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**Social Expenditures at Sub-National
Level: An Experience from Indian
state of Odisha**

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Social Expenditures at Sub-National Level: An Experience from Indian state of Odisha*

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Abstract

The composition and trends of social expenditures at sub-national level in India has been examined using the secondary data from 1987-88 to 2013-14 of the state of Odisha. The composition shows (1) the insignificant share of productive social expenditures, (2) significant share of education relegating the role of health care and (3) higher priority of transfer payments relative to the level of employment and health. The comparative analysis of the composition between pre and post-restructuring period indicates the shifting of priority from education and health towards transfer payments in the later than the former period. The level of social expenditures has been declined over the time period leading to excessive contraction of educational expenditures. The decline in the level of social expenditures is attributed to the use of implicit loopholes of the efficiency criteria used for the devolution of federal transfers. For the economic development of the state increased level of social expenditures, higher priority of education and health and reform in the efficiency criteria used for the devolution of transfers are of crucial need of the hour.

Key words: social expenditures, health, education, transfer payments, efficiency criteria

JEL Classification codes: I32, I10, I20, H10, G10

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1. Introduction

The issues of social expenditures have been widely discussed in the literatures due to low level and increasing inequalities in the provision across the sub-national (state) levels (Kurian, N J 2000)¹. The lower level and increasing inequality leads to low level of economic development in the country (Bhattacharya, Govind 2009) due to interlinkage between investment in social (human capital) and economic expenditures (physical capital) (Appleton, Simon and Francis Teal 1998). The increasing inequality in the provision results inequality in the levels of development across states. The low level of social expenditures is because of inefficient bureaucracies, corruption and waste. However, mainly the introduction of economic reforms during 1990s has adversely affected the expenditures on social services particularly in the poorer states (Dev, S Mahendra and Jos Moij 2002) despite a series of corrective measures². With the adoption of corrective measures few states improved significantly while others lagged behind. Odisha improved to a larger extent than other states in terms of own revenue efforts and expenditure contraction (Ravishankar et al 2008). In this context, this paper re-examines the trends and composition of social expenditures in Odisha.

The remaining structure of the paper is organized as follows. The relevant literatures relating to social expenditures have been reviewed in Section II. In Section III the sources of data and research methods used are presented. The empirical results of composition and trends of social expenditures in Odisha have been explored in Section IV. This section also analyses the comparative study of composition and trends of social expenditures between pre and post restructuring period. Section V gives an outline of summary and policy suggestions.

¹ Although these expenditures are concurrent jurisdictions of both centre and states, the share of states is significant (Dev, S Mahendra and Jos Moij 2002; Mohan, Rakesh 2005). S Mahendra Dev and Jos Moij (2002) have estimated that the social expenditures of states were 85% and 80% during 1990-91 and 1998-99 respectively.

² The two notable fiscal discipline measures are Medium Term Fiscal Restructuring Programme (MTFRP) and Fiscal Responsibility Budget Management Act (FRBMA) introduced during 11th and 12th Union Finance Commission (UFC) periods. According to the former, if the state eliminates the revenue deficits, contracts the fiscal deficit to 2.5 per cent of GSDP and interest payment to 18-20 per cent of revenue receipts by 2004-05, it will receive full amount of incentive grants in proportion to its population from the designed fund. Similarly on the basis of the later debt relieves are given to states on the conditions of elimination of revenue deficits by 2008-09, reduction of fiscal deficits to 3 per cent of GSDP or its equivalent ratio of interest payment to revenue receipts, committing to annual reduction targets for both deficits, annual statement of the prospect of state economy and fiscal strategy and special statement along with budget giving the details of number of employees and aided institutions.

Part II

2. Review of Literatures

The trend of social expenditures in India has been widely discussed in the literatures (Dev, S Mahendra and Jos Moij 2002; Guhan 1995; Lalvani, Mala 2009). Dev et al (2002) has examined the trends of combined social expenditures of centre and states, social expenditures of centre as well as average level of social expenditures of 25 states from 1990-91 to 2000-01. In addition to it, they have analysed the trends of social expenditures of 15 major states each³. The observations in the trends are (1) declining level of combined social expenditures of centre and state, (2) Increased level of central social expenditures and (3) declining level of state social expenditures. The trends of major heads of combined social expenditures of centre and states show that (1) the share of education has increased (2) the share of health has remain constant, (3) the share of rural development declined in the latter half of 1990s and (4) the share of expenditures on basic minimum services increased. The trends of aggregate social expenditures of 25 states reveals that (1) the share of education has increased (2) the share of health has declined and (3) the share of rural development declined in the later half of 1990s. Declining share of education in all states except Haryana, Orissa, Punjab and Rajasthan and share of health in all states except Haryana, Punjab and Rajasthan and MP and mix trend of water supply and sanitation for all states and (5) better performance of rich and middle income states than the poorer states are the glaring findings of the analysis of the trends of social expenditures of 15 major states.

Guhan (1995) has examined the trends of social expenditures of the central and state governments from 1990-91 to 1995-56 using social expenditures as percentage of total expenditures as well as GDP. He has found that the level of central social expenditures has marginally increased while that of states has declined drastically over the period. Chakrabarty et al (2006) has compared the shares of combined educational expenditures of centre and states as well as the aggregate educational expenditures of 15 major states between pre and post reform period. They have found that the shares of both the variables have significantly declined in post than pre reform period. Bhat et al (2006) has shown that the trend of aggregate public

³ The trends of social expenditures have been examined using the trends of per capita figure and social expenditures as percentage of total expenditures and Gross State Domestic Product (Dev, Mahendra and Jos Mooij 2002).

health care expenditures of all states has declined significantly from 1987 to 2003. It is due to contraction of health care expenditures with the introduction of liberalization.

However, little attention has been drawn to explore the trends and composition of social expenditures at the sub-national level in the restructuring period.

Part III

3. Data Base and Research Methods

The secondary data collected from 1987-88 to 2013-14 have been used to examine the level and composition of social expenditures in Odisha. The data relating to different components of social expenditures have been collected from Reserve Bank of India (RBI) Bulletins, RBI, website www.org.rbi.in and Odisha Budget Papers. The various Censuses of India for Population figure and Central Statistical Organization for Net State Domestic Product data have been referred.

The composition of these expenditures has been examined using their per capita figure, percentage of total social expenditures, total expenditures and NSDP over the time periods. In addition to it, the composition has been explored between pre and post restructuring period. The per capita figures reflect the total amount of social services available to an individual per time period. The social expenditures as percentage of total social expenditures, total expenditures and NSDP indicate the share of different components of social expenditures in their total, the share of social expenditures in total requirements and the effort of the state for human capital formation respectively. The level of these expenditures has been analysed using the overall growth rates of total as well as per capita figures.

Part IV

4. Empirical Results of Composition and Trends of Social Expenditures in Odisha

The composition of social expenditures⁴ reveals that (1) education has been given significant priority, (2) the role of health care has been neglected, (3) relatively higher priority has been given to the transfer payments than the health and (4) the

⁴ The social expenditures mainly consists of education, arts, sports and culture, public health and family welfare, water supply and sanitation, housing, urban development, labour and employment, welfare of SC, ST and OBC, social security measures, nutrition and others. The relief for natural calamities has been excluded from the analysis since these expenditures depends on the extent of natural calamities. These expenditures are met out of both revenue and capital account of the budget. The revenue account expenditures are the consumption expenditures while the capital account expenditures are investment expenditures.

revenue account social expenditures constitute more or less total social expenditures (Table 1). It is observed from the trends that (1) the total social expenditures are growing at lower pace than the total expenditures of the state (2) the expenditures on education are growing at higher rate than the expenditures on health and NSDP (3) the growth rate of health expenditures is lower than NSDP, total social expenditures, revenue expenditures and total expenditures of the state and (3) the expenditures on welfare of SC,ST and OBC are rising at a higher rate than all the components of social expenditures, revenue expenditure, total expenditures and NSDP (Table 3).

4.1: Composition of Social Expenditures in Odisha

The estimation of the average shares of different components of social expenditures show that the share of education is highest (52.7%) among all the heads of social expenditures over the period of time. The share is around four times of health expenditures. The combined expenditure on health, family welfare, water supply, sanitation and nutrition is even less than half of the share of education. The expenditures on medical facility with low expenditures on water supply, sanitation and nutrition will not improve the health of the people due to the expenditures on the later three are directly linked with the health of people. Since health and education are interconnected, the low level of expenditures on health relative to education will deteriorate the quality of education⁵ (Jocelyn Finlay, 2006; Weili Ding and Steven F. Lehrer, 2007; Marc Suhrcke and Carmen de Paz Nieves, 2011).

The share of expenditures on labour employment being marginal (2.1%) in total social expenditures indicates its negligence. The combined expenditures of housing, urban development, welfare of SC, ST and OBC, social security welfare and public information (transfer payments) constituting the significant portion (22%) of total social expenditures is more or less same as that of the combined expenditure on health, family welfare, water supply, sanitation and nutrition. The relatively higher emphasis on the transfer payments leads to the lower level of economic development. The share of different components of social expenditures as percentage of total

⁵ Jocelyn Finlay (2006) has argued that health has three main effects on the economic growth namely direct effect, interactive effect and incentive effect. The direct effect of health indicates that when the health of workers increases the productivity per unit of labour increases. The complementarities of health and education state the interactive effect and the incentive effect reflects the increase in the educational investment. Ding et al (2007) points out that the health behaviours and health conditions directly affect the educational outcomes. In the same way Suhrcke (2011) argues that growing poor health deteriorates the quality of education.

requirements, NSDP and per capita composition shows more or less the same thing (Table A1).

Table 1: Composition of Social Expenditures in Odisha

Item	ESAC	MPH&FW	WSS	HS	UD	WSSO	SSW	LLW	NT	Oth	Total
1987-88	295.1 (48.9)	148.7 (24.6)	5.5 (0.9)	9.6 (1.6)	1.6 (0.3)	3.6 (0.6)	82.3 (13.6)	0.0	0.0	57.6 (9.5)	604.0 (100.0)
1988-89	353.7 (52.9)	162.8 (24.3)	5.6 (0.8)	11.6 (1.7)	2.8 (0.4)	5.9 (0.9)	87.0 (13)	0.0	0.0	39.4 (5.9)	668.6 (100.0)
1989-90	434.0 (56.3)	171.1 (22.2)	2.2 (0.3)	14.9 (1.9)	1.9 (0.3)	2.6 (0.3)	99.7 (12.9)	0.0	0.0	44.2 (5.7)	770.6 (100.0)
1990-91	461.9 (55.1)	140.6 (16.8)	48.9 (5.8)	24.9 (3)	15.7 (1.9)	78.1 (9.3)	34.6 (4.1)	9.3 (1.1)	12.7 (1.5)	10.9 (1.3)	837.5 (100.0)
1991-92	552.7 (53.0)	171.8 (16.5)	80.0 (7.7)	18.9 (1.8)	25.5 (2.5)	89.3 (8.6)	65.9 (6.3)	10.8 (1)	14.7 (1.4)	12.5 (1.2)	1042.0 (100.0)
1992-93	631.1 (52.9)	175.4 (14.7)	104.4 (8.8)	19.0 (1.6)	20.9 (1.8)	106.4 (8.9)	90.6 (7.6)	12.4 (1)	19.3 (1.6)	13.2 (1.1)	1192.6 (100.0)
1993-94	695.1 (53.5)	192.3 (14.8)	97.1 (7.5)	22.1 (1.7)	23.2 (1.8)	119.4 (9.2)	99.0 (7.6)	13.3 (1)	24.6 (1.9)	14.2 (1.1)	1300.3 (100.0)
1994-95	828.4 (53.7)	244.2 (15.8)	108.7 (7.1)	40.0 (2.6)	23.8 (1.5)	137.4 (8.9)	104.6 (6.8)	15.3 (1)	22.7 (1.5)	16.1 (1)	1541.3 (100.0)
1995-96	945.9 (52.3)	265.4 (14.7)	133.2 (7.4)	30.9 (1.7)	25.8 (1.4)	165.9 (9.2)	119.1 (6.6)	13.9 (0.8)	90.8 (5)	18.7 (1)	1809.5 (100.0)
1996-97	1078.7 (53.5)	283.7 (14.1)	149.6 (7.4)	31.5 (1.6)	31.7 (1.6)	164.6 (8.2)	144.5 (7.2)	18.9 (0.9)	94.1 (4.7)	20.7 (1)	2017.9 (100.0)
1997-98	1210.9 (55.2)	308.1 (14.1)	190.3 (8.7)	29.8 (1.4)	32.7 (1.5)	169.5 (7.7)	146.3 (6.7)	16.7 (0.8)	68.8 (3.1)	20.9 (1)	2194.1 (100.0)
1998-99	1483.4 (54.2)	406.8 (14.9)	255.2 (9.3)	31.7 (1.2)	48.1 (1.8)	228.7 (8.4)	148.6 (5.4)	24.0 (0.9)	75.6 (2.8)	35.7 (1.3)	2737.8 (100.0)
1999-00	1939.1 (60.2)	431.5 (13.4)	243.4 (7.6)	32.5 (1)	66.3 (2.1)	233.0 (7.2)	150.3 (4.7)	22.5 (0.7)	67.8 (2.1)	35.7 (1.1)	3222.0 (100.0)
2000-01	1760.5 (56.9)	458.9 (14.8)	221.5 (7.2)	47.1 (1.5)	45.2 (1.5)	223.0 (7.2)	191.6 (6.2)	22.4 (0.7)	53.1 (1.7)	72.2 (2.3)	3095.4 (100.0)
2001-02	1755.6 (55.9)	449.6 (14.3)	251.4 (8)	62.7 (2)	43.8 (1.4)	268.9 (8.6)	208.3 (6.6)	21.4 (0.7)	46.6 (1.5)	30.4 (1)	3138.6 (100.0)
2002-03	1902.4 (55.7)	497.4 (14.6)	248.7 (7.3)	86.0 (2.5)	49.4 (1.4)	267.1 (7.8)	225.6 (6.6)	21.8 (0.6)	76.9 (2.3)	38.4 (1.1)	3413.8 (100.0)
2003-04	1899.5 (54.4)	500 (9.4)	258.2 (7.4)	57.8 (1.7)	48.7 (1.4)	230.9 (6.6)	374.9 (10.7)	22.2 (0.6)	61.6 (1.8)	36.7 (0.7)	3490.4 (100.0)
2004-05	1997.4 (53.2)	630.9 (16.4)	275.5 (7.3)	78.2 (2.1)	37.3 (1)	242.7 (6.5)	323.7 (8.6)	23.0 (0.6)	110.8 (3)	33.4 (0.9)	3752.8 (100.0)
2005-06	2313.9 (52.6)	467 (10.6)	383.4 (8.7)	96.7 (2.2)	59.1 (1.3)	370.9 (8.4)	400.6 (9.1)	38.4 (0.9)	230.6 (5.2)	39.9 (0.9)	4400.3 (100.0)
2006-07	2478.6 (49.7)	608.2 (12.2)	384.9 (7.7)	124.4 (2.5)	57.2 (1.1)	444.6 (8.9)	545.5 (10.9)	46.4 (0.9)	246.4 (4.9)	46.5 (0.9)	4982.5 (100.0)
2007-08	3266.0 (47.9)	746.6 (11)	794.9 (11.7)	214.8 (3.2)	237.5 (3.5)	575.4 (8.4)	656.3 (9.6)	54.2 (0.8)	215.6 (3.2)	53.0 (0.8)	6814.2 (100.0)
2008-09	4501.1 (51.9)	936.8 (10.8)	982.8 (11.3)	237.0 (2.7)	136.1 (1.6)	666.1 (7.7)	880.6 (10.2)	43.2 (0.5)	218.8 (2.5)	73.2 (0.8)	8675.5 (100.0)
2009-10	5554.2 (54.7)	1170.9 (11.5)	680.7 (6.7)	196.9 (1.9)	282.9 (2.8)	835.2 (8.2)	941.0 (9.3)	73.5 (0.7)	350.0 (3.4)	70.6 (0.7)	10155.6 (100.0)
2010-11	6611.9 (54.6)	1272.4 (10.5)	575.3 (4.8)	271.4 (2.2)	266.0 (2.2)	1211.3 (10)	1204.7 (10)	68.6 (0.6)	518.8 (4.3)	102.7 (0.8)	12103.1 (100.0)
2011-12	6909.9 (39.2)	1461.9 (8.3)	650.8 (3.7)	280.2 (1.6)	173.8 (1)	1272.5 (7.2)	1955.1 (11.1)	83.6 (0.5)	635.1 (3.6)	4191.0 (23.8)	17613.9 (100.0)
2012-13(RE)	8152.7 (39.3)	1933 (9.3)	749.6 (3.6)	377.2 (1.8)	305.2 (1.5)	1804.9 (8.7)	2716.1 (13.1)	114.2 (0.5)	705.3 (3.4)	3906.8 (18.8)	20764.9 (100.0)
2013-14(BE)	8883.0 (38.9)	2171.6 (9.5)	1157.6 (5.1)	406.2 (1.8)	719.0 (3.1)	1892.0 (8.3)	2764.1 (12.1)	159.3 (0.7)	658.4 (2.9)	4036.0 (17.7)	22847.2 (100.0)
% of TSE	52.7	14.2	6.6	1.9	1.6	7.3	7.2	2.1	2.5	3.8	100.0

% of TEXP	10.6	2.9	1.3	0.4	0.3	1.5	1.3	0.4	0.5	0.5	19.6
% of NSDP	3.7	1.0	0.5	0.1	0.1	0.5	0.5	0.1	0.2	0.3	7.1
Per Capita	660	155	84	26	25	109	131	12	42	115	1360

Note: ESAC = Education, Sports, Arts and Culture, MPH = Medical and Public Health and Family Welfare, WSS =Water Supply and Sanitation, HS = Housing, UD = Urban Development, WSSO = Welfare of SC, ST and OBC, LLW = Labour, Law and Welfare, SSW = Social Security and Welfare, NT = Nutrition, OTH = Other and TOT = Total. Values in the brackets are percentage of total social expenditures

Source: RBI, Bulletin various issues for 1987 to 1990-91, RBI website for 1990-91 to 2009-10 and website of ministry of finance government of odisha for 2009-10 to 2013-14 (BE).

The analysis of the decomposition of social expenditures into revenue and capital account indicates that social expenditures are more or less used for consumption purposes only (Table 2). The share of revenue account social expenditures is on an average 95% of total social expenditures. It has remained stagnant over the time period. The revenue account expenditures on education are more than half of total revenue account social expenditures. However, it increased continuously from 47.8% in 1987-88 to 60% during 1999-00 and then declined tremendously to 37% in 2013-14 (BE). In a similar way the expenditures on health, social security welfare, nutrition, labour employment, and welfare of SC, ST and OBC have declined over the years. The expenditures on miscellaneous expenditures have increased tremendously over the years from 9% in 1987-88 to 37% in 2013-14(BE).

4.2: Trends of Social Expenditures

The social expenditures are growing at a lower rate than total expenditures even if they are rising in the same rate as that of revenue expenditures and NSDP (Table 3). The estimation of the growth rates shows that while the total social expenditures are rising at 13.9 per cent per annum, NSDP, revenue expenditures and total expenditures are increasing 13, 13.7 and 20.4 per cent respectively. The per capita growth rates also indicate that even if the per capita social expenditures are on an average increasing in the same rate of NSDP and revenue expenditures these expenditures are rising 6.5 per cent less than the growth rate of total expenditures of the state. It indicates that over time the state has given higher priority to non social expenditures relative to social expenditures. Further even if the capital account social expenditures are growing 2 percent more than the revenue account social expenditures

the larger base between the two does not help for the growth of human capital formation in the state.

Table 2: Revenue Account Social Expenditures in crores

Item	ESAC	MPH	WSS	HS	UD	WSSO	LLW	SSW	NT	Oth	Total
1987-88	288.6 (47.8)	147.6 (24.4)	0	0	0	0	0	79.2 (13.1)	0	57.6 (9.5)	573.0 (94.9)
1988-89	339.3 (50.7)	162.2 (24.2)	0	0	0	0	0	86.8 (13)	0	39.4 (5.9)	627.7 (93.9)
1989-90	415.0 (53.8)	169.2 (21.9)	0	0	0	0	0	99.4 (13)	0	44.2 (5.7)	727.8 (94.4)
1990-91	451.7 (52.6)	135.0 (16.1)	40.4 (4.8)	11.4 (1.3)	13.8 (1.6)	75.2 (9)	9.3 (1.1)	34.5 (4.1)	12.7 (1.5)	10.9 (1.3)	794.8 (94.9)
1991-92	548.5 (52)	156.6 (15)	63.2 (6)	11.4 (1)	21.7 (2)	86.1 (8.2)	10.8 (1)	65.6 (6.3)	14.7 (1.4)	12.5 (1.2)	991.0 (95.1)
1992-93	620.1 (52.9)	171.5 (14.4)	88.1 (7.4)	12.9 (1)	18.6 (1.6)	102.3 (8.5)	12.4 (1)	89.9 (7.5)	19.3 (1.6)	13.2 (1.1)	1148.4 (96.3)
1993-94	688.2 (52.9)	187.4 (14.4)	70.8 (5.4)	13.3 (1)	20.8 (1.6)	116.0 (8.9)	13.3 (1)	98.6 (7.5)	24.6 (1.9)	14.2 (1)	1247.2 (95.9)
1994-95	815.2 (52.9)	215.7 (14)	87.3 (5.7)	19.5 (1.2)	21.2 (1.4)	133.4 (8.6)	15.3 (1)	104.2 (6.7)	22.7 (1.5)	16.1 (1)	1450.7 (94.1)
1995-96	942.6 (52)	254.8 (14.1)	110.4 (6.1)	19.1 (1)	22.9 (1.3)	163.0 (9)	13.9 (0.7)	118.9 (6.6)	90.8 (5)	18.7 (1)	1755.2 (97)
1996-97	1066.1 (52.8)	273.8 (13.6)	112.0 (5.6)	19.2 (1)	29.2 (1.4)	162.2 (8)	18.9 (0.9)	143.9 (7.1)	94.1 (4.7)	20.7 (1)	1940.1 (96.1)
1997-98	1208.4 (55)	297 (13.5)	146.2 (6.7)	21.5 (1)	30.7 (1.4)	166.5 (7.6)	16.7 (0.8)	146.3 (6.7)	68.8 (3.1)	20.9 (1)	2123.0 (96.7)
1998-99	1479.7 (54)	401.2 (14.7)	218.7 (8)	21.9 (0.8)	46.3 (1.7)	225.7 (8.2)	24.0 (0.8)	148.3 (5.4)	75.6 (2.8)	35.7 (1.3)	2677.1 (97.8)
1999-00	1930.4 (59.9)	425.7 (13.2)	221.9 (6.9)	24.6 (0.7)	65.4 (2)	230.3 (7.1)	22.5 (0.7)	150.3 (4.7)	67.8 (2.1)	35.7 (1.1)	3174.5 (98.5)
2000-01	1741.6 (56.2)	433.1 (14)	166.6 (5.4)	31.0 (1)	44.1 (1.4)	216.7 (7)	22.4 (0.7)	191.6 (6.2)	53.1 (1.7)	72.2 (2.3)	2972.3 (96)
2001-02	1733.3 (55.2)	421.4 (13.4)	177.0 (5.6)	46.6 (1.5)	43.2 (1.4)	263.2 (8.4)	21.4 (0.7)	208.3 (6.6)	46.6 (1.5)	30.4 (1)	2991.4 (95.3)
2002-03	1882.8 (55.1)	459.6 (13.5)	203.5 (6)	37.0 (1)	49.0 (1.4)	258.2 (7.5)	21.8 (0.6)	225.6 (6.6)	76.9 (2.2)	38.4 (1.1)	3252.9 (95.3)
2003-04	1881.8 (53.9)	458.8 (8.6)	211.4 (6)	41.0 (1.1)	47.7 (1.4)	227.7 (6.5)	22.2 (0.6)	374.9 (10.7)	61.6 (1.8)	36.7 (1)	3363.8 (96.4)
2004-05	1995.4 (53.1)	627.5 (16.7)	228.6 (6)	57.1 (1.5)	36.1 (1)	241.2 (6.4)	23.0 (0.6)	323.7 (8.6)	110.8 (2.9)	33.4 (0.9)	3676.8 (98)
2005-06	2311.6 (52.5)	450.6 (10.2)	313.3 (7.1)	79.3 (1.8)	57.5 (1.3)	359.5 (8.1)	38.4 (0.9)	400.6 (9.1)	230.6 (5.2)	39.9 (0.9)	4281.2 (97.3)
2006-07	2474.4 (49.7)	575.5 (11.6)	257.9 (5.1)	107.5 (2.1)	50.8 (1)	412.0 (8.2)	46.4 (0.9)	545.5 (10.9)	246.4 (4.9)	46.5 (0.9)	4762.8 (95.6)
2007-08	3260.2 (47.8)	726.2 (10.7)	354.1 (5.2)	142.4 (2.1)	222.2 (3.3)	486.8 (7.1)	54.2 (0.8)	656.3 (9.6)	215.6 (3.1)	53.0 (0.8)	6171.0 (90.6)
2008-09	4497.7 (51.8)	921.9 (10.6)	270.0 (3.1)	147.0 (1.7)	128.6 (1.5)	573.5 (6.6)	43.2 (0.5)	880.6 (10.1)	218.8 (2.5)	70.7 (0.8)	7751.9 (89.3)
2009-10	5541.1 (54.6)	1146.3 (11.3)	346.5 (3.4)	152.1 (1.5)	274.7 (2.7)	701.6 (6.9)	73.5 (0.7)	941.0 (9.3)	350.0 (3.4)	66.3 (0.7)	9592.9 (94.4)
2010-11	6424.3 (53)	1243.8 (10.3)	512.5 (4.2)	178.0 (1.5)	261.2 (2.1)	816.6 (6.7)	68.6 (0.6)	1204.7 (9.9)	518.8 (4.3)	90.2 (0.7)	11318.6 (93.5)
2011-12	6809.8 (38.7)	1425 (8.1)	563.2 (3.2)	163.8 (1)	165.1 (1)	982.7 (5.6)	83.6 (0.5)	1803.6 (10.2)	635.1 (3.6)	4173.9 (23.7)	16805.6 (95.4)
2012-13(RE)	7906.4 (38)	1818.6 (8.8)	599.2 (3)	217.7 (1)	272.2 (1.3)	1343.5 (6.5)	114.2 (0.5)	2516.1 (12.1)	705.3 (3.4)	3879.1 (18.7)	19372.3 (93.3)
2013-14(BE)	8624.7 (37.7)	2004.2 (8.8)	745.1 (3.2)	251.5 (1.1)	651.0 (2.8)	1432.9 (6.2)	159.3 (0.7)	2594.1 (11.3)	658.4 (2.9)	3990.2 (17.4)	21111.2 (92.4)
Average	2514.0 (51.4)	581.9 (12.4)	254.5 (4.8)	76.1 (1.1)	108 (1.5)	407.3 (6.7)	39.5 (0.7)	527.1 (8.6)	192.4 (2.6)	480 (3.8)	5061.3 (95.1)

Note: Same as Table 1.

Source: Same as Table 1

Table 3: Growth Rates of Social Expenditures

Components of Social Expenditures	Growth Rate	Per Capita Growth Rate
ESAC	13.2*	11.6*
Health (MPH+WSS+NS)	12.6*	11.0*
MPH	10.5*	8.9*
WSS	18.9*	17.2*
HS	14.7*	13.0*
UD	18.4*	16.8*
WSSO	20.5*	18.8*
LLW	5.0*	3.5
SSW	17.9*	16.3*
NT	17.7*	16.0*
Others	15.4*	13.8*
Total Social Expenditures	13.9*	12.4*
Revenue account Social Expenditures	13.8*	12.2*
Capital account Social Expenditures	15.8*	14.1*
NSDP	13.0*	11.4*
Revenue Expenditures	13.7*	12.1*
Total Expenditures(R+C)	20.4*	18.7*

Note: The acronyms are same as Table 1 and * indicates significant at 5% significance level.

Source: Same as Table 1

Although the expenditures on education are growing lower than total social expenditures, revenue expenditures, total expenditures and NSDP, they are increasing marginally (0.6%) more than the health expenditures. The expenditures on water supply and sanitation and nutrition are rising more than the expenditures on education, revenue expenditure, total expenditures and NSDP. The expenditures on the welfare of SC, ST and OBC are increasing at a highest rate (20.5%) than the other expenditures. The higher growth rate of these expenditures adversely affects the growth of the economy since these expenditures do simultaneously contribute towards the economy.

4.3: A Comparative Analysis of Social Expenditures between Pre- and Post- Restructuring Period

The constitutional division of revenue raising capacity and expenditure responsibilities between centre and states listed in the seventh schedule gives rise to

fiscal imbalances in Indian federal transfers system⁶. In order to reduce the imbalances central shared taxes and grants (federal transfers) from centre to state are transferred through the UFC under article 280, PC and Central Ministries (CM) under article 282⁷. The share of a state in UFC transfers is determined by the methods and their weights used in the distribution of UFC transfers⁸. Often the methods and their weights have changed (Om Prakash, et al. 2003; Indira Rajaraman et al 2005; Srivastava, 2010). If the methods and their weights are favourable for a state, the share of the state increases and vice versa. However the methods used as equity criteria contradicts the methods used as efficiency criteria⁹ and the contradiction encourages states to use either of the two criteria as their strategy to maximize their share in federal transfers. The neutral and equity criteria have been used upto 9th UFC period and thereafter neutral, equity and efficiency criteria to distribute the central shared taxes (Table A2). In this context a comparative analysis has been made between the UFC periods using need and equity on the one hand and need, equity and efficiency on the other.

The declining share of social expenditures and shifting of government's priority from human capital formation to transfers payments are the glaring observations in the post restructuring period (Table 4).

The average estimate of social expenditure reveals that the total social expenditures as percentage of NSDP have remained more or less constant in both the periods. The share of these expenditures in total expenditures has declined by 6.2% in the later period due to decline in the share of revenue account social expenditures.

⁶ The fiscal imbalances are vertical and horizontal. The inequality in revenues and expenditures between different levels of government is called vertical fiscal imbalance while between same levels of government is horizontal fiscal imbalance. The vertical fiscal imbalance arises due to the assignment of progressive taxations on the centre with minor levies on the states on the ground of uniformity and efficiency and larger share of expenditure responsibilities with the state on the ground of autonomy. The horizontal fiscal imbalance is due to differences in tax base, tax effort, geographical and climatic conditions, population growth and the level of development.

⁷ However the UFC being a constitutional body and its transfers constitute on an average 70% (14 major states average from 1976-77 to 2009-10) of total transfers over time period heavily influences the revenue of state.

⁸ The different methods used to distribute central shared taxes over time are population and area (neutral criteria), inverse income method and distance method (equity based principles), tax effort and improvement in own revenue over revenue expenditures, revenue deficit and fiscal deficit (efficiency criteria). It has been estimated using the data of 14 major states from 1976-77 to 2009-10 that on an average the central shared taxes is 90% of total UFC transfers. The UFC distributes grants on the basis of Gap Filling Approach and per capita expenditures of state (equity criteria).

⁹ The neutral criteria provides equal per capita share to states irrespective of the level of fiscal capacity. The equity criteria provides more per capita share to states with more deficiency in fiscal capacity and vice versa. The efficiency criteria give more per capita share to states with higher fiscal discipline. While the equity criteria arouses to decrease fiscal capacity the efficiency criteria arouses to increase the fiscal capacity.

Although the growth rate of these expenditures is marginally higher in later period than the former it is not able to influence the share of the expenditures. In the former period, the UFC used the neutral (need) criteria to distribute the central shared taxes and equity criteria to distribute central shared taxes and grants with a diversion of weights from neutral towards equity criteria over successive Commissions. Odisha being a poor state could gather a significant share of its total revenue (38.1%) in terms of UFC transfers and hence did not interfere the share of social expenditures. In the later period three criteria were used to distribute the central shared taxes but weight shifted continuously from need and equity towards efficiency. Comparing the benefits of equity and efficiency criteria Odisha used efficiency criteria as its strategy since need criteria is independent of the level of fiscal capacity (Footnote 9). It increased the tax effort by 1.4% and declined the proportionate increase in the share of revenue expenditures by 16.2% relative to the own revenue in NSDP through the contraction of social expenditures¹⁰. The share of revenue expenditures in total expenditures declined from 60.3% to 45.3%. The addition of larger share of central shared taxes with increased own revenue on the one hand and reduction of revenue expenditures on the other hand reduced the revenue and fiscal deficit¹¹. The average revenue deficit declined by 0.1% while the fiscal and primary deficit by 1% and 1.8% respectively in the later period.

Table 4: Composition of Social Expenditures between Pre and Post Restructuring Period

Components	% of Total Soc exp		% of NSDP		% of Tot exp	
	Pre	Post	Pre	Post	Pre	Post
ESAC	53.3	52.4	3.5	3.8	12.8	9.6
MPH&FW	18.7	12.4	1.2	0.9	4.2	2.4
WSS	4.9	7.3	0.3	0.5	1.4	1.3
HS	2.0	1.9	0.1	0.1	0.5	0.3
UD	1.3	1.7	0.1	0.1	0.4	0.3
WSSO	5.8	7.9	0.4	0.6	1.7	1.4
LLW	5.6	0.7	0.4	0.0	0.9	0.1
SSW	4.1	8.5	0.3	0.6	1.2	1.3
NT	1.0	3.2	0.1	0.2	0.3	0.5
OTH	3.4	4.0	0.2	0.4	0.6	0.5

¹⁰ It has been estimated that the proportion of own revenue has increased by 26.9% while the proportion of revenue expenditures has increased by 10.7% in NSDP from pre to post contradictions period.

¹¹ The central shared taxes have increased by 0.9% in the post than the pre contradictions period.

TOT	100.0	100.0	6.6	7.3	24.0	17.8
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Note: Same as Table 1

Source: Same as Table 1.

The commission wise analysis in the post restructuring period indicates that the share of social expenditures in total expenditures has declined tremendously (Table 5). It is found that the share has decreased from 32% during 10th UFC to 8% during 13th UFC. The state used the loophole of the efficiency criteria as its strategy to harness more federal transfers due to the continuous diversion of the weight from need and equity towards efficiency criteria in the distribution of central shared taxes and introduction of MTFRP during 11th and FRBMA during 12th UFC period¹².

The share of social expenditures in total expenditures declined from 10th to 11th UFC period by 10.5%. During 11th UFC period, MTFRP was introduced along with the diversion of weight (5%) from neutral criteria towards equity (2.5%) and efficiency (2.5%) criteria used in the distribution of central shared taxes (Table A2). Comparing the benefits derived from equity principle used to distribute central shared taxes and grants with that of efficiency criteria used in the distribution of central shared taxes and MTFRP, Odisha used the later as its strategy. However, it marginally (0.6% of NSDP) reduced the revenue deficit through the contraction of social expenditures (Table A3) due to small size of the cake in MTFRP (2% of total grants) (Rao 2004).

The share of social expenditures declined tremendously from 11th to 12th UFC period (15.2%). During 12th UFC period, FRBMA was introduced along with the diversion of weight (12.5%) from equity towards neutral (10%) and efficiency (2.5%) criteria used in the distribution of central shared taxes. Comparing the benefits derived from equity principle used to distribute central shared taxes and grants with that of efficiency criteria used in the distribution of central shared taxes and FRBMA, Odisha used the later as its strategy. Since the size of benefit from the FRBMA is large it eliminated the revenue deficit and contracted the fiscal deficit to 3% of GDP through the larger contraction of social expenditures (Table A3).

¹² Although the state has increased its own revenue marginally over successive commissions (Table A4), it has contracted the social expenditures vehemently. The loophole of the efficiency criteria is contraction of revenue account social and economic expenditures to raise the proportion of own revenue relative to revenue expenditures and reduce the revenue deficit and fiscal deficit.

The further reduction of weight of equity criteria from 12th UFC to 13th UFC by 2.5% leads to the marginal rise (1.7%) in social expenditures due to the marginal revenue surplus on the hand of the state (Table A2).

Table 5: Commission wise Social Expenditures (% of Total Expenditures)

	ESAC	MPH	WSS	HS	UD	WSSO	LE	SSW	NT	Oth	Total
8 th FC	7.5	2.5	1.3	0.5	0.3	1.3	0.5	0.5	0.3	0.2	14.8
9 th -1 FC	8.9	2.5	1.1	0.5	0.3	1.4	0.2	0.5	0.3	0.2	15.8
9 th -2 FC	15.7	4.6	2.2	0.6	0.5	2.6	0.3	1.9	0.5	0.3	29.3
10 th FC	17.6	4.5	2.6	0.4	0.5	2.6	0.3	2.0	1.1	0.3	32.0
11 th FC	12.5	3.0	1.5	0.4	0.3	1.5	0.1	1.5	0.4	0.3	21.5
12 th FC	3.2	0.7	0.6	0.2	0.1	0.5	0.0	0.6	0.2	0.1	6.3
13 th FC	4.0	0.9	0.4	0.2	0.2	0.8	0.1	1.1	0.3	0.1	8.0

Note: Same as Table 1

Source: Same as Table 1.

The disaggregated analysis shows that the priority of the government has shifted from education and health to transfer payments. It has been estimated that the expenditures on education and health has declined by -0.9% and -1.7% respectively while the expenditures welfare of SC, ST and OBCs and social security welfare have increased 2.1% and 4.4% respectively in the later period¹³.

Part V

5. Conclusion

The level of expenditures on social services is welcomed in a country to raise the human capital formation for further stimulation of growth and development. In Odisha the level of these expenditures has declined tremendously over the time period particularly in the post restructuring period. The state has misused the efficiency criteria to harness larger share of federal transfers through social expenditures contraction. The loopholes are implicit in the efficiency criteria introduced in the devolution of federal transfers as well as in the restructuring programme of MRTFRP and FRBM Act. The state has shifted its priority from education and health to transfer payments to increase its political gain¹⁴. The loopholes of the efficiency criteria used

¹³ The health expenditures is the combination of expenditures on public health and family welfare, nutrition, and water supply and sanitation. Even if the share of expenditures on water supply and nutrition has increased by 2.4% and 2.2% respectively the share of public health and family welfare has decreased by 6.3%.

¹⁴ It has been observed that the number of members elected to the Legislative Assembly from Biju Janata Dal party has increased over successive elections (Various State Election Commissions).

to restructure the finances of the poor state and higher priority of transfers' payments have pulled it into the mire of poverty. It has surpassed Bihar in the level of poverty in 1999-2000 (Bhattachaya 2009). In this juncture the state has to raise its level of social expenditures and give more priority to health and education for economic development. In addition to it, the reform in the efficiency criteria is of crucial importance.

Appendix

Table A1: Composition of Social Expenditures in Odisha (Average of 1987-88 to 2013-14(BE))

	% of TSE	PCSE	% of TE	% of NSDP
ESAC	53.72	660.52	10.6	3.72
MPH	13.66	152.82	2.8	0.93
WSS	7.48	86.33	1.5	0.51
HS	2.15	26.77	0.4	0.15
UD	1.82	25.82	0.3	0.13
IB	0.29	2.88	0.1	0.02
WSSO	8.46	110.78	1.6	0.58
LE	0.97	9.42	0.2	0.07
SSW	7.79	130.81	1.3	0.54
NT	2.85	43.59	0.5	0.19
OTH	0.80	9.91	0.2	0.10
TOT	100	1259.65	19.4	6.90

Note: Same as Table 1

Source: Same as Table 1

Table A2: Weights of Equity and Efficiency Criteria of UFC to Distribute Central Shared Taxes

	7 th	8 th	9 ^{th-1}	9 ^{th-2}	10 th	11 th	12 th	13 th
Equity	12.5	71.25	56.25	59.37	60	62.5	50	47.5
Efficiency	0	0	0	0	10	12.5	15	17.5
Neutral	87.5	28.75	53.75	40.63	30	25	35	35

Source: Respective Finance Commission Reports.

Table A3: Commission wise Deficits

UFC	RD%NSDP	FD%NSDP	PD%NSDP
8 th	0.9	5.4	2.8
9 ^{th-1}	0.8	4.6	2.1
9 ^{th-2}	1.1	4.9	1.7
10 th	4.1	6.5	3.0
11 th	3.5	6.2	0.6

12 th	-2.1	0.5	-2.7
13 th	-1.9	2.3	0.4

Note: RD = Revenue Deficit, FD = Fiscal Deficit, PD = Primary Deficit and NSDP = Net State Domestic Product

Source: Same as Table 1.

Table A4: Commission wise State Finances

UFC	OR%RE	OWT%NSDP	OWNT%NSDP	CST%NSDP
8 th	38.6	4.3	1.8	4.3
9th-1	39.3	4.2	1.6	4.6
9th-2	37.6	4.5	2.1	5.5
10 th	33.4	4.2	1.7	4.7
11 th	37.6	5.7	1.8	5.9
12 th	51.4	6.5	2.4	6.7
13 th	53.0	7.1	3.0	6.4

Note: OR = Own Revenue, OWT = Own Tax, OWNT = Own Non Tax, CST = Central Shared Tax and NSDP = Net State Domestic Product

Source: Same as Table 1.

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