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RESEARCH ARTICLE

SHIFTS IN PUBLIC HEALTH BUDG*ET AL*LOCATION AND DISPARITIES AMONG MAJOR INDIAN STATES

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ABSTRACT

Since India's economic liberalization in 1991, government spending on infrastructure and public health services—which aims to promote fair access—has changed significantly. Due to disparities in budgetary resources and policy priorities, Indian states exhibit significant variability in their spending patterns as primary healthcare providers. With a focus on interstate inequalities, equity concerns, and the impact of public funding on health outcomes, this study examines changing public health budget trends in 15 key states over the post-reform era. It examines changes in budgetary allotments, per capita expenditures, and the ratio of revenue to capital expenditures using state-level data. The results show unequal progress, with wealthier states in a better position to support health services and infrastructure while poorer states must contend with competing demands for growth and budgetary limits. Essentially, the main challenge facing post-reform India is not only increasing overall public health spending but also allocating it fairly among states in order to promote a stronger, healthier nation. For consistent growth in the health sector, policy recommendations emphasize more fiscal devolution, targeted expenditures, and strong institutions.

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INTRODUCTION

Public healthcare expenditure and its associated interventions play a crucial role in addressing major diseases, alleviating acute poverty, and improving socio-economic conditions. It also contributes indirectly to a nation's overall development across social, economic, and industrial dimensions. However, following the implementation of structural adjustment programmes, global health expenditure experienced a slowdown, with developing countries facing particularly severe consequences. In light of the growing health challenges in these regions, greater emphasis is needed on strengthening the financing mechanisms of public health services to ensure that population health needs are met more effectively and equitably. The importance of strong health funding systems in helping nations attain and maintain universal coverage—also known as "universal health coverage" or "social health protection"—has been emphasized in recent World Health Assembly (WHA) resolutions. Ensuring that everyone has access to necessary health services, such as prevention, promotion, treatment, and rehabilitation, without experiencing financial hardship is known as universal health coverage. In a developing country like India, achieving universal health coverage requires focused attention on providing financial protection to the poor and addressing challenges related to resource allocation. Furthermore, from the perspectives of social welfare, equity, and justice, the public sector's involvement in providing and funding healthcare services becomes more significant (Guruswamy *et al*., 2008). According to existing research, nations with higher public health spending and faster economic growth typically have better health outcomes than those with lower public health spending (NCMH, 2005). Furthermore, the distribution of resources across various health sector components has a substantial impact on health outcomes since different allocation patterns have diverse effects on outcomes (Hooda, 2013). Numerous studies on India's health expenditure patterns, including micro-level analyses dating back to 1944, reveal that the private sector has consistently accounted for nearly 80 percent of total health spending (Duggal, 1991). Evidence from a number of plan documents shows that public health spending has decreased after independence. The health sector received very little funding at the time of independence, and since then, its expansion has not kept up with population demands; health spending is still at under 1% of GDP (Hooda, 2015). The private sector has intervened, albeit with various degrees of effectiveness and quality, as the government has found it difficult to meet the growing needs for healthcare. Regarding trends and patterns, several studies consistently highlight a deceleration in health expenditure following economic reforms in India, although most of these analyses focus on aggregate expenditure (Joshi, 2006; Guruswami *et al*.,

2008; Berman & Ahuja, 2008; Berman *et al*., 2010; Rao & Choudhury, 2012; Hooda, 2013, 2015). Therefore, to gain a clearer understanding of changing trends and disparities in health budgeting since economic reforms, it is essential to examine health expenditure at both the national and state levels.

LITERATURE REVIEW

After the post-war period and since the last quarter of the twentieth century there was a common question among the academicians and policymakers about the persistent rise in health expenditure, solutions or suggestions for cost containment and cost-effectiveness (Matto and Matto, 1998 and Gerdtham and Jonsson, 2000). Most of the studies started research on the above-stated issues by using the Determinants Approach in which per capita health care expenditure was regressed on the variables which in turn was thought to affect health expenditure. The first generation study starting from Kleiman (1974) followed by Newhouse (1977), Leu (1986), OECD (1987a), Gertham *et al* (1988), Culyer (1989), Plaff (1990), and Gertham *et al*. (1992a, 1992b) have used several cross-sectional bivariate and multivariate regression analysis to examine the observed differences in health expenditure across countries. The most common results derived from their studies stated that the per capita income is the most significant factor in explaining healthcare expenditure among the countries under study. Most of the studies cited that the 90% percent variation in health expenditure is explained by real per capita income which indicates a strong nexus between national income and national expenditure on health care. Empirical findings from the many studies confirmed the elasticity of health care expenditure with respect to income is greater than one and health being considered as the luxury good.

It was Parkin *et al*. (1987) and Gbesemete and Gerthan (1992) who made an attempt to estimate the parameter by using the the data of 18 OECD countries and 30 African countries by using different functional form and conversion factors of exchange rate and PPP and their results are slightly different from the earlier studies on income elasticity which is not significantly higher than one. In the same way, Milne and Molina (1991) had got the same empirical results as Gerthan and Jonsson (1991c) when they pooled the cross-section data of 11 EC countries from 1980 and 1985. The second generation studies started by criticizing the smallness of cross-sectional data and the homogeneous assumption of health care across countries and problem in identifying the systematic relationship between the variables. The studies by Culyer (1990) and Hitiris and Posnett (1992) have attempted to address the above problems by estimating individual countries and pooled cross-section and time series models respectively for OECD countries. The studies concluded by stating the income elasticity was varied from 1.02 to 1.16 at both exchange rate and PPP, which confirmed the elasticity of health spending is around unity. Apart from the GDP, other non-income factors also had a specific influence on the healthcare demand although their coefficients are very small. Recently so many studies have been conducted by applying Unit root and cointegration methods to observe the connection between health expenditure and GDP. In one case Hansen and King (1996) supported the inclusion of time trend whereas, McCoskey and Selden omitted the time trend in his model giving the argument that it will create a significant loss of power with no significant improvement in fit. The studies by Hansen and King (1996), Blomqvist and carter (1997), Roberts (1998) found different results because they have adopted different methods of co-integrating relationship. In opposition to Hansen and King, others have rejected the null hypothesis of unit roots for both HE and GDP based on an individual country by country and panel unit root tests. The above studies found the non-stationarity for Health expenditure and GDP and elasticity of health expenditure is around one. Further, Gerdtham, U.G and Mickael Lothgren (2000) have estimated the relationship between health expenditure and GDP by using some new country by country and panel data for 21 OECD countries covering the updated data from 1960 to 1997 by adopting stationary and co-integration tests. From the cointegration test through ECM both by country-specific and panel, it rarely rejects the no-cointegration hypothesis and the same result of co-integration was supported by Shin. The study by Matteo and Matteo (1998) and Freeman (2003) provided a strong evidence of cointegration and the elasticity for health care expenditure is well below one, which clearly stated that health is not a luxury good . In the same way Sen, A (2005) estimated the income elasticity of OECD data and found lowest elasticity of 0.21 to 0.51 by incorporating various demand and supply determinants. Recently the study conducted by Baltagi and Moscone (2010) and Farag *et al*. (2012) found a strong cointegration between health expenditure and income by using a panel data and concluded the elasticity is less than one reveals the necessary nature of income elasticity. The evolution of the studies for examining the connection between health expenditure and income are of two types. The short-run type of analysis basically used cross-sectional data and estimated the elasticity of health expenditure and the long-run type of study had used cointegration technique to examine the relationship.The overall findings concluded that economic growth had been a most significant factor in determining the health expenditure of a country may be developed, developing and underdeveloped.

Most of the above studies are confined to developed countries and all the studies gives inconclusive evidence of income elasticity of health expenditure. Numerous studies have been carried out in developing nations; in the case of India, only a few have measured the elasticity of health care services and assessed the long-term relationship between health care spending and income. Bhat and Jain (2006), Rahman (2008), Pradhan and Bagchi (2012), Hooda (2015), and Behera and Dash (2016, 2017 & 2017) all investigate the connection between health care spending and economic growth in India. Using random effect models, previous research by Bhat and Jain (2006), Rahman (2008), and Hooda (2015) discovered that state fiscal capacity and income have the biggest influence and are the most significant determinants of the states' health spending patterns, with income elasticity ranging from 0.47% to 0.68%. Similarly, a small number of scholars, including Pradhan and Bagchi (2012), Behera and Dash (2016), Behera and Dash (2017), and Behera and Dash (2017), investigated the long-term and causal link using the co-integration and VECM frameworks. The aforementioned research looked at the dynamic relationship between health care spending and income over the short and long terms, but their findings were contradictory. The current study differs from previous research in a crucial way: it looks at the public health budget at the state and Central levels from both category-wise (Revenue and Capital vs. Plan and Non-plan) and component-wise (Medical

and Public Health, Family Welfare, and Water Supply and Sanitation).

METHODOLOGY

This study relies entirely on secondary data from government publications and planning documents. Health spending data came from the Reserve Bank of India's annual State Government Finances report in the RBI Bulletin, covering revenue and capital outlays for total sectoral expenditure. State-specific deflators were computed from Central Statistical Organization's State Domestic Product series at 1980-81, 1992-93, 1999-00, and 2004-05 prices. For objectives one and two, 1991-92 to 2014-15 data enabled analysis of trends, patterns and growth in public health expenditure. Population figures were sourced from Selected Socio-Economic Statistics India reports (2006, 2011, 2017) by the Central Statistical Organization, Government of India. The period was chosen for complete variable availability. Time-series data (1991-92 to 2014-15) included GSDP, health expenditure, and population. Expenditures were deflated to constant 2004-05 prices using GDP deflators for current-to-constant conversion; state-level used Gross State Domestic Product deflators. Real per capita health spending was derived from population and SDP deflators. Health outcomes and other data drew from Sample Registration System (Registrar General of India), UNDP Human Development Report, WHO World Health Statistics, and World Bank World Development Indicators. Public health expenditure was disaggregated into: (1) medical and public health, (2) water supply and sanitation, (3) family welfare. Trends—component-wise and aggregate—were examined under revenue/capital heads (plan and non-plan). Budget trends, patterns, and disparities used tables and graphs; growth applied Compound Annual Growth Rate.

RESULTS AND DISCUSSION

This section briefly explains the details of expenditure incurred at both central and state level on different accounts over the study period from 1990-91 to 2013-14. Further it also highlights the trend and growth pattern of public health expenditure and its different components over the study period. In addition to that it has also given a detailed explanation of expenditure pattern between economically developed and economically less developed states.

Trends of Public Health Expenditure by the Central and State Governments in India (Aggregate level): As outlined earlier, public health expenditure comprises three main categories: (a) medical and public health, (b) family welfare, and (c) water supply and sanitation. This section delves into the trends of these overall components of total health spending. Analysis here covers five key areas: (1) revenue expenditure trends on health, (2) capital expenditure trends, (3) plan expenditure trends, (4) non-plan expenditure trends, and (5) total health expenditure trends. Detailed breakdowns by component—covering medical and public health, family welfare, and water supply and sanitation—are addressed below. Health spending is separately evaluated for central and state governments across revenue, capital, plan, and non-plan categories. Table-1 shows trends in central government health expenditure and its parts. The annual average growth rate of central revenue expenditure indicates irregular patterns: it stood at 1.24 percent in 1991-95, rose to 3.98 percent in 1996-2000, then fell to 3.67 percent in 2011-13 (Table-3). As a share of Gross State Domestic Product, it dropped steadily from 1.08 percent in 1991-95 to 0.77 percent in 2011-13 (Table-2). Over this period, the compound annual growth rate of revenue expenditure was a mere 0.03 percent, with a coefficient of variation at 22.67 percent. State governments' revenue expenditure followed suit, declining from 1.28 percent in 1991-95 to 0.83 percent in 2011-14 (Table-6). Its annual average growth rate fell from 10.76 percent in 2009 to 0.79 percent in 2014 (Table-7). This downward trend in revenue spending at both levels stems from recent fiscal caution and policy directives to curb excess outlays on salaries for health personnel and other recurring costs (Guruswamy *et al*., 2008).
A similar irregularity marks central government's capital expenditure on health, with data showing fluctuations in both absolute terms and percentage changes over time. Table-2 highlights its minimal share, staying below 0.30 percent throughout. The annual average growth rate mirrored this: 13.02 percent in 1996-2000, dropping sharply to 2.77 percent in 2006-10, and edging up slightly to 7.56 percent recently. States' capital expenditure from 1991-2014 largely paralleled the center's, with an annual average growth of 14.77 percent in 1996-2000, declining to 3.28 percent in 2006-10, and rising modestly to 5.36 percent in 2011-14. In summary, public health expenditure trends—under both revenue and capital heads—show a general decline, with some recent modest upticks lacking a consistent pattern.

At the Central and state levels, health spending is now analyzed under both plan and non-plan headings. The plan health expenditure as a proportion of GDP has been decreasing at the central level, from 0.52 percent between 1991 and 1995 to 0.45 percent between 2011 and 2013. Thus, plan health expenditures have decreased during the research period. The negative percentage of plan health expenditures is indicated by the Compound Annual Growth Rate, which is -0.01 percent. It has been steadily falling across the states as well, following the same pattern. Between 1991 and 1995, the percentage share of plan health expenditures was 0.56; between 2011 and 2013, it dropped to 0.49. Similar to plan health spending, non-plan health spending at the central level shows a distinct downward trend over the course of the study. Between 1991 and 1995, non-plan spending was 0.69 percent of GDP; however, between 2011 and 2013, it dropped to 0.51 percent. The annual average growth rate likewise shows a downward tendency, going from 4.65 percent between 1996 and 2000 to 2.73 percent between 2011 and 2013. The same pattern can be seen in state government non-plan spending as well; from 1991 to 1995, the percentage share of non-plan health spending was 0.89 percent, but from 2011 to 2013, it dropped to 0.53 percent. The compound annual growth rate was negative i.e., -0.02, which indicates the negative growth of non-plan expenditure incurred by the states during the study period. The data makes it abundantly evident that, in terms of percentages, state non-plan spending from 1991 to 2014 was significantly higher than federal spending. However, overall plan spending remained high even at the start of the new plan. However, because the Central and state governments did not prioritize the health sector, non-plan spending has now surpassed plan spending, which suggests that the government is merely maintaining the resources that were previously established and has not made any notable additions to the current plan items. Government spending on health care covers the following areas: (1) medical and public health; (2) family welfare; (3) water supply and sanitation; (4) nutrition; and (5) social

security and welfare with regard to caring for children and people with disabilities. In general, the first three components of health spending—medical and public health, family welfare, and water supply and sanitation—have been included in this analysis. Table-3 represents central share of all the three components as a proportion to GDP. All the three components were showing a downward pattern after 1991. In case of Medical and Public Health, the share has stood at 0.83 during 1991-95 which has been declining to 0.53 during 2006-10. The annual average growth rate has also been showing a negative pattern during the study period. Like Medical and Public Health, a similar pattern can also be observed for the other two components i.e., Family Welfare and Water Supply and Sanitation. In case of Family Welfare, the percentage share was 0.12 during 1996-2000 but it declined to 0.08 during 2006-10. The last component i.e. Water Supply and Sanitation has been maintaining constant pattern throughout the study period. From the Table-6, it is clearly revealed that expenditure on all the three components by the states during 1991-2014 has been considerably higher than that of the central government in percentage term but same pattern of decline was witnessed for the states throughout the study period. If we look at the entire amount of money spent on health care by the Central and state governments, a few things become clear. Table 6 demonstrates that the state government's rate of change in total health spending as a percentage of GSDP has remained greater than the federal government's. The state governments' steady increase in capital expenditures was the main driver of this high pace of development. State spending has increased throughout time due primarily to the expansion of capital expenditures, while state revenue expenditures have decreased. Table-1 reveals that the growth of Health expenditure (CAGR) is below the growth of Gross state domestic product which means that the growth pace of health expenditure was lagging behind the growth of GDP. The same pattern can be observed for expenditure on Health of all state governments and their respective GSDP (Table-5). The percentage share of Health expenditure which was 1.20 percent during the period from 1991-1995 has come down to less than one percent (0.96) during 2011-13. The percentage of state government's health expenditure as a proportion to GSDP stood at 1.39 percent during the same period of 1991-95 but the same declining pattern observed during the period from 2011-13, where it slashed down to 1.02 percent.

To determine if public health expenditure has kept pace with economic growth, the percentage growth rates of both variables were analyzed over the full study period. Figure 1 and Table 8 clearly show that public health spending as a share of GDP remained largely stable at about 1 percent from 1991-92 to 2013-14. This stagnation in health expenditure relative to GDP provides a macroeconomic view of public financing for India's health sector during the period. Figure 1 reveals a comparable growth trajectory for public health expenditure and Gross Domestic Product, with minor deviations. GDP growth exhibits a cyclical pattern, which health spending generally mirrors; however, health expenditure growth occasionally diverged from GDP, dipping into negative territory. Over the entire period, health expenditure growth turned negative in 1995, 2001, 2002, and 2010. GDP growth showed similar fluctuations but never fell below the horizontal axis or into negative values. Given the diverse and complicated financing mechanisms at the central and state levels, the picture emerging from the analysis of health expenditure pattern is rather vague.

Table 1. Components wise Health Expenditure of the Central Government (in Per capita terms)

Year	Per Capita RE	Per Capita CE	Per Capita Plan Exp	Per Capita Non-plan Exp	Per Capita HE	Per Capita GDP
1991	179.45	20.16	90.51	109.10	199.61	15959.06
1992	181.60	19.02	81.99	118.63	200.62	16476.12
1993	188.43	19.82	86.67	121.57	208.24	17065.14
1994	190.97	22.35	91.52	121.05	213.32	17798.88
1995	191.09	20.64	92.51	119.22	211.73	18724.81
1991-95	**186.31**	**20.40**	**88.64**	**117.91**	**206.71**	**17204.80**
1996	196.11	21.23	96.94	120.41	217.34	19830.24
1997	210.30	22.89	104.27	128.92	233.19	20292.15
1998	224.17	28.19	109.47	142.89	252.36	21245.01
1999	233.36	30.51	111.25	152.80	263.87	22524.55
2000	234.46	42.77	125.37	151.86	277.23	23035.34
1996-00	**219.68**	**29.12**	**109.46**	**139.38**	**248.80**	**21385.46**
2001	231.49	36.77	124.44	143.82	268.27	24061.23
2002	223.67	43.92	110.64	156.96	267.59	24589.31
2003	229.62	44.99	117.37	157.24	274.61	26127.40
2004	228.74	57.37	126.76	159.35	286.11	27536.08
2005	251.93	60.48	140.97	171.44	312.41	29688.85
2001-05	**233.09**	**48.71**	**124.04**	**157.76**	**281.80**	**26400.58**
2006	251.14	79.58	160.31	170.41	330.72	32048.27
2007	265.75	96.45	178.49	183.71	362.20	34528.70
2008	280.37	102.99	193.69	189.67	383.35	36328.75
2009	310.90	90.38	182.78	218.50	401.28	38904.38
2010	325.21	75.28	181.85	218.64	400.49	41797.89
2006-10	**286.67**	**88.94**	**179.43**	**196.18**	**375.61**	**36721.60**
2011	336.83	73.44	180.95	229.31	410.27	44004.22
2012	350.86	84.99	204.59	231.26	435.85	45377.36
2013	363.76	96.15	222.25	237.66	459.91	46926.12
2011-13	**350.48**	**84.86**	**202.60**	**232.74**	**435.34**	**45435.90**
MEAN	246.97	51.76	135.46	163.24	298.72	28037.82
SD	55.98	29.54	42.99	40.67	82.68	10003.46
CV	22.67	57.08	31.74	24.92	27.68	35.68
CAGR	0.03	0.07	0.04	0.04	0.04	0.05

Source: Author's Compilation from RBI, Handbook of Statistics on State Government Finance

Table 2. Components wise share of Health Expenditure as a Percentage of GDP (all India)

YEAR	RE as % of GDP	CE as % of GDP	Plan exp as % of GDP	Non-plan exp as % of GDP	HE as % of GDP
1991	1.12	0.13	0.57	0.68	1.25
1992	1.10	0.12	0.50	0.72	1.22
1993	1.10	0.12	0.51	0.71	1.22
1994	1.07	0.13	0.51	0.68	1.20
1995	1.02	0.11	0.49	0.64	1.13
1991-95	**1.08**	**0.12**	**0.52**	**0.69**	**1.20**
1996	0.99	0.11	0.49	0.61	1.10
1997	1.04	0.11	0.51	0.64	1.15
1998	1.06	0.13	0.52	0.67	1.19
1999	1.04	0.14	0.49	0.68	1.17
2000	1.02	0.19	0.54	0.66	1.20
1996-00	**1.03**	**0.13**	**0.51**	**0.65**	**1.16**
2001	0.96	0.15	0.52	0.60	1.11
2002	0.91	0.18	0.45	0.64	1.09
2003	0.88	0.17	0.45	0.60	1.05
2004	0.83	0.21	0.46	0.58	1.04
2005	0.85	0.20	0.47	0.58	1.05
2001-05	**0.89**	**0.18**	**0.47**	**0.60**	**1.07**
2006	0.78	0.25	0.50	0.53	1.03
2007	0.77	0.28	0.52	0.53	1.05
2008	0.77	0.28	0.53	0.52	1.06
2009	0.80	0.23	0.47	0.56	1.03
2010	0.78	0.18	0.44	0.52	0.96
2006-10	**0.78**	**0.24**	**0.49**	**0.53**	**1.03**
2011	0.77	0.17	0.41	0.52	0.93
2012	0.77	0.19	0.45	0.51	0.96
2013	0.78	0.20	0.47	0.51	0.98
2011-13	**0.77**	**0.19**	**0.45**	**0.51**	**0.96**
MEAN	0.92	0.17	0.49	0.60	1.09
SD	0.13	0.05	0.04	0.07	0.09
CV	14.31	30.97	7.57	11.50	8.53
CAGR	-0.02	0.02	-0.01	-0.01	-0.01

Source: Author's Compilation from RBI, Handbook of Statistics on State Government Finance

Because a variety of financing mechanisms and patterns are working, widespread variation exists in the structure of health expenditure at the state level as well. More insight can be gained by separately examining the public health expenditure mechanisms of the respective states.

Health Expenditure by the State Governments (Disaggregate level): The same database was employed to examine health care financing patterns across India's major states. To compare states' financing approaches relative to their economic growth levels, this study analyzed state health expenditures by grouping them into two categories—economically developed (richer states) and economically less developed (poorer states)—based on their Gross State Domestic Product from 1991 to 2014.

Table 3. Category wise Health expenditure of the Central Government (in Per capita Terms)

Year	MPH	FW	WS& S	MPH as a % GDP	FW as a % GDP	WS & S as a % GDP
1991	145.68	0.00	60.20	0.91	0.00	0.38
1992	138.65	0.00	60.96	0.84	0.00	0.37
1993	138.71	0.00	61.91	0.81	0.00	0.36
1994	143.54	0.00	64.70	0.81	0.00	0.36
1995	141.17	0.00	72.15	0.75	0.00	0.39
1991-95	**141.55**	**0.00**	**63.98**	**0.83**	**0.00**	**0.37**
1996	116.30	28.03	67.40	0.59	0.14	0.34
1997	121.70	24.24	71.40	0.60	0.12	0.35
1998	128.50	25.16	79.53	0.60	0.12	0.37
1999	139.96	24.22	88.18	0.62	0.11	0.39
2000	151.20	25.80	86.87	0.66	0.11	0.38
1996-00	**131.53**	**25.49**	**78.68**	**0.61**	**0.12**	**0.37**
2001	152.34	27.41	97.48	0.63	0.11	0.41
2002	149.85	27.66	90.76	0.61	0.11	0.37
2003	147.57	25.02	95.00	0.56	0.10	0.36
2004	149.63	24.79	100.19	0.54	0.09	0.36
2005	150.48	23.47	112.15	0.51	0.08	0.38
2001-05	**149.97**	**25.67**	**99.12**	**0.57**	**0.10**	**0.38**
2006	168.69	24.23	119.49	0.53	0.08	0.37
2007	180.75	24.95	125.01	0.52	0.07	0.36
2008	190.73	27.11	144.37	0.53	0.07	0.40
2009	204.08	31.24	148.04	0.52	0.08	0.38
2010	232.71	36.90	131.67	0.56	0.09	0.32
2006-10	**195.39**	**28.89**	**133.72**	**0.53**	**0.08**	**0.37**
2011	244.28	39.06	117.15	0.56	0.09	0.27
2012	256.69	40.15	113.42	0.57	0.09	0.25
2013	274.10	46.34	115.41	0.58	0.10	0.25
2014	286.83	46.56	126.52	0.00	0.00	0.00
2011-14	**265.48**	**43.03**	**118.13**	**0.57**	**0.09**	**0.25**
MEAN	173.09	23.85	97.92	0.60	0.07	0.34
SD	49.88	14.22	27.23	0.17	0.05	0.08
CV	28.82	59.64	27.81	28.50	63.11	24.79
CAGR	0.24	0.18	0.20	-2.00	-1.00	-1.96

Source: Author's Compilation from RBI, Handbook of Statistics on State Government Finance

Table 4. Trends in Annual Average Growth rate of all the components of Health Expenditure of Central Government

Year (India)	AAGR RE	AAGR CE	AAGR Plan	AAGR Non-Plan	AAGR M & PH	AAGR FW	AAGR W& S	AAGR HE
1991	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1992	1.18	-6.01	-10.38	8.03	-5.07	0.00	1.25	0.50
1993	3.62	4.03	5.40	2.42	0.04	0.00	1.53	3.66
1994	1.33	11.35	5.30	-0.43	3.36	0.00	4.32	2.38
1995	0.06	-8.28	1.07	-1.54	-1.68	0.00	10.33	-0.75
1991-95	**1.24**	**0.22**	**0.28**	**1.70**	**-0.67**	**0.00**	**3.49**	**1.16**
1996	2.56	2.77	4.56	0.99	-21.38	0.00	-7.05	2.58
1997	6.75	7.24	7.04	6.60	4.44	-15.62	5.60	6.80
1998	6.18	18.81	4.75	9.77	5.29	3.65	10.22	7.60
1999	3.94	7.60	1.59	6.49	8.18	-3.89	9.81	4.36
2000	0.47	28.66	11.27	-0.62	7.43	6.14	-1.51	4.82
1996-00	**3.98**	**13.02**	**5.84**	**4.65**	**0.79**	**-1.94**	**3.41**	**5.23**
2001	-1.28	-16.31	-0.75	-5.59	0.75	5.87	10.88	-3.34
2002	-3.50	16.27	-12.48	8.37	-1.66	0.89	-7.41	-0.25
2003	2.59	2.38	5.74	0.18	-1.55	-10.54	4.47	2.56
2004	-0.39	21.57	7.41	1.32	1.38	-0.92	5.18	4.02
2005	9.21	5.14	10.08	7.06	0.56	-5.63	10.67	8.42
2001-05	**1.33**	**5.81**	**2.00**	**2.27**	**-0.10**	**-2.06**	**4.76**	**2.28**
2006	-0.31	24.00	12.07	-0.61	10.79	3.12	6.14	5.54
2007	5.50	17.50	10.19	7.24	6.68	2.90	4.42	8.69
2008	5.21	6.35	7.85	3.14	5.23	7.95	13.40	5.52
2009	9.82	-13.95	-5.97	13.20	6.54	13.22	2.48	4.47
2010	4.40	-20.06	-0.51	0.06	12.30	15.35	-12.43	-0.20
2006-10	**4.92**	**2.77**	**4.72**	**4.61**	**8.31**	**8.51**	**2.80**	**4.80**
2011	3.45	-2.51	-0.50	4.66	4.74	5.52	-12.40	2.38
2012	4.00	13.58	11.55	0.84	4.83	2.72	-3.28	5.87
2013	3.55	11.61	7.95	2.69	6.35	13.34	1.72	5.23
2011-13	**3.67**	**7.56**	**6.33**	**2.73**	**5.31**	**7.19**	**-4.65**	**4.49**

Source: Author's Compilation from RBI, Handbook of Statistics on State Government Finance

Table 5. Components wise Health Expenditure of the State Governments (in Per Capita terms)

Year	Total RE	Total CE	Total Plan	Total Non-Plan	Total M & PH	Total FW	Total W & S	Total HE	All GSDP
1991	2880.28	237.27	1351.20	1766.35	2178.89	0.00	938.66	3117.55	216098.89
1992	2907.42	261.06	1234.09	1932.43	2187.62	0.00	980.86	3168.48	224647.32
1993	2977.46	286.46	1290.90	1973.02	2240.25	0.00	1010.85	3263.92	241053.66
1994	3133.24	334.80	1421.68	2041.67	2254.27	0.00	1213.76	3468.03	253992.29
1995	3392.52	279.60	1386.45	1929.60	1831.98	441.45	1062.88	3672.13	261541.44
1991-95	**3058.18**	**279.84**	**1336.86**	**1928.61**	**2138.60**	**88.29**	**1041.40**	**3338.02**	**239466.72**
1996	3136.00	340.59	1497.03	1979.56	1929.60	382.78	1164.21	3476.59	276216.02
1997	3374.84	349.87	1604.58	2120.14	2068.72	394.40	1261.60	3724.72	282968.01
1998	3701.07	445.79	1711.97	2434.89	2314.78	402.59	1429.50	4146.86	294632.08
1999	3853.60	469.84	1758.44	2565.00	2467.03	424.07	1432.35	4323.44	326500.90
2000	3798.27	656.97	1959.63	2495.67	2459.80	434.27	1561.17	4455.24	328155.63
1996-00	**3572.76**	**452.61**	**1706.33**	**2319.05**	**2247.98**	**407.62**	**1369.77**	**4025.37**	**301694.53**
2001	3593.44	522.20	1812.02	2303.62	2334.69	425.27	1355.67	4115.64	339993.92
2002	3514.96	609.16	1611.13	2512.99	2284.20	380.70	1459.21	4124.12	347504.36
2003	3558.23	622.06	1643.72	2536.58	2264.11	377.89	1538.30	4180.30	372392.87
2004	3613.63	799.67	1802.39	2610.92	2309.08	362.78	1741.45	4413.30	416513.30
2005	3742.50	896.03	1955.67	2682.87	2449.22	360.97	1828.34	4638.54	448675.13
2001-05	**3604.55**	**689.83**	**1764.99**	**2529.39**	**2328.26**	**381.52**	**1584.59**	**4294.38**	**385015.92**
2006	3773.43	1130.86	2154.36	2749.92	2585.08	373.03	1946.18	4904.29	489210.71
2007	4012.40	1448.20	2513.71	2946.89	2772.32	409.46	2278.78	5460.60	526084.86
2008	4297.64	1662.43	2866.66	3066.70	3038.86	465.42	2429.05	5960.07	553374.73
2009	4815.58	1429.33	2797.62	3447.29	3535.98	535.36	2150.08	6244.91	590342.57
2010	5030.56	1132.25	2820.46	3342.37	3714.91	565.15	1887.67	6162.82	637214.81
2006-10	**4385.92**	**1360.61**	**2630.56**	**3110.63**	**3129.43**	**469.69**	**2138.35**	**5746.54**	**559245.54**
2011	5397.01	1143.82	2792.25	3748.58	3999.30	606.03	1935.58	6540.83	669321.44
2012	5640.60	1307.80	3180.24	3768.17	4387.98	667.77	1893.11	6948.40	700186.27
2013	5785.66	1520.87	3444.66	3800.25	4540.85	670.96	2092.76	7306.53	739603.58
2014	5831.46	1475.20	3975.76	3330.91	4244.41	758.14	2299.18	7306.66	634518.72
2011-14	**5663.68**	**1361.92**	**3348.23**	**3661.98**	**4293.13**	**675.73**	**2055.16**	**7025.61**	**685907.50**
MEAN	3990.08	806.76	2107.78	2670.27	2766.41	393.27	1620.47	4796.83	423780.98
SD	927.00	480.56	757.82	633.34	826.98	209.93	451.93	1351.54	168116.21
CV	23.23	59.57	35.95	23.72	29.89	53.38	27.89	28.18	39.67
CAGR	0.03	0.08	0.05	0.03	0.03	0.03	0.04	0.04	0.05

Source: Author's Compilation from RBI, Handbook of Statistics on State Government Finance

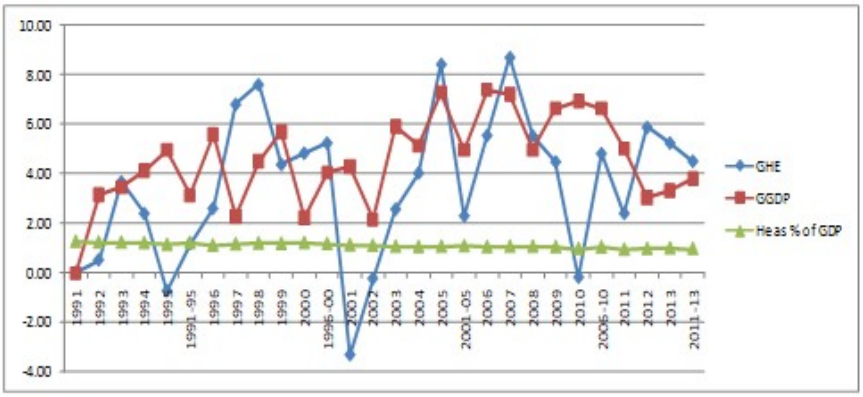
Table 6. Components wise share of Health Expenditure as a Percentage of GSDP (all States)

Year	RE	CE	Plan	Non Plan	M & PH	FW	W & S	HE
1991	1.33	0.11	0.63	0.82	1.01	0.00	0.43	1.44
1992	1.29	0.12	0.55	0.86	0.97	0.00	0.44	1.41
1993	1.24	0.12	0.54	0.82	0.93	0.00	0.42	1.35
1994	1.23	0.13	0.56	0.80	0.89	0.00	0.48	1.37
1995	1.30	0.11	0.53	0.74	0.70	0.17	0.41	1.40
1991-95	**1.28**	**0.12**	**0.56**	**0.81**	**0.89**	**0.04**	**0.43**	**1.39**
1996	1.14	0.12	0.54	0.72	0.70	0.14	0.42	1.26
1997	1.19	0.12	0.57	0.75	0.73	0.14	0.45	1.32
1998	1.26	0.15	0.58	0.83	0.79	0.14	0.49	1.41
1999	1.18	0.14	0.54	0.79	0.76	0.13	0.44	1.32
2000	1.16	0.20	0.60	0.76	0.75	0.13	0.48	1.36
1996-00	**1.18**	**0.15**	**0.57**	**0.77**	**0.75**	**0.14**	**0.45**	**1.33**
2001	1.06	0.15	0.53	0.68	0.69	0.13	0.40	1.21
2002	1.01	0.18	0.46	0.72	0.66	0.11	0.42	1.19
2003	0.96	0.17	0.44	0.68	0.61	0.10	0.41	1.12
2004	0.87	0.19	0.43	0.63	0.55	0.09	0.42	1.06
2005	0.83	0.20	0.44	0.60	0.55	0.08	0.41	1.03
2001-05	**0.94**	**0.18**	**0.46**	**0.66**	**0.60**	**0.10**	**0.41**	**1.12**
2006	0.77	0.23	0.44	0.56	0.53	0.08	0.40	1.00
2007	0.76	0.28	0.48	0.56	0.53	0.08	0.43	1.04
2008	0.78	0.30	0.52	0.55	0.55	0.08	0.44	1.08
2009	0.82	0.24	0.47	0.58	0.60	0.09	0.36	1.06
2010	0.79	0.18	0.44	0.52	0.58	0.09	0.30	0.97
2006-10	**0.78**	**0.24**	**0.47**	**0.56**	**0.56**	**0.08**	**0.38**	**1.03**
2011	0.81	0.17	0.42	0.56	0.60	0.09	0.29	0.98
2012	0.81	0.19	0.45	0.54	0.63	0.10	0.27	0.99
2013	0.78	0.21	0.47	0.51	0.61	0.09	0.28	0.99
2014	0.92	0.23	0.63	0.52	0.67	0.12	0.36	1.15
2011-14	**0.83**	**0.20**	**0.49**	**0.53**	**0.63**	**0.10**	**0.30**	**1.02**
MEAN	1.01	0.18	0.51	0.67	0.69	0.09	0.40	1.19
SD	0.21	0.05	0.06	0.12	0.14	0.05	0.06	0.17
CV	20.49	29.90	12.53	17.23	20.38	52.80	15.22	14.06
CAGR	-0.02	0.03	0.00	-0.02	-0.02	-0.02	-0.01	-0.01

Source: Author's Compilation from Handbook of Statistics on State Government Finance, RBI

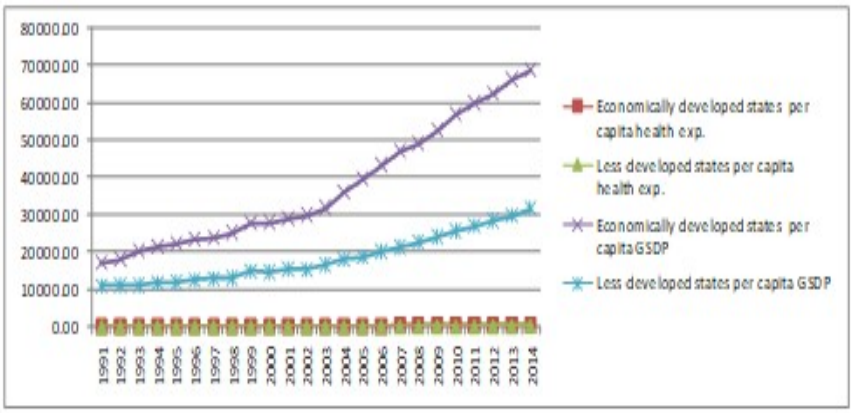
The median value served as the cutoff for classification. Table 9 below lists the GSDP for all states during the study period and identifies those in each category. The total state government expenditure on Health was collected from RBI database on State Government Finance and deflated the estimated annual population during 1991-2014 in order to determine the per Capita expenditure on health by all the states. The Table-9 clearly depicts the cut-off median value i.e., Rs 41361.27 per capita GSDP, which demarcate the boundary between developed and less developed states. The states which are above this median value are Karnataka, Andhra Pradesh, Punjab, Kerala, Tamil Nadu, Gujarat, Haryana and Maharashtra respectively according to their ascending order after the median value. In the same way the states which are below the median value are considered as economically less developed states, the states below the median value according to their ascending order are Bihar, Assam, Uttar Pradesh, Madhya Pradesh, Odisha, Rajasthan and West Bengal respectively. Table-10 illustrates per capita public health spending across two state groups: economically advanced and less developed ones. The common assumption holds that states with higher per capita GSDP allocate more to health—and vice versa—but certain exceptions appear in the table. Notably, not every affluent state outspends its poorer counterparts on a per capita basis. Figure-2 vividly shows the per capita growth trajectories of GSDP and public health expenditure for both developed and less developed states. The lower curves depict less developed states, while the upper ones represent developed states. The disparity between per capita GSDP and health spending proves smaller among less developed states than among their developed peers. This implies that poorer states, despite lower health outlays, sustain steadier alignment with their GSDP growth. Conversely, developed states commit larger sums yet lag behind their own GSDP expansion rates.

Figure 1. Change in Public Health Expenditure and GDP in India during 1991-92 to 2013-14



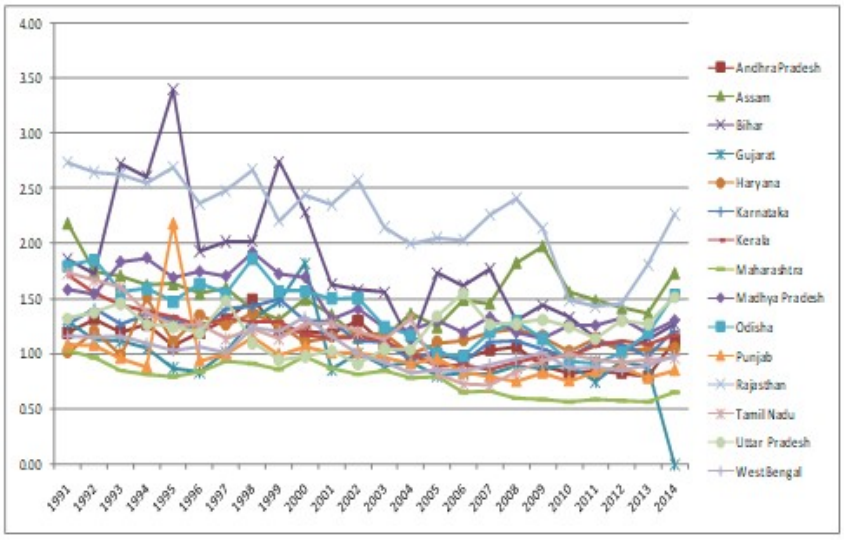
Source: Author's estimation

Figure 2. Trends of Per Capita Health Expenditure and GSDP according to Level of Economic Growth in Major States, 1991-2014



Source: Author's Estimation

Figure 3. Public Health Expenditure as a Percentage of GSDP of all the Major states in India, 1991-2014



Source: Author's Estimation

Overall, developed states exhibit a substantial divide between GSDP and per capita health expenditure; whereas less developed states show a narrower gap. At lower economic growth levels, poorer states seem to strike a more balanced path between growth and health sector investment. Growth trajectories of GSDP and per capita health expenditure differ across poorer and developed states, forming non-uniform clusters.

Inter-state variations persist within both developed and underdeveloped categories. The figure shows that not all developed or underdeveloped states have followed consistent health spending patterns relative to their GSDP levels over time. Poorer states largely display a comparable trend, barring a few exceptions in terms of relative GSDP and per capita health outlays. Among poorer states, Bihar, Assam, and Uttar Pradesh deviate from uniformity. Developed states like Tamil

Table 7. Trends in Annual Average Growth Rate of all the Components of Health Expenditure of State Governments

Year	AAGR RE	AAGR CE	AAGR Plan	AAGR Non-plan	AAGR M& PH	AAGR FW	AAGR W& S	AAGR HE
1991	0	0	0	0	0	0	0	0
1992	0.93	9.75	-9.49	8.59	0.40	0	4.30	1.61
1993	2.35	9.39	4.40	2.06	2.35	0	2.97	2.92
1994	4.97	15.22	9.20	3.36	0.62	0	16.72	5.89
1995	7.64	-20.21	-2.54	-5.81	-23.05	0	-14.20	5.56
1991-95	**3.18**	**2.83**	**0.31**	**1.64**	**-3.94**	**0.00**	**1.96**	**3.19**
1996	-8.18	17.87	7.39	2.52	5.06	-15.33	8.70	-5.62
1997	7.08	3.07	6.70	6.63	6.73	2.95	7.72	6.66
1998	8.81	21.47	6.27	12.93	10.63	2.03	11.74	10.18
1999	3.96	3.13	2.64	5.07	6.17	5.07	0.20	4.08
2000	-1.46	28.33	10.27	-2.78	-0.29	2.35	8.25	2.96
1996-00	**2.04**	**14.77**	**6.65**	**4.88**	**5.66**	**-0.59**	**7.32**	**3.65**
2001	-5.70	-25.30	-8.15	-8.34	-5.36	-2.12	-15.16	-8.25
2002	-2.23	14.69	-12.47	8.33	-2.21	-11.71	7.10	0.21
2003	1.22	1.71	1.98	0.93	-0.89	-0.74	5.14	1.34
2004	1.53	22.88	8.80	2.85	1.95	-4.17	11.67	5.28
2005	3.44	9.05	7.84	2.68	5.72	-0.50	4.75	4.86
2001-05	**-0.35**	**4.61**	**-0.40**	**1.29**	**-0.16**	**-3.85**	**2.70**	**0.69**
2006	0.82	21.09	9.22	2.44	5.26	3.23	6.05	5.42
2007	5.96	20.59	14.30	6.68	6.75	8.90	14.60	10.19
2008	6.64	12.15	12.31	3.91	8.77	12.02	6.19	8.38
2009	10.76	-14.47	-2.47	11.04	14.06	13.06	-12.98	4.56
2010	4.27	-22.94	0.81	-3.14	4.82	5.27	-13.90	-1.33
2006-10	**5.69**	**3.28**	**6.83**	**4.19**	**7.93**	**8.50**	**-0.01**	**5.44**
2011	6.79	-0.13	-1.01	10.84	7.11	6.74	2.48	5.78
2012	4.32	12.80	12.20	0.52	8.86	9.25	-2.24	5.87
2013	2.51	12.42	7.68	0.84	3.37	0.48	9.54	4.90
2014	0.79	-3.64	13.36	-14.09	-6.98	11.50	8.98	0.00
2011-14	**3.60**	**5.36**	**8.06**	**-0.47**	**3.09**	**6.99**	**4.69**	**4.14**

Source: Author's Compilation from RBI, Handbook of Statistics on State Government Finance

Table 8. Growth of Public Health Expenditure and GDP in India, 1991-2014

Year	Growth of Health Expenditure	Growth of GDP (in %)	Health Expenditure as % of GDP
1991	0.00	0.00	1.25
1992	0.50	3.14	1.22
1993	3.66	3.45	1.22
1994	2.38	4.12	1.20
1995	-0.75	4.94	1.13
1991-95	**1.16**	**3.13**	**1.20**
1996	2.58	5.57	1.10
1997	6.80	2.28	1.15
1998	7.60	4.49	1.19
1999	4.36	5.68	1.17
2000	4.82	2.22	1.20
1996-00	**5.23**	**4.05**	**1.16**
2001	-3.34	4.26	1.11
2002	-0.25	2.15	1.09
2003	2.56	5.89	1.05
2004	4.02	5.12	1.04
2005	8.42	7.25	1.05
2001-05	**2.28**	**4.93**	**1.07**
2006	5.54	7.36	1.03
2007	8.69	7.18	1.05
2008	5.52	4.95	1.06
2009	4.47	6.62	1.03
2010	-0.20	6.92	0.96
2006-10	**4.80**	**6.61**	**1.03**
2011	2.38	5.01	0.93
2012	5.87	3.03	0.96
2013	5.23	3.30	0.98
2011-13	**4.49**	**3.78**	**0.96**

Source: Author's Compilation from Handbook of Statistics on State Government Finance, RBI

Nadu, Kerala, Gujarat, and Haryana maintain a steady gradient, though greater divergence appears in Maharashtra, Punjab, Andhra Pradesh, and Karnataka. This suggests their health allocations have failed to match economic prosperity levels during the study period. Alternatively, the link between health spending and economic growth at the state level can be accessed via the share of GSDP devoted to health. Figure-3.18 illustrates public health expenditure as a percentage of GSDP for major states from 1991-2014.

It reveals that most states have kept this proportion steady, lingering near 1 percent. A modest upward shift emerges in many states since 2004-05. However, if we consider the group averages for developed and less developed states, remarkable differences appear in their expenditure pattern (figure-3 and figure-4). The Table-11 given below presents the average health expenditure as a proportion of average per capita GSDP for economically developed and less developed states. It is clearly visible that in spite of their poor GSDP and economic

Table 9. States According to Order of Average GSDP per Capita, 1991-2014 (Rs.)

State	1991-95	1996-00	2001-05	2006-10	2011-14
	Economically less developed States				
Bihar	6861.294	6480.536	8169.892	11418.92	16680.92
Uttar Pradesh	10718.99	12263.92	14025.99	18160.96	22045.41
Madhya Pradesh	13205.43	14912.24	16703.85	22211.72	29964.58
Rajasthan	12231.32	16435.21	19649.02	27402.74	36215.16
Assam	13175.13	14695.24	18298.46	22099.15	21629.73
Odisha	11047.23	13114.39	17673.14	27578.76	33371.04
West Bengal	13557.02	18430.06	24007.37	31420.36	39695.89
	Economically developed StatesMedian-41361.27				
Kerala	16574.02	22823.95	32835.11	48822.20	61291.27
Tamil Nadu	17576.16	24288.83	31107.51	50619.11	68932.52
Punjab	25824.28	30818.74	36921.74	48815.33	60341.19
Maharashtra	23672.11	29769.91	37450.97	58219.89	75103.61
Andhra Pradesh	15280.62	19466.11	26091.47	39415.05	51561.48
Karnataka	15812.41	21937.27	28052.89	41505.43	41361.27
Gujarat	19972.41	26827.40	34289.31	54165.59	70249.76
Haryana	23958.29	29430.16	39739.21	57390.28	74601.19
India	**17204.89**	**21385.46**	**26400.58**	**36721.64**	**45435.95**

Source: National Accounts Statistics, MOSPI, Govt. of India

Table 10. Per-capita Public Health Expenditure of Major States of India: 1991-2014

States	1991-95	1996-00	2001-05	2006-10	2011-14
Economically less developed					
Bihar	158.67(2.31)	144.19(2.22)	123.33(1.50)	168.44(1.47)	191.21(1.14)
Uttar Pradesh	142.40(1.32)	138.65(1.13)	150.43(1.07)	429.05(1.32)	648.45(1.30)
Odisha	181.49(1.64)	214.16(1.63)	221.44(1.25)	304.92(1.10)	390.78(1.17)
Assam	233.97(1.77)	215.54(1.46)	229.26(1.25)	368.81(1.66)	325.41(1.50)
Madhya Pradesh	224.31(1.69)	261.90(1.75)	214.72(1.28)	271.02(1.22)	378.57(1.26)
Rajasthan	323.38(2.64)	399.48(2.43)	432.58(2.20)	559.53(2.04)	634.86(1.75)
West Bengal	150.90(1.11)	217.33(1.17)	227.32(0.94)	288.91(0.91)	358.74(0.90)
Economically developed					
Andhra Pradesh	183.81(1.20)	249.07(1.27)	285.68(1.09)	375.40(0.95)	465.03(0.90)
Karnataka	208.56(1.31)	300.81(1.37)	304.45(1.08)	427.96(1.03)	452.20(1.09)
Kerala	243.96(1.47)	288.62(1.26)	343.54(1.04)	453.85(0.92)	668.28(1.09)
Tamil Nadu	263.82(1.50)	292.61(1.20)	350.43(1.12)	429.05(0.84)	648.45(0.94)
Gujarat	213.78(1.07)	346.47(1.29)	304.63(0.88)	466.40(0.86)	600.15(0.85)
Haryana	279.68(1.16)	370.96(1.26)	443.26(1.11)	654.32(1.14)	793.65(1.06)
Maharashtra	207.63(0.87)	267.95(0.90)	304.81(0.81)	351.91(0.60)	445.95(0.59)
Punjab	321.57(1.24)	317.56(1.03)	357.91(0.96)	386.21(0.79)	506.41(0.83)
India	206.70(1.20)	248.80(1.16)	281.79(1.06)	375.61(1.02)	435.34(0.95)

Source: Author's Compilation from Handbook of Statistics on State Government Finance, RBI

Table 11. Trends in Per Capita Health Expenditure as a Percentage of GSDP of all the Major States, 1991-2014

Year	Average for Economically developed states	Average for Economically less developed states
1991	1.24	1.79
1992	1.25	1.71
1993	1.14	1.78
1994	1.18	1.74
1995	1.25	1.74
1991-95	**1.21**	**1.75**
1996	1.09	1.62
1997	1.15	1.67
1998	1.25	1.74
1999	1.20	1.59
2000	1.22	1.65
1996-00	**1.18**	**1.65**
2001	1.09	1.47
2002	1.08	1.42
2003	1.03	1.32
2004	0.97	1.25
2005	0.92	1.31
2001-05	**1.02**	**1.36**
2006	0.86	1.35
2007	0.89	1.42
2008	0.92	1.47
2009	0.91	1.44
2010	0.87	1.21
2006-10	**0.89**	**1.38**
2011	0.90	1.17
2012	0.91	1.19
2013	0.88	1.27
2014	0.72	1.52
2011-14	**0.85**	**1.28**
MEAN	1.04	1.49
SD	0.16	0.21
CV	15.34	13.76
CAGR	-0.02	-0.01

Source**:** Author's Compilation from Handbook of Statistics on State Government Finance, RBI

status, the poorer states have consistently spent higher proportions of their GSDP on health as compare to the economically richer states.

These positive indications for the under developed states can be due to increased expenditure made at state and national level as most of the states are coming under BIMARU and Empowered Action Group (EAG) category of states and have been the central focus for their poor health and economic development.

Conclusion and Policy Suggestions

Over the past 50 years, India has made strides in health infrastructure and key indicators, yet its public health financing remains inadequate. Backward states continue to trail in reaching "health for all" goals.

Though all states bear responsibility for greater health and education spending, post-1990 priorities waned—exacerbated by pre-existing fiscal strains and weak political will for social sectors. Key insights from the analysis include:

- Public health expenditure trends—under revenue and capital heads at central and state levels—show an overall decline, though recent years indicate modest recovery.
- At the central level, plan health expenditure as a GSDP share fell from 0.52 percent (1991-95) to 0.45 percent (2011-13), with states mirroring this drop from 0.56 percent to 0.49 percent
- Central non-plan expenditure as a GDP percentage declined from 0.69 percent (1991-95) to 0.51 percent (2011-13); states followed suit, from 0.89 percent to 0.53 percent.
- States' shares across all three expenditure components (1991-2014) exceeded the center's, y*et al*l exhibited consistent declines.
- Total health expenditure's GSDP share dropped from 1.20 percent (1991-95) to 0.96 percent (2011-13) centrally, and from 1.39 percent to 1.2 percent for states.
- Real-term health spending fluctuated irregularly, but as a GDP/GSDP proportion, it stayed mostly flat near 1 percent.
- Growth and patterns in public health outlays vary: developed states lead in per capita spending, but lag poorer states in GSDP proportion.
- Policy recommendations for improved health spending and outcomes in India are as follows.
- Underdeveloped states need more resources, as their capital outlays fall short of health infrastructure thresholds for effective care delivery. Capital spending's GSDP share has steadily declined despite its minor role relative to revenue—trends that must improve for better access to facilities.
- Plan and non-plan expenditures interconnect and mutually influence each other; resource-scarce states should balance both to avoid overburdening non-developmental costs over developmental ones.
- Needy or less developed states warrant priority, given the absence of long-run ties between their economic growth and health spending.
- All states must enhance fiscal capacity and space for health to prevent service disruptions during crises.
- To meet WHO targets—5% of GSDP and 15% of total budget on health—state governments should tap external grants and alternative tax sources.

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