Chapter 7

Concluding Remarks and Future research

The thesis has firstly addressed the problem of data inadequacy of poverty, inequality and growth in Indian Context and its remedy obtained by updating the database using current NSS data. These are overall long time series data amongst those which ever have been used. In this penultimate chapter we discuss the major conclusions emerging from this empirical study from a unified standpoint and the exiting studies by an advanced econometric time series analysis on Indian poverty, growth and inequality. It has attempted to analyse the problem of poverty from the perspective of policy formulation using time series data of poverty and its most related variables growth and inequality. The present study carries forward this work focusing on some of the somewhat ignored issues and aspects of time series econometric analysis applied on such economic indicators of chief interest in Indian economy. In terms of specific contributions of the present study we may note the following.

We have considered the database prepared by Berk Ozler, Gourav Datt and Martin Ravallion (1996) as a part of the research project undertaken by Policy Research Department (PRD) of World Bank Group on Indian poverty and growth. Datt (1998) published the data in a paper format. Undoubtedly, it is an eminent data base spanning from 1958 to 1999 across the major states of India in the rural and urban sectors separately. It may be surprising that after the launch of the database, these have not been updated or nobody has thought of it. The database has become old and so we have updated the database up to 2012 following the some methodology as in Datt (1998). Such data assemblage has helped us to focus on various unseen aspects of Indian poverty, growth and inequality inevitably necessary for policy evaluation. However, we have successfully updated the database and obtained some major findings focusing on long term policy reformation in Indian economy. Some preliminary analyses have also been
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done and there exist a large scale of temporal and cross-sectional variation in the rural and urban sector separately in India. We have analyzed these findings subsequently in a rigorous manner.

The Indian economy has performed reasonably well after the initiation of reform policies in 1991. Hence, economic growth enhanced significantly with a rising trend. In the third chapter we have done a meticulous study to seek the answer to question of whether the growth had been poverty reducing or not. So, we turn to an overall quantifiable assessment of economic policies on poverty in India. Actually, incidence of poverty depends on growth as well as distribution of income (proxy by consumption expenditure). Impact of economic policy on poverty operates through these two channels. If mean consumption growth is accompanied by adverse distribution effect, growth effect on poverty might be neutralized to some extent by the distribution effect. The decomposition of overtime changes in poverty into growth and redistribution components provide a mixed result. In the rural sector almost all the growth and redistribution component have become negative implying both are favourable in reducing poverty in terms of absolute poverty (HCI), depth of poverty (PG) and intensity of poverty (SPG). In the urban sector, we obtained quite different result. All the growth components are negative implying that growth have reduced poverty but the redistribution components are positive which indicate that the deterioration of consumption inequality contributed to the worsening of poverty. Also, we have observed that there exists a large variation of poverty amongst the different classes of earning people in the society. The agricultural labour in the rural sector and casual workers in the urban sector are the most deprived section of the society. The policy implication is obvious that government should target such groups of poor people for benefit supply and social safety net.

The chapter four alters the direction of analysis from the previous one to Time Series analysis in Indian economy. Economists have long relied on the neoclassical growth model (Solow, 1956) to think about economic growth. An important corollary of the extended neoclassical growth model for poverty analysis has introduced convergence concept. It is implicit in the model that poor states should grow faster than rich ones and should eventually
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catch up i.e. convergence in income (proxy by per capita expenditure) exists. The chapter has attempted at examining if regional disparities in level of living (consumption expenditure), poverty and inequality amongst major states of India have converged with the passage of time. The Time Series approach (new) has been thought to introduce in this track. The panel unit root tests which are robust to cross sectional dependence have been applied. We have found that inequality and poverty indicators have converged across both rural and urban level with respect to some ‘numeraire’ (benchmark) as national average or any other suitably chosen state as best performer. The level of living (consumption) has also converged at urban level. However, divergence has been observed in rural sector for level of living (consumption). Next, we have tried to see if there exist different homogeneous groups so that heterogeneity may be present across groups but convergence may be achieved among the members of the same group. Indeed, we have found two prominent groups of states for rural sectors viz., low growth and high growth states by the factor analysis in multivariate set up. It has been also interesting that the level of living (consumption) has converged among the members in each group separately. Towards this end, we have attempted at identifying the responsible entities for such divergence – central or state governments or both. It has been also examined and found by applying factor model in panel that both the central and state governments have the responsibilities for such alienation of some states (low growth) from the rest. The emergence of such two groups in rural is a major issue to policy makers. Divergence of regions would be very much serious for worsening economic, social and political conditions. Further explorations using state specific characteristics may be very much interesting and important.

In the chapter five we have applied the famous Granger–causality approach to panel data by one way fixed effect model in order to establish relationship between literacy and poverty and that between literacy and inequality. In the model, the variables viz. poverty (HCI, PG & SPG) and literacy have been considered exogenous to determine causality from literacy to poverty and vice-versa. Similarly we have found causality from literacy to inequality. If a macro policy improves both growth and distribution, poverty reduction would be faster since the policy would affect poverty directly apart from the effects working through growth (Panda, Manoj, 2003).
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Literacy has been found as such a human development indicator apart from the economic growth as a human development factor. Education, or human capital, is a major asset of the non-rich and any successful development process ensures that education attainment spreads (Bhalla, S, 2011). Increase in literacy increases human capital and it is an “engine” of growth (Lucas, 1998), enhances income i.e. consumption expenditure and consequently there is decrease in poverty. On the contrary, decrease in poverty generates demand for education and so there would be increase in human capital as a determinant of (income) consumption growth. Literacy also gives rise to employment in the weaker section of the society and so income (consumption) inequality begins to decrease. So, educational expansion in India is expected to have several multiplies effects. (Bhalla, S, 2011). Therefore, literacy is a very useful instrument in proper channeling balanced growth with equity and poverty alleviation successfully.

The relationship between consumption growth and inequality is very much debatable issue in Indian economy. Recently, panel data based on short Time Series or cross country data sets have been used largely to explore the relationship. But these relationships are actually dynamic in nature and need to be considered over a much longer time horizon (Andrew, M. and S. Pal, 2004). In the chapter six, we have tested this relationship depicted by famous Kuznets’ hypothesis (1955) in such long time dimension. Our findings suggest that there is evidence in support of Kuznets’ hypothesis. At the beginning, we have tested the direction of causality between inequality and growth to know whether the fitted model in panel data is really best fitting or not. We found that there was only unidirectional causality from growth to inequality. This empirical finding strongly suggest to fit for a single equation based model where consumption inequality(Gini) would be taken as the sole endogenous variable. Economic inequalities are highly explained by level of development along with state and time specific factors. The growth and inequality both are weighted averages or aggregate values (by composition) of those variables in rural and urban sectors respectively. The fitted curve(Kuznets’) strongly indicate that inequality has started to come down as consumption level increases after reaching a peak. The middle class people are uplifting since various development programs might have contributed to trickle down the high growth to the lower/poor class people. Once the overall growth climaxes a critical level, inequality starts to reduce due to multiplier and
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trickle down effects. Some other human development indicators may be considered in this line of Kuznets’ hypothesis i.e education, health, infrastructure growth etc. to strongly unify our standpoint of existing Kuznets’ hypothesis.

However, it is obvious that an exhaustive study on Time series in Indian context of poverty, growth and inequality is very much scarce. Actually, as far as we know, there is no such study on systematic data. In this regard, the present study has contributed to this literature as some remedial of problem of data analysis at long term. Besides our analysis, there would be more crucial issues in this context. Latent Markov model can be applied for analyzing change in poverty status of different household types/castes over different points of time. We can observe the dynamics of consumer expenditure in the transition matrix relating to the absolute poverty, depth of poverty and severity of poverty. Also, the aspect of multidimensional analysis of poverty is ignored. We have thought of these issues for future research in this context.