# **Governance and Income Inequality**

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## INTRODUCTION

Major problems of developing countries are unequal income distribution and low growth rate, which affect their welfare aspects. It was implicitly assumed that whenever we achieve target of higher growth rate, benefit of growth would automatically trickle down to the poor. History of developing countries shows that the rich benefited more than the poor as evidenced by rising income inequality during the period of higher economic growth.

The economic policy changes are often triggered by the logic of low level of equilibrium of output level, employment and income distribution. To overcome this low level of equilibrium trap, government often adopt polices so as to achieve high level of income and employment growth and development, and equitable income distribution. Coherent policy instruments are essential to meet these policy targets. Impact of any macro economic policy has been examined by studying its impact on economic growth and income distribution. In recent years polices have been directed toward reducing the level of poverty and inequality through raising quality of life in society by providing efficient and effective governance. This new economic philosophy has resulted in a massive change in the policy orientation of countries; the priority is now centred on issue of governance and focus is now shifted towards a qualitative nature of its growth and development. According to Sen (1983), the realisation of human capabilities, that enlarge the range of human choices, is essential for a broader notion and measure of economic well-being. The institutional frame work is then considered as one of the essential elements for translating growth and well-being into a sustainable process.

The institutional/governance frame work is vital for sustainable economic growth along with other policy factors like government polices to allocate resources for poverty alleviating and reduce economic inequality.

The concept of accommodating other socio-economic indicators along with per capita income growth have taken up a significant amount of attention, since the United Nation (1954) recommended that national income was to be supplemented by a further set of indices, reflecting various constitutions and determinants of aggregate development and well-being. The studies by Adelmam and Morris (1967) also examined the interactions among the processes of social, economic and political change with the level

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and pace of economic development. Early works done by Anderson (1964) and Aaron (1967) showed that there was an inverse relationship between growth and income distribution. One of the significant contributions to the quality of life with some social indicators was proposed by Morris (1979) who constructed the physical quality of life index and later by Dasgupta and Weale (1992). UNDP Human Development Index had brought together the production and distribution of commodities and expansion and use of human capabilities in their measure. All these indices essentially focus on choices as they are based on indicators like life expectancy, educational attainment, per capita income, civil and property rights [Nagar and Basu (2002)]. In some of the most cited studies show relationship between trade policy, economic growth, poverty reduction and income distribution are probably by Dollar (1992), Ben-David (1993), Sachs and Warner (1995), Edward (1998), Frankel and Romar (1999), Dollar (2001) and Dollar and Kraay (2001). Later empirical work shows that government polices aimed at increasing economic well-being would end poverty. Le Blanc (2000) examines the relationship between economic growth in the macro economy and poverty and finds that this relationship is very sensitive to the distribution features.

Now in some major studies, researchers are showing that the differential performance level across countries is mostly because of the quality of institutional mechanism and other policy level implementation factors. The recent literature on governance proposes that an efficient and effective institutional mechanism is critical in influencing growth and well-being in to a sustainable process. The World Bank (1994) defines good governance as the 'manner in which power is exercised in the management of country economic and social resources. Further the IMF (1996) in its Interim committee meeting identified promoting good governance in all aspects that is social and economic efficiency and growth of the countries. The UNDP (1997) report observes that result of good governance is development that gives priority to poor, advances the cause of women, sustains the environment and creates needed opportunities for employment and other livelihoods. Thus we see the concept of good governance is multifaceted and encompasses different element of the state and the society. Kaufmann, et al. (1999a, 1999b, 2002) indicates a strong causal relationship running from good governance to an increasing level of per capita income and other social outcomes. According to Rodrik (2000) the institutes would work efficiently in which they protect private property and environment, moderate business activity, support macroeconomic stability, provide social insurance and protection, and manage social conflicts are the one where economies could handle differential level of economic development and could achieve sustainable economic advancement.

The World Development Report (2003) emphasised that for sustainable development in a dynamic world, the institutions need to be improved at many levels, from local to global. Moreover, the World Bank's The Quality of Growth (2000) stressed that there are four factors especially relevant for poverty outcomes; distribution, sustainability, variability, and governance surrounding the growth process

Impact of different policy instruments depends on how effectively public sector performs to achieve these objectives. This phenomenon is also called "Good Governance". Governance means the mechanism of decision-making process by which decision is implemented. Economists agree that governance is one of the critical factors explaining the divergence in performance across different countries. The major objective of this paper is to examine the change that occurred in economic growth and income distribution due to effectiveness of different public polices. In addition, we show how this relationship could have been overlooked by previous studies by introducing Sen (1974) welfare index. Effectiveness of any public policy should be checked by how much it helps to improve welfare of the economy. Either this objective is achieved by increasing economic growth or improving income distribution, so that benefit of prosperity should be enjoyed by all segment of the economy.

### METHODOLOGY

Public sector performance depends on how it effects economic growth and income distribution of the economy that is measured by Gini coefficient. Furthermore, different instruments which explain good governance like Political stability, Government Effectiveness, Regulatory quality, Rule of Law and Control of Corruption explain cross-country variations in economic growth and income distribution of the economy. In sensivity analysis of cross-country regression, the most severe difficulty is in isolating the impact of Good Governance indicators from other macro economic variables. However, the complex interaction among Good Governance indicators and other macro economic variables creates difficulties.

The analysis starts from the following Sen Index of welfare..

$$W_t = Y_t + (1 - G_t)^p$$
 ... ... ... (1)

Where  $W_t$  is welfare,  $Y_t$  is out put, and  $G_t$  is an index of the income distribution. Also noted that  $\beta$  is the share of income distribution in social welfare.

Taking natural log on both sides and differentiating with respect to time yields the following differential equation to account for growth process.

$${}^{*}W/W = Y/Y + (\beta)(1-G_t)^{*}/(1-G) \qquad \dots \qquad \dots \qquad \dots \qquad \dots \qquad \dots \qquad (2)$$

Where dots indicate instantaneous rate of change over time.

Equation (2) indicates that the growth rate of welfare W/W equals the growth rate

of output Y/Y plus the growth rate of one minus Gini coefficient G/G. According to the objective of our study, we first analyse the impact of good Governance on each component of above equation. We can then analyse the impact of good Governance on economic growth. For convenience in empirical analysis, we specify the following linear relationships.

$${}^{*}_{Y/Y} = a_0 + \sum_{j=1}^{k} b_j P_j + \sum_{j=1}^{l} c_j E_i + U \qquad \dots \qquad \dots \qquad \dots \qquad \dots \qquad \dots \qquad (3)$$

$$1 - \frac{K}{G} = \alpha_0 + \sum_{j=1}^k \beta_j P_j + \sum_{j=1}^l \gamma_j E_j + V \qquad \dots \qquad \dots \qquad \dots \qquad \dots \qquad (4)$$

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In Equations (3) and (4)  $P_{j}$ , and  $E_{j}$  stands for political and economic indicators of good Governance. In Equation (3)  $a_{0}$  measures the exogenous component of economic growth attributes to pure exogenous progress,  $b_{j} = (j = 1, ..., k)$  measures the effect of political factors on economic growth, and  $c_{j}$  (j = 1, ..., l) measures the effect of economic indicators on economic growth. Like wise in Equation (4)  $\alpha_{0}$  indicates the exogenous growth in Gini coefficient that cannot be attributed to any of the variables in equation, while  $\beta_{j} = (j = 1, ..., k)$  and  $\gamma_{j} = (j = 1, ..., l)$  shows the effect of political and economic variables on the growth rate of Gini coefficient. The variables U and V represent random growth shocks and the random fluctuations in Gini coefficient.

Finally, model of this study is represented by Equations 2 to 4.

In order to study the impact of good Governance on economic growth and income distribution for SARRC countries, the study chooses World Bank "Aggregate Governance Indicators 1996-2005" dataset for four countries; Bangladesh, India, Pakistan and Sri Lanka. The study used different indicators of Good Governance like political and economic indicators. In political indicators, the study uses political stability, government effectiveness, regulatory quality, rule of law and control of corruption and in economic indicators, government expenditure on health and education, reserves and inflation rate.

Following, Arellano and Bond (1991), Arellano and Bover (1995), Blundell and Bond (1997), we use system GMM method in which the levels of instruments are used to form the moment conditions for the equation.

Specifically, if the causality problem between Governance and social welfare were not settled before hand, the random term would be correlated with Governance variables. This creates simultaneity bias. Furthermore, since the inter country variation in Good Governance indicators is much more prominent than the intra country variation, the above mentioned correlation is mostly confined to country specific random errors. The proposed estimation procedures handle this problem in the following way. First, the country specific effect is eliminated in the equation with first difference. Second, for the equations in levels we use appropriate instrumental to tackle this problem. We follow the second method. Given that lagged values are used as instrument in the regression, the model (2-4) is estimated by GMM procedure, generating consistent and efficient coefficient estimates. The use of GMM is also called for in the light of simultaneity in our equation system 2 to 4.

#### **EMPIRICAL RESULTS**

The estimates of Equations (2-4) are presented in Tables 1 and 2.

According to the results of empirical finding, although some Good Governance indicators improve welfare of the society but it has negative influence on GDP growth rate. In most of the developing countries, government face budget deficit, it has limited resources but unlimited expenditure categories. So in which category government chooses to increases its expenditure; either they give more importance to welfare or GDP growth rate? Government can achieve some of objectives through increasing its expenditure on regulatory measures like equitable income distribution, encouraging domestic product or reducing demand for some products. Which policy government

## Table 1

Variable	Parameter Estimate
Intercept	-1.27
	(4.39)*
GDP Growth Rate	1.00
	(8.32)*
1-Gini Coefficient	1.032
	(7.58)*
$\mathbb{R}^2$	0.98

The Effect of GDP Growth Rate and Gini Coefficient on Welfare (Dependent variable is Growth Rate in Social Welfare)

Note: The t-values significant at 1 percent, 5 percent and 10 percent levels are indicated by \*, \*\*, \*\*\*.

## Table 2

Variable	Parameter Estimate of GDP Growth Rate	Parameter Estimate of Gini Coefficient	
Intercept	-2.29	-1.07	
	(-0.76)	(-7.53)*	
Political Stability	-0.22	0.10	
-	(-0.76)	(1.16)***	
Regulatory Quality	2.01	-0.35	
	(1.70)***	(-4.13)*	
Rule of Law	-5.43	-0.34	
	(-3.17)*	(-2.82)**	
Control of Corruption	5.00	-0.15	
	(2.71)**	(-2.18)**	
Government Effectiveness	-1.17	0.47	
	(-0.81)	(3.36)*	
Government Reserves	0.24	-0.03	
	(2.12)**	(-6.79)*	
Public Expenditure on	0.25	-0.005	
Education	(1.65)***	(-0.72)	
Public Expenditure on	0.44	-0.02	
Health	(1.99)***	(-1.28)***	
Inflation Rate	-0.22	-0.007	
	(-0.76)	(-0.64)	
$R^2$	0.13	0.60	

The Effect of Good Governance on GDP Growth and Gini Coefficient
(Dependent Variables are GDP Growth Rate and Gini Coefficient)

Note: The t-values significant at 1 percent, 5 percent and 10 percent levels are indicated by \*, \*\*, \*\*\*.

should follow? It depends on the priority of the governments whether they give more weight to GDP growth rate or achieving some other objectives, which can have ever lasting impact on growth rate of the economy. So expenditure to improve public institutions of any country depends on its priorities and efficiency of the government, so in developing countries there is need of strong and efficient government to achieve growth and welfare objective.

Mostly all expenditure increase welfare of the economy, but those expenditures, which generate employment opportunities and have forward linkage, influence the welfare strongly than the others. In our analysis expenditure on regulation, and control of corruption help to improve income distribution and output growth rate of the economy. Whenever there is equal distribution of the income welfare of the society improves. So there is need to have strong government that implement polices and increase expenditure for the improving income distribution and GDP growth rate of the economy. When GDP growth rate increase, it shows per capita income increase, but this is not only objective of Good Governance. There is need to transfer fruit of prosperity to all segment of the economy and reduces trap of poverty. When government expenditure on education and health sector increases, it improves human capital of the economy and helps to increase employment opportunity in the economy that in turn reduces unequal income distribution from the economy and improves welfare of the society. As population growth rate is high in this region of SAARC countries so when labour force participation rate increases then income also increases because of proper utilisation of under utilised resources of the economy and helps to increases demand for goods and services. It also helps to increase output in the economy because demand creates its own supply and benefit of out put goes at gross root level. When reserves ratio increases in the economy it shows that there are unutilised resources in the economy and effect welfare of the economy negatively by increasing unequal income distribution. (Reserves show that there is trade surplus and government have enough resources to finance and help to improve output growth rate).

Whenever law and order condition improves and there is political stability in the economy then there is favourable environment for local and foreign investment. When investment opportunities increase it generate employment opportunities and help to improve output growth rate in the economy. As most of the developing countries face budget deficit and whenever expenditure on law and order increases, it shows crowding out of productive public expenditure and effect income growth rate negatively but helps to improve income distribution. Political stability and government effectiveness has strong impact on output growth rate and to remove inequality from the economy because these factors not only attract local investment but also foreign direct investment. But in this specific sample, even if government sector is stable, there is still a lot of corruption and crowding out and misutilisation of expensive resources. This is why stable and efficient sector has no role to boost out put growth. When out put level is low the investment is also at low level and major problem of unemployment cannot be solved and therefore, income distribution remains worse.

We are now in a position to derive the effects of good Governance variables on economic welfare because some categories affect GDP growth positively while its impact on welfare is negative and vice versa. In order to analyse the effects of good Governance variables on economic welfare, we substitute the estimated Equations 3 and 4 in the estimated Equation 2. The result is presented in Table 3.

According to Table 3, we first examine the effects of good Governance on GDP growth rate and then its effects on Gini coefficient.

Table 3	
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	Quantity	Quality	
Variable	Channel	Channel	Total Effect
Political Stability	-0.22	0.90	0.68
Regulatory Quality	2.01	1.35	3.36
Rule of Law	-5.43	1.34	-4.09
Control of Corruption	5.00	1.15	6.15
Government Effectiveness	-1.17	0.53	-0.64
Government Reserves	0.24	1.03	1.27
Public Expenditure on Education	0.25	1.005	1.25
Public Expenditure on Health	0.44	1.02	1.46
Inflation Rate	-0.22	1.007	0.78

Impact of regulation and control of corruption on output growth dominate as compared to its impact on distribution of income and help to improve welfare of the economy. Political stability helps to improve welfare by improving income distribution of the economy. When expenditures are diverted to improve law and order condition, there occurs large crowding out of productive public expenditure, and welfare of the economy decreases because our sample consists of those countries that have limited resources and unlimited utilisation. While economic indicators, that show condition of the governance like reserves, government expenditure on health and education, has positive impact both on output growth and income distribution, and helps to improve welfare of the society.

## CONCLUSION

This study is an attempt to analyse the effects of a set of Good Governance instruments on economic welfare. The study considers both the quantity and quality channels through which a Good Governance instrument could affect economic welfare. The quantity channel here refers to growth in the stock of output, while the qualitative channel means to improve income inequality in the economy. The empirical analysis is based on data for four SARRC countries for period 1996 to 2005. The empirical results lead us to a number of interesting conclusions that are discussed below.

Government sector play very important role in this specific sample but efficiency of public sector is poor. Although resources are limited and countries face budget deficit but still large public sector has no strong impact to increase output which can improve the welfare of the economy, as there is large misallocation of resources and corruption in public sector. So the need of time is to increase efficiency of public sector as it is possible only by increasing efficiency of public institutions, minimising corruption and crowding out of resources.

It was commonly assumed that if government achieve objective of output growth then it has to sacrifice welfare aspect by making income distribution worse off and vice versa but according to empirical finding of this paper there is positive relation between output growth and improved income distribution of the economy. The output growth will increase income generating activities in the economy thus reduce unemployment rate which is major problem of developing countries. When public sector tackles this problem then output growth and income distribution improves in the economy. Whenever government increases its expenditure in productive and efficient way, it achieves both objectives side by side and increase welfare of the society.

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## Comments

This paper has examined the changes that occurred in economic growth and income distribution due to effectiveness of different public policies by using Sen (1974) welfare index. The study has used the World Bank "Aggregate Governance Indicators 1996–2005 for four countries; Bangladesh, India, Pakistan and Sri Lanka. The two major findings of the study are: (1) the efficiency of public sector to increase output which can improve the welfare of the economy is poor; and (2) there is a positive relation between output growth and improved income distribution of the economy. The paper argues that output growth will increase income generating activities in the economy thus reduce unemployment rate.

However, the study has not discussed and compared the growth, governance and inequality situation in the four above-mentioned countries. It is therefore difficult to put the study in proper context. It has also ignored the inter-country variations in the analysis. For example, during the last one and half decade the relationship between growth and income distribution in Pakistan is unclear, although it has generally been positive, while in other countries of the refer, relationship could be in the expected direction. This study must be considered as an explanatory in nature requiring for further indepth investigation.

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