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# An Analysis of Public Spending on Education in India with Special Reference to Odisha

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## ABSTRACT

Education plays vital role for human development. But unfortunately the annual budget allocation as percent of GDP in India is lower in comparison to the same in developing nations. To get a proper insight, the current paper makes a modest attempt to understand the spending pattern of Centre and States in general and of Odisha in particular. For this purpose, the study uses Union and State budget data from the year 1995 to 2016. Education continues to get an increasing allocation in absolute terms over the years, but as percent to GDP the allocation is not encouraging. The upcoming budget may focus on higher resources for education and spending towards building world class Universities and skill based education system to address the issue of unemployment.

Keywords: Public Spending; Education; Odisha; Skill based.

## **1.0 Introduction**

Education in India is provided by both public and private sector. Private sector education is expensive and mostly confined to privileged section of the society. Government financed education is highly subsidized and to some extent free and at school level it often comes with a combo package of free food and uniform. For providing this free service, government has to spend thousands of crores of rupees towards education. Both centre and States spend for enhancing quality and promotion of education.

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In India, government allocates its money on education sector under two accounts - revenue account and capital account. Revenue account budget is used for financing regular expenses like wages and capital budget for one time expense like infrastructure. So it can be interpreted in a way that revenue spending is for maintaining the existing facility and capital spending is for addition to the existing facility. This is the reason why capital account spending is much less to revenue account for most of the years.

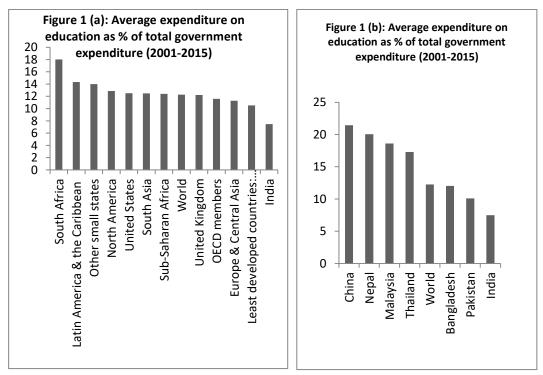
History speaks that during 16<sup>th</sup> and 17<sup>th</sup> century, education was confined only to the privileged group. Finkelstein (2000) mentioned that Edward Misselden and Thomas Mun wanted education to be extended to the industrial workers. And it was William Petty who first advocated equitable distribution of education. In 18th and 19th century, Horace Mann, Henry Barnard and Robert Owen favoured educational opportunities to be extended to the poor people.

Theodore Schultz marked the beginning of what Bowman (1966) later described as 'the human investment revolution in economic thought'. To quote US President Barack Obama, (25 July 2009) "in an economy where knowledge is the most valuable commodity a person and a country have to offer, the best jobs will go to the best educated - whether they live in the United States or India or China". This sentiment is reflected in the writings of Goldin (2001).

Starting from the same economic level as India, per capita income of China has increased between 1950 and 1959 by 100 percent accompanied by an equally dramatic educational expansion whereas in India by only 12-15 percent. Compared to India, China treats education with greater seriousness as an economic and political weapon. Realizing the importance of education, counties like Afghanistan, Algeria, Argentina, Brazil, Denmark, East Germany, France, Iran, Iraq, New Zealand, Norway, Poland, Sri Lanka, Turkey, USSR, UAR, and Yugoslavia did not charge any tuition fees at the early stage from students (Azad, 1976).

The entire world believes that every unit of money spent on education today, is going to bear fruits in the near future. US economy spends a lot of money on education per student as it believes that "the best jobs will go to the best educated" (Obama, 25 July 2009). It is evident from Figure 1 (a) that South Africa (18 percent) spends the highest amount of average expenditure on education as percent of total government expenditure (2001-2015) based on World Bank database. The average expenditure on education as percent of total government expenditure (2001-2015) in India is around seven percent which is lower than the countries like China, Pakistan, Bangladesh, Malaysia, Nepal, Thailand and the World average of 12 percent in the last fifteen years [Figure 1(b)]. Figure 1 (b) depicts that our neighboring countries like China, Nepal, Malaysia, and Thailand spend more than the world average. Bangladesh and Pakistan

spend little less than the world average but more than that of India. If India by spending less than other country is able to achieve the pseudo name of 'Knowledge Economy' then it can surely achieve higher development by spending more.



Source: As estimated by author based on data from World Bank

Since research has shown that right education has the potential to affect economic growth in a positive way (Schultz, 1968; Denison, 1966; Gounden, 1967; Erdem and Tugcu, 2011; Enders & Teichler, 1997; Post, 2011; Maqsood, Maqsood and Raza, 2012), spending on it is considered a wise choice. India being tagged as 'Knowledge Economy' exerts more pressure on the government to priorities the education sector. In this connection, the present piece of research work attempts to analyse the public spending on education in India vis-à-vis Odisha.

#### 2.0 Data and Method

Secondary data on public spending on education and Gross State Domestic Products (GSDP) were collected from Reserve Bank of India website for the period of 1995-96 to 2015-16 in current prices. The time frame includes financial disturbances like depression from 2008-10, introduction of 100 percent foreign direct investment (*FDI*) towards higher education since 2013, demonetization of more than 82 percent of Indian currency in 2016, and passing of the historic Goods and Services Tax bill.

Simple statistical tools like trend analysis, growth rate and central tendency are used to elaborate the findings. The spending undertaken by Centre and state are taken into consideration combined and separately. Both revenue account spending and capital account spending are considered.

#### 3.0 Analysis of Results

From the time of Independence and first Five Year Plan of India, education was not prioritized till the third Five Year Plan. Public spending in the fourth plan shows an abnormal rise because, based on the suggestions of the Education Commission (1964–1966) government announced the first National Policy on Education in 1968 towards 'radical restructuring' and compulsory education for children (Figure 2). It was during the Seventh Plan period (1985-1990) that education started receiving its proper place in the budget.

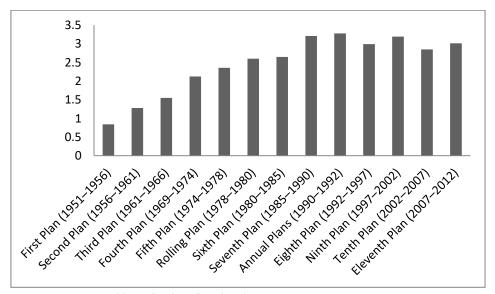


Figure 2: Expenditure on Education as % age GDP (MHRD)

Source: As estimated by author based on data from MHRD.

Prime Minister Rajiv Gandhi introduced National Policy on Education, 1986 and under this "special emphasis on the removal of disparities and to equalize educational opportunity". The government initiated Open University and Rural University. The Eighth plan saw a reduction in government spending on education even though the UPA government took steps to modify the National Policy on Education, 1986 and focus on "Common Minimum Program" because of negative BOP after LPG under New Economic Policy 1991. Another major setback to spending on education was during the Tenth plan. The global financial crisis which sent shock waves, affecting many countries though did not harm India, but the money allocated to education was called back for security reasons. Judging the positive impact of global financial crisis of USA, India carried on with its usual spending on education during the Eleventh Plan.

#### 3.1 Public spending on education by the Centre and States

Public spending on education by Union and state governments are being discussed here. Both revenue accounts and capital accounts are accounted for. Revenue expenditures are made for immediate expenses like salaries, wages and so on, while capital expenditures are for creation of fixed assets like infrastructure. The secondary data for 1995- 2006, past 20 years show that spending by revenue and capital account by both Centre and state governments taken together took a steep upward movement after 2008-09. While the percentage share of public spending on education with respect to the developmental expenditure in both revenue and capital account are compared to the share of the developmental expenditure undertaken by revenue and capital account combined to GDP, it is seen that revenue and capital account taken together is spending much more on education than the share of total developmental spending to GDP (Table 1). Revenue account itself is spending more on education than capital account.

Revenue accounts expenditure on education as percentage of total developmental expenditure follows same pattern as expenditure on education, art and culture as percentage of total developmental expenditure of revenue and capital taken together. The expenditure in revenue account alone is three times the share of developmental expenditure to GDP on education. The annual World Economic Situation Prospects report projected India's growth rate to be "6.7 percent in 2017, 7.2 percent in 2018 and 7.4 percent in 2019" (Table 2). This is because of the sound monetary and fiscal policy, growth in private consumption, control of recent inflation and "Indian government's emphasis on public investment and infrastructure projects".

By Account	Revenue + Capital	Revenue + Capital	Revenue	Capital
Centre + States	Total Developmental Expenditure as percent of GDP	Expenditure on education, art & culture as percent of Total Developmental Expenditure	Expenditure on education as percent of Total Developmental Expenditure	Expenditure on education, art & culture as percent of Total Developmental Expenditure
1995-96	10	26	31	2
1996-97	10	26	30	2
1997-98	10	26	31	2
1998-99	11	28	32	2
1999-00	11	29	34	1
2000-01	11	27	32	1
2001-02	11	27	32	1
2002-03	11	26	31	1
2003-04	12	23	28	1
2004-05	11	25	31	1
2005-06	11	23	30	2
2006-07	12	23	28	2
2007-08	12	20	27	2
2008-09	14	21	25	3
2009-10	14	23	28	2
2010-11	14	23	28	3
2011-12	14	24	28	2
2012-13	14	23	28	2
2013-14	13	24	29	3
2014-15	14	22	27	3
2015-16	14	23	29	4

# Table 1: Percentage Share of Public Education Spending: Centre and States Combined

Source: As estimated by author based on data from RBI database.

The revenue expenditure on education has been more fluctuating over the years compared to GDP. The revenue expenditure on education has been higher in between 1998-2000. Post 2000, the growth rate in GDP has been greater than that of the revenue expenditure on education. During 2005-06, both were approximately same and the next year it was slightly more than GDP growth rate. But the year 2007-08 when the world economy was going through a financial crisis, the expenditure on education was steeply cut down from 19 percent to seven percent by 12 percent. However, immediately the next year it was raised by 19 percent. Then onwards the expenditure rate has been same as growth rate of GDP.

Centre and states	GDP Growth Rate	Growth Rate in Expenditure on Education, art & culture (Revenue + Capital)	Growth Rate in Expenditure on Education (Revenue )	Growth Rate in Expenditure on Education, art & culture (Capital)
1996-97	16	15	15	14
1997-98	11	14	14	5
1998-99	15	25	25	21
1999-00	12	20	21	- 33
2000-01	8	1	1	4
2001-02	8	6	6	29
2002-03	8	5	5	- 15
2003-04	12	7	7	50
2004-05	14	13	12	37
2005-06	14	15	14	70
2006-07	16	19	19	40
2007-08	16	8	7	32
2008-09	13	27	26	36
2009-10	15	26	26	2
2010-11	20	24	24	22
2011-12	12	14	15	- 13
2012-13	14	13	13	26
2013-14	13	11	11	27
2014-15	11	12	11	62
2015-16	9	12	11	32

 Table 2: Growth Rate of Public Education Spending by Centre and States

 Combined

Source: As estimated by author based on data from RBI database.

#### 3.2 Public spending on education by the Centre

Expenditure on education by the Union government as a percentage of the total developmental expenditure has been increasing since 1995-96. It was 8.3 percent in 1995 and has increased to 13.3 per cent in 2015-16 (Table 3). Capital expenditure is consistent over the years, except 2008-10. Due of this, the gap between capital expenditure of Centre and GDP keeps fluctuating.

Growth rate in public education spending under capital account is extremely fluctuating ranging between 103.7 in 2009-2010 to - 33.1 in 2011-12 (Table 4). Revenue spending too shows volatility. However ups and downs in public education spending by Centre is not in the same pattern as that of GDP. GDP growth rate appears to be smoother compared to growth in central spending towards education.

Centre	Total Developmental Expenditure as percent of GDP (Revenue + Capital)	Developmental Expenditure as percent of GDP (Revenueeducation, art & culture as percent of Total Developmental Expenditure+Expenditure (Revenue + Capital)		Expenditure on Education, art & culture as percent of Total Developmental Expenditure (Capital)
1995-96	3.9	7.9	8.3	0.9
1996-97	3.7	7.9	8.2	0.9
1997-98	4.0	8.4	9.0	0.6
1998-99	4.0	9.7	10.4	0.5
1999-00	4.2	9.6	10.5	0.4
2000-01	4.2	9.5	10.3	0.4
2001-02	4.3	8.9	9.5	0.4
2002-03	4.7	8.6	9.1	0.4
2003-04	4.7	8.4	8.9	0.3
2004-05	4.4	10.0	11.0	0.4
2005-06	4.7	11.0	11.9	0.3
2006-07	5.1	11.6	12.5	0.2
2007-08	6.1	9.6	11.8	0.1
2008-09	6.8	10.0	10.6	0.2
2009-10	6.4	10.4	11.1	0.6
2010-11	6.7	10.6	11.6	0.2
2011-12	6.6	10.8	11.8	0.2
2012-13	6.1	11.5	12.6	0.2
2013-14	5.7	12.2	13.6	0.2
2014-15	5.1	10.9	12.0	0.2
2015-16	4.5	11.2	13.3	0.3

# Table 3: Percentage Share of Public Education Spending by Centre

Source: As estimated by author based on data from RBI database.

## Table 4: Growth Rate of Public Education Spending of the Centre

Centre	GDP Growth Rate	Growth Rate in Expenditure on Education, art & culture (Revenue + Capital)	Growth Rate in Expenditure on Education (Revenue)	Growth Rate in Expenditure on Education, art & culture (Capital)
1996-97	15.7	9.8	10.7	- 3.5
1997-98	10.8	25.4	25.6	- 5.6
1998-99	14.7	34.7	36.0	1.0
1999-00	12.2	15.1	15.2	0.8
2000-01	7.6	7.9	8.1	- 1.3
2001-02	8.2	3.1	2.3	5.2
2002-03	7.7	13.0	12.6	4.2
2003-04	12.0	10.5	11.1	11.5
2004-05	14.1	27.7	28.8	27.2
2005-06	13.9	33.5	34.6	- 9.6

2006-07	16.3	32.1	33.0	- 10.7
2007-08	16.1	14.7	14.8	9.0
2008-09	12.9	32.0	32.1	43.1
2009-10	15.1	11.7	11.5	103.7
2010-11	20.2	29.2	29.9	-16.8
2011-12	12.2	13.7	14.2	- 33.1
2012-13	13.9	9.7	9.7	53.8
2013-14	13.3	12.9	12.3	15.4
2014-15	10.8	-11.4	-11.8	- 0.6
2015-16	8.7	-1.0	-1.2	89.0
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Source: As estimated by author based on data from RBI database.

## 3.3 Public spending on education by states

Although the spending on education by states went up in nominal term but as percentage share of developmental spending, it decreased (Table 5).

States	Total Developmental Expenditure as percent of GDP (Revenue + Capital)	Expenditure on education, art & culture as percent of Total Developmental Expenditure (Revenue + Capital)	Expenditure on education as percent of Total Developmental Expenditure (Revenue)	Expenditure on Education, art & culture as percent of Total Developmental Expenditure (Capital)
1995-96	7.70	30.92	37.54	2.38
1996-97	7.64	31.04	36.22	2.89
1997-98	7.65	31.30	37.79	2.35
1998-99	7.76	33.14	38.81	2.85
1999-00	7.85	35.59	41.71	1.69
2000-01	7.73	33.67	40.37	1.48
2001-02	7.63	33.56	39.85	1.89
2002-03	7.27	33.25	39.90	1.47
2003-04	8.06	28.45	35.75	1.49
2004-05	7.39	29.95	38.86	1.75
2005-06	7.77	28.34	37.71	2.31
2006-07	8.27	26.51	35.39	2.59
2007-08	7.83	25.86	34.86	2.98
2008-09	8.43	26.09	34.63	3.43
2009-10	8.80	28.09	36.89	3.01
2010-11	8.31	30.53	38.54	3.68
2011-12	8.58	30.15	38.03	2.86
2012-13	9.07	28.50	35.20	3.17
2013-14	8.66	29.47	36.67	3.60
2014-15	11.33	26.06	32.38	3.96
2015-16	11.17	27.11	33.81	4.71

Source: As estimated by author based on data from RBI database.

The fall in percentage share of revenue spending on education was more prominent to capital spending. Capital account spending towards education is very less and the growth rate is unstable (Table 6).

States	GDP Growth Rate	Growth Rate in Expenditure on Education, art & culture (Revenue + Capital)	Growth Rate Growth Rate in Expenditure on Education (Revenue)	Growth Rate Growth Rate in Expenditure on Education, art & culture ( Capital)
1996-97	15.70	15.21	15.28	15.44
1997-98	10.79	11.89	11.96	5.64
1998-99	14.69	23.28	23.28	22.36
1999-00	12.19	21.73	22.59	-35.03
2000-01	7.63	0.39	0.37	4.00
2001-02	8.19	6.36	6.21	31.60
2002-03	7.66	1.59	1.69	-16.57
2003-04	12.03	6.40	5.96	53.62
2004-05	14.10	10.01	9.77	37.80
2005-06	13.92	13.42	12.42	74.70
2006-07	16.28	15.70	15.11	41.49
2007-08	16.12	7.24	6.52	32.03
2008-09	12.89	22.64	22.10	35.86
2009-10	15.06	29.35	30.60	0.11
2010-11	20.17	23.30	23.33	23.10
2011-12	12.23	14.43	15.27	-12.34
2012-13	13.91	13.84	13.63	24.99
2013-14	13.28	11.85	11.47	27.58
2014-15	10.78	28.21	27.19	63.16
2015-16	8.71	11.47	10.84	31.36

Table 6: Growth Rate of Public Education Spending of the States

Source: As estimated by author based on data from RBI database.

The capital expenditure on education is highly fluctuating ranging from as high as 74.70 (2004-05) to as low as -35.03 (1999-00). From 2004 to 2009 the growth rate in capital account spending has been greater than revenue account spending and even GDP growth rate.

#### 3.4 Public spending on education by Odisha

The total developmental spending of Odisha shows an upward slope from 1999 till 2009. The figures fall from 2009-10 but then again it starts moving up. In the same period Odisha's GSDP also dropped (Table 7).

ODISHA	Developmental Expenditure asculture as percentpercent of GSDPDevelopmentalI(Revenue + Capital)ExpenditureI(Revenue + Capital)(Revenue + Capital)I		Expenditure on education as percent of Total Developmental Expenditure (Revenue)	Expenditure on Education, art & culture as percent of Total Developmental Expenditure (Capital)	
1999-00	15	31	35	1.11	
2000-01	13	32	37	2.34	
2001-02	12	31	36	2.74	
2002-03	12	31	37	1.86	
2003-04	12	29	32	8.01	
2004-05	9	30	35	0.20	
2005-06	9	30	35	0.23	
2006-07	9	26	31	0.31	
2007-08	10	25	32	0.21	
2008-09	12	26	33	0.09	
2009-10	1	29	36	0.38	
2010-11	1	29	34	4.63	
2011-12	1	25	30	2.36	
2012-13	1	24	29	0.76	
2013-14	1	22	27	2.13	
2014-15	2	22	27	3.38	
2015-16	2	19	25	3.03	

## Table 7: Percentage Share of Education Spending of Odisha

Source: As estimated by author based on data from RBI database.

According to Economic Survey of Odisha 2011-12, "two factors have impacted the State's fiscal scenario in 2009-10 and 2010-11. The first was the worldwide recession, which adversely affected the Indian economy as well as the State's economy in many ways including reductions in the State's own revenues and central transfers. The second actor impacted materially on the expenditure side of the budget. The State implemented revision of salaries and pensions of its employees as per the recommendations of the 6<sup>th</sup> Pay Commission, effective from 1 January 2006". Capital account remains to be fluctuating over the time. Odisha government spends more on education compared to developmental sending's share of GSDP. Revenue account spending is greater compared to others. Percentage share of education spending from revenue account shows a downward sloping pattern over the years. Capital account remains low with occasional rise in 2003-04 and 2010-11. During 2009-10 to 2011-12 there has been a huge leap in growth rate of capital account spending by Odisha Government of about 1331.2 percent (Table 8).

ODISHA	GSDP Growth Rate	Growth Rate in Expenditure on Education, art & culture (Revenue + Capital)	Growth Rate Growth Rate in Expenditure on Education (Revenue)	Growth Rate Growth Rate in Expenditure on Education, art & culture (Capital)
2000-01	1	0.05	-9.78	117.2
2001-02	8	0.06	-0.47	18.0
2002-03	6	0.06	8.62	-11.9
2003-04	23	0.06	6.62	273.8
2004-05	27	0.05	-0.60	-97.3
2005-06	9	0.06	15.85	13.4
2006-07	20	0.05	7.04	86.4
2007-08	27	0.05	31.76	36.2
2008-09	15	0.04	37.96	-42.1
2009-10	10	0.00	-87.68	-60.9
2010-11	21	0.21	15.94	1331.2
2011-12	14	0.16	6.00	-46.6
2012-13	13	0.15	6.66	-59.8
2013-14	9	0.16	14.03	285.8
2014-15	12	0.14	18.59	132.6
2015-16	7	0.11	16.38	36.0

#### Table 8: Growth Rate in GSDP and Education Spending of Odisha

Source: As estimated by author based on data from RBI database.

In 2003-04 capital account grew by 273.8 percent. Revenue account growth rate is fluctuating too, ranging from 37.96 percent in 2008-09 to -87.68 percent the following year 2009-10.

#### 3.5 Spending per plan period

During the Ninth and Tenth Plan the total developmental expenditure by revenue and capital department (Table 9) increased in amount (by Rs. 128550 crore) but the proportion (10 percent of GDP) remained almost the same.

However, during the Eleventh Plan, there was a change in percentage spending by more than three percent. A large portion of the total developmental budget has been allocated for education. Even though in nominal terms the amount of expenditure on education is increasing, but as percentage of total developmental expenditure the expenditure on education has not increased much.

Revenue account and capital account spending per plan period on percentage basis of total developmental spending tend to move in opposite directions for Centre (Table 10). Under revenue account, Centre increases spending on education but the capital account spending is reduced per plan.

Plan Era	GDP	Total development al. (Revenue + Capital) [As % of GDP]	Education, art & culture. (Revenue + Capital) [As % of Devt.Exp]	Total developmen tal. (Revenue)	Educatio n. (Revenue) [As % of Devt.Exp]	mental. (Capita I)	Education, art & culture. (Capital) [As % of Devt.Exp]
1997- 02	1755 238	184489 (10 %)	49485 (26 %)	153384	48314 (31 % )	30958	544 (1 % )
2002- 07	2857 370	313039 (10 % )	78401 (25 % )	251922	76503 (30 % )	59745	808 (1 % )
2007- 12	5950 678	776247 (13 % )	170511 (21 % )	596945	164304 (27 % )	175212	4061 (2 % )

## Table 9: Spending Per Plan Period (in ₹ Crore): Centre and States Combined

Source: As estimated by author based on data from RBI database.

Table 10: Cent	ral Spending	Per Plan	Period (	₹ Crore)
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Plan Era	GDP	Total developmental (Revenue + capital) [As % of GDP]	Education, art & culture. (Revenue + capital) [As % of Devt. Exp]	Total developme ntal (Revenue)	Education (Revenue) [As % of Devt. Exp]	Total develop mental (Capital)	Education art & culture. (Capital) [As % of Devt. Exp]
9 <sup>th</sup> Plan 1997-02	9932 160	412511 (4.15 % )	38068 (9.23 % )	362345	36155 (9.98 %)	50166	212 (0.42 % )
10 <sup>th</sup> Plan 2002-07	1660 8114	789504 (4.75 % )	80320 (10.17 %)	701320	77065 (10.99 %)	88184	273 (0.31 % )
11 <sup>th</sup> Plan 2007-12	3361 5134	2207168 (5.57 %)	228714 (10.36 % )	1952206	222628 (11.40 % )	254961	498 (0.19 % )

Source: As estimated by author based on data from RBI database.

For States (Table 11) total developmental spending (10 percent) as percentage of GDP was highest during the 10<sup>th</sup> Plan period, but total educational spending (23 percent) as percentage of total developmental spending was the lowest during that period.

Capital account spending on education seems to be at its lowest too (1.8 percent). Revenue account spending was higher than its previous plan by seven percent. Odisha government had spent 20-30 percent of total developmental spending on education from 1997 to 2012 (Table 12).

Revenue account share on education spending falls subsequently for Three Plan period. However, capital account falls during  $10^{th}$  plan remaining same for  $9^{th}$  and  $11^{th}$  plan.

Plan Era	GDP	Total developme ntal. (Revenue + capital) [As % of GDP]	Education, art & culture. (Revenue + capital) [As % of Devt.Exp]	Total develop mental. (Revenu e)	Educatio n(Revenu e) [As % of Devt.Exp ]	Total developmen tal. (Capital)	Education , art & culture. (Capital) [As % of Devt.Exp]
9 <sup>th</sup> Plan 1997-02	8995592	695781 (7%)	230877 (33 % )	726221	226726 (31 % )	118507	2566 (2.1 %)
100002	0775572	(770)	(33 /0)	720221	(31 /0 )	110507	(2.1 /0 )
Plan		1474670	339843		332769		4643
2002-07	14669253	(10 %)	(23 %)	869004	(38 %)	250598	(1.8%)
11 <sup>th</sup>							
Plan		2436322	676324		650338		20656
2007-12	29173801	(8%)	(27 %)	1787415	(36 % )	648908	(3.1%)

Table 11: State Spending Per Plan Period (₹ Crore)

Source: As estimated by author based on data from RBI database.

Plan Era	GDP	Total developme ntal. (Revenue + capital) [As % of GDP]	Education, art & culture. (Revenue + capital) [As % of Devt. Exp]	Total develop mental. (Revenu e)	Education (Revenue) [As % of Devt. Exp]	Total develop mental. (Capital )	Education, art & culture. (Capital) [As % of Devt. Exp]
9 <sup>th</sup> Plan	3203	33332	10050		9931		120
1997-02	02	(10.4 %)	(30.1 %)	28537	(34.8 %)	4796	(2.5 %)
10 <sup>th</sup> Plan	7400	43883	11462		11429		33
2002-07	80	(5.9 %)	(26.1 %)	35438	(32.2 %)	8445	(0.3 % )
11 <sup>th</sup> Plan	1399	20406	4476		4361		115
2007-12	963	(1.4 % )	(21.9 %)	16036	(27.1 %)	4370	(2.6 %)

Source: As estimated by author based on data from RBI database.

## 3.6 Comparative study between Odisha and India

On the recommendations of the 14<sup>th</sup> Finance Commission, central government reduced its own budgetary spending on social sector and channelized the fund towards states. The states chose education and health among the social sectors to spend the received fund on. Developed states with higher funds decided to spend more on

education compared to others like Odisha. From 2011 onwards, Centre has been spending less on education than states in India.

As per data (Figure 3) "one encouraging sign in recent budgets is that poorer states seem to be raising their expenditure on health and education at a pace that is equal, or sometimes greater than their richer counterparts. For instance, education outlay in states such as Jharkhand and Madhya Pradesh saw greater increases in the fiscal year ending March 2017 than developed states such as Delhi and Andhra Pradesh".

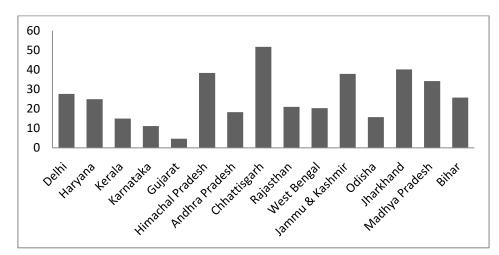


Figure 3: States' education\* spending (% YoY)

\*Education' also includes sports, art and culture; BE: Budget Estimates & RE: Revised Estimates Source: As estimated by author based on data from CMIE States of India and Mint.

Centre's spending on education as percentage of its own total developmental spending have remained low yet consistent from 1999-00 till 2015-16 (Table 13). There seems to be a slight rise in the share from 2003-04 to 2006-07. During world depression the share was reduced. Total states share of spending on education out of total developmental spending rather has been falling till 2008-09. During world financial crises the states spent more on education. Post depression the increasing share started reducing. Odisha government has been cutting down its share of spending on education between 2008-09. However, in 2009-10 the share of spending was increased between 2010-11, then it started falling between 2015-16.

Year on year growth rate comparison (Table 14) shows both Centre and states have high fluctuations. States growth rate started rising from 2000-01 whereas Centre growth rate increased a year later. Both Centre and states increased their spending from 2002-03 till 2006-07.

Table 13: Expenditure on Education, Art & Culture as Percent of To	tal
<b>Developmental Expenditure (Revenue + Capital)</b>	

Year	Centre	States	Odisha
1999-00	9.6	35.59	31
2000-01	9.5	33.67	32
2001-02	8.9	33.56	31
2002-03	8.6	33.25	31
2003-04	8.4	28.45	29
2004-05	10.0	29.95	30
2005-06	11.0	28.34	30
2006-07	11.6	26.51	26
2007-08	9.6	25.86	25
2008-09	10.0	26.09	26
2009-10	10.4	28.09	29
2010-11	10.6	30.53	29
2011-12	10.8	30.15	25
2012-13	11.5	28.50	24
2013-14	12.2	29.47	22
2014-15	10.9	26.06	22
2015-16	11.2	27.11	19

Source: As estimated by author based on data from RBI database.

# Table 14: Growth Rate in Expenditure on Education, art & culture. (Revenue + Capital)

Year	Centre	States	Odisha
1999-00	15.1	21.73	0.05
2000-01	7.9	0.39	0.06
2001-02	3.1	6.36	0.06
2002-03	13.0	1.59	0.06
2003-04	10.5	6.40	0.05
2004-05	27.7	10.01	0.06
2005-06	33.5	13.42	0.05
2006-07	32.1	15.70	0.05
2007-08	14.7	7.24	0.04
2008-09	32.0	22.64	0.00
2009-10	11.7	29.35	0.21
2010-11	29.2	23.30	0.16
2011-12	13.7	14.43	0.15
2012-13	9.7	13.84	0.16
2013-14	12.9	11.85	0.14
2014-15	-11.4	28.21	0.11
2015-16	-1.0	11.47	0.05

Source: As estimated by author based on data from RBI database.

In 2007-08 both Centre and states reduced their spending. The following year 2008-09 both increased. But in 2009-10 states kept increasing their growth rate but the Centre reduced. Centre even showed negative growth rate (-11.4) during 2014-15. Growth rate in Odisha government spending on education is negligible and stable. During the 9<sup>th</sup> plan period the difference between Odisha's share of spending on education and all states share of spending on education was only 2.9 percent, which increased to 3.1 percent in the 10<sup>th</sup> plan and subsequently to 5.1 percent in the 11<sup>th</sup> plan (Table 15). Odisha's share of spending on education kept falling with each successive plan period, but the Centres share of spending on education decreased only during 10<sup>th</sup> Plan but subsequently went up in the 11<sup>th</sup> Plan.

Plan Era	Centre	States	Odisha
9 <sup>th</sup> Plan: 1997-02	9.23 %	33 %	30.1 %
10 <sup>th</sup> Plan: 2002-07	10.17 %	23 %	26.1 %
11 <sup>th</sup> Plan: 2007-12	10.36 %	27 %	21.9 %

 Table 15:Spending Per Plan Period (Revenue + Capital)

Source: As estimated by author based on data from RBI database.

#### 4.0 Conclusion

The funds allocated for education at least in nominal terms seems to be increasing per budget. But the percentage share of GDP seems to be low for a country exhaling in service sector and boasting of being a 'Knowledge Economy'. The major share of money is spent towards meeting the recurring expenses of the education sector. Occasionally money is sanctioned to capital account for building of infrastructure or long term assets. The current scenario demands more spending on job oriented institutes to control unemployability of Indian graduates. National Board for Skills Assessment and Certification (NBSAC) may be made more popular. The idea of developing Skills University like that in Singapore can be adopted. Vocational training can be given priority. It is time to priorities outcome based education system to output based education system.

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