taxable services, but it is continued on corporation and income taxes. With similar modalities of PSK, an attempt to create the Madhyamik and Uchchtar Shiksha Kosh[2] (MUSK) as a non-lapsable reserve fund crediting the realised SHEC proceeds, was disrupted in 2010 but was finally created in 2017. The fund is to be utilised after exhausting the gross budgetary allocations made to the schemes in the Secondary and Higher Education sub-sector.

It is to be mentioned here that the amount of *education cess* realised increased from nearly Rs 5000 crores in 2004-05 to more than Rs. 42000 crores in the recent budget estimates (Figure-3.3). For a decade, from 2004-05 to 2014-15, the ***amount of education cess*** realised increased consistently after which it showed high level of fluctuation.

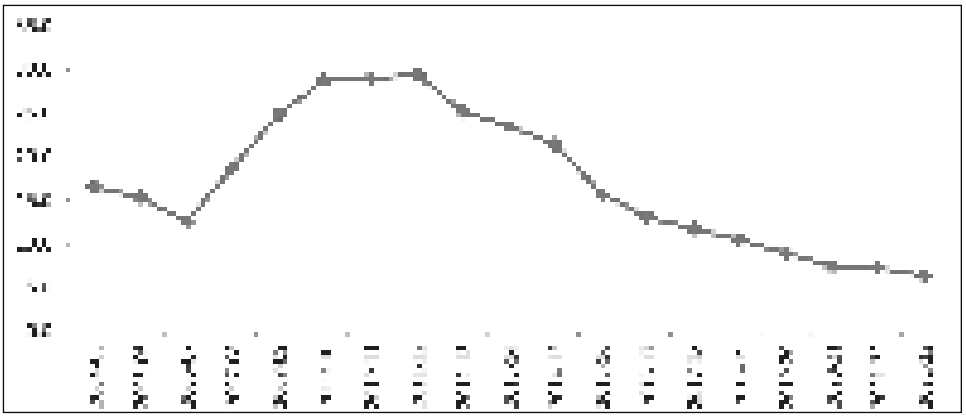
Figure-3.3: Education and Health Cess in the Union Tax Revenue Receipts (Rs. Cr)



Source*: Union Budget Documents.*

Education cess constituted 15% of all cesses and surcharges estimated/realised by the Union Government during 2004-05. Thereafter, following a short slump it rose steadily to reach the peak 30% during 2009-10 to 2011-12 after which it recorded a decline (Figure-3.4). Such a movement of ***education cess*** in the total amount of ***all kinds of cesses and surcharges*** is largely due to fluctuations in the amount of the latter also.

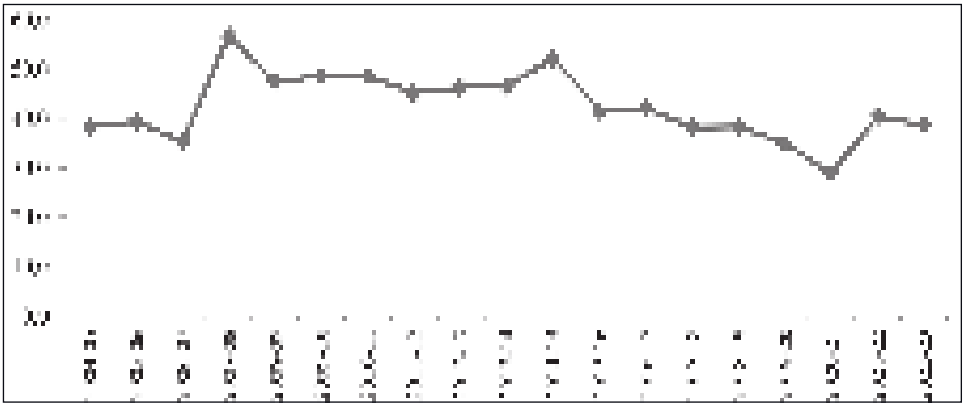
Figure-3.4: Education Cess as a Percentage of Total Cesses and Surcharges realized or Estimated for Union Government over a period



***Source**: Calculated based on relevant information/statistics collected from Union Government Budget documents.*

The amount collected through ***Education Cess*** has contributed to 40% to 50% of the total expenditure on education incurred by the Ministry of Education, Government of India (Figure-3.5). The rest of the expenditure on education is met from Union Government tax revenues other than *education cess*.

Figure-3.5: Education Cess as a percentage total Expenditure incurred by Ministry of Education, Government of India



***Source**: Calculated based on relevant information/statistics collected from Union Government Budget documents.*

The Ministry of Education, Government of India expenditure on education has consistently increased till 2014-15, thereafter it begun to fluctuating in its trend (Figure-3.6). Such a fluctuation in expenditure on education spending by the Ministry is associated with fluctuation in the amount realized by the Union Government through ***Education Cess*** during the period.

Figure-3.6: Total Expenditure on Education Incurred by the Ministry of Education, Government of India (Rs. Cr)

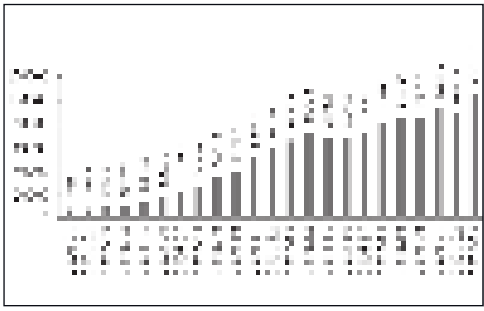
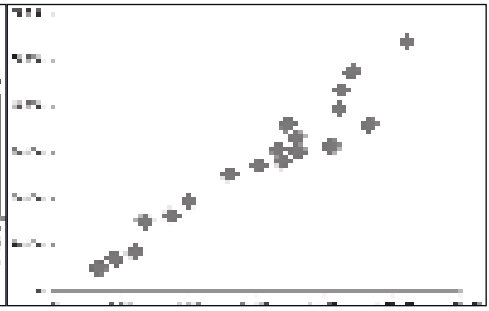


Figure-3.7: Scatter Plot showing Relationship between Education Cess and MOE Budet Expenditure



***Note**: Including Department of School Education and Literacy (DSL) and Higher Education (HE).*
***Source**: Union Budget Documents.*

The ***Education Cess*** proceeds cover most of the Union Government's flagship Centrally Sponsored Scheme (CSS) related to school and higher education (Table-3.2). While doing so, it covers a large part of the Ministry of Education's budget expenditure.

Table-3.2: Union Government's Expenditure on Education, CSS and the Education Cess (Rs. Cr)

Description	2019-20	2020-21	2021-22	2022-23
Total Expenditure on Education by the Ministry	89436.6	84219.4	88001.5	104277.7
Centrally Sponsored Scheme (CSS)	43404.0	41266.7	41369.8	52737.1
Samagra Shiksha (SS)	32376.5	27834.6	30000.0	37383.4
Mid-Day-Meal (MDM)	9699.0	12878.2	10233.8	10233.8
Rashtriya Utchhatar Shiksha Abhiyan (RUSA)	1277.8	165.2	793.3	2043.0
% of CSS in Total Expenditure on Education	48.5	49.0	47.0	50.6
Health and Education Cess (@4%) Proceeds	39240.6	35894.8	47307.7	53846.2
Education Cess (@3%) Proceeds	29430.4	26921.1	35480.8	40384.6

***Source**: Compiled based on Union Budget Documents.*

Education Cess is, in principle used, to meet the financial resources required for flagship CSSs of elementary, secondary and higher education. The major ones are Samagra Shiksha (subsuming SSA and RMSA), Mid-Day-Meal (MDM), and RUSA. Annually realized ***Education Cess*** proceeds are to be credited to the PSK and MUSK reserved funds. The fund is to be utilized for the CSSs after exhausting the gross budgetary allocations made to the schemes. However, the modus operandi regarding reserve funds (PSK and MUSK) appears to be that the annual amount transferred to PSK is not

equal to all the ***Education Cess*** (EC) proceeds realized; the former is less than the latter amount (Table-3.A1). The amount financed from PSK to meet CSSs was almost equal to the amount transferred to PSK except for a couple of years[3] (Table-3.A1). They are not equal, the amount transferred to MUSK and the amount spent on CSSs of these Secondary and Higher Education Departments financed through MUSK. Its funds are used for programmes other than CSSs.

The annual Union-Budget allocations to CSSs (SSA & MDM) of elementary education during the 10th (2002-07) and 11th (2007-12) Five-Year Plan periods indicate that only 50-60% of the total amount required for these CSSs are met from the PSK reserve fund[4]. Although the actual realized proceeds of ***education cess*** (elementary) are nearly equivalent to meet the actual total amounts spent on SSA and MDM, the PSK reserve fund is used to finance SSA/SA and MDM. This is because the amount annually transferred to PSK is far lower than the ***education cess*** proceeds realized; hence, the expenditure on CSSs met from PSK is lower than proceeds realised.

The MUSK reserve fund for higher education is ideally meant for use to finance CSSs of this sub-sector, like RUSA and student financial aid, among others. However, the Union Government has used it to finance the UGC, AICTE, IITs, NITs and Central Universities. MUSK reserve fund has been operational since 2018-19. In the first two years, RUSA got less than 20% of MUSK funds spent on higher education. The MUSK fund spent on secondary education is used to finance Kendriya Vidyalaya Sanghatan (KVS) schools under the Ministry of Education.

On the whole, it is observed that the Union Government's collection of cesses and surcharges, which is not shareable with states, is considerably high, comprising more than one-quarter of its gross tax revenue. ***Education cess*** imposed since 2004-05 on specific categories of taxes increased consistently till 2014-15 and fluctuated thereafter. ***The education cess*** realized constitutes half of the total expenditure on education by the Union Government's Ministry of Education. Recent fluctuations in education expenditure of the Union's Ministry of Education are associated with fluctuations in the ***education cess*** realized. Although the ***education cess*** realized has the potential to meet a whole or significant part of expenditure on centrally sponsored schemes (CSS), particularly ***Samagra Shiksha***, Mid-day-Meals (MDM) and RUSA, the amount actually transferred to the reserve fund (PSK and MUSK) created to meet the finances required for these schemes is considerably lower. The MUSK reserve fund is at the discretion of the Ministry of Education; it is used to finance the autonomous bodies and central institutions under the Ministry.

***Post-Script*[5]**

When examining the Union Budget 2024-25, its allocations are found to be against the governing principles of the reserve funds of PSK & MUSK of the education cess. First, the letter and spirit of these funds are to meet the resources required for the Centre's interventions in the form of the Central Sector Schemes implemented in states. Hence, these funds should be allocated for **scheme expenditure** at large and thus become part of transfers to states under CSS. Second, it is intended to meet the gap in requirements for implementing Centrally Sponsored Schemes across states after exhausting the gross budgetary support of Union Budget made to the programmes such as Samagra Shiksha (SS) combining SSA and RMSA, MDM and RUSA. Third, the Union Budget allocations made to CSS would eventually benefit the states and, in a way, strengthen financial federalism.

In the Union Budget 2024-25, health and education cess proceeds credited to PSK are allocated for Samagra Shiksha to the extent of ₹31,000 crores, and ₹12,000 Cr for PM-Poshan, but the proceeds credited to MUSK are being diverted and used for other education sector expenditures of the Centre. There were instances of such diversion even earlier. The current budget, however, took this to new heights - the fund is allotted for Kendriya Vidyalayas (KVs), Navodaya Vidyalayas (NVs), University Grants Commission (UGC), and Central Universities (CUs), Indian Institutes of Technologies (IITs) and National Institutes of Technology (NITs) along with skill India. Largely, central bodies or institutions would benefit from the HEC proceeds credited to MUSK.

In all, the Union Budget 2024-25 has allocated ₹1.21 lakh crores to the Ministry of Education, of which nearly ₹73,500 crores is allocated to School Education and about ₹47500 crores to Higher Education. However, all of this is not allocated from standard budgetary provisions. A total of ₹67,000 crore will be met from PSK (₹43,000 crore) and MUSK (₹24,000 crore). Of the total funds in MUSK, only around ₹6,500 crores are allocated to Samagra Shiksha, and around ₹500 crores for scholarships and the rest are allocated for meeting the expenditures of Central bodies or institutions like the KV /NV /UGC/CU/IIT/NIT under the Ministry of Education. Besides, ₹2,600 crores of MUSK would be used in the skill development programme under the Ministry of Skill Development and Entrepreneurship. Of the ₹47,500 crores allocated to higher education, a paltry allocation of Rs 1,800 crores has been made to the RUSA/PM-USHA meant for higher education in state-level institutions, while there was absolutely no allocation from MUSK to it! This is a gross diversion of resources of the education cess and its reserve funds of PSK and MUSK, working much in contradiction to the much against the very purpose for which the funds were set up.

Although the process of levying cesses and surcharges, collection of proceeds and their utilisation by the Union Government had begun in the 1970s and continued for the last five decades, the magnitude of such proceeds and their share in total tax revenues of the Union Government increased unprecedentedly during the last two decades. Levying and enhancing cesses and surcharges itself gives rise to a vertical imbalance in financial federalism. Addressing the issue of vertical imbalance and compensating for it, the respective Finance Commissions recommended an increased share of central transfers to states in Union tax revenue. Contrary to this, revenue resources of the Union government are enhanced and increasingly mobilised through cesses and surcharges, which are non-shareable with states. Suppose the purpose of levying cess and surcharges is to mobilise the additional resources required to facilitate health care and enhance the quality of education by implementing the programmes in states. In that case, it should be spent accordingly for the purpose that would benefit the states.

Public institutions of higher education in states are starved of financial resources, and concomitantly, quality is badly affected. UGC grants or RUSA/PM-USHA funds disbursed to them are meagre and make no impact. Less than 10% of UGC grants are allocated to state institutions, and the rest are allocated to central universities and institutions. Even allocations for UGC are cut down by ₹3900 crore in the recent budget. While the UGC was allocated ₹6400 crore in FY 2024, in the recent budget, it was reduced to ₹2500cr. Education cess proceeds of MUSK could have been put to better use to strengthen the higher education institutions under public management across the states.

3.4 Concluding Remarks

Since the 1970s, the Union Government has started imposing and collecting certain *surcharges and/or cesses* on selected taxes to mobilise additional resources, partly or in full, to meet some of its initiatives or schemes. What is noticeable is that over a period of time, the amount of such *surcharges and cesses* increased considerably and grew to constitute 25% to 30% of gross tax revenue. The bone of contention, in general, is that in a federal structure of Indian polity, the Union Government has the authority to levy, collect and control, to utilise such additional resources for its own purpose without sharing the same resources with the states.

In the case of education, when the Government of India introduced certain large-scale initiatives like SSA (2000), RMSA (2008), and RUSA (2013) country-wide, it required mobilising additional resources to finance the same; hence, the Union Government

has introduced education cess since 2004-05. The concern, however, in the case of the Union Government's expenditure on education is that despite its leverage of constitutional provision to mobilise additional resources to finance the same, the Central Government's share of total public expenditure on education is less than 25%. In comparison, all the state governments contribute more than 75%.

In a federal political system structure, a constitutional framework placed education in the concurrent list wherein both the central and state governments are equally responsible for educational development. Expenditure on education is 15 to 20% of the total budget expenditure of state governments, whereas it is less than 8% in the case of Union Budget expenditure. Nearly half of the education expenditure incurred by the Ministry of Education, Government of India, is met from additional resources mobilised through ***education cess***, and the rest is met through regular tax revenues. The Union government, despite its leverage of education cess could not enhance education budget to any remarkable extent. Rather, it is going the other way round.

State governments do not have such leverage to meet the necessary public educational expenditure by mobilising additional resources. Instead, they have to meet the same from the proceeds of their regular tax revenues. This is building pressure on the state government to command its resources. In the context of the longstanding goal, which is reiterated in NEP 2020 as well, of increasing the public expenditure on education equivalent to 6% of GDP, how to raise such additional resources required and who has to bear the burden or take responsibility? continues to remain the big question.

* * *

Appendix

Table-3.A1: Education Cess Realised, Transfers made to Prarambhik Shiksha Kosh (PSK) and Madhyamik Uchchtar Shiksha Kosh (MUSK) and their Utilisation

Year	Education Cess Realised			Transfers made to			Amount met for CSSs from PSK			Met from MUSK	
	EC	SHEC	HEC	PSK	MUSK-SE	MUSK-HE	Total	SSA/SS	MDM	SE	HE
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
2004-05	5010.0	-	-	-	-	-	-	-	-	-	-
2005-06	7032.0	-	-	-	-	-	-	-	-	-	-
2006-07*	8186.0	229.0	-	8746.00	-	-	8746.00	5831.00	2915.00	-	-
2007-08*	12998.0	2210.0	-	11128.00	-	-	11128.00	6993.00	3400.00	-	-
2008-09*	14219.0	2090.0	-	12134.33	-	-	12134.33	7280.33	4854.00	-	-
2009-10	16812.6	2603.0	-	12257.67	-	-	13998.11	8415.48	4907.54	-	-
2010-11	21335.0	3830.9	-	15805.00	-	-	15805.00	9433.00	6372.00	-	-
2011-12	23070.4	4123.5	-	18334.00	-	-	18006.27	11839.82	6166.45	-	-
2012-13	25879.5	4692.1	-	20667.34	-	-	20137.47	14031.58	6626.74	-	-
2013-14	28229.2	5050.6	-	19988.24	-	-	19988.24	14469.71	6413.19	-	-
2014-15	30678.5	5298.6	-	22319.19	-	-	22319.19	15563.67	6755.52	-	-
2015-16	25800.3	2222.0	-	19298.16	-	-	19298.16	13621.13	5708.68	-	-

2016-17	28306.8	1941.2	-	19732.47	-	-	18818.06	13345.00	5473.06	-	-
2017-18	30236.1	1009.1	-	19139.80	-	-	19091.14	13171.78	5916.23	-	-
2018-19	*21723.2*	*10861.6*	43446.5	25227.90	4413.14	8195.84	24850.99	18395.62	6446.87	3664.05	6120.76
2019-20	*19620.3*	*9810.1*	39240.6	26848.35	5061.02	9399.03	26848.36	18372.41	8475.94	3804.35	7084.48
2020-21	*17947.4*	*8973.7*	35894.8	30168.34	5567.12	15000.00	30168.34	23473.78	11526.22	5542.23	12965.19
2021-22*	*23653.9*	*11826.9*	47307.7	31788.25	7000.00	18000.00	31788.25	#	#	#	#
2022-23*	*26923.1*	*13461.5*	53846.2	38000.00	10100.00	14250.00	38000.00	#	#	#	#
2023-24**				30000.00	6000.00	6000.00	30000.00	#	#	#	#

***Notes**: **EC** – Education Cess (Elementary); **SHEC** – Secondary and Higher Education Cess; **HEC** – Health and Education Cess; **PSK** – Prarambhik Shiksha Kosh; **MUSK** – Madhyamik Uchchtar Shiksha Kosh; SE – Secondary Education; HE – Higher Education; SSA – Sarva Shiksha Abhiyan; RMSA – Rashtriya Madhyamik Shiksha Abhiyan; SS – Samagra Shiksha; MDM – Mid Day Meal programme; * Revised estimates; ** Budget estimate; '-' Not applicable; Figures in Italics (2018-19 to 2022-23) regarding EC and SHEC are author's estimates; # Not Available.*

***Source**: Union Budget documents.*

Endnotes

1 This Section of the Monograph is published in Indian Journal of Human Development (IJHD of Sage), Vol.17(3), 2023. See Motkuri and Revathi (2023c).

2 See at https://pib.gov.in/PressReleasePage.aspx?PRID=1499914

3 For instance, as per the Union Budget 2011-12, the actual amount transferred to PSK was Rs. 12257.67 crores in 2009-10 and the schemes financed from the fund (PSK) amounted to Rs. 13998.11 crores, which is exceeding the amount credit to the fund for the year.

4 ASERF (2008) ***Education Cess***, *Apeejay Stya Education Research Foundation (*www.aserf.in*)*. See at https://aserf.org.in/analysis/Education%20Cess.pdf.

5 This part appeared in Opinion page of Hans India daily on 15th September, 2024 (see Revathi and Motkuri: Is Education Cess Serving its Purpose: https://www.thehansindia.com/hans/opinion/news-analysis/is-education-cess-serving-its-purpose-907054)

4. Private and Public Expenditure on Education in India: Trend over last Seven Decades[1]

4.1 Introduction

Growing demand for education in India, coupled with the inadequacy of public expenditure on education has resulted in growing private expenditure on education. This has far-reaching implications for affordability and access to education.

With the expanding infrastructure, transportation and communication facilities, leading to mobility of people and penetration of markets; expanding base of the middle class and emerging neo-middle classes; structural changes in the labour market, and; urbanisation. Rapid growth in infrastructure, transport and communication have accelerated peoples mobility and market penetration increased the size of the middle class and ushered in the neo-middle classes. All these factors alongwith structural changes in the labour market and urbanisation, have contributed to a rise in perceived values of education and to the growing demand for education. The non-fulfilment of the public education system due to inadequate funding strained the private pockets to meet the growing demand. The recent National Education Policy 2020, which is the third in a series, adds further impetus to the privatisation of education.

Against this backdrop, the current section examines and analyses the trend in private and public expenditure on education in India for the last seven decades since independence. The analysis is based on public expenditure on education compiled by the Ministry of Education, Govt. of India, which includes expenditure incurred by the education department and all other departments on education and training-related programmes and activities. Data on private expenditure on education is based on the private final consumption expenditure (PFCE) on education as estimated by the National Accounts Statistics (NAS).

4.2 Data Sources and Methodological Issues

The primary sources of public expenditure on education are budget documents where the *budget major head* (BMH) representing education (codes 2202, 2203, 2205, 4202 and 6202) presents the budget expenditure on education. Reserve Bank of India has been compiling and building a time series of all the state governments' expenditures by major heads, including education.

The *Ministry of Education* (MoE), *Government of India*, also compiles expenditure on education, which comprehensively covers the expenditure on education, not only by Education Departments but also all the other Ministries and Departments incurred for education and training-related programmes and activities. This is reported in the annual series of reports on the Analysis of Budget Expenditure on Education (ABEE). Analysis in section two of the monograph is based on the ABEE. The same is used in the current section to analyse public expenditure on education. The MoE, Govt of India made these statistics available from 1951-52 to 2020-21. *The definition and coverage of expenditure on education have been largely intact throughout the period*. Hence, the time series data regarding expenditure on education is consistent and comparable over a period. MoE compilation in the latest report of ABEE presents actual expenditure on education till 2019-20. It is the revised expenditure for 2020-21 and budget expenditure for 2021-22. We also attempted a projection/extrapolation (forward) based on the past growth for the subsequent years as and when required.

It is noteworthy that the Covid-19 pandemic has adversely impacted all the economic activities and social services during 2020-21. Therefore, though there is an increase in public and private expenditure on education for the year 2020-21 over the previous year, rate of growth in the same is far lower during the period. Though public expenditure on education picked up in the subsequent year (2021-22), private expenditure on education was also affected this year.

One of the sources of private expenditure on education could be the ***Private Final Consumption Expenditure*** (PFCE) on education, as estimated by the *National Accounts Statistics* (NAS). PFCE comprises an important component of GDP at market prices following the ***expenditure method*** in estimating the national income following methods of the national accounting system. As defined in *National Accounts Statistics* (NAS), *Private Final Consumption Expenditure* (PFCE) is the expenditure incurred by the *resident households* as well as the *Non-Profit Institutions Serving the Households* (NPISH) on the final *consumption of goods and services*. The estimate of total final consumption expenditure is derived using *the commodity flow* approach. Education expenditure is one of the major components of the PFCE.

One of the shortcomings of the NAS-PFCE-based estimate of private expenditure on education however, is that this estimate is possible only at the national level; no such estimate is available at the sub-national level. Again, one must note that the NAS-based private final consumption expenditure on education includes the household expenditure and expenditure incurred by trusts and organisations on education[2]. It also

includes the value of educational goods and services produced for their own use by the Trusts. However, one can consider the analysis of the NAS-based PFCE on education in a lifecycle approach for expenditure on education.

The other major source of information for the *private expenditure on education* is the national-level large-scale household survey-based estimates (Motkuri and Revathi, 2023a). They are the National Sample Survey Office's (NSSO) different rounds of *Consumer Expenditure Surveys* (CES) and Surveys on *Household Social Consumption on Education* (HSCE). As already mentioned, NSSO has been conducting a large sampled quinquennial CESs since the 1970s and the latest survey for which estimates are available is 2011-12. A survey conducted in 2017-18 was withdrawn from the public domain for unknown reasons. Finally, a survey of such nature was conducted in 2022-23. Education is one of the *household consumption expenditure* (HCE) items; hence, expenditure on this captured in these surveys. Also, since the mid-1980s, the NSSO has been carrying surveys focused on household social consumption on education, besides health. So far, there are five such surveys: 1987-88, 1995-96, 2006-07, 2013-14, and 2017-18. These surveys have captured households' private expenditure on education.

It is important, however, to note the differences between NAS (for PFCE) and NSSO (for CES-based HCE) in their estimates of private consumption expenditure in general and that of education in particular (Motkuri and Revathi, 2023a). Ideally, both should match with each other, but in practice, they do not. The divergence between these two estimates, particularly in terms of the total private consumption expenditure, has been increasing over the period of study. The PFCE estimates have always been higher than the estimates of CES.

One of the reasons for the differences could be that the NAS-PFCE covers, as mentioned above, consumption expenditure of both the resident households and the *Non-Profit Institutions Serving the Households* (NPISH). In contrast, NSSO-CES covers only the resident households (Motkuri and Revathi, 2023a). Besides, the NSSO-CES also suffers from *under-reporting non-sampling error*s, especially in the economically better-off and/or affluent households, along with relapses in longer recall. However, one of the advantages of the NSSO-CES estimate is that estimates are made not only for the national level but also for sub-national (state and regional) levels. Similar shortcomings and advantages of CES are applicable to the NSSO's Surveys on *Household Social Consumption on Education*.

One similarity between NAS-PFCE and NSSO-CES is that both capture education expenditure across all age groups and, hence, have broader coverage reflecting the perspective of life-long learning. In contrast, the *Social Consumption on Education* survey captures only school or college age groups and those attending formal or informal education institutions among those below 35 years (Motkuri and Revathi, 2023a).

The analysis in this section covering private and public expenditure on education is based on two sources: ABEE of the Ministry of Education, Government of India for public expenditure, and NAS-based PFCE on education for private expenditure. Both sources have a broader and more comprehensive coverage of expenditure on education. Since the present analysis is limited to trends at the national level only, the PFCE estimate is used for the country's private expenditure on education. Unless otherwise specified, per capita is per person as the analysis is not made per school-age or college-age population or per student.

4.3 Private and Public Expenditure on Education: Trends

Expenditure on education in India over the seven decades since independence reveals a remarkable growth in both private and public expenditure. Private expenditure (PFCE) on education increased from ₹86.5 crores in 1951-52 to ₹5,57,848.5 crores in 2019-20 and the same is expected to be ₹9,48,186.5 crores by 2024-25. Public expenditure on education increased from ₹64.5 crores to ₹8,12,214 crores, and further to ₹14,38,768.7 crores for the years mentioned above (Table-4.1). All the figures are in current prices. In terms of the per capita expenditure on education (per person), private expenditure had increased from ₹2.4 in 1951-52 to ₹3,805.7 in 2019-20, and to ₹5,221.9 in 2022-23, whereas the per capita public expenditure on education had increased from ₹1.8 to ₹5,555.8, and to ₹7,954.9 during the same period (Table-4.2).

Table-4.1: Total Private and Public Expenditure on Education in India

Year	GDP	PFCE	TBE	Expenditure on Education	
				Public	Private
1	2	3	4	5	6
1951-52	10863.3	9994.4	814.1	64.5	86.3
1961-62	18682.1	16112.4	2225.4	260.3	213.2
1971-72	50119.9	40236.1	10610.9	1011.1	619.3
1981-82	172775.5	131555.5	44479.0	4298.3	2334.1
1991-92	662260.5	443834.2	185905.0	22393.7	9667.1
2001-02	2315243.0	1485155.6	652967.0	79865.7	40777.4
2011-12	8736328.7	4910447.3	2421769.0	333930.4	182377.5
2019-20	20103592.9	12245357.3	5410887.1	812214.0	557848.5

2021-22	23597398.5	14382704.0	7098451.1	967177.0	621619.0
2024-25	32411406.0	20029580.3	9800797.8	1438768.7	948186.5

***Notes**: 1. Values are ₹ in Crores and in Current Prices; 2. **GDP** – Gross Domestic Product of India; **PFCE** – Private Final Consumption Expenditure - Total; **TBE** – Total Budget Expenditure of all sectors and combined of all the State governments and the Centre; 3. **Public** – Budget Expenditure on Education by both the Centre and State Governments, as is compiled by Min of Education, GoI; 4. **Private** – PFCE on Education (i.e. households excluding the Government expenditure); 5. GDP is 2011-12 Series; 6. Till 2019-20 figures are actuals, it is budget estimate for 2021-22 and for the year 2024-25 figures are projected/extrapolated (forward) based on the past growth.*

***Sources**: 1. National Accounts Statistics (NAS); 2. Reserve Bank of India (RBI); 3. Ministry of Education (MoE), Government of India (GoI); 4. Economic Surve*

At the time of independence, private expenditure on education was higher; subsequently, public expenditure outpaced the private. While the total private expenditure on education in India (absolute amount) had increased by nearly 6464 times, during the last seven decades since independence (i.e. between 1951-52 and 2019-20), the public expenditure on education had increased by 12600 times during the same period. In other words, the rate of growth during the last seven decades in *current prices* is 13.84% per annum in case of private expenditure on education, whereas for the public expenditure on education it is 14.9% per annum, which has grown one percentage point higher than that of private (between 1951-52 and 2019-20).

Table-4.2: Per Capita (per person) Expenditure (Rs.) on Education in India: Private and Public

Year	GDP	PFCE	TBE	Expenditure on Education		Ratio of Public to Private
				Public	Private	
1	*2*	*3*	*4*	*5*	*6*	*7*
1951-52	297.9	274.1	22.3	1.8	2.4	0.7
1961-62	420.6	362.8	50.1	5.9	4.8	1.2
1971-72	904.3	725.9	191.4	18.2	11.2	1.6
1981-82	2501.4	1904.6	643.9	62.2	33.8	1.8
1991-92	7748.0	5192.6	2175.0	262.0	113.1	2.3
2001-02	22324.9	14320.7	6296.3	770.1	393.2	2.0
2011-12	71680.2	40289.4	19870.2	2739.8	1496.4	1.8
2019-20	150025.6	91382.5	40379.4	6061.3	4163.0	1.5
2021-22	172552.1	105171.2	51906.3	7072.3	4545.5	1.6
2024-25	230145.1	142224.9	69593.0	10216.3	6732.8	1.5

***Notes**: 1. Values are in Rupees (₹.) and in Current Prices; 2. **GDP** – Gross Domestic Product of India; **PFCE** – Private Final Consumption Expenditure; **TBE** – Total Budget Expenditure of all sectors and combined of all states and Centre; 3. **Public** – Budget Expenditure on Education by both the Centre and State Governments, as is compiled by Min of Education, GoI; 4. **Private** – PFCE on Education (i.e. households excluding the Government expenditure); 5. Per capita is per person; 6. Till 2019-20 figures are actuals, it is budget estimate for 2021-22 and for the year 2024-25 figures are projected/extrapolated (forward) based on the past growth.*

***Sources**: Authors' calculations based on: 1. National Accounts Statistics (NAS); 2. Reserve Bank of India (RBI); 3. Ministry of Education (MoE), Government of India (GoI); 4. RGI and Census of India.*

Similarly, the per capita private expenditure on education (per person) in India had increased by nearly 1759 times during these seven decades, whereas the per capita public expenditure on education had increased by 3439 times during the same period. In other words, the *rate of growth* in *per capita private expenditure on education* during the last seven decades in *current prices* is 11.6% per annum, whereas the *per capita public expenditure on education* is 12.7% per annum. The per capita public expenditure has grown one percentage points high than that of private expenditure.

Higher quantum of private expenditure on education as compared to that of public during the early years of post-independence period was a reflection of the situation in British Colonial regime. Although the British introduced the modern and mass education system in India and provisions for educational grants were made, significantly larger part of the educational services were privately financed (parents, village/town communities, philanthropies, charities etc.,) (Nurullah and Naik, 1951). Post-War Educational Development Plan (1944) intended for a multi-fold rise in the public investment (expenditure) on education.

Post-independence, the Kher Committee (1949) recommendations along with the state-led development and planning initiatives, more particularly from the Second Five-Year-Plan onwards made efforts in the direction (Govinda and Mathew, 2018). Further, recommendations of the Kothari Commission (1966) that translated into the first National Education Policy 1968, followed by the second National Education Policy 1986, laid more emphasis on public investment on education (Govinda and Mathew, 2018). Thus, since the mid-1950s the public expenditure on education has outpaced the private, a trend that continued till 1980s. But during the last three decades since 1990s, the growth in private expenditure on education overtook the public. It coincides with the economic reforms and liberalisation policy introduced during the early 1990s

An increase in both the private and public expenditure on education, reflecting the expanding base of education system during the last seven decades, is several times higher than the increase in GDP, total PFCE and total budget expenditure (TBE). Such a mammoth increase (in values of current prices) in expenditure on education (public and private) might have been partly due to inflationary tendencies of the economy, but it can well be attributed to the expanding base of the education system in terms of both the number of educational institutions and the enrolment in both the private and public sector institutions in the country.

In 1950-51, the number of schools in India was around 2.3 lakhs, and colleges and universities were around 600, with enrolment being 238 lakh, while in colleges and universities it was just 4 lakhs; teachers in schools were 7 lakhs, and a few thousands in

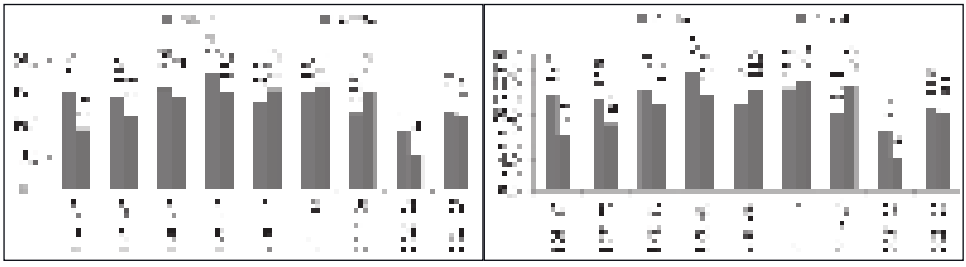
colleges. They increased manifold during the last seven decades: around 15 lakh schools and 50 thousand Higher Education Institutions (HEIs) in the recent past, with the enrolment more than 600 lakh in schools and 410 lakh in HEIs, and more than 36 lakh teachers in schools and 14 lakh in HEIs.

The overall annual growth (CAGR or semi-log trend) for the last seven decades indicates that public expenditure on education has grown more rapidly than private. But the annual growth in public expenditure on education separately for each decade indicates such supremacy of the public has not continued. Growth in public expenditure on education was higher than the private during the first four decades (from 1950s through 1980s), but thereafter (1990s through the present decade) the situation has reversed (Figure-4.1a&b). In other words, growth in private expenditure on education has been higher than that of public expenditure since 1990s. As a result the ratio of public to private expenditure on education has increased continuously and consistently for the first four decades, and it began decelerating during the last three decades especially since 1990s (Table-4.2).

The trend is in fact, reflecting the increasing privatisation of education since 1990s. The per capita public expenditure on education was 0.7 times that of the private and the ratio increased to 2.3 in early 1990s. Such a ratio is gradually declining since 1990s, and it is 1.5 at present. It would further decline in the next decade, as the rate of growth in private expenditure on education is outpacing public expenditure (Table-4.2). Although Covid-19 affected the growth in both the private and public expenditure on education, its adverse impact is more on the private expenditure (Figure-4.1a&b). In fact UDISE+ data on school education has shown that the enrolment in government schools increased faster than private ones during the post-Covid period.

Figure-4.1: Annual Growth (%) in Expenditure on Education in India: Private and Public

a) Total Expenditure on Education ***b) Per Capita Expenditure on Education***



Notes: *1. Compound Annual Growth Rate (CAGR in %); 2. Growth of Expenditure in current prices; 3. Till 2018-19 figures are actuals, revised estimates for 2019-20, budget estimates for 2020-21and for the years 2021-22 and 2022-23 figures are projected/extrapolated (forward) based on the past growth.*

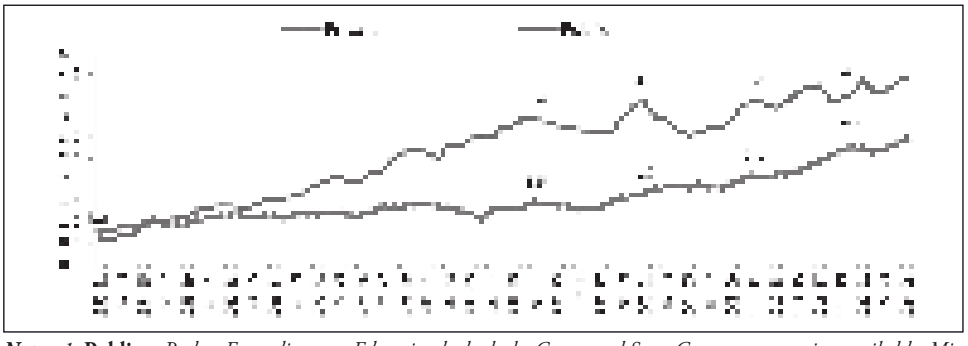
Source: *Authors' calculations based on sources: 1. PFCEE, National Accounts Statistics (NAS); 2. ABEE, Ministry of Education (MoE), Government of India (GoI).*

The increase in per capita private expenditure on education would be not only due to rapid growth of education in private sector (the base expansion of private), but also the increase in per capita expenditure per student owing to increase in fee and other charges over a period (Motkuri and Revathi, 2023a). As the estimates based on NSSO's recent 75th round survey on ***Social Consumption: Education*** (2017-18) show, nearly 41% among the children of 3-35 years age who are currently attending educational institutions (pre-schools, schools and colleges) are attending such institutions under private management[3]. In higher education, more than 75% of institutions and 65% of enrolment is under private management in 2021-22[4] (AISHE, 2024). Besides, public (Government) institutions as well have introduced various self-financed courses or programmes, and there is a considerable enrolment in the same.

In terms of expenditure on education as a percentage of GDP, in 2019-20 India's public expenditure is 4%, while that of the private expenditure is 2.8% (Figure-4.2). Together, an amount equivalent to nearly 6.8% of GDP is spent on education in the country in 2019-20. The revised estimates in 2020-21 and the budget estimates in 2021-22 indicate that the percentage of public expenditure on education is a marginally higher, while the private expenditure remains the same.

The expenditure on education by public and private sources was equivalent to 0.6% and 0.8% of GDP respectively in 1950-51, and together it was merely 1.4%. The public expenditure on education as a percentage of GDP had increased by seven times, whereas the percentage of private increased three times during the last seven decades. The trend shows that expenditure on education as percentage of GDP is increasing continuously and consistently, for both the sources: private and public[5].

Figure-4.2: Private and Public Expenditure on Education in India as a Percentage of its GDP



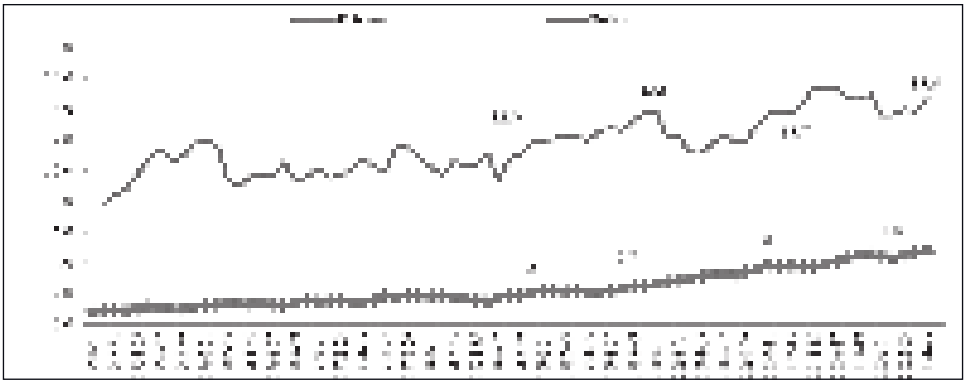
***Notes**: 1.* **Public** *– Budget Expenditure on Education by both the Centre and State Governments, as is compiled by Min of Education, GoI;* **Private** *– PFCE on Education (i.e. private/households' expenditure, excluding the Government/public expenditure); 2. Till 2018-19 figures are actuals, revised estimates for 2019-20, budget estimates for 2020-21and for the years 2021-22 and 2022-23 figures are projected/extrapolated (forward) based on the past growth.*

***Source**: Authors' calculations based on 1. National Accounts Statistics (NAS) for PCEE and GDP, and Ministry of Education, Govt of India for ABEE.*

The private and public expenditure on education as a percentage of total public expenditure and private consumption expenditure respectively, during the last seven decades, is also showing an increasing trend (Figure-4.3). This is because of the higher growth of private expenditure on education vis-à-vis growth in total private expenditure (PFCE), and similarly higher growth in case of public expenditure on education compared to that of total (Centre and States) budget expenditure.

The percentage of education expenditure (private) in total PFCE had increased five times from less than one percent (0.8%) in 1951-52 to 4.6% in 2019-20, while the increase in the public expenditure domain was doubled from 7.9% to 15% during the same period. Though the level of private expenditure is lower than that of public expenditure, the rise in its share as percentage of PFCE was almost five times during the period. Moreover, the increase in education expenditure share in total private consumption expenditure domain is continuous and more consistent than that of public.

Figure-4.3: Public and Private Expenditure on Education respectively as % of Total Private and Public Expenditure - All India



***Notes**: 1.* **Private** *– Private expenditure on education as a percentage of total PFCE; 2.* **Public** *– Public expenditure on education as a percentage of total budget expenditure (TBE); 3. Till 2018-19 figures are actuals, revised estimates for 2019-20, budget estimates for 2020-21and for the years 2021-22 and 2022-23 figures are projected/extrapolated (forward) based on the past growth.*

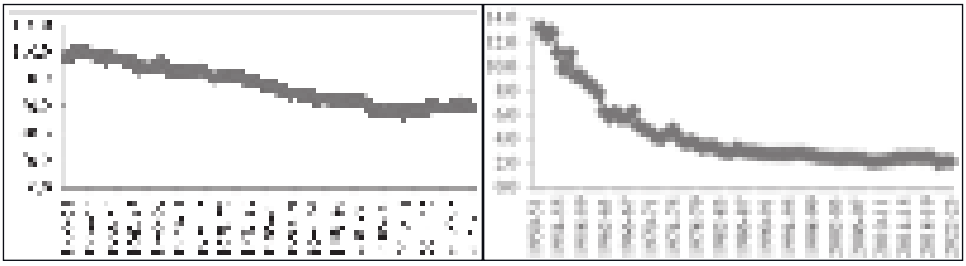
***Source**: Authors' calculations based on 1. National Accounts Statistics (NAS) for PCE, and Ministry of Education, Govt of India for ABEE.*

Private final consumption expenditure holds a major share in the Gross Domestic Product[6] (GDP) at market prices of a country. In India, although there was gradual decline in share of PFCE in GDP at market prices (95% in 1950-51, to around 60% in the recent past), it is still a major contributing component of GDP (Figure-4.4a). It also means that, correspondingly, the share of government expenditure is rising. This is

reflected in the declining trend in ratio of Private (PFCE) to Government expenditure. The total private consumption expenditure (PFCE) was almost twelve times higher than that of public (Government) in 1951-52, but it is just twice that of public expenditure at present (see Figure-4.4b).

Figure-4.4: Private Final Consumption Expenditure (PFCE) in GDP: India

a) % of PFCE in GDP ***b) Ratio of PFCE to Govt Expenditure***



***Source**: Authors' calculation based on National Accounts Statistics (NAS), Government of India.*

Finally, the real growth (i.e. in constant prices) in private and public expenditure on education gives the true picture, and highlights the following patterns. Firstly, the growth in private expenditure on education (either total or per capita) is higher than the total private expenditure (PFCE). Secondly, growth in private expenditure on education is higher than that of public (Table-4.3). Thirdly, while an accelerated rate of growth since 1970s is observed for private expenditure on education, there is a decelerated rate of growth for public expenditure on education throughout.

Table-4.3: Real Rate of Growth (Constant Prices) in Private and Public Expenditure on Education in India

Decade	Growth in Total Value					Growth in Per Capita				
	GDP	PFCE	TBE	on Education		GDP	PFCE	TBE	on Education	
				Public	Private				Public	Private
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*
1950s	3.9	3.4	8.6	13.9	6.8	2.0	1.6	6.6	12.0	5.1
1960s	3.5	2.9	7.8	11.0	8.7	1.3	0.7	5.6	8.8	6.5
1970s	3.3	3.0	6.2	5.4	3.4	1.1	0.8	4.0	3.1	1.2
1980s	5.2	4.0	7.3	8.0	4.4	3.1	1.9	5.2	5.9	2.3
1990s	5.8	4.9	4.6	5.6	6.1	3.9	2.9	2.6	3.7	4.1
2000s	6.6	5.4	7.2	4.3	5.9	5.0	3.8	5.6	2.7	4.3
2010s	6.6	6.7	5.3	5.3	7.9	5.4	5.5	4.1	4.1	6.8
2020-21 to 2024-25	5.7	5.3	6.5	6.9	6.9	4.7	5.2	5.5	5.9	7.1

***Notes**:1. Values are Rate of Growth (%) in Constant (2011-12) Prices; 2. Growth is based on **semi-log model** for each of the decade; 3. **GDP** – Gross Domestic Product of India; **PFCE** – Private Final Consumption Expenditure - Total; **TBE** –*

Total Budget Expenditure of all sectors and combined of all State governments and Centre; 4. ***Public*** *– Budget Expenditure on Education by both the Centre and State Governments, as is compiled by Min of Education, GoI; 5.* ***Private*** *– PFCE on Education (i.e. households excluding the Government expenditure).*

Sources*: Authors' calculation based on: 1. National Accounts Statistics (NAS); 2. Reserve Bank of India (RBI); 3. Ministry of Education (MoE), Government of India (GoI).*

Above illustrations indicate that although the share of total PFCE in the GDP and ratio of PFCE to total Government (budget) expenditure is declining, the share of private expenditure on education in total PFCE is increasing. It indicates increasing prioritisation of education in the private domain, reflecting growing importance of education among the households across economic and social classes.

In the scenario of increasing demand for education, the inadequacy of Government expenditure, resulting in limited number and capacity of public institutions (public supply is short of demand) would result in an excess demand scenario – which is catered to by private institutions. Inadequacy of public expenditure also affects the resource (human, financial, and physical infrastructure) availability in institutions under public management, and thereby the quality of education delivered and post-completion services like placement. It creates a differentiated demand. Private institutions serve any such differentiated demand. Thus, excess as well as the differentiated demand have been leading to growing private expenditure on education.

All the above trends reflect the growing burden on private pockets. The increasing share of education in the total PFCE has a burdening effect on the household consumption expenditure. Higher growth in private expenditure on education vis-à-vis public expenditure has a substituting or complementing effect due to inadequacy of public expenditure. The burden falling on private pockets has implications on affordability and thereby access to education for the poor and the marginalised. The longstanding recommendation of the first National Education Commission headed by Kothari, (also endorsed by all subsequent National Education Policies), that 'public spending on education to be raised to 6% of GDP', could find place in manifestos and common minimum programmes, however is yet to be realised.

The recent third National Education Policy (NEP) 2020, while endorsing the 6% norm, intends to curb commercialisation of education, especially post-secondary education. However, certain other provisions made in the NEP-2020 may encourage the private sector participation in education, and they may lead to furthering of commercialisation of private education. Along with setting uniform standards and common guidelines to public and private institutions, the policy also provides autonomy to private institutions

to set fee for their programmes. They are to be transparently and fully disclosed along with flexibility in required conditions for establishing private education institutions especially in the higher education segment. Given the ground realities, eventually it may lead to furthering of commercialisation.

4.4 Cointegration and Causality Analysis

In addition to the above descriptive analysis, this section examines whether there exist a long-run equilibrium relationship between public and private expenditure on education on the one hand and if they both contribute to the economy (GDP). This analysis is based on the time-series econometric tools, such as cointegration, causality tests, and VAR-based error correction modelling. In this section we present our preliminary results, while a systematic analysis of the same is being made in a separate paper. The observations made in this analysis would well connect with findings of the existing literature to a certain extent as discussed below.

A stream of endogenous growth models research has been focussing on investment in education for human capital formation fostering economic growth, reducing inequality, and promoting individual well-being (Annabi, 2017). One strand within the stream focusses on public and private investments in education and their impact (see Bräuninger, and Vidal, 2000; Arcalean and Schiopu, 2010; Magalhães and Turchick, 2022). The focus of the research in this strand has been the impact of education on either growth or inequality or both. Further, such impact is analysed through combinations of private and public expenditure on two different stages of education: school (k-12) and post-secondary or higher education (see Bräuninger, and Vidal, 2000; Arcalean and Schiopu, 2010; Annabi *et al.,* 2011; Magalhães and Turchick, 2022).

Such an analysis in the literature shows that public expenditure on education is a key factor fostering growth and reducing inequalities. Developed countries have witnessed the same (UNESCO, 2022). Developing countries like India, are witnessing the opposite – predominance of private expenditure. For instance in USA, school education is more or less public funded and higher education is left to private sector, but still economically poor are supported with public funding through vouchers, scholarships, and fellowships. In India, private sector is continuing to occupy major part of school as well as higher education in the country.

An analysis of *cointegration* shows the long-run equilibrium relationship while checking the stationarity of the time series. Such time series analysis is systematically dealt with and reported elsewhere (Motkuri, 2020). It is observed that non-stationary level series

of GDP and expenditure on education by both the sources (private and public) is found to be stationary on their first-differenced series. Hence, the series are individually first-order integrated processes. A *cointegration* testing (both the Engel-Granger and Johansen procedures) has shown that there is a long-run equilibrium relationship between the investment in education (public and private) and the country's GDP (Motkuri, 2020). Further to coingration testing, a ***Granger Causality*** test is performed for three time series (GDP, PFCE on Education, and Public Expenditure on Education). Results are as presented below in Table-4.4. Granger causality test statistics for decision is derived for six combinations of three times series.

Table-4.4: Granger Causality Test Results and Decision

Sno	Causality (H0)	F	p	Decision
1	PFCE does not cause GDP	0.7582	0.522	Do not reject
2	PEE does not cause GDP	4.6479	0.005	Reject
3	GDP does not cause PFCE	3.3940	0.023	Reject
4	GDP does not cause PEE	2.3041	0.859	Do not reject
5	PFCE does not cause PEE	1.3689	0.261	Do not reject
6	PEE does not cause PFCE	1.1259	0.346	Do not reject

Note: 1*. PFCE – Private Final Consumption Expenditure on Education; PEE – Public Expenditure on Education; GDP – Gross Domestic Product;* ***2****. Both the direct Granger Causality test and the VAR based test for the same is performed and both have shown same results.*

Source*: Author's estimation*

A key takeaway of the ***Granger Causality*** is that while public expenditure on education causes GDP, the causality is opposite for private investment (expenditure) in education (Table-4). There is no Granger causality found, in either direction, between private and public investment. These observations in direction of causality provide an insight for the *path analysis*. While the change (increase) in *public expenditure on education influences the change (increase) in country's GDP, this in turn influences the change (increase) in private expenditure on education*.

Table-4.5: Results of Simple VAR based Vector Error-Correction (VEC) Model

Relationship	Variable	Coefficient	SE	Z	Significance
1	*2*	*3*	*4*	*5*	*6*
Model-1: lPCGDP on lPCPEE					
Long-Run	lPCPEE (β)	1.763	0.301	5.870	0.000***
Short-Run	ECT(β)	(-)0.032	0.015	-2.120	0.034**
Model-2: PCPFCEE on PCGDP					
Long-Run	PCGDP(β)	0.019	0.009	2.120	0.034**
Short-Run	ECT(β)	(-)0.027	0.015	4.39	0.086*

***Notes**: **1**. lPCGDP – log of Per Capita Gross Domestic Product; lPCPEE – log of Per Capita Public Expenditure on Education; lPCPFCEE – log of Per Capita Private (Final Consumption) Expenditure on Education; ECT – Error-Correction Term (Short-Run Adjustment factor); **2**. All the time series are in per capita terms (per person) and in constant (2011-12) prices; 3. Short-run parameters are avoided in reporting; 4. Significance: *** at 1%, ** at 5% and * at 10%.*

***Source**: Authors' estimates using STATA.*

Further, the estimates of a very basic version of the Vector Error-Correction (VEC) model based on Vector Auto-Regression (***VAR)*** procedure for cointegrated time series, are fairly in line with the long-run equilibrium relationship; represented by coefficient of long-run (β) and error correction term (ECT) as a short-run adjustment parameter (α) in the VEC model (Table-4.5). Beta (β) is cointegration equation parameter indicating the long-run equilibrium relationships. As expected, the sign of the long-run equilibrium factor coefficient (β) is positive, and that of ECT (α) is negative. Both are found to be significant. The VEC model estimates fairly confirm the insights of Granger causality directions and the long-run equilibrium relationships.

4.5 Concluding Remarks

Inadequacy of public investment on education, especially in the context of growing demand for education, has resulted in growth in private expenditure on education. This has far-reaching implications for affordability and access to education. The present paper has examined the private and public expenditure on education in India. It is observed from the analysis that India is spending around 4% of GDP as public expenditure on education, and around 2.8% of GDP as private expenditure; together, it is spending around 6.8% of GDP on education.

Private expenditure on education as a share in private final consumption expenditure has risen five times since the 1950s, indicating the priority placed by households on

education. Another notable trend is that growth in private expenditure on education is higher than that of public expenditure during the last three decades. The ratio of public to private in terms of expenditure on education is declining during this period. This reflects increasing privatisation of education in India. This trend has far-reaching policy implications, especially in higher education.

The Covid pandemic has affected the growth in expenditure on education, both private and public. An econometric analysis has indicated that there is no causality between private and public expenditure on education. They have a long-run equilibrium relationship with GDP, although direction of causality is different. While public expenditure on education causes the country's GDP, which in turn causes the private expenditure on education. In other words, high growth in economy is a positive factor for growth in private expenditure on education.

* * *

Endnotes

1 This section of the Monograph is published in India Public Policy Review (IPPR), Vol. 5(1), 2024. See Motkuri and Revathi (2024a).

2 It further includes the expenditure of the households on recreation and cultural activities for earlier years nowadays they are available separately for education

3 NSS KI (75/25.2): Key Indicators of Household Social Consumption on Education in India.

4 All-India Survey on Higher Education (AISHE) 2021-22, Ministry of Education, Govt. of India.

5 However, the trend in expenditure on education (as percentage of GDP) for the entire period indicates that the post reform period (during 2000 to 2008-09, witnessed a lower trend. This was the time when the pace of economic reforms picked up which had adversely affected the public expenditure in general, social sector and in particular expenditure on education. It is well known that this phase was characterised by, downsizing the state and reducing the fiscal deficits of the Centre and State Governments along with privatisation including the education sector.

6 The Gross Domestic Product (GDP) at market prices of a country consists of Private as well as public (Government) final consumption expenditure along with investment that consisting of Gross Fixed Capital Formation (GFCE), change in stocks and valuables, and net imports (exports-imports). Usual national income accounting equation is GDPMP = C+I+G+(X-I).

5. Private Expenditure on Education in India: National Level Analysis Exploring NSSO Survey (CES and SCE) Estimates[1]

5.1 Introduction

Education contributes to human capital formation and human development. Public expenditure on education is broadly guided by the social returns to education while private expenditure follows private returns. With Education being a Public Good, the State has been the major investor in public education. A growing economy and a rising perceived value of education has led to phenomenal growth in demand for education in India. The mismatch between demand for education and public supply of education has necessitated growth in private education. The inadequacy of public expenditure on education has been necessitating growing private expenditure on education. The growing tendency of private expenditure has far reaching implications for affordability and access to education especially to the masses aspiring higher education. The third National Education Policy 2020 does not appear serious to address these concerns but seems to add further impetus to privatisation of education.

Against backdrop, the current section examines and analyses the trend in the level of private expenditure on education in India covering three decades period 1986-87 to 2017-18. The analysis is based on NSSO's Consumer Expenditure Survey along with its Social Consumption Expenditure (Hereafter NSSO-CES and NSSO-SCE) survey estimates of household/private expenditure on education. Two important sources of information or estimates on private expenditure on education are: Private Final Consumption Expenditure (PFCE) estimates of National Accounts and Statistics (NAS) and NSSO estimates (see Appendix for details; also Motkuri and Revathi, Sep, 2020). This section is based on survey estimates of NSSO.

5.2 Private Expenditure on Education: Analysis of NSSO-CES Estimates

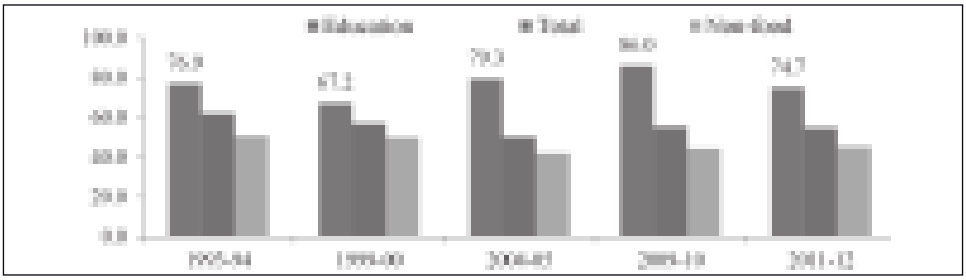
Differences in NAS-PFCE and NSSO-CES Estimates

There is a growing divergence between private final consumption expenditure (PFCE) estimates of NAS and household consumption expenditure (HCE) estimates based on NSSO quinquennial round Consumption Expenditure surveys (CES) and it is a cause of concern (see Appendix and Table- A.1). Such difference is very high and divergence has increased over a period especially in case of non-food expenditure. Education is

part of the non-food commodity groups in these estimates. But we can observe that deviation of CES estimate from PFCE in respect of education is lesser when compared to the deviation of overall expenditure and that of non-food category (Figure-5.1).

Although the NAS-PFCE is more comprehensive than NSSO-CES based estimate in respect of private expenditure in general and private expenditure on education in particular, NAS-PFCE has a limitation of its availability at national level only. NSSO-CES estimates allow sub-national and economic class level analysis. The deviation with respect to expenditure on education from NAS-PFCE to NSSO-CES is comparatively lower than that of averages for food or non-food. Therefore, they are useful for analysis of private expenditure on education.

Figure-5.1: Differences in estimate of Private Expenditure on Education - NSSO-CES Estimate as a percentage of NAS-PFCE in India



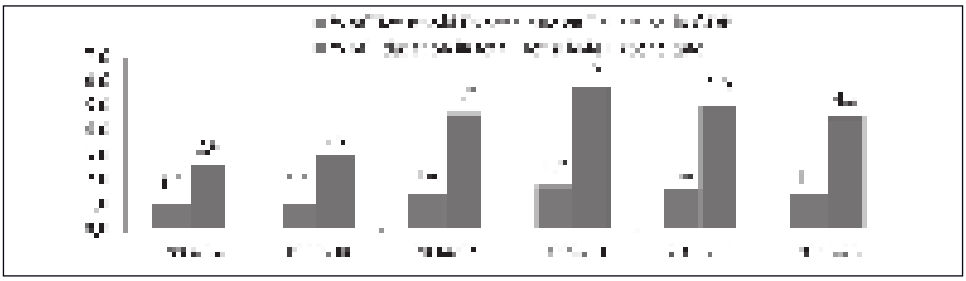
***Notes**: 1. NSSO-CES estimates considered here are based on URP for the year 1993-94, MRP for the years 19990-2000 and 2004-05, MMRP for the years 2009-10 and 2012.*

***Source**: 1. NSSO-CES Reports; 2. NAS, Government of India.*

Trends in Household (Private) Expenditure on Education

Household (private) expenditure on education as a percentage of total household consumption expenditure (HCE) increased from 2.6% in 1993-94 to peak of 5.7% in 2009-10 and slightly declined to 4.5% in 2022-23. Since the year 2009-10 is considered as not a normal year because it was affected by drought, one can see certain increase in 2011-12 from that of previous main round of CES in 2004-05. This shows a clear increasing trend in household expenditure on education during the more or less two decade period between 1993-94 and 2011-12. Similarly, as a percentage of GDP, the household (private) expenditure on education showed an increase from 1% in 1993-94 to its peak of 1.7% in 2009-10 and declined to 1.3% in 2022-23. It is obviously indicating that the growth in per capita household expenditure on education is higher (or faster) than of total household consumption expenditure per person and the per capita GDP.

Figure-5.2: Household (Private) Expenditure on Education in India as a percentage of its GDP and of total Household Expenditure



Notes: 1. *Percentages in current price values; 2. Note 1 of Figure 1 applies.*

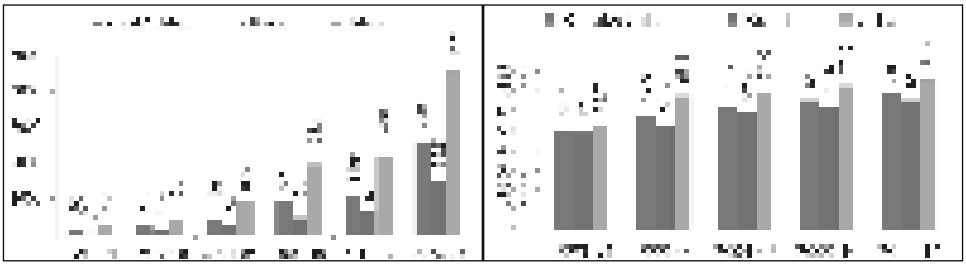
Source: *Authors' calculation based on NSSO-CES Reports and CSO Data.*

The per capita household (private) expenditure on education in India as per the NSSO-CES estimates (annualised) was ₹102 per annum in 1993-94 (rural and urban combined and in current prices), it had increased to ₹2582 per annum by 2022-23 (Figure-5.3a). It shows a manifold (more than eleven times) increase during the three decades period between 1993-94 and 2022-23, registering a growth rate of 12% per annum in current prices during this period.

Figure-5.3: Per Capita Private Household Expenditure on Education and Percentage of Households Reporting the same in India: NSSO-CES

a) Per capita Private/Household Expenditure on Education (in ₹ 0.00) – Annual

b) Percentage of Households Reporting Expenditure on Education



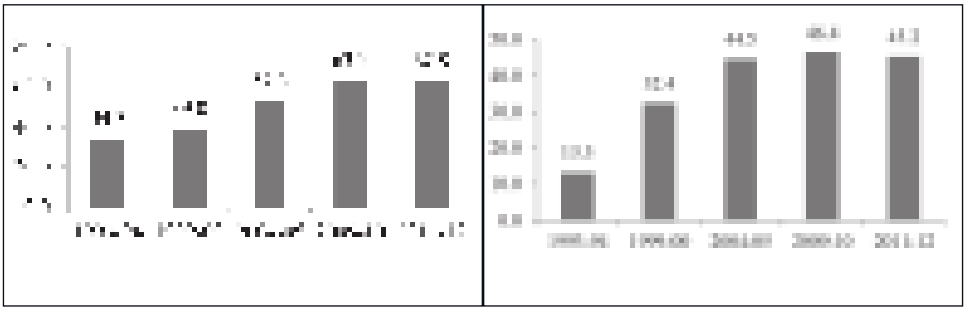
Notes: *1. Per capita expenditure on education is per person (not per student) and it is in current prices; 2. NSSO-CES estimates considered here are based on URP for the year 1993-94, MRP for the years 19990-2000 and 2004-05, and MMRP for the years 2009-10 and 2012; 3. NSSO-CES estimates for a month are annualised.*

Source: *NSSO-CES Reports.*

Increase in the total and per capita private expenditure on education is definitely affected by the inflationary tendency of the economy. But the increase is largely due to expanding base of the education system. The percentage of households reporting expenditure on education has increased by 19 percentage points from 50% in 1993-94 to 69% in 2011-12 (Figure-5.3b). It indicates the rise in number of households paid educational services during the nearly two decade period.

Figure-5.4: Expenditure on Tuition Fee and Other Fees – as a percentage of Total Household Expenditure on Education in India

a) % of Tuition and Other Fee in total Household Expenditure on Education ***b) Percentage of Households Reporting Tuition and Other Fees***



***Notes**: Rural and Urban Combined.*

***Source**: Authors' calculation based on NSSO-CES Reports.*

Along with the rise in the average number of households using education services, it is also possible that the average number of persons within the households utilizing educational services has also increased. The increasing percentage of eligible age-group population in India attending educational institutions is an indicator reflecting the above statement. An increase in the percentage of population pursuing higher levels of education is another indicator reflecting expanding base of the education system. The level of expenditure at each of the higher levels of education from the base has increased. Beyond expanding the base of education system, the shift towards privatisation is also another factor that is causing the rise in the household (private) expenditure on education.

The increasing private expenditure is reflected through increasing tuition fee and other fee as a percentage of total household expenditure on education (Figure-5.4). It was one third (34.3%) of the total household expenditure on education in 1993-94, while it nearly doubled during the two decades period to 63% by 2011-12. The percentage of households reporting such expenditure increased fourfold from 13.3% to 45.2% during the period. The share of all other components of education related expenditure (books/ journals, stationery, private coaching/ tutor etc.,) were reduced to one-third of the total household expenditure on education during the period.

Expenditure on Education by Economic (MPCE) Classes

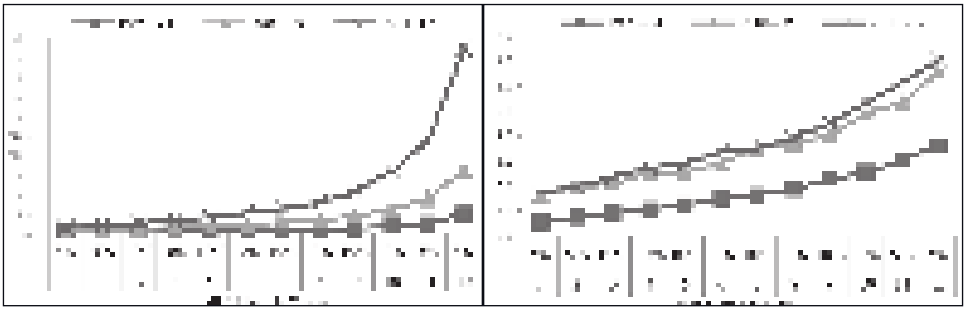
As one examines the distributional aspect of expenditure on education across economic classes, on finds that the per capita household expenditure on education is obviously low, confined to the bottom layer of the economic stratums than to those in the higher strata [2]

(Figure-5.5a). Also, the percentage of education in the total household consumption expenditure (HCE) is lower in the bottom economic strata when compared to higher strata (Figure-5.5b). It indicates a positive relationship, that is, both the absolute amount of private expenditure on education and its share in total household consumption expenditure are positively associated with income level of the household/family. It is however more important to understand the growth in per capita household/private expenditure on education across economic classes. The growth is higher in lower MPCE (fractile) classes when compared to higher ones during the last two decades.

Figure-5.5: Household Expenditure on Education in India by MPCE Fractile Classes

a) Per Capita Household Expenditure on Education by MPCE Classes

b) Percentage of Expenditure on Education in total Household expenditure by MPCE



***Note**: 1. Rural and Urban Combined; 2.NSSO-CES estimates for the month are annualised; 4. Current prices.*

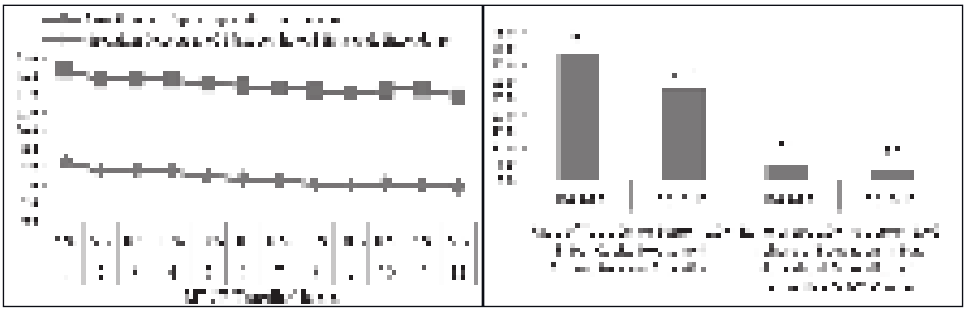
***Source**: Authors' calculation based on NSSO-CES Reports.*

The share of education has increased across MPCE fractile classes, as the growth in per capita expenditure on education is higher than that of total household expenditure across all such classes. Further, growth is higher in lower MPCE classes when compared to higher classes (Figure-5.6a). As a result the ratio of per capita private expenditure on education of top 10% of population to that of bottom 10% declined during the two decade period (Figure-5.6b). Even the ratio of top 10% to bottom 10% with respect to share of per capita expenditure to total expenditure has also declined. These indicators point towards increased prioritisation of education even among the poorer households falling into the lower economic classes. Increasing private expenditure on education among the bottom economic classes does have implications for the well-being of such households.

Figure-5.6: Growth in Per Capita Household Expenditure on Education in India by MPCE Fractile Classes

a) Growth in Per Capita Household Expenditure on Education and by MPCE Classes

b) Ratio of top 10% to bottom 10% in Per capita expenditure on education and its share in total expenditure



***Note**: 1. Rural and Urban Combined; 2. Compound Annual Growth Rate (CAGR) in per cent.*

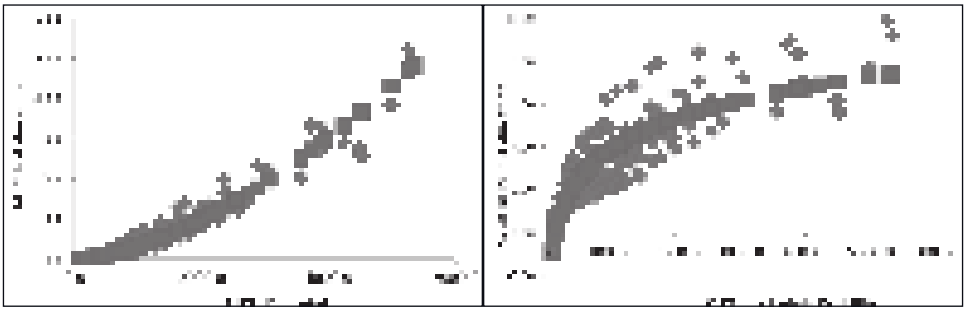
***Source**: Authors' calculation based on NSSO-CES Reports.*

Application of Engel's elasticity function to per capita private expenditure on education and total household consumption expenditure per person reveals the estimated ***elasticity of expenditure on education is greater than one***. Then, the estimated Engel's curve and elasticity efficient of 1.6 indicates that education is a normal good (Figure-5.7). While the estimated increase in absolute expenditure on education is showing an exponential pattern, the share of education in total expenditure indicates an asymptotic (horizontal) pattern after reaching threshold level (5%). It shows that although amounts spent on education increases faster at higher levels of total household expenditure, the increase in share of expenditure that is spent on education is decelerating at higher income levels.

Figure-5.7: Elasticity of per capita Private (Household) Expenditure on Education to Total Per Capita Consumption Expenditure – All India

a) Elasticity of absolute Expenditure on Education

b) Elasticity of Percentage share of Education



***Notes**: Based on NSSO Consumer Expenditure Survey (CES) of 50th (1993-94), 61st (2004-05) and 68th (2011-12) round estimates by MPCE Classes.*

***Source**: Authors' Estimation.*

Overall, the NSSO-CES estimates for the household consumption expenditure (HCE) on education indicate that its share with respect to GDP and total HCE is increasing which means household expenditure on education is growing faster than the total HCE and GDP. Although there is positive association between income (expenditure) classes and the per capita expenditure on education and its share in total HCE, it is growing faster among the bottom economic stratum. Therefore, the ratio of top 10% of population by HCE to the aforementioned bottom 10% in terms of per capita household expenditure on education has declined. It shows increasing prioritisation of education even among the poorer households, while bearing the cost of it. This amounts to the increasing burden on the poor to spend on education which would have been otherwise served through public investment.

5.3 Private Expenditure on Education: Analysis of NSSO-SCE survey estimates

As mentioned above, NSSO surveys on social consumption on education (SC-E) are another major source of information on private/household expenditure on education. It allowed coverage of a broader period of three decades, for the analysis. These surveys completely focus on participation in education, consumption of educational services and household expenditure on education. It must be noted that each of these rounds of SCE surveys has a different reference age-group. While the 42nd round (1986-87) had 0-29 years age as a reference age group, the 52nd round (1993-94) had 5-24 years age group, the 64th round (2007-08) had 5-29 years age group and the recent 75th round (2017-18) has 3-35 years age groups. Therefore, the overall enrolment rates and/or current attendance rates are not comparable across the rounds unless they are made age-group specific rates. Unlike NSSO-CES, the estimate of per capita expenditure on education reported in the respective reports of NSSO-SCE represent per student not per person.

Taking note of such differences, a comparable estimate across the rounds of per capita private expenditure on education (per person) is derived (Table-5.1). The NSSO-SCE survey based estimate of per capita private expenditure on education (per person, not per students) was ₹52 in 1986-87. With a manifold (nearly 54 times) increase during the last three decades, it shot up to ₹2582 by 2017-18. It registered an annual rate of growth at nearly 14% in current prices during the period. One could also observe that the NSSO-SCE based estimate of per capita private expenditure on education (per person) is better matching with that of the estimate based on NAS-PFCE. The NSSO-SCE based estimate was around 91% of the NAS-PFCE in 1986-87 but as regards the estimates of next two rounds i.e. 52nd (1995-96) and 64th (2007-08), it in fact exceeded the PFCE estimate of per capita private expenditure on education. The NSSO-SCE

estimate based on the recent survey i.e. 75th (2017-18) round formed around 80% of NAS-PFCE. As regards, NSSO-SCE based private expenditure on education as a percentage of GDP, it doubled from 1% in 1986-87 to 2% in 2017-18 (Table-5.1).

Table-5.1: NSSO-SCE Survey based Estimates of Private Expenditure on Education in India

Sno	Indicators/Details	1986-87 (42nd)	1995-96 (52nd)	2007-08 (64th)	2017-18 (75th)
1	*2*	*3*	*4*	*5*	*6*
1	Reference Age group of the Survey	0-29	5-24	5-29	3-35
2	% of Reference Age in Total Population	63.9	43.3	49.6	59.0
3	Population: Reference-age (in Millions)	494.7	402.7	570.4	776.6
4	Population: All-Ages (in Millions)	774.2	930.1	1149.9	1316.3
5	% Currently Enrolled and Attending	25.7	49.8	52.0	43.9
6	% of Students in General Courses/Stream	99.0	97.0	97.8	96.1
7	% of Students in Technical Courses/Stream	1.0	3.0	2.2	3.9
8	Estimated No of Students (in Millions)	127.1	200.6	296.6	340.9
9	Estimated Expenditure per Student (₹)	314	904	2467	9948
10	Estimated Total Expenditure (₹) Crores)	3993	18130	73167	339850
11	***Per Capita per Person (₹): All Ages***	***52***	***195***	***636***	***2582***
12	***As a Percentage of GDP***	***1.2***	***1.5***	***1.5***	***2.0***

***Notes**: 1. Based on NSSO-SCE Rounds; 2. Rural and Urban combined; 3. Percentages of reference-age groups are derived from interpolations of Census population and RGI Projections.*

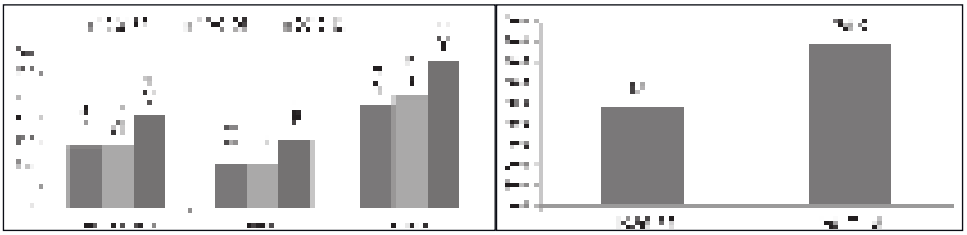
***Source**: Authors' compilation and estimates based on NSSO-SCE Reports on respective rounds.*

One would also notice that the student population (irrespective of the reference age) increased from 127.1 million in 1993-94 to 340.9 million by 2017-18. It has registered just a threefold increase but private expenditure on education per student or per person has registered 54 times increase. One of the factors as mentioned above, for the increase in per capita private expenditure on education, is privatisation. In fact, the share of private sector has increased during the last three decades. The overall percentage of students (among reference-age population) attending private educational institutions in India was 27.6% in 1986-87 and it has increased to 40% in 2017-18 (Figure-8a). This is predominant in urban areas wherein the percentage of students attending private educational institutions has increased from 45.4% to 65.0% during the same period. Even in rural areas it increased from 19% in 1995-06 to 30.8% in 2017-18. It indicates rapid spread of private sector into the countryside as well.

Figure-5.8: Trend in Privatisation of Education in India

a) Percentage Attending Private Institutions (aided and unaided) among Total Students in the Reference Age-group

b) Percentage of Private Institutions (aided and Unaided) in Total Private Expenditure on Education



***Note**: 1. Percentage among total students in the reference-age population which varies across NSSO-SCE Surveys; 2. Figure 2b represents the rural and urban combined.*

***Source**: Authors' compilation and calculation based on NSSO-SCE Reports.*

More importantly the private expenditure on education incurred by the students attending private institutions (aided and unaided together) accounted for little less than half of the total private expenditure on education in India in 1986-87 and it has increased to more than three-fourths of total in 2017-18 (Figure-5.8b). Such a trend of privatisation of education is very much disquieting.

Table-5.2: Average Private Expenditure on Education per Student (₹) in India by Level of Education – 2017-18

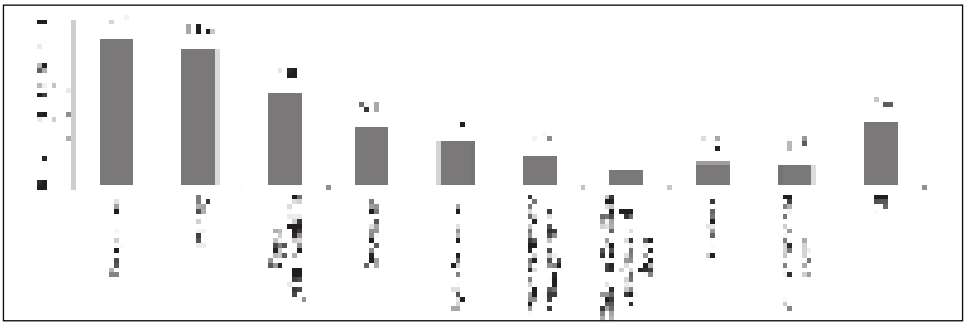
S No	Level of Education	All	Govt.	Pvt Aided	Pvt Unaided
1	*2*	*3*	*4*	*5*	*6*
1	Pre-primary	8,997	1,030	13,223	12,834
2	Primary	6,024	1,253	12,889	14,485
3	Upper Primary/Middle	6,866	2,181	13,243	17,360
4	Secondary	9,013	4,078	12,487	20,804
5	Higher Secondary	13,845	7,001	16,415	25,852
6	Diploma/Certificate below Graduate	12,045	7,647	21,037	19,291
7	Diploma/Certificate Graduate and above	14,823	12,817	22,232	15,453
8	Graduate	14,264	10,501	16,769	19,972
9	Post-Graduate and above	18,110	14,656	19,388	26,839
10	All	8,331	3,135	14,155	17,082

***Notes**: 1. Rural and Urban Combined; 2. Values are Rs. and in current prices.*

***Source**: NSSO-SCE Key Indicators Report of 75th (2017-18) round.*

The cost of education has increased with the growth of private institutions especially the private unaided institutions with their growing enrolment. As exhibited in Table-5.2 and Figure-5.9, first, the overall per capita private expenditure on education (per student) is five times higher for students attending private unaided institutions compared to their counterparts in Government institutions. Across the levels of education, the ratio of private unaided to government is interestingly very high in case of pre-primary students attending private institutions and is followed by primary and middle levels of education (Figure-5.9). It is lowest in higher education.

Figure-5.9: Ratio of Private Unaided to Government Institutions in respect of Average Expenditure on Education per Students by Level of Education in India – 2017-18



***Notes**: 1. Rural and Urban Combined.*

***Source**: Authors' calculation based on NSSO-SCE Report of Key Indicators of 75th (2017-18) Round Survey.*

Second, the overall average per capita private expenditure (per student) on pre-primary education is higher than that of primary and middle levels of education. Third, cost of education in private aided institutions is competitively high on the lines of private unaided institutions. Fourth, expenditure on higher levels of education in the government institutions as well is considerably high. All these factors show up in the declining ratio of private to public institutions in terms of average expenditure on education per student and by level of education. Such trend may be due to increasing self-finance courses in government institutions. Also, the cost for transportation, uniforms, books etc., other than tuition fee which is free, may be equally applicable to students in government institutions as well.

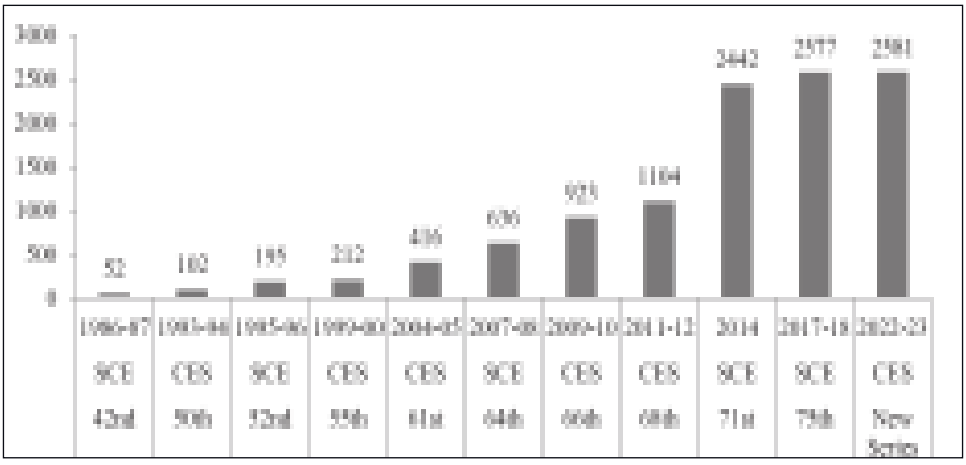
To sum up, the NSSO-SCE survey estimates show that the trend over a period of last three decades is consistent with the other estimates (PFCE and NSSO-CES): a manifold increase in per capita private expenditure on education over and above the increase in GDP and hence its percentage in GDP. The trend in privatisation and its contribution to private expenditure on education is explicit.

Broad Trend across Rounds of Surveys for the last three Decades

While taking note of the methodological issues in estimates of private expenditure on education across the NSSO rounds especially between CES and SC-E, the Figure-5.10 presents the broad trend in per capita private expenditure on education (per person) in India during the last three decades. Again, Figure-5.11 presents the broad-trend in private expenditure on education in India as a percentage of country's GDP for the same period. It is based on combining estimates based on various rounds of both the CES and SCE surveys of NSSO.

There is a consistent trend in per capita private expenditure on education (per person) across various rounds of surveys over the last three decades period (Figure-5.10). It indicates more than fourfold increase during the 1990s and fivefold increase during the first decade of the 21st Century. And there is a threefold increase during the last decade. Such an increase with the tendency of strained private pockets in meeting the growing demand definitely would have far reaching implications for affordability and access to education. The NEP 2020 appears not so concerned about the implications of rising privatisation in higher education.

Figure-5.10: Per Capita Private Expenditure on Education (per Person) in India



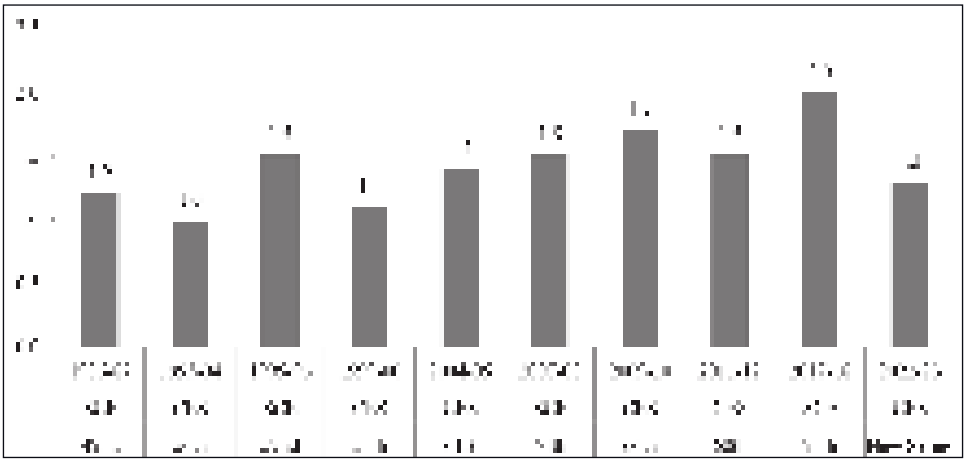
***Note**s: Rural and Urban combined.*

***Source**: Authors' calculations based on various NSSO-CES and SCE Survey Reports.*

Private expenditure on education as a percentage of GDP indicates that it is in the range of 1% to 1.5% for two-and-half decades (1986-87 to 2011-12) period, till the first decade of 21st century and shot-up to 2% in 2017-18 (Figure-5.11). One should, however, note that the trend based on SC-E is higher than that of CES. Considering the same, one may look into visuals indicating that the growth in private expenditure on

education in India is little higher than the rate country's GDP is growing, and thereby its' percent in GDP is increasing at least marginally.

Figure-5.11: Broad-Trend combining estimates of CES and SC-E on Private Expenditure on Education in India as a percentage of its GDP



***Note**s: Rural and Urban combined.*

***Source**: Authors' calculations based on various NSSO-CES and SCE Survey Reports.*

These trends are a pointer towards concern - given the unequal distribution of incremental GDP where the poorer economic classes get smaller share in incremental GDP, and the incremental expenditure on education is also unequal but the share of the poor and bottom economic classes is increasing. In fact it is observed that the growth in private expenditure on education is higher than that of total per capita household expenditure. Further, such a growth is higher for bottom economic classes than that of upper classes. This could not be merely due to the increase in the base of attendance rate among the bottom economic classes but also due to the absolute increase in expenditure per student, as noted above. This may be appropriate for the analysis at the aggregate level, if not at the decile level. On the whole, the above analysis boils down to indicate that when the poor are complying with the obligation of compulsory school education, the state has withdrawn from ensuring access to public education free of cost.

5.4 Concluding Remarks

The present section examined the private expenditure on education while exploring the NSSO-CES and NSSO-SCE estimates related to household or private expenditure on education. It is observed that the share of expenditure on education with respect to GDP and total HCE is increasing which in turn shows that household expenditure on education is growing faster than the total HCE and GDP. Although there is positive

association between household per capita expenditure across decile class and their per capita expenditure on education along with its share in total HCE, it is growing faster among the bottom economic stratum with rise in their per capita expenditure on education and its share in their total HCE. Therefore, the ratio of top 10% of population by HCE to that of the bottom 10% in terms of per capita household expenditure on education had declined. This shows increasing prioritisation of education even among the poorer households. But on the other hand it is also indicating increasing burden on the poor to spend on education which would have been otherwise served through public investment.

* * *

Endnotes

1 This Section of Monograph is published in Indian Journal of Human Development (IJHD of Sage), Vol. 17(1), 2023. See Motkuri and Revathi (2023a).

2 Economic stratums here are percentile distribution of population by household monthly consumption expenditure.

6. Expenditure on Higher Education in India: Contributions of Public (Centre and State Governments) and Private (Households)

6.1 Context

The base of higher education in India is increasingly expanding from a narrow selective base of the elite to a more broad-based one encompassing all population segments. In the context of emerging knowledge-based societies and economies across the globe, labour markets and human resources and their capacities need to be strengthened. In this regard, higher education in India must be further expanded without compromising quality. The Public-Good nature of education, in general, and the Merit-Good nature of higher education, in particular, desire public education through state investment. The non-fulfilment of the public education system owing to funding crunch and governance, privatisation and growing private expenditure on education have become causes of concern. The quality of education and employability of graduates are other major challenges that needs to be addressed by higher education institutions in India. Although the recent National Education Policy (NEP) 2020 has drawn attention to the expansion and quality of higher education, it has not delineated any mechanism to address commercialisation and the challenges of public funding of higher education.

Against this backdrop, the current section examines and analyses the trends in expenditure on higher education in India. The analysis covers both the public and private expenditure on higher education. It also assesses the contributions of the Centre (Union Govt.) and state government within the public expenditure. The analysis is based on public expenditure as compiled (in the ABEE report) by the Ministry of Education (MoE), Government of India. Private expenditure on education is based on the estimates of NSSO in various rounds of its surveys that focus on social consumption on education (NSSO-SCE). All these sources of data are already discussed in the previous sections, hence not repeated in this section. Unless and otherwise mentioned, ***Public education expenditure*** in this section refers to the total of education department and other departments spending on education. Further, analysis in this section is based on ***revenue account*** expenditure on education.

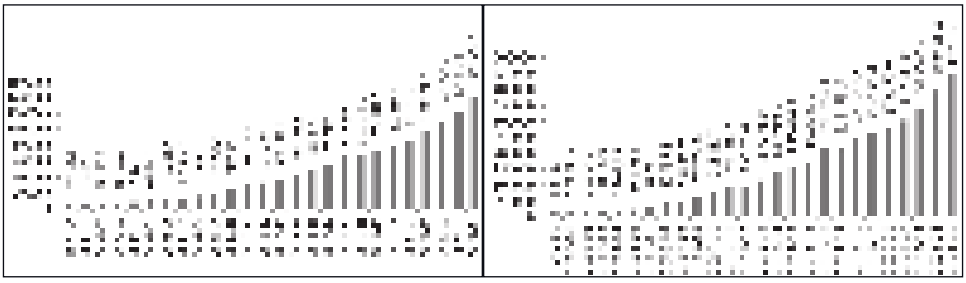
6.2 Public Expenditure on Higher Education

Level of Public Expenditure on Higher Education

A manifold increase during the last two decades can be observed in the total public expenditure on education in general and higher education in particular (Figure-6.1a&1b). While the total expenditure on education increased multifold from ₹74,816/- crores in 1999-2000 to ₹9,67,477/- crores in 2021-22, the expenditure on higher education increased from ₹22,778/- crores to ₹3,02,086/- crores during the same period. The GDP has increased 12 times registering an annual rate of growth of 12.1% during the last two decades, between 1999-2000 and 2021-22. The total public (government budget) expenditure (of centre and state governments together) of all sectors has increased 13 times while registering around a 12.2% annual growth rate (in current prices) during the period. The public expenditure on education in general has increased 13 times while registering a 13.2% annual growth, whereas the public expenditure on higher education in particular has increased 16.5 times while registering a 14.4% annual growth during the period. It is clear that the public expenditure on higher education in India has grown more than the rate of growth in GDP, total budget expenditure and public expenditure on education in general. Our projections (based on historical annual growth) indicate that total expenditure on education in general would increase to around ₹14,02,036.7/- crores whereas the expenditure on higher education in particular would increase to ₹4,52,517/- crores by 2024-25.

Figure-6.1: Public Expenditure on Higher Education in India (Rs. Crores)

a) Total Expenditure on Education ***b) Expenditure on Higher Education***



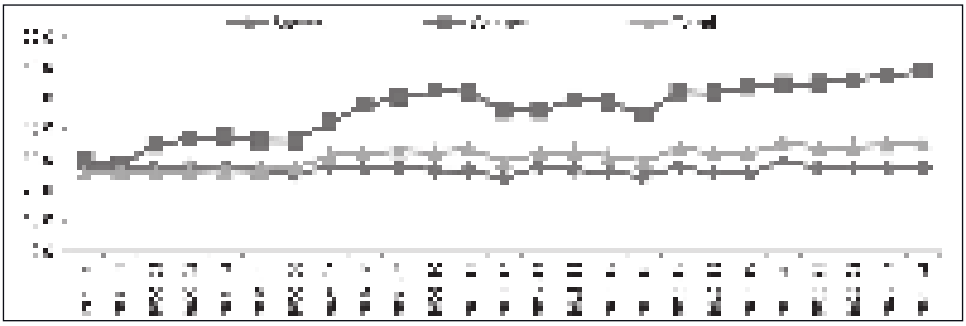
Notes*: 1. Values are Rupees in Crores and in Current Prices; 2. Revenue Account of the Budgeted expenditure; 3. In respect of Expenditure on Higher Education for the period between 1999-2000 and 2004-05 and again after 2021-22 the figures are Authors estimates and for the rest, they are actuals; 4. Expenditure on Higher Education consisting that of University and Higher education along with that of Technical education.*

Source*: ABEE, Ministry of Education, Govt. of India.*

As a result of the above, the share of expenditure on higher education has increased, either as a percentage of GDP, total budget expenditure and/or the total expenditure on education in general (Figures-6.2; 6.3a&3b). Higher education in India accounted for

around one-quarter (25%) of the total public expenditure on education (of Centre and State Governments together) in the country at the turn of 21st century and it increased by nine percentage-points to 35% by the end of the second decade of this century (Figure-6.2).

Figure-6.2: Higher Education as percentage of Total Expenditure on Education in India by the Centre and State Governments



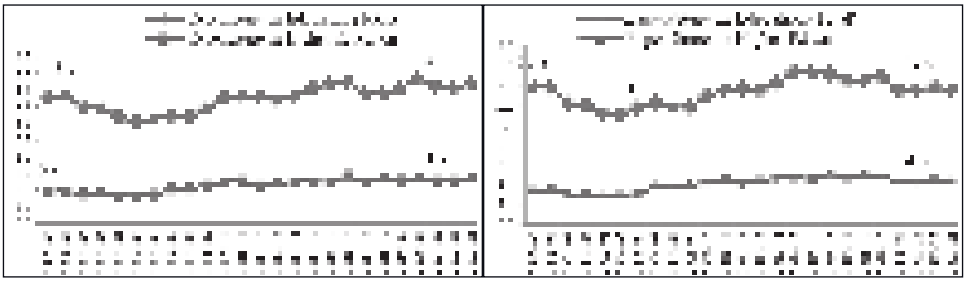
***Notes**: 1. Expenditure on Education by both the Centre and State Governments is combined.*

***Source**: Authors' calculations based on ABEE, Ministry of Education, Govt. of India.*

In the federal structure of Indian polity, the central government in its total budget expenditure on education kept a higher share for higher education as compared to that of all the state governments (Figure-6.2). Higher education share in the Union Government expenditure on education was around 30% in 1999-2000 and it has increased by 26 percentage points to 56% in 2021-22 whereas in the state government's expenditure on education, the share of higher education remained more or less stable, hovering around 27%, during the last two decades period.

Figure-6.3: Public Expenditure on Education and Higher Education in India as a percentage of GDP and Total Budget Expenditure

a) % of GDP ***b) % of Total Budget Expenditure***



***Notes**: 1. Figure represent percentage; 2. Revenue Account of the Budgeted expenditure; 3. Expenditure on Higher Education for the period between 1999-2000 and 2004-05, the figures are Authors estimates and for the rest, they are actuals; 4. Expenditure on Higher Education consisting that of University and Higher education along with that of Technical education.*

***Source**: Authors' calculations based on data sourced from ABEE, Ministry of Education, Govt. of India.*

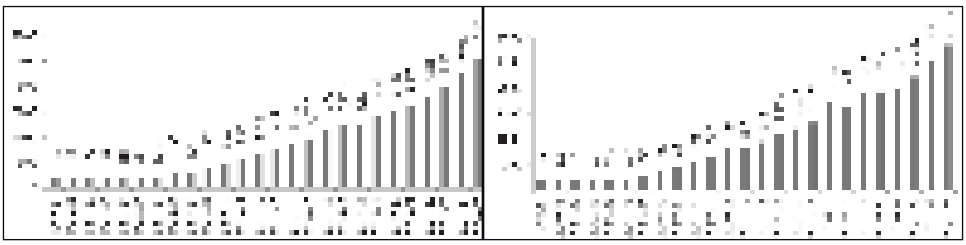
As a percentage of GDP, the total public expenditure on education, in general, was 3% during the early years of the first decade of this century and increased to 4% during the last two decades and hovering around it. The public expenditure on higher education has hovered around 1% during the period (Figure-6.3a). The share of education, in general, in the total public (government budget) expenditure was 11% during the early 2000s and increased to 15% during the mid-2010s but tended to decline thereafter. During the same period, the share of the higher education, has increased from 3% to 5% and tended to decline (Figure-6.3b).

The per capita, per person of all ages (but not per college-age person or student), public expenditure on education, in general, has increased from ₹757/- at the turn of this century (1999-2000) to ₹7,231/- in 2021-22, whereas the per capita, per person, public expenditure on higher education has increased from ₹184/- to ₹2,209/- during the same period (Figure-6.4a&b).

The per capita GDP and total public (government budget) expenditure in general (all sectors) have increased 8.7 and 9.6 times respectively, while registering an annual growth rate around 10.6% and 10.8% (current prices) during the last two decades period, from the turn of the century to beginning of the third decade. The per capita (per person) public expenditure on education in general has increased 9.5 times while registering an annual growth rate of 11.8% during the period, whereas the per capita public expenditure on higher education has increased 12 times while registering a 13% annual growth rate (current prices) during the period. The trend is obviously similar to that discussed above. The growth in per capita expenditure on higher education is higher than that of GDP, total public expenditure and public expenditure on education in general.

Figure-6.4: Per Capita Public Expenditure on Higher Education in India (Rs.)

a) Per Capita Expenditure on Education ***b) Per Capita on Higher Education***

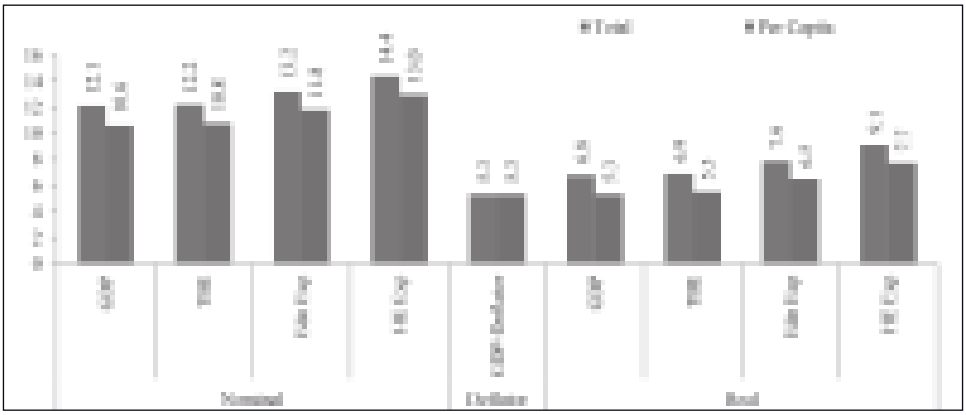


***Notes**: 1. Values are Rupees in Crores and in Current Prices; 2. Revenue Account of the Budgeted expenditure; 3. Expenditure on Higher Education for the period between 1999-2000 and 2004-05 the figures are Authors estimates and for the rest, they are actuals; 4. Expenditure on Higher Education consisting that of University and Higher education along with that of Technical education.*

***Source**: Authors' calculations based on Ministry of Education, Govt. of India.*

One of the factors that can be attributed to increase in the total and per capita expenditure on education in general and higher education in particular is definitely affected by the inflationary tendencies of the economy. If we take into account the increase in GDP deflator, which increased by 3.3 times or grown rate 5.2% during the last two decades (between 1999-2000 and 2021-22), and deduct that from the increase in higher education expenditure, still there is a real growth.

Figure-6.5: Rates of Growth (%) in GDP, Total Budget Expenditure (BE) of the Country, Expenditure on Education and of Higher Education (HE) in India, between 1999-2000 and 2021-22



Source: *Authors' estimates.*

The real growth and increase in expenditure on education in general, and higher education in particular, is due to the ever-expanding base of the education system towards universalisation. In 1950-51, the number of colleges and universities were around 600 with an enrolment of just 4 lakhs and a few thousand teachers in these higher education institutions (HEIs). They increased multifold during the last seven decades: to around 50 thousand HEIs in the recent past with an enrolment of 370 lakhs and more than 14 lakh teachers. Most of such expansion in higher education in India took place during the last two decades. The gross enrolment in higher education was less than 1% in 1950-51 it has increased to mere 8% at the turn of 21st century but during the last two decades it has increased to 28% in 2021-22: about 20 percentage-points during the period that means one percentage-point increase per year (Varghese, 2020; Motkuri and Revathi, 2024).

The expanding base of the education system in India is evolved over a period into a public-private mix. As private sector has grown faster, its share in total HEIs and enrolment has increased. Correspondingly, the share of the public has declined. However, although the share of public in the country is contracting, the size of public in

terms of number of government institutions (HEIs) and enrolment in these institutions have been increasing over a period. During early fifties, there were less than 30 public universities and institutions of national importance and now there are more than 600. The number of colleges was less than 600 with an enrolment of less than four lakh, now there are around 9000 colleges with 8.9 million enrolment in the public sector alone.

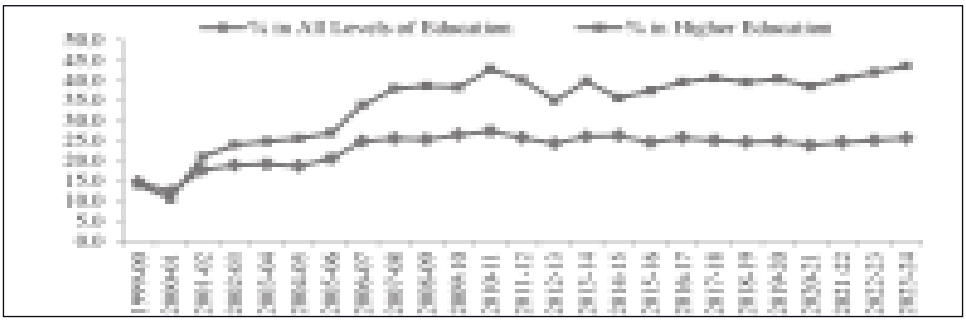
Increase in size of the public during the last two decades has also been considerable. Therefore, increase in the size of public has brought with it considerable increase in public expenditure.

Second, increase is attributed to the increasing base of technical education, which costs higher than the general education. Over a period, the STEM programmes and courses have drawn a growing demand. Fourth, increasing facilities in the existing institutions as well as in new ones along with making provisions to embed and facilitate the advanced technologies available in these institutions and training required has resulted in the increase in the number of public initiatives.

6.3 Centre and State Governments' Contributions to Expenditure on Higher Education

As education is in the list of concurrent subjects, according to the Constitution of India, one would be interested in understanding the Centre's (Union Govt.) contribution to education development, in general and higher education in the country in particular. Although with less than one-fourth of the total expenditure on education, the share of Centre (Union Govt.) has in fact increased during the first decade of this century, after which it has either stagnated or declined (Figure-6.6). Similarly, increase in the share of Centre in total expenditure on higher education as well, was observed during the first decade of the century.

Figure-6.6: Share (%) of Centre (Union Govt.) in total Expenditure on Education in India



***Note**: Revenue Account.*

***Source**: Authors' calculations based on Ministry of Education, Govt of India.*

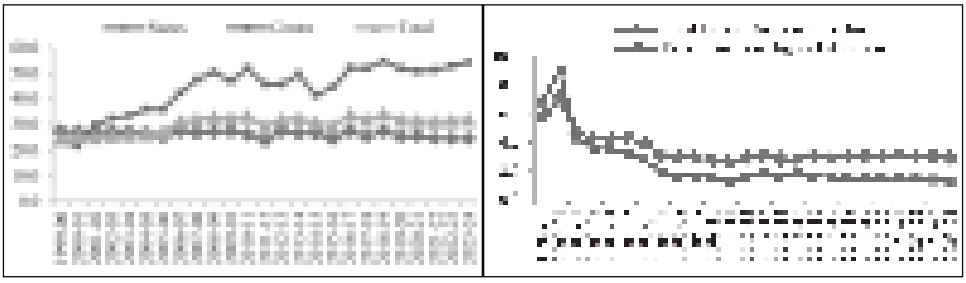
Share of the Centre (Union Govt.) in total expenditure on education, in general, combined of Centre and State Governments has increased from 14% in 1999-2000 to peak of around 27% in 2010-11, (Figure-6.6). Similarly, share of the Centre in total expenditure on higher education, in particular, has increased from 14% to 43% during the first decade (1999-00 to 2010-11) of this century. Thereafter, it has hovered around 45% during the second decade.

It indicates that share of the Centre in total expenditure on higher education is higher than that of its share in total expenditure on education, in general (Figure-6.6). It means that Government of India has prioritised high education more than that of state governments in their education budgets. Further, the share of higher education within the Centre's total expenditure on education is much higher when compared to the share of higher education within the state governments' total expenditure on education (Figure-6.7a). The other metric is also showing similar pattern for Centre's changing financial responsibility in education. The ratio of state governments' total expenditure on education to that of the Centre (Union Govt.) has declined drastically during the first decade of the century (Figure-6.7b). Thereafter it has shown a stable trend during the second decade of this century. Such a trend is explicit for both the expenditure on education in general and expenditure on higher education in particular.

Figure-6.7: Centre and State Governments Contributions in Public Expenditure on Higher Education in India

a) Share (%) of Higher Education in total Expenditure of Centre and State Governments on Education

b) Ratio of State to Centre in terms of Expenditure on Higher Education



***Notes**: 1. Values represent percentage; 2. Revenue Account of the Budgeted expenditure; 3. In respect of Expenditure on Higher Education for the period between 1999-2000 and 2004-05 the figures are Authors estimates and for the rest, they are actuals; 4. Expenditure on Higher Education consisting that of University and Higher education along with that of Technical education.*

***Source**: Authors' calculations based on Ministry of Education, Govt. of India.*

The above trends indicate that although higher education has received a better and increased prioritisation in Centre's expenditure on education in the first decade of the century, it could sustain the level in the following decade. The contribution of Centre to the total expenditure on higher education is better than its contribution to education in general, as the share of higher education varied from 40% to 50% of Centre's total expenditure on education. However, the absolute amount of Centre's expenditure on higher education is less than 60% of what the states are spending. The pattern of Centre's expenditure on higher education as shown below indicates that it is largely on Central Institutions.

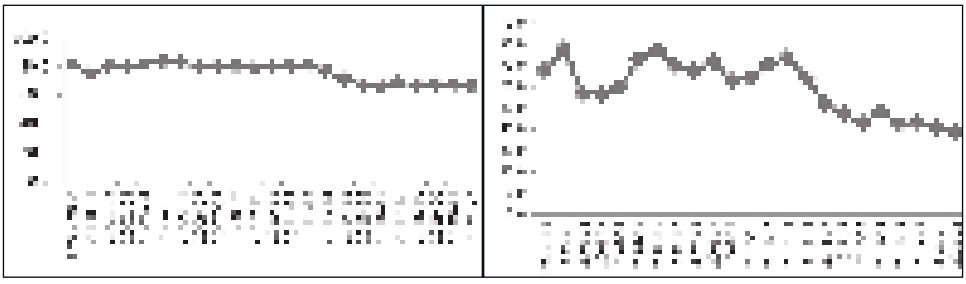
Ministry of Education (Union Govt.): Prioritising on Central Institutions

Education Department is not the only source of resources allocation and expenditure on education related programmes and activities. In addition to Education Department there are many other Departments that incur expenditure on education. However, as one could observe, the Ministry of Education at the Centre (Union Govt.) and Departments of Education in the states are the major stakeholders in the total expenditure on education in general and higher education in particular. Since mid-1970s, the share of all Education Departments in the total expenditure on education (Centre and state combined) began declining. By the end of the second decade of this century, the share of all Education Departments in the total expenditure on education in India had declined to less than 70% (Figure-6.8a). The decline is even faster in the Union Government's expenditure on education. The share of Ministry of Education within the total of Union Govt.'s total expenditure on education was around 70% during the early 1990s and now by the end of the second decade of this century it declined to less than 40% (Figure-6.8b). Again the decline is faster in the second decade.

Figure 6.8: Education Departments' Share (%)in total Expenditure on Education in India

a) Share of all Education Departments in Total Expenditure on Education (Centre and State Govts.) in India

b) Share of Education Department (MoE) in Centre's (Union Govt.) Total Expenditure on Education

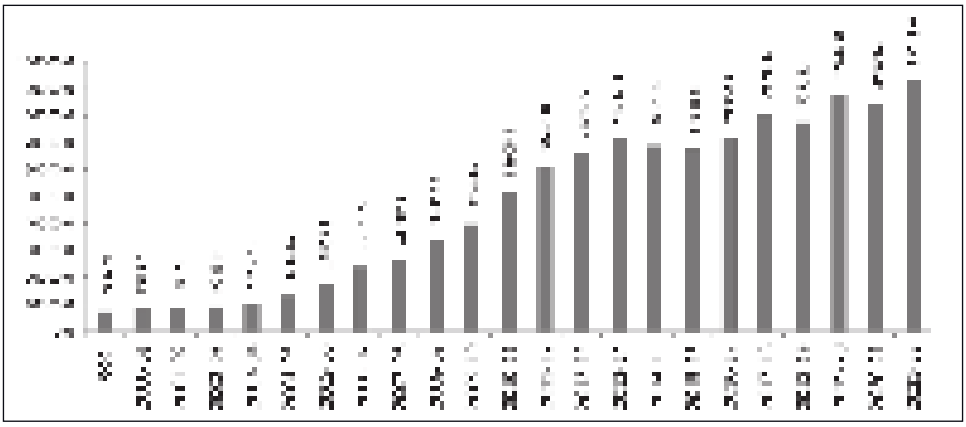


***Notes**: MoE – Ministry of Education, Govt of India.*

***Source**: Authors' calculations based on Ministry of Education, Govt of India.*

The trend in absolute amount of expenditure on education by the Education Departments of the Centre (i.e. Ministry of Education) indicates that it has increased from ₹7332.6/- crores at the turn of the century to ₹93,219/- crores by the end of the second decade of this century (Figure-6.9). However, most a major part of such increase had taken place during first decade of the century. In the second decade, the Centre's expenditure on education through its Education Departments had a very slow growth and it is almost stagnant in the recent past despite increase in the number of instiitutions and enrolment within them. For instance, the number of Central Universities has increased from 16 in 1999-2000 to 41 in 2010-11 and further to 47 in 2018-19. Similarly the Institutions of National Importance have increased from 9 to 59 and to 127 during the period. Therefore, such stagnation may have implications for quality dilution across levels of education.

Figure-6.9: Trend in Total Expenditure of Education Department (in Rs. Crores) – MoE, Govt. of India

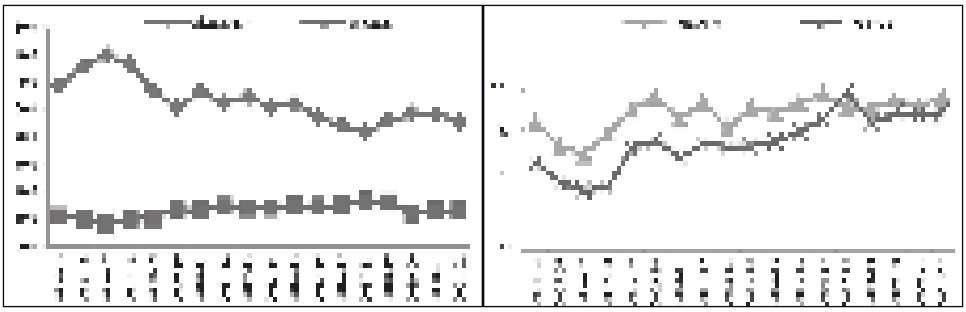


***Notes**: 1. MoE – Ministry of Education; 2. Values are in Rs. Crores and in current prices*
***Source**: Ministry of Education, Govt of India.*

Of the total expenditure of the Ministry of Education (Union Govt.), elementary education used to have larger share (more than 60%) but it has declined to less than 50% in the recent past (Figure-6.10a). Secondary education which had around 10% stake in the early 2000s has increased its share to 16% in 2019-20 and declined to 13% in 2021-22 (Figure-6.9a). Both the university and technical education have increased their share continuously since mid-2000s (Figure-6.9b). Around 19% of MoE expenditure on education is on university education while another 17% is spent on technical education.

Figure-6.10: Percentage Distribution of Budgeted Expenditure of Ministry of Education Government of India

a) Share (%) of Elementary and Secondary in total Expenditure of MoE *b) Share (%) of University and Technical Education in total Expenditure of MoE*



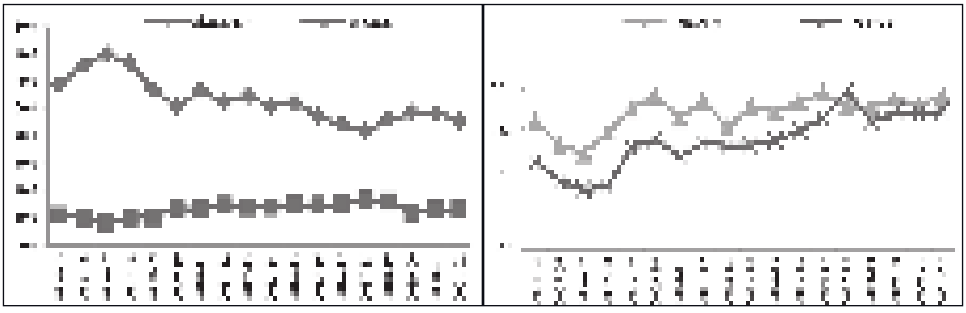
***Notes**: MoE – Ministry of Education, Govt of India.*

***Source**: Authors' calculations based on Ministry of Education, Govt of India.*

Of the total expenditure of School Education Department of Ministry of Education (Govt. of India) that spent on elementary education, two-thirds is being incurred on implementing Centrally Sponsored Scheme (CSS) of Sarva Shiksha Abhiyan (SSA) and another one-third is being spent on the other flagship CSS: Mid-Day Meal (MDM) scheme. They are largely transferred to States as states are the main stakeholders implementing both the schemes. In case of the expenditure on secondary education by MoE, most part (three-quarters) is spent on Central Institutions such as Kendriya Vidyalayas (KVs) and Jawahar Navodaya Vidyalayas (JNVs). Central transfers to states in the form CSS is very less in the secondary education domain.

Figure-6.11: Share (%) of Broad Sector and Functional Allocation of Budgeted Expenditure of Department of Higher Education, MoE, Government of India

a) by Broad Sectors *b) By Broad Functional Allocation*

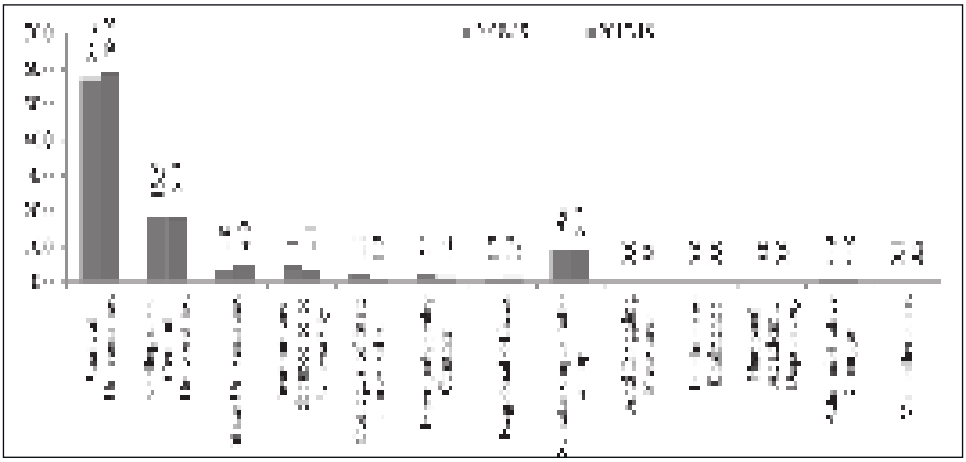


***Notes**: MoE – Ministry of Education, Govt of India; 2. UGC- University Grants Commission; INI – Institutions of National Importance.*

***Source**: Authors' calculations based on Ministry of Education, Govt of India.*

Of the total expenditure of Higher Education Department of Ministry of Education, three-quarters is being spent on Central bodies including UGC, AICTE, Central Universities and all other Institutes of National Importance (which in turn includes IITs, IIMs). Transfers to states (including that of Rashtriya Uchchatar Shiksha Abhiyan - RUSA) is less than 10% of the total expenditure incurred by Higher Education Department of the Ministry of Education, Govt. of India (Figure-6.11a).

Figure-6.12: Distribution (%) of Expenditure Disbursed by the UGC



***Notes**: Figures are in percentages; UGC – University Grants Commission.*

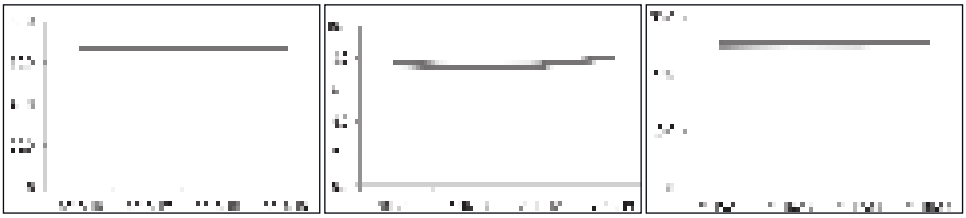
***Source**: Authors' calculations based on University Grants Commission (UGC) Annual Reports.*

The most part of expenditure incurred by University Grants Commission (UGC) is on Central Universities and Colleges under these universities (Figure-6.12). More than three-quarters of the total expenditure on UGC is on these universities and colleges. The state universities and colleges affiliated to these universities get a meagre 5% of the total expenditure on the UGC.

In all, the Centre's (Union Govt.) contribution to total expenditure on education in India increased during the first decade of the century but still increased by less than one-quarter of the total expenditure on education in general. Its share in total expenditure on higher education appears to be better. Recent stagnation is however a cause of concern. Moreover, most part of the expenditure incurred by Min. of Education, Govt. of India is spent on Central Institutions.

Figure-6.13: Share (%) of Private, Central and State Government Institutions in total Enrolment at Higher Education Institutions in India

a) % of Private *b) % of Central Govt.* *c) % of State Govt.*



***Note**: 1. Share (%) of private, central and government institutions in respect of enrolment in higher education; 2. State Govt.'s share in residual after the share of Private and Central Govt institutions in total enrolment.*

***Source**: Authors' Calculations based on AISHE.*

But the Central institutions covered only around 8% of the total enrolment of HEIs in India, whereas the public institutions of state governments covered around one-quarter of it (Figure-6.13b&c). State government institutions are having three times the number of students in central institutions but their financial resources for higher education are 1.7 times that of Centre. One can visualise huge difference between public institutions of the states and the Centre in per capita expenditure per student and its implications for quality in the state institutions for higher education.

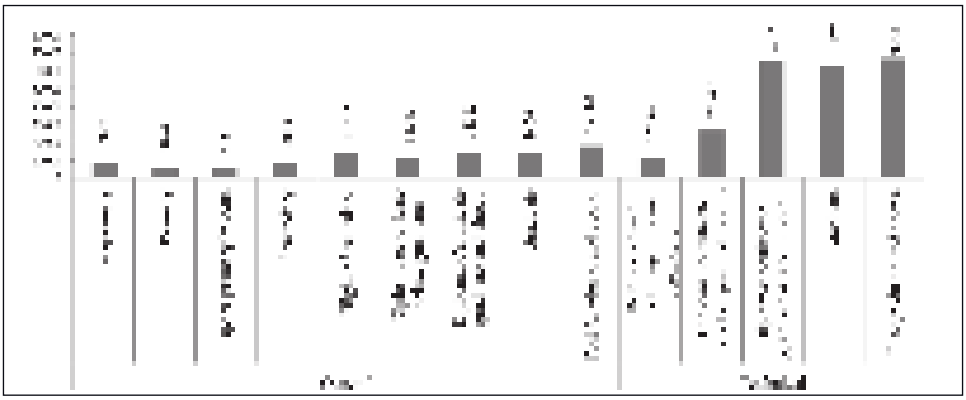
6.4 Private Expenditure on Higher Education

Along with public expenditure, private expenditure is another major source of expenditure on higher education. While 4% of GDP is spent as total public expenditure on education, another 21.8% of GDP is spent (as PFCE estimates of NAS) as total private expenditure on education (Motkuri and Revathi, 2024). Again, the public expenditure on education forms around 17% of total public budget expenditure (of Centre and state Governments), while the private expenditure on education constitutes 4% of total private expenditure (Motkuri and Revathi, 2023). The per capita public expenditure on education (per person, not per student) is ₹6061/- and that of private is ₹4163/- in 2019-20. (Chapter / Section 4) The growth in public expenditure on education outpaced the private during first four decades after independence, thereafter the growth of private expenditure on education in general outpaced the public during the last three decades (Motkuri and Revathi, 2024).

It reflects the trend of fast growing private sector in Indian education system in general. Private sector and private (household) expenditure is emerging as formidable prime mover in the Indian higher education system. As All India Survey on Higher Education (AISHE) annual reports have shown, 75% of higher education institutions (HEIs) in India and 65% of enrolment HEIs are under private management. Even the public

institutions have begun offering self-finance courses, for their sustenance owing to inadequate public funding. Therefore, the private expenditure on higher education in India is growing faster especially during the last three decades.

Figure-6.14: Average Household (Private) Expenditure (Rs.) per Student by type of Course and Level of Education in India, 2017-18



***Notes**: 1. Values are in Rs. and in current prices; 2. Rural and Urban Combined.*

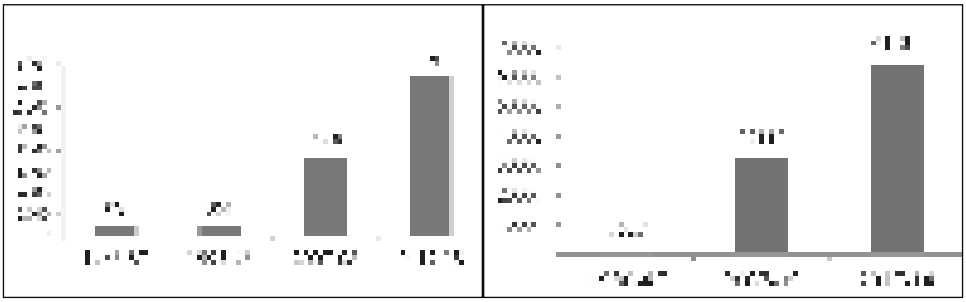
***Source**: NSSO-SCE Report No. 585.*

It can be observed that expenditure per student varied by level of education and type of course (Figure-6.14). It is implicit for the public and private expenditure on education by level of education. The private expenditure on education per student is higher at higher level of education (graduation and post-graduation) for general courses and further high for technical education.

The trend in private expenditure on higher education in India indicates that there is a remarkable growth in such expenditure during the last two decades (Figure-6.15a&b). In case of general courses, it increased nearly 17 times while registering a 14.5% annual growth rate, from ₹876/- (per student of higher education) in 1986-87 to ₹4,768/- in 2017-18. The average private expenditure on higher education per student is higher in technical courses and the increase during the period is even more in these courses. It increased more than 42 times while registering 19.5% annual growth rate from ₹1,527/- to ₹64,131/- during the same period.

Figure-6.15: Trend in Average Private (Household) Expenditure (per Student) on Higher Education in India

a) All General Courses of Higher Education *b) All Technical Courses of Higher Education*

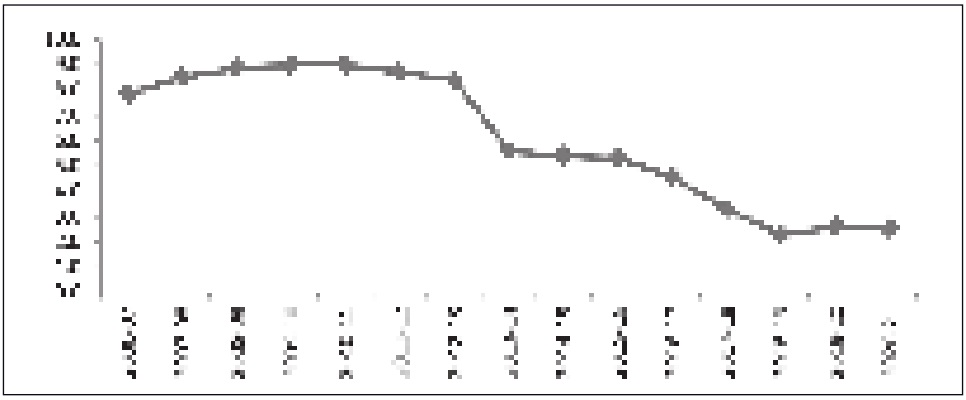


***Notes**: 1. Values are in ₹ and in current prices; 2. Rural and Urban Combined; 3. For the year 1995-96, the figures for technical education are not available because a large part of technical education is combined with general education.*

***Source**: Authors' calculations based on NSSO-SCE Survey Reports*

However, the growing private expenditure on education appears to have an adverse impact on the pace of expansion in higher education in the country. In fact, it is implicit as the growth in enrolment and that of (i.e. rate of growth in) the GER is decelerating during the last one decade (Figure-6.16). One of the reasons for decelerating growth in enrolment in higher education could be increasing privatisation and private expenditure on such education. In this context, it is a cause of concern achieving the recent National Education Policy (NEP) 2020 target 50% GER by 2035 from that of 28% in 2021-22.

Figure-6.16: Decelerating Growth in Enrolment at Higher Education in India



***Notes**: 1. Growth in Enrolment – percentage change (%); 2. Three-Year Moving Average.*

***Source**: Authors' calculation based on UGC and AISHE data.*

The phenomenal growth of private sector in higher education during the 1990s and first decade of this century has already exhaustively tapped the affordable sections of society/economy, especially middle classes and above economic stratums. Now it may have to penetrate through the lower middle classes for which affordability is an issue.

But the ever-increasing cost of education in private sector might make higher education unaffordable to such classes. Expansion of public education system can only serve the poor and middles classes than private sector.

In all, the private expenditure on higher education is considerably high and increasing over a period. Such a high and increasing private expenditure on higher education has far reaching implication for further expansion of higher education in India. The recent National Education Policy (NEP) 2020 has not been concerned with the trend of increasing private costs of higher education

6.5 Concluding Remarks

This section examined and analysed the trend in expenditure on higher education in India. It also reflected on the private expenditure on higher education in the country. It is observed that while nearly 4% of GDP is the total public expenditure on education in general, public expenditure on higher education constitutes 1% of GDP. Education in general accounts for around 15% of total budget (Govt) expenditure in India, while the higher education forms around 5%. The share of higher education in the total expenditure on education is around 30%. While more than 50% of centres education expenditure is on higher education, states spend less than 30%. Share of Centre in total expenditure on higher education increased more than its share in total expenditure on education. Most of the Centre's expenditure on higher education is for Central Institutions and as a result very meagre funds are left as transfers to states. Increasing privatisation of higher education has implications for growing private expenditure and for further expansion of higher education.

* * *

7. Summary and Concluding Remarks

This study has examined the private and public expenditure on education in India. The analysis is based on public expenditure on education compiled by Ministry of Education, Govt of India that includes expenditure incurred by education department as well as by all other departments on education and training related programmes and activities. The analysis has covered a period of last three decades.

The 'Public-Good' nature of education desires more of public investment but the trend indicates a fast-growing private expenditure on education in India. It is so especially in the area of higher education. The analysis of private expenditure on education is based on the private final consumption expenditure (PFCE) on education as estimated by the National Accounts and Statistics (NAS). The analysis has also drawn from the NSSO-CES and SCE survey estimates published in respective rounds of NSSO survey reports. While covering the overall expenditure on all levels of education, the study also examined and analysed the trend in expenditure on higher education in India, in particular. It also reflected on the private expenditure on higher education in the country.

7.1 Summary

From the economic framework and human capital perspective, the instrumental role of education is well established and recognised as a critical factor in economic development especially in the emerging knowledge-based economies. Developed and East Asian countries' economic growth experience in fact indicates the critical nature of investment in education. Considerable economic externalities and social returns to education along with private returns substantiate it as a 'Public Good' and hence necessitate public investment (expenditure). Inadequacy of public investment on education especially in the context of growing demand for education resulted in growth in private expenditure on education. It has far reaching implications for affordability and access to education. Further, in a federal polity of constitutional framework, education in India is listed as a concurrent subject that requires equal-sharing of responsibilities on the fronts of financial, regulatory and developmental functions.

India's experience, however, shows dire inadequacy of public investment leading to growing private expenditure on education. Within the sphere of public investment, lion's share of contributions is made by the state governments.

India's spending on education is equivalent to around 4% of the country's GDP as a public expenditure, and around 2.8% of GDP as private expenditure based on Private Final Consumption Expenditure on Education, as estimated by NAS. Together the country's spending on education is equivalent to around 6.8% of GDP. The estimated private expenditure on education based on consumer expenditure survey (CES) of NSSO shows that it constitutes 1.3% of GDP, and hence the public and private expenditure on education is just 5.3% of GDP. The private expenditure on education (based on NAS-PFCE) as a share in private final consumption expenditure (PFCE) has increased five times since 1950s indicating the priority for education. Another notable trend over a period of seven decades is that growth in private expenditure on education is higher than that of public expenditure during the last three decades. The ratio of public to private in terms of expenditure on education is seen to be declining during this period. Such trend reflects increasing privatisation of education in India. This trend has far reaching policy implications especially in higher education.

Evident from our analysis of public expenditure on education is the fact that the share of Centre and State is highly skewed- it is equivalent to 1% of GDP that is borne by the Centre or the Union Government, while 3% of GDP equivalent is borne by all the State governments together. Education, listed as a concurrent subject requires co-sharing on the fronts of financial, regulatory and developmental functions in a federal polity. Of the total public expenditure on education in the country, while the Centre contributes less than a quarter (20% to 25%), the remaining three quarters is spent by the state governments. Even as a percentage of their total budget expenditure, Centre spends less than 8% and states are spending more than 20% on education.

The Union Government is imposing and collecting Education Cess and mobilising additional resources using constitutional provision, to meet or finance a few of its flagship initiatives in the elementary and secondary education, especially the SSA, RMSA which are now subsumed as Samagra Shiksha. Nearly half of the total expenditure incurred by Ministry of Education, Government of India, is met from such additional resources mobilised through education cess. Budget estimates for the years 2022-23 and 2023-24 indicate that education cess is more than the allocations made to flagship schemes, Samagra Shiksha, MDM and RUSA. The Union government is diverting education cess proceeds to spending on central sector domain of the education expenditure, such as UGC, KVs, JNVs and also other central institutions.

Despite having such leverage for Union Government its share in the total public expenditure on education in the country could not be increased. Pressure is built

on already strained resources of the state governments. Replacing the Planning Commission (PC) with the NITI Ayog has resulted in state governments' loss of grants-in-aid. The Finance Commission's award increasing the States' share in divisible pool of tax revenues could not compensate the losses incurred in resource realisation of the state governments. Given their resources and pressures of competing priorities related to various welfare and developmental initiatives, state governments are constrained to bear the burden of increasing the public expenditure on education equivalent to 6% of GDP. The NEP 2020 is in fact silent on the Union Government's contribution in increasing the public expenditure on education.

As a result of inadequacy in public investment despite the fact that Public-Good nature of education desires more of it, there is a growing trend in private expenditure on education in India. Analysis has revealed that the percentage of expenditure on education in GDP and total household consumption expenditure (HCE) has increased which shows that household expenditure on education is growing faster than their total HCE and the GDP. There is a positive association between income level and the expenditure on education and its share in total HCE. However, private expenditure on education is growing faster among the bottom economic stratum, as is their per capita expenditure on education and its share in their total HCE. Therefore, the ratio of top 10% of population to bottom 10% in terms of per capita expenditure on education though high is showing a declining trend during the period of analysis. It shows the increasing prioritisation of education even among the poor household but at the cost of dent in their private pocket expenditure.

The trend is reflected in the analysis of public expenditure on higher education in India as also in the private expenditure on higher education in the country. It is observed that while the total public expenditure on education in general is 4% of GDP, public expenditure on higher education constitutes 1% of GDP. Education in general, accounts for less than 20% of total budget expenditure in India, whereas the higher education constitutes around 5%. The share of higher education in the total expenditure on education is around 30%. While the Centre spends more than 50% of its education expenditure on higher education, the states spend less than 30%. Share of the Centre in total expenditure on higher education increased more than its share in total expenditure on education. Most of the Centre's expenditure on higher education is spent for Central Institutions and as a result very meagre funds are provided towards 'transfers to states'. Increasing privatisation of higher education has implications for growing private expenditure and for further expansion of higher education.

7.2 Concluding Remarks

The analysis brings forth a few critical aspects of India's investment in education. The total investment of India in education (public and private) is equivalent to 5% to 7% of the country's GDP. The public expenditure on education is equivalent to 4% of GDP. The remaining is private expenditure, and it varies by the source of the estimate: NAS-PFCE (2.8%), NSSO-SCE (2%) and NSSO-CES (1.3%).

The nature of education as a 'Public Good' requires a massive public investment. However, public expenditure on education in India is grossly inadequate. It is less than expected or recommended (equivalent to 6% of GDP). Again, the distribution of public expenditure in the country between the centre and the states heavily relies on resources from the state governments (>75%). The state governments spend around 20% of their budgetary expenditure on education, while the Centre spends less than 8%. The Kher Committee, after independence, had recommended a ratio of 70:30 for the states and the Centre regarding public expenditure on education in India to achieve universal elementary education. Again, the transfer of education from the *state subject* to the *concurrent* list in the federal structure of the Constitutional framework could have further increased the Federal government's financial responsibility. However, despite leveraging the specific provisions regarding the financial resources in the Constitutional framework of federalism, particularly that concerned with education cess, the Centre could not increase its financial responsibility.

Further, in letter and spirit, proceeds of the education cess are to fund the centrally sponsored schemes (CSS) from which the states could have benefited while implementing the schemes. However, a considerable part of the education cess proceeds is diverted and allocated to UGC, KVs, and JNVs among others, which are regular central sector expenditure subjects of the Ministry of Education. A concern in this regard is that the long pending rise in education spending to 6% of GDP, also proposed by the NEP 2020, must be equally shared by both the Centre and States lest education development remains just a lofty ideal.

With a growing demand for education, an inadequacy of public investment resulted in increasing private expenditure on education. The NAS-PFCE-based estimates have shown that private expenditure on education in India has grown faster than public expenditure during the last three decades. The national-level large-scale sample-survey (NSSO-CES/SCE) estimates of India have shown that the population base of the private expenditure on education, concerned with the percentage of total households in the country incurring such expenditure, has increased. This is remarkably increased

in rural India too. During the last three decades, the private sector's growth in the education eco-system has been phenomenal. The number of institutions and enrolment under the private sector has multiplied, and thereby, the private sector's share in the country's education eco-system has substantially increased. However, the private sector in education varies, primarily by four parameters: the size of institutions (enrolment), their resources (human and financial ones), cost of education (budget/economical to corporate/elite ones) and the quality concerned with the maintenance of standards and delivering quality education. The private sector is more heavily concentrated in the pre-primary and tertiary levels of education.

The origin of the private sector in education and its growth is usually associated with serving the *excess demand* that is not met in public sector institutions. However, the growth pattern of India's private sector in education is to serve not only the excess demand but also the *differentiated demand,* which is concerned with perceived quality and other parameters such as placement potential, reputation or brand. In the past, due to a lack of vacant seats in public institutions, private institutions were an alternative. It has been the opposite since the turn of the 21st Century; students prefer and choose private despite the vacant seats in public institutions. The immediate effect of the inadequacy as well as inefficient use of public expenditure on education is a compromise on the quality of education delivered in public institutions, along with a shortage of human resources and other necessary infrastructure and facilities. The difference in the quality of education delivered in public and private institutions perpetuates educational inequality. This affects employability through differences in graduates' knowledge, skills and competence. Growing demand for education and aspirations, along with the perceived quality of education, are driving the demand (excess and differentiated) for education in the private sector. However, the affordability concerns always remain. COVID-19 demonstrated that the loss of family incomes has driven students to shift from private to public institutions.

Hence, the policy concern must be increasing the public investment in education, thereby strengthening the public institutions and ensuring the quality of education delivered in these institutions. To a certain extent, it curtails the growing demand for private education, mainly that associated with the differentiated demand. Also Centre has to bear a greater responsibility in sharing the public investment in education.

* * *

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Appendix

Data Sources and Methods: Methodological Issues

Two important sources of information or estimates on private expenditure on education are: PFCE estimates of NAS and NSSO survey estimates. In the national income accounting framework, total private expenditure in general holds major share in the GDP at market prices. In India, National Accounts Statistics (NAS) division of Central Statistics Office (CSO) estimates the Private Final Consumption Expenditure (PFCE) following the *commodity flow method*. Educational services is one of the core item groups for NAS estimates.

As regards the other alternative, to understand the household level living standards, poverty conditions along with economic inequalities, large scale household consumption expenditures surveys are conducted to make an estimation in this regard. National Sample Survey Office (NSSO) through its Consumer Expenditure Surveys (CES) captures and estimates the household consumption expenditure (HCE) based on *recall method*. Although every round of NSSO surveys capture household consumption expenditure (since 1950-51), they are based on very thin sample and useful for overall estimate at the national level only. The quinquennial rounds of CES that began in early 1970s are large sample surveys and hence they are useful for estimates at subnational levels (States and Regions) and economic classes (percentiles, quartiles/quintiles, fractiles or deciles) along with commodity level estimates.

The first quinquennial CES was started in 27th round (1972-73) and it was followed by 32nd (1977-78), 38th (1983), 43rd (1987-88), 50th (1993-94), 55th (1999-2000), 61st (2004-05) and 66th (2009-10) rounds. The last large sample CES estimates available is one which was conducted in the 68th (2011-12) round. In fact it was conducted to replace the non-normal estimates of 66th round survey because the year 2009-10 was found to be not a normal year (as it was affected by drought). Although more recently there was the 75th (2017-18) round which has carried a large sample CES, Government of India has withdrawn the estimates and report owing to unknown reasons. Education encompassing the household expenditure on fee, books, stationery etc., is one of the commodity group for which CES Schedule captures the amount spent on it by each sample household.

Conventionally, NSSO-CESs are based on 30-days reference period in capturing the expenditure on various goods and services consumed by the households. In other words

such surveys have been capturing the expenditure incurred on such goods and services listed in the schedule, during the last 30 days before the survey. The 30-day reference period was used across all the commodity groups without exception. Although for the relatively infrequent categories of commodity groups (I-type categories) double reference period (30 and 365 days) was used in all surveys from 27th (1972-73) to 68th (2011-12) rounds except 55th (1999-2000) round, the estimates made available through NSSO reports -were based only on 30-days reference period till 50th (1993-94) round[1]. In the 55th (1999-2000) round, the 30-day reference period was withdrawn for five relatively infrequent categories of commodity groups and only the 365-day reference. Period was in the used. In the Subsequent rounds, 61st (2004-05) onwards, double reference periods were used for five commodity groups (I-type Category) and estimates based on both the reference periods were made available. Education is one of the five relatively infrequent categories of commodity groups (I-type Categories), and in fact it was made part of the double reference period[2] category in 1993-94 (NSSO, 2006: 28).

NSSO also introduced certain changes with regard to reference period of recall in 66th (2009-10) and 68th (2011-12) rounds of CES. It has introduced for the first-time the 7-day reference period for frequently purchased non-durable goods of food items like vegetables/ fruits and fish/ meat (II-Type category). In this respect, it has canvassed two schedules in these two rounds of survey with the same consumption item groups but varying in the reference periods. Schedule I is the usual one and repeat of previous rounds i.e. the double reference period is for I-Type Category of item groups along with 30-day reference period for all the item groups. Schedule II has only a 365-days reference period for item groups of I-Type category, 7-day recall period for II-Type category item groups (like vegetables) and 30-day recall period for all the other item groups (III-type category).

In this respect, there are three different estimates made for total household consumption expenditure based on these two rounds (66th and 68th). One is based on usual reference period (URP) for all the item groups (30-day reference period only). Second is based on the mixed reference period (MRP) i.e. 365-days for some item groups and 30-day reference period for all the other. These two estimates are based on information captured in the same scheduled i.e. Schedule I. Third estimate is based on Schedule II which uses three reference periods (365, 7 and 30 days) for three different item group categories (I, II and III type categories). All the previous rounds have canvassed only one schedule with double reference period. They had a scope for two different estimates, one based on URP and the other on MRP. Hence, expenditure on education based on the CESs

since 50th round has two or three different estimates.

Further to CES, certain rounds of NSSO surveys also focussed on social consumption on education (NSSO-SCE) along with health. It started in the 35th round (1980-81) and followed by 42nd (1986-87), 52nd (1995-96) 64th (2007-08), and 71st (2014) rounds; the recent one is 75th (2017-18) round. The results of the first survey of its kind in the 35th round, however, were not brought out, while subsequent rounds of the survey were published (NSSO, 1998:1). The 71st (2014) round differs from the other rounds of SCE in terms of duration of the survey which was half-a year (six months period) while all the others had one year period. All these rounds of surveys (NSSO-SCE) in fact, covered both health and education but with separate survey schedules. They were essentially used to assess the benefits derived by households belonging to different sections of the society from public services in the areas of education and health and private expenditure on these services. The reference period for the NSSO-SCEs especially for capturing expenditure, is the last 365 days.

The above are the three major and important sources in India capturing and estimating the private expenditure on education. One would expect ideally the estimates of all the three sources to match or converge, but they do not in reality. Especially, the growing divergence between Private Final Consumption Expenditure (PFCE) from National Accounts Statistics (NAS) and Household Consumption Expenditure from NSSO Quinquenial Round Survey on Consumption Expenditure (NSSO-CES) are a cause of concern (see GoI, 2015). One of the reasons is that while the PFCE estimates cover expenditure of resident households as well as that of not-for-profit or non-profit institutions serving the household (NPISH), CES estimates covers only the resident households. The second is methodological, in that while the PFCE estimate of NAS is based on commodity flow methods, the CES estimate of NSSO is based on the method of sample survey and respondent recall. For these reasons, there is a growing divergence between PFCE of NAS and household consumption expenditure from NSSO quinquennial round survey (CES) on Household Consumption Expenditure (HCE) and it is a cause of concern (Table-A1.1). Such difference is very high and divergence has increased over a period, especially in case of non-food expenditure.

Table A1.1: Difference in NAS and NSSO Estimates on Private/Household Total Consumption Expenditure in India

Year	NSSO-CES Estimates (Rs. Cr)			NAS-PFCE Estimates (Rs Cr)			% of NSS-CES in NAS-PFCE		
	Food	Non-food	Total	Food	Non-food	Total	Food	Non-food	Total
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
1972-73	23420	9790	33210	23379	11752	35131	100.0	83.3	94.5
1977-78	36500	20030	56530	39801	23282	63083	91.7	86.0	89.6
1983	69735	39996	109731	85613	60471	146084	81.5	66.1	75.1
1987-88	106205	67560	173765	122805	101256	224061	86.5	66.7	77.6
1993-94	224066	131704	355770	315243	259529	574772	71.1	50.7	61.9
1999-00	410918	305473	716391	647011	610530	1257541	63.5	50.0	57.0
2004-05	481189	485204	966393	769500	1156092	1925592	62.5	42.0	50.2
2009-10	1017817	1040111	2057928	1371888	2349566	3721454	74.2	44.3	55.3
2011-12	1332965	1496601	2829566	1858707	3308739	5167446	71.7	45.2	54.8

***Notes**: 1. Values in columns 2 to 7 are in Rs. Crores and in Current Prices; 2. Figures represent total Consumption Expenditure; 3. Up to the 50th round (1993-94) for NSSO-CES, values are URP estimates, for 61st round (2004-05), it is MRP based estimate, and for the 66th (2009-10) and 68th (2011-12) rounds they are MMRP (Schedule 2) based estimates; URP – Usual Reference Period; MRP – Mixed Reference Period; MMRP – Modified Mixed Reference Period;*

***Source**: Government of India (2015).*

As regards the availability of estimates for expenditure on education, the PFCE of NAS estimates are available since 1950-51 till 2019-20. The NSSO reports that carried the estimate of CES up to 50th (1993-94) round clubbed the expenditure on education in the ***miscellaneous goods*** category. The CES estimate for expenditure on education is however made available since 50th (1993-94) round. The estimates of private expenditure on education based on NSSO surveys on social consumption on education (NSSO-SCE) are made available since 42nd (1986-87) round onwards.

NSSO-CES estimates are made separately for rural and urban areas and made for a month period (for 30-days period). They have to be combined to get overall value using rural and urban population weights and it is to be annualised to get yearly value. It is important when we make comparison with PFCE and public expenditure, estimates are made for the year. Following are the formulas to derive overall and annual values.

Annual value of CES = Monthly value of CES / 30 * 365 ------ 1

Rural-Urban combined value (Yru) = (Yr * Wr) + (Yu * Wu) ------ 2

Y- Expenditure value
W – Weight; **r** – rural; **u** – urban; **ru** – rural and urban combined
'**/**' - symbol of division; '*****' – symbol of multiplication

As the reference period of NSSO-SCE is last one year (365 days), it does not have to be annualised again but like NSSO-CESs as these estimates are made separately for rural and urban, they need to be combined to get overall estimate following the above formula. Secondly, like NSSO-CESs the estimates of NSSO-SCE on expenditure on education are in per capita values. But unlike NSSO-CES, the NSSO-SCE estimates of expenditure on education are per capita per student, not for population. For the purpose of comparison the per capita per student values needs to be converted into per capita per person (population) through following method.

Nc = N * r ---- 3

Nc – Reference-Age Population size (ex: 5-29 Years) i.e. school/college-going-age persons;
N – Total Population; **r** - % of reference-age population in the total population

S = Nc * a ---- 4

S - Students i.e. number of persons in reference-age attending educational institutions
a – percentage of reference-age persons attending educational institutions

TPEE = S * PCPEEs ---- 5

TPEE – Total Private Expenditure on Education

PCPEEs – Per Capita Private Expenditure on Education per Student

$$PCPEEp = TPEE / N \text{ ---- } 6$$

or

$$PCPEEp = \{[(N * r) * a] * PCPEEs\} / N \text{ ---- } 7$$

or

$$PCPEEp = r * a * PCPEEs \text{ -----} 8$$

PCPEEp - Per Capita Private Expenditure on Education per Person

Estimated values of '**r**', '**a**', and **PCPEEs** are available from the published reports based on NSSO-SCE surveys, total population figures for the relevant survey reference year can be derived from the Census of India population figures or RGI projections. When per capita expenditure per student was given by type of course ('i' = general, technical and/or vocational) or level of education ('i' - primary, middle, secondary and/or higher education), the average can be derived as:

$$PCPEEs = \sum_{(i=1 \text{ to } n)} PCPEEs_i * W_i \text{ ----- } 9$$

and hence finally the per capita per person:

$$PCPEEp = r * a * \sum_{(i=1 \text{ to } n)} PCPEEs_i * W_i \text{ ----- } 10$$

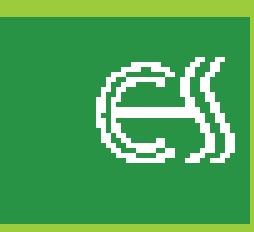
Taking into account methodological issues, availability of estimates and their transformations based on calculation methods mentioned above, the analysis is based on NSSO estimates reported in various reports published/released following the respective rounds of survey. The NSSO-CES estimates of private expenditure on education are available in reports following the 50th (1993-94) round and hence the analysis covers thenceforth. Also the analysis of estimates based on NSSO-SCEs is made using such survey estimates covering four rounds since 42nd (1986-87) round to the recent 75th (2017-18) round. As the 71st round (2014) of SCE survey is slightly different from the rest, it is skipped in the main analysis.

* * *

Endnotes

1 The Reports (NSS Report no. 357 and 404) based 38th (1983) and 50th (1993-94) round of CES had an attempt that made it available such an estimates of MPCE (it was said to be adjusted MPCE) first time using 365-day reference period of concerned item groups (see NSSO, 1989&1997). Such an estimate is known now as mixed reference period (MRP) estimate. It is mixed because, all the other items groups the estimate is based 30-days reference period and for those item groups having double reference period (30 and 365 days) the estimate is based on 365-day reference period. When these estimates of these two groups of items are combined it is referred to as MRP.

2 It was only three of the five I-type categories were given the double reference period up to the 43rd (1987-88) round; education and institutional medical care were included in the category from the 50th (1993-94) round onwards (NSSO, 2006: 38).



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