

Private and Public Expenditure on Education in India

Trend over last Seven Decades

Venkatanarayana Motkuri and E. Revathi



Research Cell on Education (RSEPPG)
Centre for Economic and Social Studies

(ICSSR, Ministry of Education, Government of India)

Hyderabad-16

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Contact Details:

Research Cell on Education

Centre for Economic and Social Studies

(ICSSR, Ministry of Education, Government of India)

N.O. Campus, Begumpet,

Hyderabad – 16

Phone: 040 2340 2789 / 23416780 / 23416610-13

post@cess.ac.in

<https://cess.ac.in/>

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Private and Public Expenditure on Education in India: Trend over last Seven Decades

Venkatanarayana Motkuri and E. Revathi[#]

Abstract

This note 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. For private expenditure on education, it is based on the private final consumption expenditure (PFCE) on education as estimated by the national accounts and statistics (NAS). It is observed from the analysis that India is spending on education around 4% of GDP as a public expenditure and around 2.5% of GDP as private expenditure; together it is spending around 6.5% of GDP on education. Notable trend over past three decades is that growth in private expenditure on education is higher than that of public expenditure. The ratio of public to private in terms of expenditure on education is declined during this period. Such trend reflects increasing privatisation of education in India and has far reaching policy implications.

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

I Introduction

Growing demand for education in India coupled with inadequacy of public expenditure on education has been resulting in growing private expenditure on education which in turn 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 labour market, and urbanisation have contributed to rise in perceived values of education and to the growing demand for education. The non-fulfilment of public education system due to inadequate funding, strained the private pockets in meeting the growing demand. The recent National Education Policy 2020 which is third in series, appears to add further impetus to privatisation of education.

In this backdrop, the present exercise examines and analyses the trend in private and public expenditure on education in India for the last seven decades period since independence. 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 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).

[#] Venkatanarayana Motkuri (venkatanarayan@gmail.com) is an Associate Professor and Coordinator of Research Cell on Education (RSEPPG), E. Revathi (revathi@cess.ac.in) is a Professor and Director, Centre for Economic and Social Studies (CESS), Hyderabad and also Overall Co-ordinator of RSEPPG. This Research Study at RSEPPG of CESS is conducted with financial support of the *Telangana State Council for Higher Education* (TSCHE).

II Data Sources and Methodological Issues

The main sources of public expenditure on education are budget documents where the *budget major head* (BMH) representing education (codes: 2202 4202 and 6202) present public/budget expenditure on education. Also Reserve Bank of India has been compiling and building a time-series of all the state Governments' expenditure by major heads that includes 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. For the current analysis, public expenditure on education as compiled by MoE, Govt of India is used. The MoE, Govt of India made available such statistics for the period since 1951-52 to the latest 2017-18.

For the private expenditure on education, one of the sources could be the *private final consumption expenditure* (PFCE) on education as estimated by the *National Accounts Statistics* (NAS). In estimating the national income following methods of national accounting system, PFCE comprises an important component of GDP at market prices following the expenditure method. 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 *final consumption of goods and services*. Such an estimate of total final consumption expenditure is derived using *commodity flow* approach. Expenditure on education is one of the major components within the PFCE. However, one of the shortcomings of the PFCE estimate of NAS is that such an estimate is made possible at the national level only, there is no such estimate available at sub-national level.

The other major source of information for the *private expenditure on education* is the national level household survey based estimates. They are National Sample Survey Office's (NSSO) different rounds of *Consumer Expenditure Surveys* (CES) and *Surveys on Household Social Consumption on Education*. As we know NSSO has been conducting larger sample quinquennial CESs since 1970s and the latest survey for which estimates are available is 2011-12. Although there was a very recent survey in 2017-18, it was withdrawn from public domain due to some reasons. Education is one of the *household consumption expenditure* (HCE) items and hence expenditure on it is captured in these surveys. Also, since mid-1980s the NSSO has been carrying surveys focused on household social consumption of education along with health. There are five such surveys so far: 1987-88, 1995-96, 2006-07, 2013-14, and 2017-18. These surveys have captured households' private expenditure on education.

One must however 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. Ideally both should match with each other but in practice they do not and the divergence between these two estimates, particularly in terms of the total private consumption expenditure, has been increasing over period. The PFCE estimates have always been higher than the estimates of CES. One of the reasons for the differences could be that PFCE of NAS covers consumption expenditure of, as mentioned above, both the resident households and the *non-profit institutions serving the households* (NPISH) whereas CES of NSSO covers only the

resident households. Besides, CES of NSSO also suffers with *non-sampling errors* of *under-reporting* especially the economically better-off and/or rich households, along with relapses in longer recall. However, one of the advantage with the CES of NSSO estimate is they are made not only for the national level but also sub-national (state and region) levels. Similar shortcomings and advantages of CES are applicable for the NSSO's Surveys on *Household Social Consumption on Education*. One similarity between PFCE of NAS and CES of NSSO is that both capture any education expenditure across all age-groups and hence have broader coverage reflecting the perspective of life-long learning, whereas the *Social Consumption on Education* survey captures only school or college age-groups and those attending formal or informal education institutions below 35 years of age.

The following analysis on private and public expenditure on education is based on two sources: Ministry of Education, Govt of India for public expenditure and PFCE of NAS for private expenditure. Both sources have 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 private expenditure on education.

III Private and Public Expenditure on Education: Trends

Expenditure on education in India over seven-decade period since independence, reveals a remarkable growth in private and public expenditure. The private expenditure (PFCE) on education increased from Rs. 86.5 crores in 1951-52 to Rs. 514763.6 crores in 2019-20, whereas the public expenditure on education increased from Rs. 64.5 crores to Rs. 849279 (all in current prices) (Table-1). In terms of the per capita expenditure on education, private expenditure had increased from Rs. 2.4 in 1951-52 to Rs. 3841.5 in 2019-20, whereas the per capita public expenditure on education had increased from Rs. 1.8 in 1951-52 to Rs. 6337.9 in 2019-20 (Table-2).

Initially private expenditure on education was higher but later public expenditure outpaced the private. While the total private expenditure on education in India had increased by nearly six thousand times during the last seven decades period since independence, the public expenditure on education had increased by 13 thousand times during the same period. In other words, the rate of growth during the last seven decades in *current prices* is 13 percent per annum in case of private expenditure on education, whereas for the public expenditure on education it is 14 percent per annum. Similarly, the per capita private expenditure on education in India had increased by nearly sixteen hundred times during these seven decades, whereas the per capita public expenditure on education had increased by three thousand five hundred 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 percent per annum, whereas the *per capita public expenditure on education* is 12 percent per annum.

Table-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	11054.0	10307.0	814.1	64.5	86.3
1961-62	19010.0	16617.0	2225.4	260.3	213.2
1971-72	50999.0	41496.0	10610.9	1011.1	619.3
1981-82	175805.0	135676.0	41715.7	4298.3	2334.1
1991-92	673875.0	457735.0	170370.4	22393.7	9667.1
2001-02	2355845.0	1531672.0	619713.1	79865.7	40777.4
2011-12	8736329.0	4910447.0	2249526.5	333930.4	182378.0
2019-20	20339849.0	12262064.0	5069453.7	849279.7	514763.6

Notes: 1. Values are Rs. 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 State governments 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. GDP upto 2001-02 is based on 2004-05 Series (i.e. base year), thereafter it is 2011-12 Series.

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

Such a mammoth increase might have been partly due to inflationary tendencies of the economy but must be largely due to the *expanding base of education system in terms of both 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, number of colleges and universities were around 600, enrolment in schools was 238 lakh and in colleges and universities it was just 4 lakhs, and teachers in schools were 7 lakhs and a few thousands in colleges. They increased manifold during the last seven decades: around 15 lakhs schools, 50 thousand higher education institutions (HEIs) in the recent past with the enrolment more than 600 lakh in schools and 370 lakh in HEIs, and having teachers of more than 36 lakh in schools and 14 lakh in HEIs.

Table-2: Per Capita 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	303.1	282.6	22.3	1.8	2.4	0.7
1961-62	428.0	374.1	50.1	5.9	4.8	1.2
1971-72	920.1	748.7	191.4	18.2	11.2	1.6
1981-82	2545.2	1964.3	603.9	62.2	33.8	1.8
1991-92	7883.9	5355.2	1993.2	262.0	113.1	2.3
2001-02	22716.4	14769.3	5975.6	770.1	393.2	2.0
2011-12	71680.2	40289.4	18457.0	2739.8	1496.4	1.8
2019-20	151788.7	91507.2	37831.4	6337.9	3841.5	1.6

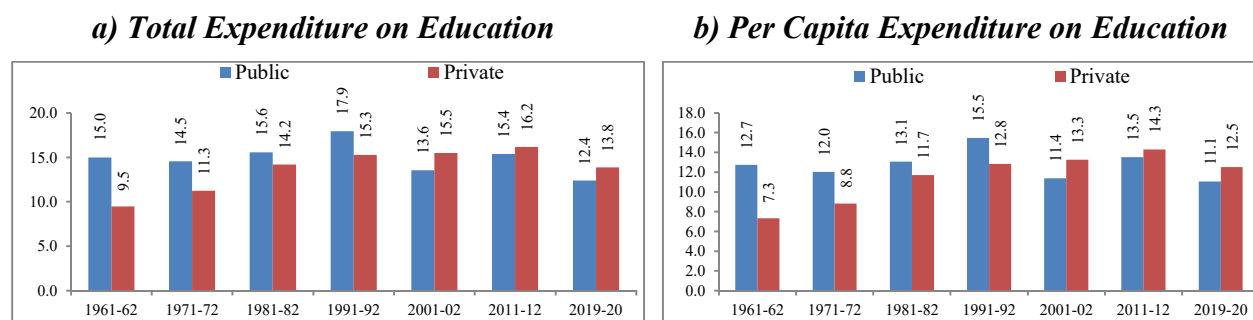
Notes: 1. Values are in Rupees (Rs.) and in Current Prices; 2. **GDP** – Gross Domestic Product of India; **PFCE** – Private Final Consumption Expenditure; **TBE** – Total Budget Expenditure of all sectors and combined of all states and Centre; 3. **Public** – Budget Expenditure on Education by both 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).

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.

It is also important to note in this context, that 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).

Undisputedly, the public expenditure on education has grown more rapidly than that of private during the last seven decades. It is important however to note that, the ratio of public to private had increased continuously for the first four decades but began decelerating during the last three decades especially since 1990s (Table-2). In other words, the growth in public expenditure on education was higher than that of private during the first four decades, from 1950s through 1980s, but thereafter (1990s through the present decade) it is the reverse (see Figure-1). Growth in private expenditure on education is higher than that of public expenditure since 1990s. The trend is in fact reflecting the increasing privatisation of education since 1990s. Currently (i.e. in 2019-20) the per capita public expenditure on education is 1.6 times higher than that of the private.

Figure-1: Growth (%) in Expenditure on Education in India: Private and Public



Notes: 1. Compound Annual Growth Rate (CAGR in %); 2. Growth of Expenditure in current prices.

Source: Authors' calculations based on sources mentioned in Table 1.

As the trend during the last three decades indicated, the faster growth in private expenditure on education over that of public would be continued and the ratio of public to private would further decline in the next decade; also private may outpace the public. 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. As the estimates of NSSO's recent 75th round *Survey on Education* (2017-18) show, nearly 41 percent 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 management¹. In higher education, more than 75 percent of institutions and 65 percent of enrolment is under private management in 2018-19². Even among the public (Govt) institutions there are various self-financed courses or programmes introduced for which there is a considerable level of enrolment.

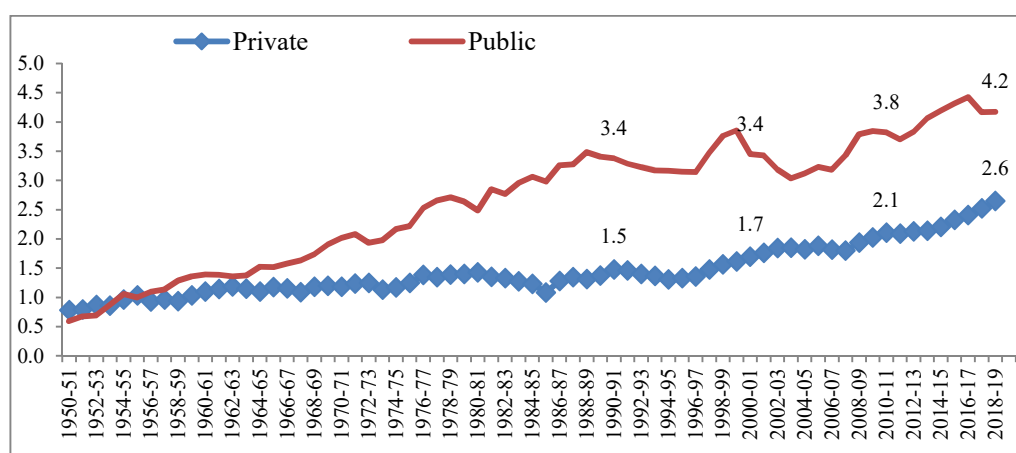
In terms of expenditure on education as a percentage of GDP, in 2019-20 India's public expenditure is 4.2 percent of GDP while private expenditure is 2.6 per cent of GDP (see Figure-2). Together, nearly 6.8 percent of GDP is spent on education in the country in 2019-20. It was

¹ NSS KI (75/25.2): Key Indicators of Household Social Consumption on Education in India.

² All-India Survey on Higher Education (AISHE) 2018-19, MHRD, Govt. of India.

0.6% and 0.8% of GDP by public and private sources respectively in 1950-51, and together it was only 1.4%. The percentage of public expenditure on education in GDP had increased by seven times whereas the percentage of private increased three times for the period during the last seven decades. Hence, the trend in expenditure on education as percentage of GDP during the last seven decades shows that it is increasing for both the private and public.

Figure-2: Private and Public Expenditure on Education in India as a Percentage of its GDP

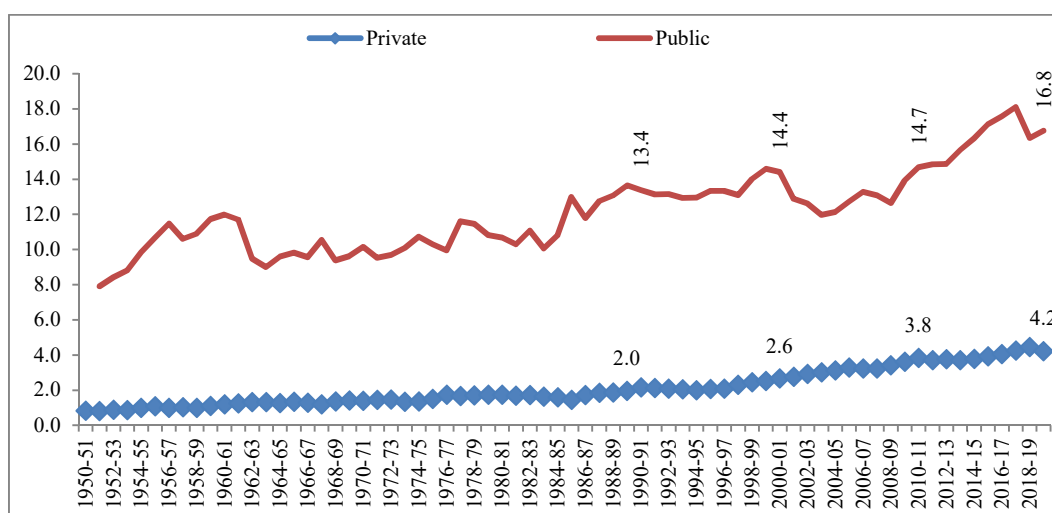


Notes: 1. **Public** – Budget Expenditure on Education by both the Centre and State Governments, as is compiled by Min of Education, GoI; **Private** – PFCE on Education (i.e. private/households' expenditure, excluding the Government/public expenditure).

Source: Authors' calculations based on National Accounts Statistics (NAS), Reserve Bank of India (RBI) and Ministry of Education, Govt of India.

An overview of 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.

As we examined earlier the private and public expenditure on education as a percentage of total private and public consumption expenditure respectively, is showing an increasing trend during the last seven decades (Figure-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 private education expenditure had increased from less than one percent (0.8%) in 1951-52 to above four percent (4.2%) in 2019-20 while the increase in the public expenditure domain was 7.9% to 16.8% 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 private final consumption expenditure was almost five times during the last seven decades. Moreover, the increase in education share in private domain is continuous and more consistent than that of public.

Figure-3: Public and Private Expenditure on Education

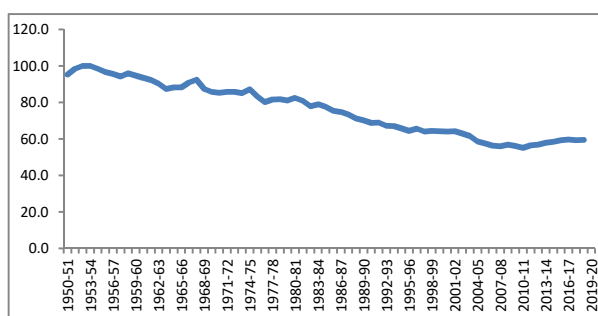
Notes: 1. **Private** - Private expenditure on education as a percentage of total PFCE; 2. **Public** – Public expenditure on education as a percentage of total budget expenditure (TBE).

Source: Authors' calculations based on sources mentioned above.

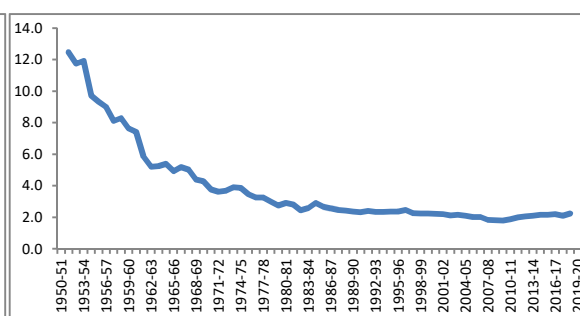
Private final consumption expenditure holds major share in the Gross Domestic Product³ (GDP) at market prices of a country. In India although there was gradual decline in share of PFCE (from 95% in 1950-51 to 60% in 2019-20) in GDP at market prices, it is still a single largest and a major contributing component of GDP (see Figure-4a). It also means that correspondingly the share of government expenditure is rising. This is reflected as the declining trend in ratio of Private (PFCE) to Government expenditure. The total private 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 in 2019-20 (see Figure-4b).

Figure-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 NAS.

The above illustration indicates that although share of PFCE in the GDP and ratio of PFCE to Government expenditure is declining, the share of education expenditure in the PFCE is

³ 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 $GDP_{MP} = C + I + G + (X - I)$.

increasing. It indicates increasing prioritisation of education in the private domain as a result of growing importance of education among the public and inadequacy of Government expenditure.

Finally, the real growth (i.e. in constant prices) in private and public expenditure on education gives the true picture and this highlights two aspects. Firstly, the growth in private expenditure on education (either total or per capita) is higher than the total private expenditure and secondly, growth in private expenditure on education is higher than that of public (Table-3). Thirdly, while accelerated rate of growth since 1970s is observed for private expenditure on education, there is a decelerated rate of growth throughout except 1980s and the last decade for public expenditure on education. All these trends reflect the growing burden on private pockets.

Table-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	4.0	3.4	8.7	13.9	6.8	2.0	1.6	6.7	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	5.7	5.4	3.4	1.1	0.8	3.5	3.1	1.2
1980s	5.2	4.0	5.3	8.0	4.4	3.1	1.8	3.2	5.9	2.3
1990s	5.8	4.8	5.5	5.6	6.1	3.9	2.8	3.5	3.7	4.1
2000s	6.4	5.3	6.0	4.3	5.9	4.7	3.6	4.4	2.7	4.3
2010s	6.6	6.9	6.2	6.1	7.8	5.4	5.7	5.0	4.9	6.7

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).

While the increasing share of education in the total PFCE, has a burdening effect on the household consumption expenditure, the higher growth in private expenditure on education vis-à-vis public expenditure has a substituting or complementing effect due to inadequacy of public expenditure. On an overall basis, the burden falling on private pockets has implications for affordability and thereby access to education.

Immediately after the independence (early 1950s) private expenditure on education was higher than that of public, a reflection of the British Colonial rule. 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 was privately financed (parents, village/town communities, philanthropies, charities etc.). Beginning with the state led development planning and more particularly from the Second Five-Year-Plan onwards, along with the recommendations of the Kothari Commission (1966); the first National Education Policy 1968 followed by the second National Education Policy 1986 there was a rise in the public expenditure on education. Since mid-1950s the public expenditure on education had outpaced the

private and that trend continued till 1980s. But during the last three decades following the economic reforms introduced during the early 1990s, the growth in private expenditure on education outpaced the public.

The recent third National Education Policy 2020, states curbing of commercialisation of higher 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 which are to be transparently and fully disclosed along with flexibility in required conditions for establishing private education institutions especially in the higher education segment. But given the ground realities this may lead to furthering of commercialisation of the private education.

The longstanding recommendation ‘public spending on education to be raised to 6% of GDP’ of the first National Education Commission headed by Kothari also endorsed by all subsequent National Education Policies, though could find place in manifestos and common minimum programmes is yet to be realised.

IV Concluding Remarks

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. In this backdrop, the present note examined the private and public expenditure on education in India. It is observed from the analysis that India is spending on education around 4% of GDP as a public expenditure and around 2.5% of GDP as private expenditure; together it is spending around 6.5% of GDP on education. Private expenditure on education as a share in private final consumption expenditure has risen 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 declining during this period. Such trend reflects increasing privatisation of education in India. This trend has far reaching policy implications especially in higher education.

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