SUMMARY AND CONCLUSIONS

The main objective or purpose of this study has been to investigate the interstate disparities in the economic development of states by a set of indicators such as NSDP (net state domestic product), per capita NSDP and social indicators such as education (measured by literacy, and gross enrolment ratio), health (measured in terms of life expectancy at birth, infant mortality rate, maternal mortality rate, access to safe drinking water facility) and poverty. The analysis is done on the basis of the assumption that economic development is a multidimensional concept and hence no single indicator (such as NSDP or per capita NSDP) is sufficient to explain the level of economic development. Our definition of economic development is not only concerned with improvements in material welfare of the people but it also with the improvements in the social status of people. Economic development involves not only increased per capita income but also involves creation of new opportunities in education, healthcare and employment sector. It includes better health services, use of more modern technology, improved transportation facility, improvement in education standard and infrastructural facilities. The study began by showing the existence of the problem of regional disparity and discusses the issue of the convergence and divergence in development. The study reviewed many work on this aspects in the second chapter and this was followed by a discussion of the various concepts of economic development and its measurement in the third chapter.

Chapter fourth deals with regional disparity in terms of Net State Domestic Product (NSDP), per capita NSDP and their growth rates. Chapter
five deals with other dimensions of development including social indicators such as education (literacy rate and gross enrolment ratio are taken as measures of educational development) and health indicators such as MMR (maternal mortality rate), IMR (infant mortality rate), LEB (Life expectancy at birth), access to safe drinking water facility which has a direct impact on health. Poverty ratios of different states are also examined.

Chapter sixth reviews government policies for balanced regional development and examines the pattern of inter-state disparities after the implementation of new economic policy measures. Plan schemes for removing inequalities have been incorporated in this chapter. Mention has also been made of the recommendations of the various Finance Commissions on transfer of resources from the centre to state with the intention of effecting more favorable allocation for the backward states thereby reducing regional inequalities.

Findings

In terms of NSDP and its growth rate, regional disparity increased over time as is shown by the increased coefficient of variation in growth rates. The coefficient of variation (C.V) in growth rate of NSDP increased from 21.8 percent in 1980-81 to 1992-93 (first decade) to 22.8 percent in 1993-94 to 2004-05 (second decade). In the decade prior to the reforms Maharashtra witnessed a high growth rate in net state domestic product (NSDP) followed by Rajasthan, Haryana, Andhra Pradesh. On the other hand Bihar, Assam, Orissa, Kerala, Madhya Pradesh and West-Bengal recorded growth rates lower than the average growth rate. In the post-reform decade, i.e. 1992-93 to 2004-05
West-Bengal, Karnataka, Haryana, Rajasthan, Gujarat, Andhra-Pradesh and Kerala were the states whose growth rates exceeded the average growth. On the other hand Assam, Bihar, Orissa, Madhya Pradesh and Uttar Pradesh experienced less than average growth rate in both the decades. In the second decade growth rate of Punjab and Tamil-Nadu decelerated below the average growth rate. Maharashtra also experienced deceleration in growth rate in the second decade. The performance of the states has thus not been uniform with some states performing better than others in the different time periods.

Per capita income is an important indicator to measure the regional disparities in economic development. In terms of per capita NSDP Punjab retained the highest position in the pre-reform period. The states of Punjab, Maharashtra, Haryana and Gujarat have had higher per capita NSDP throughout the whole period. While the states such as Assam, Bihar, Uttar Pradesh and Madhya Pradesh remained at the bottom and categorized as poorer states. These states are poorer because per capita plan outlays and investment level of the poorer states have always been much lower than those of the better-off states. These states also suffer from high population growth rates and low economic growth rates, preponderance of tribal areas in the eastern and central states. On the other hand many states showed increased per capita NSDP such as West Bengal and Andhra-Pradesh which moved closer to the national average and even crossed it in the later post-reform period (2001-02). These states can be included in the category of intermediate states. Thus, the levels of per capita NSDP depict inter-state disparity as shown by the increasing value of coefficient of variation. The coefficient of variation has increased from 32.6 percent in 1980-81 to 38.4 percent in 2004-05. These results are further
confirmed in the analysis of ranks. Maharashtra, Punjab, Haryana, Gujarat, and Tamil-Nadu are the top five states for the whole period with only changes in ranks. Similarly, Orissa, Bihar, Uttar-Pradesh, Madhya-Pradesh and Assam have been the bottom states with some minor changes. These results are further proved in the analysis of per capita NSDP at 1999-2000 base years. Kerala which emerge to be advanced state because of improvement in social indicators such as reduced birth rate, increased life expectancy, reduced maternal mortality, foreign remittances etc. Hence its income gradually increased and it can be included in the list of advanced state. Correspondingly, disparity also prevails in terms of average annual growth rates in per capita net state domestic product (PCNSDP). Tamil-Nadu and Karnataka recorded the highest growth rate of 4.44 per annum for the twenty four year period. During this period the states recorded higher growth rates are Kerala, West-Bengal, Gujarat, Haryana and Rajasthan. On the other hand Bihar and Assam have very low per capita NSDP and states such as Madhya-Pradesh, Rajasthan and West-Bengal improved their growth rate in per capita NSDP in the post-reform period. In the first decade Gujarat, Haryana, Karnataka, Maharashtra, Punjab, Tamil Nadu, Rajasthan and Orissa have had above average growth rate. Simultaneously, in the second decade Andhra Pradesh Gujarat, Karnataka, Kerala, Maharashtra, Rajasthan, Tamil-Nadu, West-Bengal recorded higher growth rate in per capita NSDP. On the other hand states such as Bihar, Punjab, Assam, Haryana, Orissa, Uttar-Pradesh and Madhya-Pradesh have recorded below average growth rates in per capita NSDP. In the third decade most states picked up and their growth rates increased. Orissa was one of the states where tremendous increase in growth rates was observed while Punjab, Tamil-Nadu
and Karnataka have experienced below average growth rates in per capita NSDP. The states such as Bihar, Assam and Uttar-Pradesh have recorded growth rates below the average growth rates. Maharashtra also experienced reduction in its growth rate during the second decade of the post-reform. Thus, it can be concluded that Andhra-Pradesh, Gujarat, Rajasthan, Tamil-Nadu, Kerala, Karnataka and West-Bengal have risen ahead in terms of income growth. Punjab and Haryana have lagged a little behind. On the contrary, backward states such as Assam, Bihar and Uttar Pradesh remained at the bottom and have recorded below average growth rate in all the periods. A deceleration was observed in the growth rate of six states included in the present study immediately after the reforms. But in 2000-04 states picked up and recorded higher growth rates. This disparity is indicated by the increasing coefficient of variation which increased from 34.9 percent in 1980-89 to 53.9 percent in 1990-99 and further to 65.0 percent in 2000-04.

This divergence or disparity process is also supported by sigma convergence and alpha convergence tests, as these tests are adopted to examine the process of convergence and divergence. In case of sigma convergence the estimated beta coefficients are positive and significant in all the period suggesting divergence in the economy. In case of alpha convergence the beta coefficients are positive in all the periods but not significant at five percent level of significance which shows no convergence but weak divergence in the economy.

In terms of literacy rate Kerala, Maharashtra, Tamil Nadu, Gujarat, Punjab and Karnataka were the better performing states while Bihar, Uttar
Pradesh, Madhya Pradesh, Rajasthan, Andhra-Pradesh, Orissa and Assam continued to be lagging states in all the three census years. The condition of female literacy is deplorable especially in Rajasthan, Andhra Pradesh and Orissa. Although all the states moved smoothly and the overall performance of states has improved as is revealed by the reduced coefficient of variation which declined from 41.4 percent in 1981 to 14.8 percent in 2001. Disparity also prevails in terms of gross enrolment ratio such as Maharashtra, Tamil-Nadu, West-Bengal Punjab and Kerala have high gross enrolment ratio. On the other hand Bihar, Uttar-Pradesh and Madhya-Pradesh remained at the bottom in terms of enrollment of students at all the level of education. Like literacy, disparity also reduced in terms of gross enrolment ratio as shown by the reduced coefficient of variation at all the level of education. Likewise, performance with respect to health also improved in all the states as indicated by the rising life expectancy and declining infant mortality, maternal mortality, improvement in the safe-drinking water facilities. However, the disparity among the states did not reduce because between the states there is a large amount of variation in public provisioning of health care, budgetary allocations for health in poorer states have been far too inadequate than the better-off states.

In terms of life expectancy at birth which is considered as one of the important indicator of health, Kerala occupied the highest position followed by Punjab, Haryana, Gujarat, Maharashtra and Tamil-Nadu which can be categorized as developed states in terms life expectancy. On the lower side five states such as Assam, Orissa, Rajasthan, Uttar Pradesh, Bihar, and Madhya Pradesh have lower life expectancy and can be categorized as under-developed.
Male-female LEB also revealed a similar picture. Infant Mortality rate is another indicator which revealed significant disparity. Infant Mortality Rate is high at 53 (2008), with the lowest obtained in Kerala at 12 and highest in Orissa at 69, a difference of almost six times. Though the disparity between states in IMR is high, it has remained almost the same over the entire period for which data has been presented. This is also evident from the minor change in coefficient of variation over the period under review. Maharashtra, Tamil Nadu, Punjab and Karnataka were at the better positions during the study period as they reduced their IMR significantly. On the other hand major states such as Orissa, Madhya Pradesh, Uttar Pradesh and Rajasthan have had high infant mortality rate. In terms of male-female infant mortality results are almost the same with minor changes. It can also observe from the analysis that in 1981 in 10 of the fifteen states under study female infant mortality rate was lower than male infant mortality rate. By 2002 only six states had a lower female IMR and by 2008 all states except Maharashtra had a higher female IMR. In Maharashtra male and female literacy was the same. Thus, regional disparities in IMR remained almost the same.

Maternal mortality also reveals inter-state disparity in the pre reform and post-reform period but in the later post-reform it showed reduced disparity among the states as shown by the low degree of coefficient of variation. Maternal mortality rate is higher in backward states (Assam, Uttar Pradesh, Rajasthan, Bihar, Orissa and Madhya Pradesh) while it is lowest in Kerala, Tamil Nadu, Maharashtra, Haryana and Gujarat. West Bengal showed improvement in its maternal mortality figures from 561 in 1982-86 to 141 in 2004-06.
In terms of access to safe drinking water facility Punjab households have a high level of safe drinking water facility and occupied the first position followed by Haryana, West Bengal in both rural areas and urban areas. The position of Karnataka households improved both in rural and urban areas. In 2001, in Uttar-Pradesh and in Bihar number of households having safe drinking water facility increased. Thus, the position of states having high level of safe drinking water facility remained almost unchanged but the position of Maharashtra and Gujarat households deteriorated in 2001 as compared to 1981 and 1991. Thus, it can be said that huge or large improvement was observed in the access to safe drinking water facility and disparity reduced among states as revealed by the reduced value of coefficient of variation.

Undoubtedly, India has achieved impressive progress in reduction of poverty but the reduction in the incidence of poverty was not uniform for all the states, it is still high in some states such as in Orissa and Bihar where poverty ratio was more than 40 percent in 2004-05. It was between 25-30 percent in Maharashtra, Tamil Nadu, Karnataka and West Bengal. In 2004-05 in Orissa poverty was almost six times that of Punjab. It is mainly concentrated in Orissa, Bihar, Madhya Pradesh and Uttar Pradesh and generally it is low in Punjab, Haryana, Gujarat and Andhra Pradesh for most of the period under study.

A significant change was observed in the poverty ratio which reduced from 40.42 percent in 1983 to 15.0 percent in 2004-05. In early post reform period (90’s) there was a significant reduction in the incidence of poverty but the reduction was not uniform among states as revealed by the increasing value of coefficient of variation from 38.35 percent in 1983 to 52.37 percent in 1999-
2000 which reduced in 2004-05 to 44.09 percent this shows that disparity increases in terms of poverty reduction but in the later post reform period (2004-05) it further reduces. Similarly, disparity also prevailed in respect of percentage distribution of poor persons as revealed by the increasing value of coefficient of variation. Four states such as Bihar, Madhya-Pradesh, Orissa and Uttar-Pradesh account for 4.98 percent share in the rural poverty in 1983. This share has increased from 55 percent in 1993-94 and further to 61 percent in 2004-05 the share of seven states (Bihar, Karnataka, Madhya-Pradesh, Maharashtra, Rajasthan, Tamil-Nadu and Uttar-Pradesh) in urban poor increased from 61.6 percent 1983 to 70 percent in 1993-94 and further to 76 percent in 2004-05. Poverty for the total population is getting concentrated in Bihar, Madhya Pradesh, Orissa and Uttar-Pradesh. These states accounted for 65 percent of the total poor in 2004-05. In these states percentage of poor people in rural areas increased such as in case of Bihar it increased from 16.82 percent in 1983 to 20.11 percent in 2004-05 and in Uttar-Pradesh 22.8 percent of the rural poor lived in 2004-05 as compared to 17.8 percent in 1983. In the relatively more developed states of Maharashtra more people in urban areas were pushed to the category of poor people as is evident by the fact that 17 percent of the urban poor in 2004-05 are the resident in Maharashtra compared to 13.9 percent in 1983.

In terms of Headcount ratio poverty ratios declined in both the rural-urban areas since 1983 and in 2004-05 it reduced in almost all the states. But the reduction in poverty was not uniform, very high poverty ratios are still concentrated in some of the states such as in Orissa and Bihar, where the ratios were more than 40 percent, and between 30 percent to 40 percent in Madhya-
Pradesh and Uttar-Pradesh in 2004-05. On the other hand absolute number of poor for the total population (rural+urban) increased in seven states in the first period of the post reform while in the second of the post reform it became concentrated in five states, viz, Bihar, Madhya-Pradesh, Maharashtra, Madhya-Pradesh and Orissa. More or less increasing trend was also observed in terms of percentage distribution of poor persons among the states as revealed by the increasing value of coefficient of variation.

The study concluded that considerable regional disparity existed among states in India during the period of the study despite the attempts of the central and state governments for balanced regional development. Indian economy in the changed economic scenario in the post reform period witnessed a spurt in private investment guided by profit considerations which added to the phenomenon of regional disparities. Obviously, the regions having better infrastructure facilities attract more private investment. Hence market forces exacerbate regional disparities. The results of the analysis strengthen this view especially during early part of the post reform period. The disparities widened in terms of per capita net state domestic product (NSDP) and its growth as indicated by the coefficient of variation figures of the selected states. However, mixed nature of disparity was observed in case of social indicators and poverty.

The government measures are too inadequate both in terms of infrastructure as well as health expenditure. It is a high time for the planners and government authorities to start separate development programmes for each backward region, to integrate programme for the development of village and small industries in backward areas and to make education and health within the
reach of the common man through increased investment in educational and health infrastructure especially in backward regions. Universalization of education especially female education must be emphasized. Greater priority should be given to the widespread and equitable provision of basic education. Thus, there is a need of appropriate regional planning to reduce inter and intra-district variations in educational and health development. There must be greater transfer of resources from centre to states, and transfer of powers to panchayats to improve development and governance in backward regions. Simultaneously, efforts should be made to reduce population growth especially in backward states and to strengthen the capacity of the poorer states to spend more on social and economic services. Thus, the solution lies not only in increasing resource flows to the backward regions but also creating an enabling environment which attract more resources. Efforts should also be made to control increasing population in backward states and to improve quality of governance. Finally, it can be said that the overall investment climate and governance need to be upgraded.

Therefore, there is urgent need for re-examination of pattern of development. Central and state governments with greater coordination should implement a major programme in human resource development through education, technical training, family welfare etc., especially in backward and rural areas. Policies should be implemented that improve quality and quantity of employment growth and that increase public investment in physical (irrigation, roads, transport etc.) and human infrastructure (health and education, etc.). Attention should be given to provide clean water, good health care and high quality education in backward states and at national level actions
should be made to see that states such as Bihar, Madhya Pradesh, Uttar-Pradesh and Orissa develop their opportunities for improvement in the level of education, health and incomes. Large improvement on human resources would help in reducing regional disparities in India. Moreover, investment must be made in such a way to which would help in reducing disparities among states in terms of per capita income and social indicators and that also reduces poverty.

A large number of studies have been undertaken on the subject of regional disparity in economic development. Most of the studies undertaken point towards divergence of inequalities. Some studies, however, point towards convergence.

Most of the studies have examined regional disparity in terms of economic factors. Mehta and Kumar (2008) have analysed regional disparity in terms of per capita net state-domestic product while others have considered it as an important factor for studying regional disparity. The present study has also taken account of socio-economic factors as well.

Mehta and Kumar’s study revealed significant divergence in levels of per capita net state domestic product across selected states. The present study also revealed significant divergence in net state domestic product and per capita net state domestic product.

Pal in his study found inter-state imbalances on the basis of diversification index, instability index and growth rate. The present study has applied different set of measures such as mean, standard deviation, average annual growth rate, coefficient of variation, sigma and alpha convergence methods to depict the level of regional disparity in India. Pal’s study concluded
that growth divergence among states is relatively more in the post reform period as compared to the pre-reform one.

Bagchi and Kurian applied many indicators for examining regional disparity such as income, poverty, electricity consumption per capita, number of telephones, motor vehicles, female literacy, urbanization, infant mortality and total fertility. The study also found divergence among states. Shetty in his study also observed increased regional disparities. He used state domestic product, per capita SDP and sectoral composition of SDP to compare economic performance of states from 1980-81 to 2000-01. The study also compared the share of agriculture, industry and service sectors in GSDP (gross domestic product) of different states. The conclusion of divergence arrived at is the same as the present study. The difference is only with respect to the parameters studied.

The sharpening of regional disparities in India have received renewed attention from researchers. While there are different views about the trends – some studies have found evidence of a measure of convergence in development among the states. While others have noticed divergence. The study by Cashin and Sahay (2006) for instance examined convergence hypothesis and found a slower speed of convergence in India.

Unlike the present study, few studies have also found conditional convergence such as the studies by Adabar and Aiyar also found evidence of conditional convergence in his study. Adabar made an effort to describe the differences in the steady state and reexamine the hypothesis of convergence
and economic growth over the period 1976-77 to 2000-01. He found evidence of conditional convergence at the rate of twelve percent per five year span.

Aiyer also found evidence of conditional convergence by estimating a panel with fixed effects. He examined inter-state disparities for a sample of nineteen states over the period 1971-96. He found a weak evidence of absolute convergence for the period 1970’s and divergence in the late subperiods especially in the post reform period.