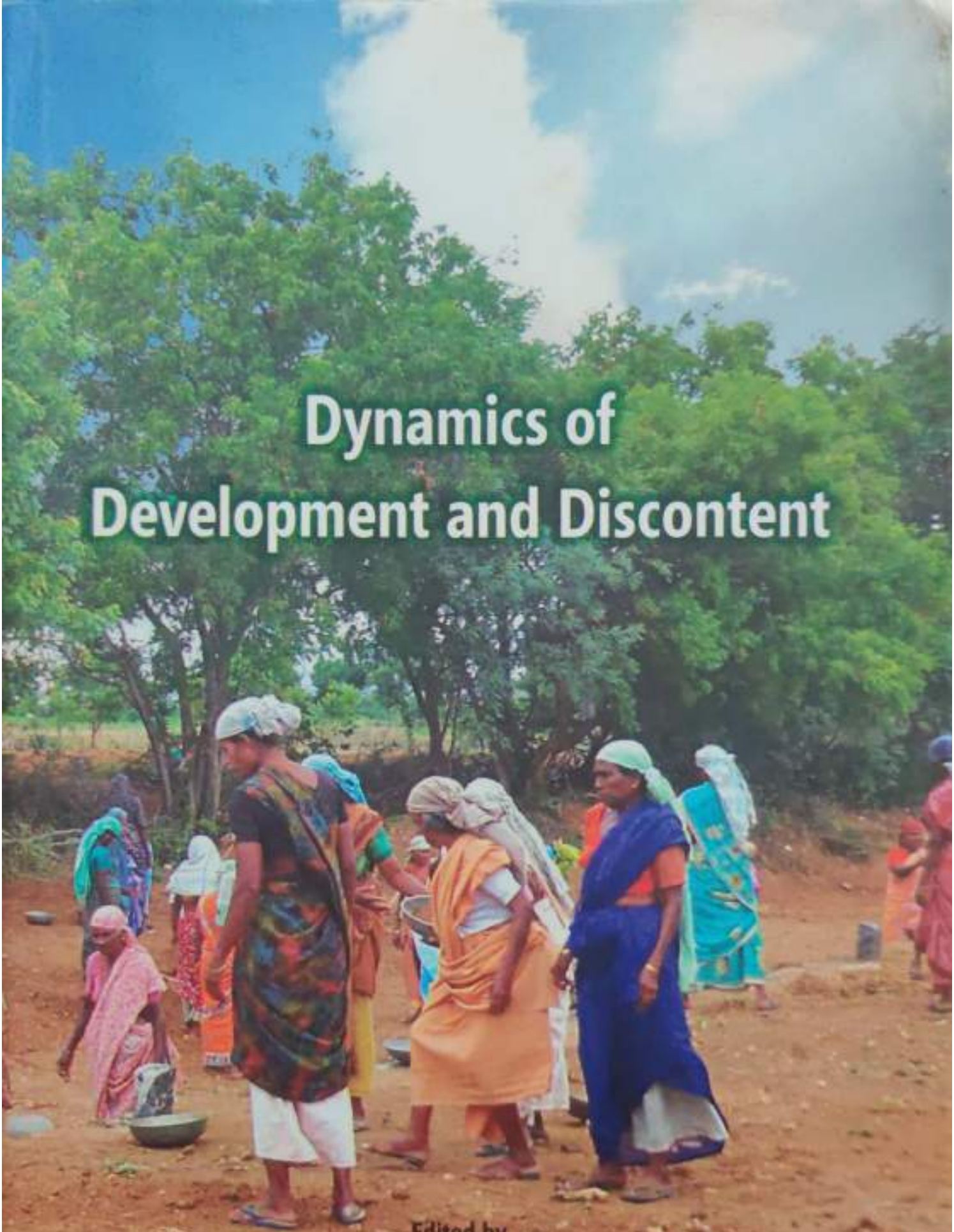
Dynamics of Development and Discontent



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Sidhartha Sankar Laha

Introduction

Health is one of the vital indicators reflecting the quality of life and therefore it has been rightly said, 'Health is wealth'. Though preservation and promotion of health is one of the most basic human rights, India is still lagging behind in realising this aspiration. Public health is concerned with the health of the community as a whole. Its key goal is to reduce population's exposure to disease. It has been said that: "Health care is vital to all of us some of the time, but public health is vital to all of us all of the time".

For several decades, public sector reforms have been premised on the assumption that improving the ability of the government to manage its business will lead to improved social and economic position of the country. The Indian economy grew at a comparatively low rate of growth of 3.5 percent from 1950 to 1980. The plethora of procedures, permits, bureaucratic controls and protectionist policies created under import substitution strategy (ISS) along with other factors landed us into economic crisis of 1991 which was reflected in macroeconomic mismanagement of the economy judged from parameters such as high fiscal deficit, high balance of payment deficit, double digit inflation, low forex reserves etc. An attempt was made to resolve this crisis through the introduction of stabilization and structural adjustment programme (SAP)/ economic reforms. One of the important planks of the stabilization measures is the compression of public expenditure and that of SAP is raising efficiency and international competitiveness.

It is apprehended that any economic reform package that relates to compression in public expenditure will adversely affect the vulnerable sections of the society as this will lead to reduction in social sector spending. The experience of many developing countries which have embarked upon a process of macroeconomic reforms during the last 20 years shows that the accentuation of reforms lead to reduction in public spending on basic services and programs directly related to social sector development or human resource development (Gupta and Sarkar, 1994). Even the European countries which have experienced reforms have had diverse experiences with respect to the social impact of reforms (Panchamukhi, 2000). It is from this angle a study of impact of economic reforms on public health expenditure which is a component of social sector expenditure in India becomes important. During the 1970's "growth with social justice" was the popular slogan. But from 1980's onwards that is from the onset of reforms the slogan of "equity with stabilization and SAP" appears to be more relevant.

But SAPs have been evaluated as having a negative impact on social sector expenditure (Cornia, Jolly and Steward 1987; Tusjita 2005, Dev and Mooji, 2002). The reduction of fiscal deficits is normally included in the conditionality of SAPs and consequently government expenditures have to be cut in order to meet the targets for reducing fiscal deficits. There are a number of studies which have pointed out the declining trend in social sector expenditures. UNICEF's Adjustment with a Human Face (Cornia, Jolly and Steward 1987) was the first major criticism of SAPs and it pointed out the negative impact on the vulnerable sections.

In the present study public expenditure on health sector has been considered for the impact of economic reform. As already mentioned there are handful studies which have found the negative impact of economic reform on health expenditure. At the same time the time-frame considered by these studies is very limited. Furthermore, most studies were restricted to only revenue expenditure. Expenditure by combined (Centre & States), centres, all states and individual states are very few. An attempt has been made here to fill this research gap. The paper has the following objectives- firstly, to examine the growth of public health expenditure of India and to measure its trends over-time period, secondly, to measure the nature and level of inter-

state disparities in health status in India, thirdly, to examine the public health system and health related policies over time in India and lastly, to identify policy implications for improving health status in India.

Data and Methodology

The study is largely based on secondary data sources. The data available with Indian Public Finance Statistics, RBI Bulletin, National Human Development Reports, Economic Survey of India, Finance Account of the State Governments, Ministry of Health and Family Welfare and National Rural Health Mission (NRHM) are utilized. Fifteen major Indian states have been selected for the analysis as they covered around ninety percent of the Indian population. The states covered in the study include, Andhra Pradesh, Assam, Bihar, Gujarat, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal. Public Health expenditure includes expenditure on a) medical and public health, water supply and sanitation and b) family welfare. The time period considered for analysis of trends of public expenditure on health sector is from 1976-77 to 2005-2006 (15 years of pre reform period)[from 1976-77 to 1990-91] and 15 years of post reform period [from 1991-92 to 2005-06]. The first reason for selecting this period is that – two appropriate divisions can be done for pre and post economic reform, and second is that before 1975-76, in budgetary classification the head health was not defined properly.

In order to remove the impact of price rise, the growth and composition of public health expenditure has been considered at constant prices with reference to 1999-2000 as the base year. By using the GDP deflator method, the current expenditure items were converted into constant prices(1993-94). The GDP deflator is the ratio of nominal GDP to real GDP. In other words, it is equal to nominal GDP divided by real GDP. To get a value at constant prices we need to divide the value of current prices with GDP Deflator, in case of individual states Gross State Domestic Product (GSDP) deflators have been used. To analyze the pattern of public expenditure on health, the present study has included plan and non plan expenditure of revenue and capital accounts; loans and advances have been excluded. The study does not analyse government programmes or schemes

relating cost to health sector development. Also the allocations of central government expenditure to individual states have been excluded from the scope of this study.

Origin of Reforms

Health Sector reforms in India were a direct outcome of economic reforms post 1991. Before this, the Indian economy was committed to socialism with slack foreign exchange flow. India followed planned economic development with a strong import substitute orientation. There was no balance of payment crisis till 1980s owing to the gulf boom and large worker remittances. With the oil crisis and an import dependent growth strategy there was a balance of payment crisis post gulf war in 1991. During this period, the social indicators too were poor. India had to go for loan under the Structural Adjustment Programme (SAP) of the World Bank (Narayana, 2008). The period also coincided with many other developing countries going for the World Bank loan. In the mean time there were two significant documents which later became the basis for reforms in many developing countries. One such document was 'Financing Health Services in Developing Countries' in 1987 by the World Bank. This document was a paradigm shift with respect to the role of government in health care provision. It called for introduction of user fee, insurance or other risk coverage, effective use of non government resources and decentralization. The World Development Report in 1993, 'Investing in Health' advocated the development of ideal environment for health, increased government spending and promoting diversity and promotion (Health Sector Reforms in India). With the fiscal deficit, the centre had to cut its total expenditure which fell more on the capital disbursement and the revenue expenditure remained unaltered. This led to a decrease in the capital expenditure and decrease in the loans given to the States and the Union Territories (Narayana, 2008). In the meantime, there were policy shifts in the five year plans. The eighth five year plan proposed revoking of free medical care and encouraged initiatives by private sector. The ninth five year plan emphasized the need to increase the involvement of voluntary, private organizations and the self-help groups and ensure inter-sectoral coordination. It also placed the need to enable Panchayati Raj Institutions (PRIs) in planning and monitoring of health

programmes. The tenth five year plan, in addition to the above points, recognized the need to address the issue of equity and the need to devise a targeting mechanism by which the population living below the poverty line will have access to subsidized health care (Health Sector Reforms in India). Despite the cut in total expenditure in the form of capital expenditure, health sector remained relatively protected. There was increase in absolute spending on health post economic reforms, though the central health spending as a percent of GDP remained stagnant. The cut fell more on the service sector. As 50 percent of the States' debt is to the Centre, total expenditure remained stagnant post 1991. The Interest of payment rose (as a percent of GDP); there was a decrease in discretionary spending. Spending on public health and water, sanitation decreased post economic reforms. Hence, the states had to go for loans form World Bank under the Structural Adjustment Programme. Seven states went for the Health System Development Project (HSDP) as a part of the structural adjustment during 1994-97. Though the health system development project recognizes the need to increase the public spending on health, the public spending as a share of total spending decreased. The decline in spending on public health, water and sanitation was milder in the reforming states. Fifteen percent of the cost of health system development project had to be borne by the states, which already had scarce resources. The loan came with a pre-condition that 65 percent of loan had to be used for strengthening of hospitals, institutions and purchasing equipment. Hence, the states couldn't use this money exclusively to improve primary health care. Despite health being a state subject, tax resources are largely controlled by the centre. The Planning Commission and Finance Commission give money to the states, but there is no mention in the constitution on the fixed proportional spending on health. The states with decreased central grant, submitted the most promising budget with the assurance of increasing health sector spending, privatization, introduction of user fee and decentralization. The HSDP was used by reforming states as a tool for leveraging external financing (Narayana, 2008). Structural adjustment pushed the states to cut health sector investments, opening up of medical care to private sector, introduction of user fee and private investments in public hospitals (Qadeer, 2000), therefore revoking free and affordable healthcare. Health sector spending remained stagnant with increase in health

inequity. Economic reforms sought to achieve rapid economic development, overall increase in productivity with free access to market, to eliminate poverty and finally leading to improved standard of living (Health Sector Reforms in India). It was thought that this effect would trickle down to health sector, which did not happen (Qadeer, 2000). Even though evidence was available that market based health sector reforms were not able to achieve equity, it was pursued (Bennett et al 1994). These changes in health financing only or donor driven changes that were non purposive are not health sector reforms in true sense.

Pre and Post Health Reforms in India

Before going to the analysis of trends and pattern of public health expenditure a quick review of private and public expenditure on health sector in different states gives us the proportion spent by public as against private, and it also shows the position of different states in both sectors. Table 1 shows the per capita public and private expenditure on health by Indian states during 2001-2002. Per capita public health expenditure is Rs. 207 in India while it is Rs. 790 from private sector. Public sector spends only 20 percent of the total health expenditure. One can easily argue that private expenditure is very important but the thing is not so uncomplicated, people who are rich can spend on health, although health expenditure has not been considered as luxurious expenditure, for poor people health spending is the territory expenditure after food and cloth. In case of health expenditure considerable inter-state disparity can be observed from the table, while private expenditure (Coefficient of Variation 28.21 percent) has less disparity than that of public expenditure (CV 46.23 percent). At the same time we can observe that there is no significant relationship between public and private expenditures. Kerala, Punjab, Haryana, Uttar Pradesh are the highest spending states in private as well as total health expenditure with the amount of more than Rs. 1100 per person, per year. While in case of public expenditure, Punjab, Kerala, Tamil Nadu, and Karnataka are the highest spending states with the amount more than Rs. 220 per person, per year. If we see the relationship with poverty of these expenditure-public expenditure turns a negative significant relationship with poverty (correlation

coefficient -0.673), whereas it is not so in case of private expenditure. Thus, mainly, it is clear that public health expenditure is for the poor and private health expenditure for the rich.

However, present study has the intension to analyze the impact of economic reform on public health expenditure and to trace out the relationships and behaviour of public and private expenditure, which is important theme of the study. India has a federal government. Indian constitution prescribes different powers through three lists i.e., State list, Central list and Concurrent list. Health comes under the state list. But centre has a strong influence on state government expenditure via its fiscal transfers. We have tried to analyze public health expenditure at four levels: combined centre and states, centre, all states and each of the fifteen major states. While most of the studies use only revenue expenditure, in this study we include both revenue and capital accounts of plan and non-plan expenditure.

Public Health Expenditure of Centre and States Combined

India's finest dedication or commitments to the public health expenditure can be seen in centre and states combined expenditure. Table 2 shows the combined health expenditure from 1976-77 to 2005-06. In the absolute term expenditure increased significantly, about 50 times from Rs. 978 crores to Rs. 47,220 crores. This impressive growth is offset by escalation of price and rapid growth in population. After converting these figures into constant prices of 1999-00, the increase is less than 6 times. If we view this growth in per capita terms at 1999-00 prices, the picture does not look so impressive. In per capita terms, expenditure increased only 3 times. In sum, increase of public health expenditure is only three times from 1976-77 to 2005-06 (over 30 years). Measuring Health expenditure as a share of total budgetary expenditure is another way to understand the commitment of budget to health sector. The share was less than 4 per cent until 1981- 82, 1982 onwards it increased and reached 4.68 per cent in 1984-85. Thereafter, the share has started declining except for some years, like 1993-94 which has second highest share (4.63 per cent) during the study period. Measuring health expenditure as a share of GDP is also considered as an important way especially when comparing with other nations. Health expenditure as a percentage of GDP was between 1.08 per cent and 1.83 per cent in the period under reference.

The share rose from 1 .08 per cent in 1977-78 to 1.83 per cent in 1987-88 but later on declined significantly. The share is 1.44 in 2006-07, which is more than 6 per cent in developed countries. Public expenditure on health in per capita term, as a share to total expenditure and percentage of GDP is less in India. In Organisation for Economic Co-operation and Development (OECD) counties public health expenditure as a share of GDP is more than 6 per cent. In France it is 10 per cent and in Germany it is more than 11 per cent (Lalitha and Guennif; 2007). Moreover, the share has shown declining trend during the period of economic reforms. Growth rates of public health expenditure in different terms in pre reform period are high as compared that of post reform period, which can be seen in the last columns of the table.

Table 1

Per Capita Public Private Expenditure on Health in Indian States, 2001-02

States/Rank	Public Exp.	PrivateExp.	TotalExp.	Percentage of Public Exp. to Total Exp.
Andhra Pradesh	182 (6)	858 (5)	1039 (5)	17.5 (9)
Assam	1766 (9)	393 (15)	569 (15)	30.9 (1)
Bihar	92(14)	687(8)	779(10)	11.8(13)
Gujarat	147(11)	670(9)	816(9)	18.0(8)
Haryana	163(10)	1408(2)	1570(2)	10.4(14)
Karnataka	206(3)	506(12)	712(12)	28.9(3)
Kerala	240(2)	1618(1)	1858(1)	12.9(12)
Madhya Pradesh	132(13)	733(7)	864(7)	15.2(11)
Maharashtra	196(5)	815(6)	1011(6)	19.4(7)
Orissa	134(12)	449(13)	582(14)	23.0(6)
Punjab	258(1)	1273(3)	1530(3)	16.8(10)
Rajasthan	182(7)	415(14)	597(13)	30.4(2)
Tamil Nadu	202(4)	644(10)	846(8)	23.9(4)
Uttar Pradesh	84(15)	1040(4)	1124(4)	7.5(15)
West Bengal	181(8)	593(11)	775(11)	23.5(5)
All India #	207	790	997	20.8
CV(percent)	28.21	46.23	39.91	37.74

Note: # All India public expenditure including expenditure by the Ministry of Health and Family Welfare, Central Ministries and local bodies, while private expenditure includes health expenditure by NGO, firms and household.

Figures in parenthesis indicate rank computed on the basis of data.

Source: Economic Survey of India, 2005-2006

Table 2
Combined (Centre and State Government) Expenditure on Health

Year	Current Prices	Constant Prices	Per-Capita Exp.	Share to Total Budget	Percentage of GDP
1976-77	978	6579	102	3.84	1.18
1977-78	1024	6486	98	3.56	1.08
1978-79	1195	7430	109	3.47	1.18
1979-80	1420	7670	111	3.85	1.28
1980-81	1724	8351	118	3.79	1.30
1981-82	2087	9120	126	4.14	1.35
1982-83	2497	10053	136	4.19	1.44
1983-84	3034	11263	149	4.39	1.50
1984-85	3909	13434	174	4.68	1.72
1985-86	4486	14371	182	4.60	1.76
1986-87	5132	15381	191	4.47	1.81
1987-88	5876	16084	196	4.59	1.83
1988-89	6492	16403	196	4.44	1.69
1989-90	6990	16271	190	4.12	1.58
1990-91	8088	17016	195	4.12	1.57
1991-92	9056	16751	188	4.13	1.52
1992-93	10291	17486	192	4.25	1.51
1993-94	12794	19766	213	4.63	1.62
1994-95	13999	19701	208	4.34	1.51
1995-96	15426	19893	206	4.33	1.42
1996-97	17322	20725	211	4.29	1.37
1997-98	20138	22599	226	4.38	1.44
1998-99	24214	25148	247	4.44	1.50
1999-00	27306	27306	263	4.46	1.53
2000-01	29963	29018	275	4.45	1.56
2001-02	30869	29028	271	4.47	1.47
2002-03	35551	32200	295	4.15	1.57
2003-04	35209	30834	262	4.15	1.39
2004-05	42191	35017	291	4.17	1.47
2005-06	47220	37665	313	4.18	1.44
Pre reform period	17.73	8.22	5.95	1.48	3.35
Post reform period	12.23	5.89	3.63	0.27	-0.27
Total reform period	14.57	5.90	3.71	0.49	0.45

Note. Total expenditure in Rs. in Crores and per capita expenditure in Rupees.
Source: Computed from the Budgetary Documents of India, Indian Public Finance Statistics and RBI Bulletin (Various Issues).

Central Government Expenditure

As mentioned already, health is a state subject in India. This means that the primary responsibility of financing and providing health care rests with the state governments. The central government's role has been to fund centrally sponsored schemes, to formulate policies and guidelines and provide statutory grants or general transfers to the states (Bajpai & Goyal, 2005). In this connection, analysing the role of central government on health spending before and after economic reform becomes imperative. There are a number of studies which have indicated the increasing public spending of central government (Dev & Mooij 2002; Prabhu, 1994; Panchamukhi, 2002; Joshi, 2005). In the present section we analyse the same with broadening of the time period and we look how much increase/decrease has taken place over time on various counts. Table 3 gives us the growth of central government expenditure on health from 1976-77 to 2005-06. As we have seen in preceding section expenditure at current prices is very impressive and not so in constant prices and in per capita constant prices. One thing here to be noted is that in per capita constant prices the increase is around 5 times from Rs. 20 in 1976-77 to Rs. 97 in 2005-06, while it is only three times in combined (centre and state) expenditure. Moreover, public expenditure on health of combined in the reform period is less as compared with that of pre reform period. In case of central expenditure the growth rates are high in reform period in all type of measurements; growth rate in per capita expenditure was 5.3 per cent per annum, which increased to 8.6 per cent per annum in the post reform period. Health expenditure as a share of total expenditure and as a percentage of GDP has increased around two times in the study period from 1.41 per cent to 2.84 per cent and from 0.23 per cent to 0.45 per cent respectively from 1976-77 to 2005-06. This increase is mainly due to implementation of many centrally sponsored health and development programmes like Rajiv Gandhi National Drinking Water Mission, National Rural Health Mission, and Jawaharlal Nehru Urban Renewal Mission (JNURM) etc.

Table 3
Central Government Expenditure on Health, (1976-77 to 2005-06)

Year	Current Prices	Constant Prices	Per-Capita Exp.	Share to Total Budget	Percentage of GDP
1976-77	192	1291	20	1.41	0.23
1977-78	194	1229	19	1.25	0.21
1978-79	187	1163	17	1.00	0.18
1979-80	197	1064	15	1.04	0.18
1980-81	238	1153	16	1.05	0.18
1981-82	290	1267	18	1.15	0.19
1982-83	386	1554	21	1.25	0.22
1983-84	447	1659	22	1.26	0.22
1984-85	611	2100	27	1.40	0.27
1985-86	685	2194	28	1.30	0.27
1986-87	754	2260	28	1.20	0.27
1987-88	887	2428	30	1.30	0.28
1988-89	1062	2683	32	1.34	0.28
1989-90	1110	2584	30	1.19	0.25
1990-91	1271	2674	31	1.21	0.25
1991-92	1374	2542	28	1.2	0.23
1992-93	1630	2770	30	1.33	0.24
1993-94	2182	3371	36	1.54	0.28
1994-95	2490	3504	37	1.55	0.27
1995-96	2974	3435	40	1.67	0.27
1996-97	3084	3690	38	1.53	0.24
1997-98	3575	4012	40	1.54	0.26
1998-99	4477	4650	46	1.60	0.28
1999-00	6004	6004	58	2.01	0.34
2000-01	6303	6104	58	1.94	0.33
2001-02	8837	8310	77	2.44	0.42
2002-03	7736	7007	64	1.87	0.34
2003-04	9263	8112	69	1.97	0.36
2004-05	11891	9869	82	2.35	0.41
2005-06	14631	11670	97	2.84	0.45
Pre reform period	17.03	7.58	5.32	0.65	2.73
Post reform period	17.63	10.99	8.62	4.80	4.53
Total reform period	16.81	7.97	5.74	2.61	2.41

Note. Total expenditure in Rs. in Crores and per capita expenditure in Rupees.
Source: Computed from the Budgetary Documents of India, Indian Public Finance Statistics and RBI Bulletin (Various Issues).

Table 4
Public Expenditure on Health of All States, (1976-77 to 2005-06)

Year	Current Prices	Constant Prices	Per-Capita Exp.	Share to Total Budget	Percentage of GDP
1976-77	897	6031	93	7.57	1.08
1977-78	937	5937	89	7.07	0.99
1978-79	1104	6866	101	7.04	1.09
1979-80	1338	7226	104	7.46	1.21
1980-81	1608	7790	110	7.10	1.21
1981-82	1949	8518	118	7.74	1.26
1982-83	2329	9377	127	8.10	1.34
1983-84	2843	10555	140	8.48	1.40
1984-85	3181	10931	142	7.98	1.40
1985-86	3679	11785	150	8.20	1.45
1986-87	4259	12765	159	8.22	1.50
1987-88	4963	13586	165	8.29	1.54
1988-89	5480	13846	165	8.17	1.43
1989-90	5962	13878	162	7.77	1.35
1990-91	6815	14338	164	7.48	1.32
1991-92	7674	14195	159	7.11	1.29
1992-93	8569	14560	160	7.18	1.26
1993-94	10646	16447	177	7.91	1.34
1994-95	11586	16305	172	7.17	1.25
1995-96	12884	16614	172	7.26	1.19
1996-97	14522	17375	177	7.16	1.15
1997-98	16964	19037	190	7.44	1.21
1998-99	20221	21001	206	7.59	1.25
1999-00	22294	22294	215	7.10	1.25
2000-01	24672	23893	226	7.11	1.28
2001-02	24892	23408	218	6.60	1.19
2002-03	29030	26294	241	6.56	1.28
2003-04	28353	24830	211	6.59	1.12
2004-05	34291	28460	236	6.90	1.19
2005-06	37523	29930	248	7.06	1.15
Pre reform period	16.62	7.20	4.95	0.78	2.37
Post reform period	11.83	5.52	3.26	-0.68	-0.62
Total reform period	13.98	5.36	3.18	-0.43	-0.06

Note: Total expenditure in Rs. in Cores and per capita expenditure in Rupees.
Source: Computed from the Budgetary Documents of India, Indian Public Finance Statistics and RBI Bulletin Various Issues

Expenditure on Health of All States

From the above analysis we find that combined (Centre and States) expenditure on health decreased after economic reforms while it increased in central government. States have the lions' share in health spending as they spend around 80 per cent of the total spending. Comparatively, changes of states spending affect a lot on the population of the country. Table 4 depicts the public health expenditure of all states from 1976-77 to 2005-06. In the current prices public health expenditure increased around 42 times from Rs. 897 crore in 1976-77 to Rs. 37523 crore 2005-05. It is necessary to mention that the picture is not so impressive in constant and per capita terms. In per capita constant term it is less than three times, which is less than centre and combined expenditures. Furthermore, growth rates are very low in the post reform period and as a share of total budget and as a share of GDP growth rates turned to negative in the post reform period.

Health Expenditure of Major States

Now we discuss the main and crucial issues about the trends and. pattern of public health expenditure of 15 major states. State-wise analysis of trends of public expenditure becomes critical when the states are reorganised or divided. The economists normally analyse trends and pattern of public expenditure in per capita terms, as a share of GSDP or National State Domestic Product (NSDP), or as a share of total expenditure. In the present study selection of 30 years is not exception for the same.

During this long period of time, many states were restructured (e.g.: Chattisgarh was carved out from Madhya Pradesh, Uttaranchal from Uttar Pradesh, Jharkhand from Bihar). Consequently, the trends and pattern of public expenditure on health is examined in per capita current and constant prices, as a share of total expenditure and also as a share of NSDP. Public health expenditure as a share of total budget in all states is around 7 per cent in the study period. It gets around 25 per cent of the social services expenditures and it is most important component after education, which occupies 55 per cent in social services expenditure. Average of per capita public expenditure on health of major 15 states increased from Rs. 114 in 1976-77 to Rs. 285 in 2005-06. The increase is not same in all states; there is huge inter-state disparity exist. The value Coefficient of variation was 30.75 percent in 1976-77 which hovered between 25 percent and 35 per

cent during the study period and reached at 35.49 per cent in 2005-06. Looking at the averages from pre (1975-76 to 1990-91) to post reform (1991-92 to 2005-06) periods it increased from 27.64 per cent to 31.91 per cent respectively. Going by the respective position of states, Bihar, Orissa, Uttar Pradesh and West Bengal are the lowest spending states, while Kerala, Haryana, Rajasthan and Punjab are the highest spending states in most of the selected years. Assam was in the 3rd position in 1976-77 which heightened its position to 2nd during 1987-88 but failed to maintain and fell to 10th position in 2004-05. Gujarat's position hovered between 6 and 9 but with an interesting exception of 1st position in 1999-00 and 2000-01.

Average per capita expenditure of all states increased between 1.2 times (lowest in Assam) and 1.9 times (highest in Karnataka) from pre reform period to post reform period. In case of growth rates of per capita health expenditure 7 out of 15 states show an increase in the reform period. Significant growth rate can be observed in Andhra Pradesh, Haryana, Kerala and West Bengal during reform period. Going by health expenditure as a share to NSDP, 7 out of 15 states' average health spending is high in post reform period, while growth rate has fell down in all states in post reform period. Moreover, except Haryana, Maharashtra, Punjab and Rajasthan remaining 11 states experienced a negative growth rate in this respect.

Another important way of analysis of public health expenditure is that of as a share of total expenditure. Examining by average shares of total expenditure, only 4 out of 15 states shown the improved shares, whereas, Gujarat and Haryana are the two states who improved in growth rates; and notably no state experienced a positive growth rate. Totally, 8 states have negative impact of economic reform on health spending as a share of total expenditures. A simple cross comparison across states in terms of their base level per capita expenditure on health and growth rates in it in the subsequent period would give us a clear indication of the nature of disparities and would help us in grouping the states as well. While there has been no change in the absolute number of states with higher than the mean level of per capita expenditure on social services or higher than the mean growth of it, the relative positions have changed overtime. Punjab, Gujarat, Maharashtra and Rajasthan have performed consistently by performing well above mean rate of growth.

On the other hand, Orissa and Bihar have continued to remain in the lower rungs of health sector spending. In the pre reform period,

Kerala and Haryana recorded lower rates of growth despite having higher than mean per capita expenditure on health; in the post reform period they joined the group of high growth rate and high per capita expenditure. Andhra Pradesh and West Bengal improved their position from low expenditure and low growth rate in pre reform period to low expenditure and high growth rate in post reform period. Assam, Madhya Pradesh and Uttar Pradesh have not shown high growth rate in post reform period, hence moved to the low expenditure and low growth rate group. Karnataka moved from high growth rate and low spending group to high spending and high growth rate group during the same period.

States Public Health Expenditure Ranking in Pre and Post Reform Regime

Description		States with higher & lower mean growth in Per capita Expenditure on Health in Pre Reform period	
		High(9)	Low(6)
States with higher and lower than average in per capita Health Expenditure in Pre Reform Period (Average 1976-77 to 1990-91)	High(8)	Punjab,Rajasthan, Maharashtra, Assam, Gujarat, Tamil Nadu	Kerala, Haryana
	Low(7)	Karnataka, Madhya Pradesh, Uttar Pradesh Bihar,	West Bengal, Orissa, Andhra Pradesh

Description		States with higher & lower mean growth in Per capita Expenditure on Health in Post Reform period	
		High(9)	Low(6)
States with higher and lower than average in per capita Health Expenditure in Post Reform Period (Average 1991-92 to 2005-06)	High(8)	Rajasthan, Haryana, Punjab, Kerala, Gujarat, Maharastra, Karnataka	Tamil Nadu
	Low(7)	Andhra Pradesh, West Bengal	Assam, Orissa, Madhya Pradesh, Uttar Pradesh, Bihar

Inter State Variation in Per Capita Public Expenditure

The health expenditure in real per capita terms shows high inter state variation. This inter state variation in health expenditure is increasing over the period. The value of coefficient of variation was recorded around 0.55 in the period 1987 to 1992 and increased to 0.64 in the period 2005 to 2011 (Table 5). The per capita spending in most of low income states is recorded lower than the high income states. Interestingly, in some of the high income states (like Gujarat and Maharashtra) the per capita expenditure is recorded lower than the average spending of all states. The variations in health expenditure themselves is not a matter for concern if it is due to the exercising of preferences by individual states on the basis of prevailing disease or mortality rate in the state. But, it became problematic when states with high prevalence of disease and/or mortality rates and states with high level of income allocate little/low funds in health sector. This may mean that either these states are shying away from fulfilling its constitutional commitment of 'Right to Health' for its citizens or consider health as low priorities sector. It can be observed that the differences in health expenditure across states probably arise either because of preference or income of the state. The differences may also arise because of fiscal disabilities of the states arising from unequal capacities in raising revenues or due to varying cost of providing health services. The regional diversity and socio economic conditions of a particular state however can also be the cause of inter state variation in health expenditure. In order to fully evaluate the reason behind the differences in health expenditure, one needs to identify the degree to which the discrepancy in health expenditure is explained by the differences in states income, fiscal capacity, priority of state governments or by other demographic factors. This, however, does not come under the preview of this study but can be the part of future research.

Table 5
Inter-State Variation in Per Capita Public Expenditure on Health

States	1987-1992	1993-1998	1999-2004	2005-2011
Andhra Pradesh	113	176	198	195
Assam	139	106	124	250
Bihar	69	80	94	108
Gujarat	164	170	223	211
Haryana	146	184	221	336
Karnataka	130	142	183	205
Kerala	146	135	164	236
Madhya Pradesh	120	149	180	175
Maharashtra	131	141	178	195
Orissa	102	110	128	169
Punjab	151	148	199	243
Rajasthan	200	227	252	267
Tamil Nadu	198	204	247	243
Uttar Pradesh	86	79	83	149
West Bengal	88	95	129	135
Mean	150	163	200	245
STDEV	82.3	90.0	118.6	157.5
CV	0.55	0.55	0.59	0.64

Source: Finance Account of States and RBI State Finances: A Study of Budget

Summary and Conclusion

It is well known fact that improved education and health positively affect economic growth. Although private expenditure is 80 per cent of the total health expenditure, government spending is necessary in a developing country like India due to poor financial position of the majority of the population. Especially in the rural area, accounting around 72 per cent of the total population in the country, expenditure on health is the territory expenditure. Cutting down of the health services affects the rural people. India accepted 'Structural Adjustment Programme in its new economic reforms, which suggests fewer government interventions in the economy including basic social services.

In this paper an attempt has been made to analyse the trends and pattern of public health expenditure pre and post economic reform periods. Public health expenditure of combined centre and states increased impressively in current prices about 50 times from Rs. 978 crores in 1976-77 to Rs. 47,220 crores in 2005-06. This impressive

growth has been eaten by escalation of price and rapid growth in population. In the per capita constant prices (1999-00) expenditure increased only 3 times. Compared to 1980s public health expenditure as a share of total budget as a percentage to GDP is less in 1990s and 2000s.

Moreover, growth rate is also less in post reform period. On the other hand centre has increased its spending after economic reforms not only in per capita term but also as a share of total expenditure and percentage to GDP. In case of All States, economic reform affected negatively, spending as a share of total expenditure and as a percentage of GDP decreased after reforms, further the growth rate is also less. Whereas analysis of 15 major states reveals that with having the continuation of increased inter-state disparity economic reforms affected differently on health sector for different states. , Bihar, Orissa, Uttar Pradesh and West Bengal are the lowest spending states, while Kerala, Haryana, Rajasthan and Punjab are the highest spending states in most of the selected years. In case of growth rates of per capita health expenditure, 7 out or 15 states show an increase in the reform period. Significant growth rate can be observed in Andhra Pradesh, Haryana, Kerala and West Bengal during reform period. This means more than 50 per cent of the selected states are affected negatively by economic reform. In case of health expenditure as a share of total budget it is less in 11 out of 15 states compared to spending of 1980s.

Public health expenditure decreased in India after economic reforms. Due to lower position in Human Development Index, India needs to improve education and health condition of the people. In case of education Sarva Shikasha Abhiyan is the central government ambitious scheme to attain the goal of universalisation of primary education by 2007 and elementary education by 2010. Similarly, as Bajapai and Goyal suggested, one Health for All programme is to be launched in India to improve the health from the ground level. Not only increasing of funds by the government but the efficient use of the fund is also important. Moreover, private and public partnership is also indispensable. Last but not least improved awareness of the people is very important.

The impact of different macroeconomic conditions shows that health expenditure is highly and negatively affected under adverse

macroeconomic conditions. Analysis at the state level shows that growth rate in per capita health expenditure in some of the low income states is negative. Interestingly, some of the high income states are found unable to maintain significant positive growth rate in health expenditure. The coefficients of growth rate during different macro economic changes vary considerably across states. There also exists a high inter state variation in per capita health expenditure in India.

The overall analysis confirms that India and its states are shying away from fulfilling its constitutional commitment of 'Right to Health' for its citizens. We have observed that public health sector has never been given an opportunity to perform well in India. Given the low level, declining and fluctuating behaviour of health expenditure over the last twenty five years, it is not surprising that the health sector performance in improving the health outcomes is not satisfactory. The failing nature of better health outcomes however can easily be reversed with the high level of public funds allocation in this sector. Specifically, India needs to double or triple its health spending from its existing level. Along with the commitments of health spending, it is important to ensure that the allocated additional public funds get spend effectively across its constituent states, which have shown low absorptive capacity to utilize the fund properly and effectively.

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