Institution of Politically Motivated Policy Certainty of Government on Economic growth: A study Among Major Indian States

Sarker, Debnarayan and Das, Debraj

Centre for Economic Studies, Department of Economics, Presidency College, 86/1 College Street, Kolkata – 700073 (INDIA)

January 2011

Online at https://mpra.ub.uni-muenchen.de/33499/
MPRA Paper No. 33499, posted 19 Sep 2011 12:39 UTC
Institution of Politically Motivated Policy Certainty of Government on Economic growth: A study Among Major Indian States

Dr. Debnarayan Sarker
Professor and Secretary, Centre for Economic Studies, Presidency College, Kolkata
86/1 College Street, Kolkata – 700073 (India)
Email: sarkar_d_n@rediffmail.com

And

Debraj Das
Junior Research Fellow, Centre for Economic Studies, Presidency College, Kolkata
86/1 College Street, Kolkata – 700073 (India)
Email: debraj.das84@gmail.com

Keywords: Policy Certainty, Politically Motivated Policy Certainty, Political Freedom, Political Stability, Income Distribution, Major Indian States

JEL Classification: H53, H52, H75.
Institution of Politically Motivated Policy Certainty of Government on
Economic growth: A study among Major Indian States

Abstract:[This paper theoretically tries to explore the impact of politically motivated policy certainty of a government guided by the norm of equality of income on economic growth and also tries to examine its empirical validity on major Indian states. This paper lends credence to the fact that politically motivated policy uncertainty among most of the major Indian states under this study has positive impact on their economic growth. This study suggests that the policy of attaining inclusive growth for Indian states should be formalized in such a way that equality in income distribution and economic growth should be attained simultaneously.]

Why do certain countries grow faster than others? Some social scientists (Feng;2003,1997;Alesina et al ,1996; Chen and Feng, 1996; Chen and Feng,1999) argue that political institutions – political freedom ,political stability, policy certainty play a significant role in the growth trajectory of a nation . How do these political institutions lead to economic performance or economic growth? It is argued that individual’s economic decisions are rationally conditioned by his assessment of the political environments for the marketplace. In particular, economic growth which is a function of reproducible capital, will increase or decrease as a function of three political variables: political freedom, political stability and policy certainty. They constitute the political foundations of economic management and effect not only on economic growth, but also on the economic determinants of growth, such as inflation, investment, human capital,
income inequality, property rights and population growth. Both the direct and indirect effects on economic growth of the political variables are important.

Political freedom or democracy has been both lauded as a vehicle for happiness and prosperity which leads to capital formulation and long run growth of nations. Rather than directly on growth, the impact of political freedom tends to be indirect through the variables that effect economic growth.

On the other hand political stability conceptualizes the probability that the current political regime remains in place for the subsequent period. The concept of government change or regime change may be due to coup d’etat, which is defined as the ‘extra constitutional or forced changes in the top government elite and the effective control of the nation’s power structure’ (Banks, 1979; 17, Chen, 2003:51). It defines the probability function of extra constitutional government change as a continuous variable, characterized as a response to economic and political conditions. The growth slows down when the probability of such irregular government change is high.

Policy certainty is defined as the absence or lack of disagreement over public policy between the governments and its opponents. The opposite concept is policy polarization which means change from current social policy or deviation from the current level of repression by a new government in future. There may be a high level of political instability, as represented by the frequency of government change, but as long as the existing policy is preserved in future, the negative effect of political instability on economic growth can be significantly offset. If the future government is perceived to be very different from the current government in its policy – thus implying a high level of uncertainty caused by a potential large policy shift from the current government – the
investors will prefer liquidizing or consuming today, rather than making a commitment to long term investment. If policy certainty is high, then investors will be comfortable in making long term investment decisions, everything else being constant.

Wealth disparity is a weak foundation for policy consensus, making it difficult for a government to adopt consistent policy for long run growth. The weak foundation for policy consensus under wealth disparity or inequality in the distribution of income may be harmful for human capital accumulation which might impede economic growth. (Castello – Climant and Domenc, 2008). A country or state with relatively high policy certainty is usually able to pursue long run, consistent growth-enhancing economic policies due to broadly based support. Empirically it has been found that policy uncertainty is a major defining character of economic growth. (Chen and Feng, 1999; Chen, 2003).

There are usually two types of measurements of policy certainty: economic policy certainty (Grier and Tullock, 1989; Aizerman and Marion, 1993; Brunetti and Weder, 1998) and politically motivated policy certainty (Chen, 2003; Chen and Feng, 1993a; Chen and Feng, 1993b; Bueno De Mesquita and Root, 2000; Bueno De Mesquita et al., 2003). Important economic policy certainty variables are standard deviation of inflation, variates of GDP, government consumption expenditure in GDP, development expenditure as a percentage of GDP, per capita development expenditure, social expenditure as a percentage of GDP, per capita social expenditure. (Feng, 2003:58).

Why are the income distribution variables the major factor of politically motivated policy certainty of a government? The income distribution variables are regarded as the most important politically motivated policy certainty variables expanded by Chen and Feng, 1996; Chen 2003; Chen and Feng, 1999; Alesina and Dodrick, 1994; Persson and
Tabellini, 1994; Perotti, 1993. Chen and Feng (1999) strongly remarks that social, political and economic conflict in a country often results from income distribution which is perhaps the single most important policy variable. In the theory of politics, the government provides a public good that benefits everyone. The government competes with the opposition by forming a winning coalition in the electorates. The size of the government coalition reflects how different the government is from the preference of the citizen at large. The relevancy of the model to the measurement of policy certainty through equality is that of income or wealth distribution is relatively equal, then the coalition sought by the government and its opposition must be large. Consequently, both parties will converge towards the interests of the large group of population, producing an outcome that reinforces policy cloning between the two opposite parties.

More importantly, economists, assuming democratic processes in which median voter determines the tax rate, choose to bare their models on the political mechanisms of income distribution and growth (Alesina and Rodrick, 1994; Persson and Tabellini, 1994; Perotti, 1993). The median voter determines a tax rate and a balanced budget and thus effects economic growth through public sectors input in the marketplace. In this process, the political mechanism and the economic structure are integrated if the mean income is above the median income; a voter majority emerges proposing a redistribution of income from the rich to the poor. The greater the inequality of wealth and income, the higher the tax rate- inequality tends to be positively associated with the level of tax rate and redistribution. According to the median-voter theorem, the less the median voter is endowed with capital, the higher the tax rate and the lower the growth rate. As the model
specifies that the redistribution of income is monotonically and negatively related to growth, income inequality is predicted to have an adverse impact on the subsequent growth rate.

How is income distribution measured? There are usually 4 measures of income distribution: Gini Coefficient (Muller, 1988), Middle income share (Perotti, 1996); ratio of income (Bollen and Jackman, 1985) and Upper income quartile (Muller, 1988). But out of all measures of income distribution as an index of policy certainty by the theory of politics, Gini coefficient is an important measures of income distribution (Chen, 2003; Chen and Feng, 1999). The larger the variable, the stronger the degree of political uncertainty.

Why is policy certainty the major defining factor of economic growth among Indian states? Among the three political variables, political freedom and political stability are not as important as policy certainty in the context of comparison among different states of India, because political freedom or democracy persists in all the Indian states and the political instability, which conceptualizes the government change or regime change due to coup d’état or the extra constitutional or forced change, does not exist among Indian states.

Why is politically motivated policy certainty the major factor of a government among major Indian states? India has a population of over one billion with a rich diversity of religious, linguistic and caste identities and federal system with 28 states and 7 union territories. Within this federal system, India possesses high potentiality for case variation analysis with the issue of political variables affecting economic growth.
More importantly, India ranks 66 out of 88 developing countries on the global hunger index. It trails sub Saharan countries like Cameroon and Sudan, where the per capita income is much lower than in India. Clearly, India’s impressive growth has not translated into eradicating hunger, and the state needs to take concerted, urgent steps to secure the right to food for its citizens. In this perspective politically motivated policy certainty seems to be the most important factor of a government affecting economic growth among Indian states.

This paper, thus, theoretically tries to explore the impact of politically motivated policy certainty of a government guided by the norm of equality of income on economic growth and tries to examine its empirical validity on major Indian states.

This paper is organized as follows: Section II outlines the simple theoretical model. Empirical works appear in section III. Section III has two parts: variables and methodology, and results of the empirical findings. Section IV concludes.

Section II

In the simple theoretical model we try to incorporate political factor into endogenous growth and drives the effect of political repression, political stability and policy certainty on long run economic growth. But in the empirical model we try to show how does policy certainty/uncertainty, a major dimensions of the political system, act as an important determinants of economic growth in the context of some major states of India, including West Bengal.

The following hypotheses are made in the theoretical model.

1) Economic growth increases as political freedom increases.

2) Economic growth decreases as political instability increases.

3) Economic growth decreases as political uncertainty increases.
The fundamental assumptions of the theoretical model are as follows:

1) The model considers an economy without population growth.

2) Utility function is strictly increasing and quasi-concave characterized by diminishing marginal utility in consumption.

3) Individuals taste does not change over time. In that case, the trade-off a consumer would be willing to make, with regard to present/young (t-1) versus future consumption/old (t) should not depend on date (i.e. the time identifier), but on the levels of consumption in each time period.

4) Individuals do have same preference for the two periods (no impatience), i.e. a given level of income will generate same utility if it is consumed in the future rather in the present.

5) When political freedom is considered we assume that current regime(government) will not change in the same period(t).

6) For political instability, we assume that current regime (government) will be replaced at time t.

7) As to policy certainty is concerned, the policy of the new political regime is assumed untested, and once the new regime is installed at time t, it is equally likely to be either more or less repressive than the current regime.

8) Basic individual skill and exogenous rate of the accumulation of the reproducible capital are constants for both the periods.
We can express impatience by assuming a representative individual born in period t-1 maximizes the following intertemporal or time-separable utility function.

\[ V(c_{t-1}, d_t) = u(c_{t-1}) + \frac{1}{1+\rho} E_t u(d_t), \quad \rho \geq 0 \quad \text{........(1)} \]

In (1) c is individual’s consumption when young, d is the individuals consumption when old, t is the time-period, \( \rho \) is the measure of time preference and e is the expectation operator. It is apparent from the utility function that consumption in the future is given less weight than consumption now. For the same preference, \( \rho = 0 \); then the ICs have slope= -1, along the 45 ray.

The utility function is additively (strongly) separable in \( c_{t-1} \) and \( d_t \).

For the simplicity of calculation, the intertemporal utility function is assumed to have constant elasticity.

\[ u(c_{t-1}) = \frac{1}{1-\sigma} (c_{t-1})^{1-\sigma} \quad \text{and} \quad u(d_t) = \frac{1}{1-\sigma} d_t^{1-\sigma} \quad \text{.........(2)} \]

And elasticity of intertemporal substitution is \( \sigma \). Here \( 0 < \sigma < 1 \).

Moreover the separable parts are functionally identical. Both are well behaved (strictly increasing and quasi-concave characterized by diminishing marginal utility in consumption).

The budget constraint when the individual is young is

\[ C_{t-1} + k_t = y_{t-1} \quad \text{.................(3)} \]

Where \( y_{t-1} \) is the individual’s income when young and \( k_t \) is the accumulation of reproducible capital, including human capital (composite of physical and human
capital). When old (i.e. at time \( t \)) Obviously, income levels determine the amount of consumption and investment in the model.

One important innovation of the theory of reproducible capital is how an individual allocates the time over various activities in the current period and that affects his productivity in the future period. (Arrow, 1962; Romer, 1986; Lucas, 1988).

Since \( k \) is the composite of physical and human capital, it creates a knowledge spillover on the basic skills of the new generation.

\[
W_{t-1}k_{t-1} = y_{t-1} \quad \ldots \ldots \ldots (4)
\]

Where \( w \) is an exogenous endowment of ‘basic skills’. It measures personal productivity in utilizing the total capital accumulated, as wage-earning potential varies from person to person with the same level of reproducible capital in the economy. Since \( k \) is the average accumulation of reproducible capital in the economy, equation (4) implies that the reproducible capital accumulated by previous generation is a positive externality on the income of the new generation. The higher the average capital accumulated, the higher is the income for the new generation with the endowment of the basic skills kept constant.

In our economic model of consumption and investment, a person decides how much to consume currently and invest for consumption in the future, conditioned by his income, while how much he earns depends on his idiosyncratic capacity and his existing reproducible capital.
Importantly, any economy functions within some sort of political framework, and consequently, it would be impossible for an economic agent to be uninfluenced to the political structure surrounding the economy.

How does the accumulation of reproducible capital work as a function of three political variables- political freedom, political stability and policy certainty?

**Political freedom:**

We start with a political regime that exists during the first period of the economic agent’s life. If this regime remains in power in the second period with a probability of \( \Pi \), the budget constraint of the individual when old is,

\[
d_t = \Pi r_t (1-\gamma) k_t, \quad \gamma<1\ldots\ldots(5)
\]

\( r_t \) is the exogenous rate of return. The variable \( \gamma \) indicates the political and social costs imposed by the government. It is the cost in the future period about which the individual is concerned when he makes an investment decision, given the political constraints. \( \gamma \) can take positive or negative sign. When government policy has a positive effect on the incentive of the economic agent to invest, which will augment of investment return to the individual, \( \gamma \) will take a negative value when exogenous rate \( r \) is kept constant. When government policy takes a toll on the economic activities, \( \gamma \) takes a positive value between zero and one. Hence the unit of \( \gamma \) lies between \(-\infty\) and \(1\). \([ \gamma = (-\infty, 1) \]).
Government may be conducive to the market by establishing rules that protect growth enhancing activities. For instance, the government may pass laws and take actions to protect property rights. The government may also provide public goods, such as national defence, communication network, transportation infrastructures, research and education all of which lead to increase private investment.

When government policy takes toll on the economic activities, \( \gamma \) takes a positive value. As a result, total return of the individual will decrease, compared to the benchmark of no government, which is \( d_1 = r_k \) (\( \gamma = 0 \)).

The variable \( \gamma \) reflects the fundamental characteristics of a political system. The reverse of which is political freedom, one of the 3 political variables of a political system.

**Political stability:**

The variable \( \Pi \) stands for political stability; as it conceptualizes the probability of the current political regime remains in place for the second period, i.e. at period \( t \). So the probability that the current regime will be replaced at period \( t \) must be \( 1 - \Pi \). Each political regime is identified with a particular set of policies, and that those policies do not change fundamentally. If the current government can maintain its rule in the future, then we can expect policy continuation. The variable \( \Pi \) captures the longevity of the current government. It is another name for political stability in our analysis. The reverse of which is political instability, i.e. if the policies do undergo a radical change, that is equivalent to political regime change and \( 1 - \Pi \) captures the probability that the current regime will be replaced. (One example is the policy change from Mao’s cultural revolution to Deng’s economic reform, where both periods were under the regime of communist
party of China, they were guided by different political and policy agendas. Therefore, the political regime changed for the two historical periods.

**Policy certainty:**

$\Delta \gamma$ measures the difference in political and social cost imposed by the new and old regimes. When $\Delta \gamma$ equals zero, it is called policy certainty, i.e. there will not be any policy difference between the current and future political regimes. The reverse of which is policy uncertainty. It is assumed that the policy of the new political regime is contested, and once the new regime is installed (i.e. the probability that the current regime will be replaced at time $t$, is $1-\Pi$), there is a probability of 50% that the new regime will be either more or less repressive than the current regime by $\Delta \gamma$. Here $\Delta \gamma$ gives the third political variable.

Thus the budget constraint of the old generation, when a new political regime is installed is:

$$d_t = \{r_1 (1- \gamma + \Delta \gamma)k_t\}(1- \Pi)/2 , \ldots (6)$$

when the current regime is less repressive

$$d_t = \{r_1 (1- \gamma - \Delta \gamma)k_t\}(1- \Pi)/2 , \ldots (7)$$

when the current regime is more repressive

when the three political variables in place, political freedom, political stability and policy certainty the individuals problem is to maximize equation (1) subject to the constraints (2) to (7), i.e.

$$\text{Max} \ u(c_{t-1}) + 1/(1+\rho) \ E_t \{ u(d_t) \} \ \ldots \ldots (8)$$

$$C_{t-1},d_t$$

Setting the marginal utility from consumption in $t-1$ equal to the marginal utility from consumption
in $t$

$$(C_{t-1})^{-\sigma} = 1/(1+\rho) \left[ \Pi(r_t(1-\gamma))^{1-\sigma} + (1-\Pi)/2 \left\{ (r_t(1-\gamma+\Delta\gamma))^{1-\sigma} + (r_t(1-\gamma+\Delta\gamma))^{1-\sigma} \right\} \right] k_t^{-\sigma}$$

...............(9)

Dividing both sides of (9) by $k_t^{-\sigma}$ and substituting $w_{t-1} k_{t-1} - k_t$ for $C_{t-1}$.

$$(k_t/(w_{t-1} k_{t-1} - k_t))^{-\sigma} = (1+\rho)^{-1} \left\{ \Pi(1-\gamma)^{1-\sigma} + (1-\Pi)/2 \left\{ (1-\gamma+\Delta\gamma)^{1-\sigma} + (1-\gamma-\Delta\gamma)^{1-\sigma} \right\} \right\} r_t^{1-\sigma}$$

Defining $g = k_t/k_{t-1}$ and denoting

$$\beta(\Pi, \gamma, \Delta\gamma) = \Pi(1-\gamma)^{1-\sigma} + (1-\Pi)/2 \left\{ (1-\gamma+\Delta\gamma)^{1-\sigma} + (1-\gamma-\Delta\gamma)^{1-\sigma} \right\}$$

...............(11)

We have, $g = w_{t-1} (1+(1+\rho)^{1/\sigma})^{1-\sigma} r_t^{1-1/\sigma} \beta^{-1/\sigma} r_t^{1-\sigma}$. So we have

$$\delta \beta / \delta \Pi > 0, (2) \delta \beta / \delta \Delta\gamma < 0, (3) \delta \beta / \delta \gamma < 0.$$

**Lemmas:**

1. $\delta \beta / \delta \Pi > 0$
2. $\delta \beta / \delta \Delta\gamma < 0$
3. $\delta \beta / \delta \gamma < 0$.

(1) $\delta \beta / \delta \Pi = (1-\gamma)^{1-\sigma} -1/2 \left\{ (1-\gamma+\Delta\gamma)^{1-\sigma} + (1-\gamma-\Delta\gamma)^{1-\sigma} \right\} > 0$

Since $(1-\gamma)^{1-\sigma}$ is a concave function of $(1-\gamma)$, it follows that $(1-\gamma)^{1-\sigma}$ is larger than the average value of $(1-\gamma+\Delta\gamma)^{1-\sigma}$ and $(1-\gamma-\Delta\gamma)^{1-\sigma}$. So we have $\delta \beta / \delta \Pi > 0$.

(2) Take the first derivative of equation (11) with respect to $\Delta\gamma$, we have,

$$\delta \beta / \delta \Delta\gamma = \left\{ (1-\Pi)/2 \right\} (1-\sigma) \left\{ (1-\gamma+\Delta\gamma)^{-\sigma} + (1-\gamma-\Delta\gamma)^{-\sigma} \right\} < 0$$. 

...............(14)
Taking the first order derivative of equation (11) with respect to $\gamma$, we have,

$$\frac{\delta \beta}{\delta \gamma} = (\sigma-1)[\Pi (1-\gamma)^{-\sigma} + \frac{1}{2}\{(1-\Pi) \{(1-\gamma+\Delta \gamma)^{-\sigma} + (1-\gamma+\Delta \gamma)^{-\sigma}\}\} < 0 \ldots \ldots (15)$$

Therefore the lemmas yield the following propositions:

1. $\frac{\delta \beta}{\delta \Pi} > 0$
2. $\frac{\delta \beta}{\delta \Delta \gamma} < 0$,
3. $\frac{\delta \beta}{\delta \gamma} < 0$.

It is important to mention that (1), (2) and (3) also satisfy the second order conditions.

Therefore we can draw the following theoretical conclusions: ceteris paribus, first, the lower the probability of the survival of the current regime or higher the level of political instability, the lower the growth rate; second, the more polarized the policy positions between the opposite parties or the higher the degree of policy uncertainty, the lower the growth rate; third, the more repressive the government or lower the level of political freedom, the lower the growth rate.

**Section III**

**Variables and Methodology**

We try to find out the effect of the political and socio-economic factors (captured by $g$, gini coefficient) on the economic growth (SGDP) among 15 major states of India (Andhra Pradesh, Assam, Bihar, Gujarat, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh, and West Bengal) during the post liberalization period (1991-2004). Economic growth is regarded as dependent variable. It is measured by per capita state gross domestic product (SGDP). We regress SGDP on $g$ (gini coefficient, policy variable) and some
control variables (birth rates, infant mortality rates and primary school enrolment rates) on the basis of simple OLS method.

Important economic control variables considered in this analysis affecting economic growth are the initial level of education, infant mortality rate and the birth rates. Human capital plays a critical role in endogenous growth models, which hold that knowledge-driven growth can lead to an increasing rate of return. In Romer’s work, for instance, human capital is the major input to research and development; since people innovate technologies necessary for continued growth (Romer 1990). Empirical evidence has revealed a positive relationship between education and growth. In this study, years spent in education are employed as a proxy for the initial stock of human capital. It is hypothesized that the initial level of human capital has a positive effect on growth.

Birth rates negatively affect economic growth. Feng, Kugler and Zak in recent works (2001, 2002), derive and test a set of conditions linking politics to growth through fertility rates. A rapid increase in population decreases human capital and transfers resources away from economic growth. Barro (1997) empirically that high fertility rates tend to have a negative effect on economic growth, while Przeworski et al. (2000) find that population growth pronouncedly reduces economic growth. Crude birth rates (CBR), defined as the number of births per 1000 population, is taken as a measure of population increase. Infant mortality rate is also an important factor affecting economic growth. In our regression model we assume that both infant mortality rate and birth rate have negative effect on growth. As regards policy variable is concerned, economic growth is negatively influenced by income inequality or policy inconsistency.
## Results

The results of the regression are given in following table.

<table>
<thead>
<tr>
<th>SL. NO.</th>
<th>STATES</th>
<th>RELATIONSHIP BETWEEN SGDP AND GINI IN PRESENCE OF THE CONTROL VARIABLE</th>
<th>SIGNIFICANT/INSIGNIFICANT (AT 5% LEVEL)</th>
<th>DESIRABLE/UNDESIRABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ANDHRA PRADESH</td>
<td>NEGATIVE</td>
<td>SIGNIFICANT</td>
<td>DESIRABLE</td>
</tr>
<tr>
<td>2</td>
<td>ASSAM</td>
<td>POSITIVE</td>
<td>INSIGNIFICANT</td>
<td>UNDESIRABLE</td>
</tr>
<tr>
<td>3</td>
<td>BIHAR</td>
<td>NEGATIVE</td>
<td>SIGNIFICANT</td>
<td>DESIRABLE</td>
</tr>
<tr>
<td>4</td>
<td>GUJRT</td>
<td>POSITIVE</td>
<td>SIGNIFICANT</td>
<td>UNDESIRABLE</td>
</tr>
<tr>
<td>5</td>
<td>HARYANA</td>
<td>POSITIVE</td>
<td>SIGNIFICANT</td>
<td>UNDESIRABLE</td>
</tr>
<tr>
<td>6</td>
<td>KARNATA</td>
<td>NEGATIVE</td>
<td>SIGNIFICANT</td>
<td>DESIRABLE</td>
</tr>
<tr>
<td>7</td>
<td>KERALA</td>
<td>POSITIVE</td>
<td>SIGNIFICANT</td>
<td>UNDESIRABLE</td>
</tr>
<tr>
<td>8</td>
<td>MADHYA PRADESH</td>
<td>POSITIVE</td>
<td>SIGNIFICANT</td>
<td>UNDESIRABLE</td>
</tr>
<tr>
<td>9</td>
<td>MAHARASRTA</td>
<td>POSITIVE</td>
<td>SIGNIFICANT</td>
<td>UNDESIRABLE</td>
</tr>
<tr>
<td>10</td>
<td>ORISSA</td>
<td>POSITIVE</td>
<td>SIGNIFICANT</td>
<td>UNDESIRABLE</td>
</tr>
<tr>
<td>11</td>
<td>RAJASTHAN</td>
<td>POSITIVE</td>
<td>SIGNIFICANT</td>
<td>UNDESIRABLE</td>
</tr>
<tr>
<td>12</td>
<td>TAMILNADU</td>
<td>POSITIVE</td>
<td>INSIGNIFICANT</td>
<td>UNDESIRABLE</td>
</tr>
<tr>
<td>13</td>
<td>UTTAR PRADESH</td>
<td>POSITIVE</td>
<td>SIGNIFICANT</td>
<td>UNDESIRABLE</td>
</tr>
<tr>
<td>14</td>
<td>WEST BENGAL</td>
<td>POSITIVE</td>
<td>SIGNIFICANT</td>
<td>UNDESIRABLE</td>
</tr>
<tr>
<td>15</td>
<td>PUNJAB</td>
<td>POSITIVE</td>
<td>INSIGNIFICANT</td>
<td>UNDESIRABLE</td>
</tr>
</tbody>
</table>

From the above results the following conclusions can be drawn.

1. For Andhra Pradesh, Bihar and Karnataka there is the significant negative relationship between the economic growth (SGDP) and the extent of income inequality /policy
uncertainty (gini coefficient). Thus for these states it may be claimed that as income inequality decreases, the SGDP rises which is definitely a desirable solution.

2. For the states like Gujrat, Haryana, Kerala, Maharashtra, Madhya Pradesh, Orissa, Rajasthan, Uttar Pradesh and West Bengal there is the significant positive relationship between the economic growth (SGDP) and the extent of income inequality / policy uncertainty (gini coefficient). This means that the SGDP per capita of these states increases with the increase in the level of income inequality / policy uncertainty. From the point of view of the common mass, this is not at all a desirable situation as it implies accumulation of the wealth in the hand of the rich class and leads to the widening of the gap between the poor and the rich.

3. For some states like Assam, Punjab and Tamilnadu there is no significant relationship between the economic growth (SGDP) and the extent of income inequality / policy uncertainty (gini coefficient) at 5% significant level.

**Section IV**

Why is the study significant? This paper, however, lends credence to the fact that politically motivated policy uncertainty among most of the major Indian states under our study (12 out of 15 states including West Bengal) has negative impact on economic growth. Only 3 states (Karnataka, Bihar and Andhra Pradesh) satisfy some expected results as per our hypothesis.
As is well known, the trickle down effect implies that the increase in GDP will reduce inequality i.e. the redistributive policies of the government will reduce income inequality by keeping up growth rate. Is the proposition effective among major Indian states? In the context of the above result it may be said that as majority of Indian population are poor, the issue of economic growth is important but not at the cost of depletion in human development issues. If economic growth is attained at the cost of increasing inequality among the individuals of the economy, then the situation is not at all viable. Economic growth should always be coupled with uniform wealth distribution. If under any situation there occurs any conflict between the economic growth and the distribution of income, then the government should construct its policy in such a way that this conflict gets resolved. So, the policy of attaining inclusive growth for Indian states should be formalized in such a way that equality in income distribution and economic growth should be attained simultaneously. Redistribution of income by fiscal methods must be ensured so that poverty and income inequality might be reduced. So, the set of established procedures of politically motivated policy certainty of government in Indian states should be executed in such a way that there must be a balance between economic growth and human development in all those states.
References:


Human Development Report, (2005), UNDP.


