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Empirical Analysis of Relationship between Poverty Reduction and Governance in Pakistan

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Poverty reduction is one of the greatest global challenge. So, the very first goal among the Millennium Development Goals (MDGs) and Sustainable Development Goals (SDGs) is to eradicate poverty. Governance in political and economic institutions is directly and strongly correlated with all strategies and measures to reduce poverty. However, this idea is not empirically tested especially in case of sub-continent. Hence, first, this paper presents statistical analysis of this phenomenon in case of subcontinent and then econometric analysis of link between governance and poverty reduction in case of Pakistan. Time series data from year 1984 to 2015 is used for econometric analysis. After checking stationary of variables, co-integration among variables, stabilities of econometric model, ARDL technique is used for estimation. What follows is the conclusion that that governance is directly affecting the schemes to reduce poverty. Moreover, the pragmatic recommendations for reduction in poverty are given in this paper.

Keywords: SDGs, MDGs, Governance, Poverty, Co-integration, Stability of econometric model, ARDL Bound Test Approach

INTRODUCTION

This research proposes a chain of governance's indicators to be used in assessing progress in the process of poverty reduction, keeping in view the Millennium Development Goals (MDGs) and Sustainable Development Goals (SDGs). United Nation has passed the resolution of Millennium Development Goals (MDGs) in 2000. Among the eight development goals poverty reduction is most important one and target was set to achieve these goals by 2015 taking 1990 as a base year. Many people, approximately 836 million people are living in extreme poverty i.e. have less than $1.25 per day and 80 percent among them are living in South Asia and Sub-Saharan Africa. However, through Millennium Development Goals (MDGs), numbers of extreme poor people decreased from 1.9 billion to 836 million between 1990 and 2015.

The sustainable development goals (SDGs) are plan of action for the people, planet and prosperity. In September 2015 UNO has approved 17 sustainable development goals and these goals must be achieved by 2030. Poverty in its all forms, and dimensions is a worst global problem, so the very first goal among these sustainable development goals is to eradicate poverty. This comprises enhancing access to basic resources and facilities, pursuing the poor people, and assisting societies which are affected by clashes and environmental disasters. Good governance as a supporting base for economic development has also become main concern for social development and poverty reduction among International Financial Institutions (IFIs).

Issue of governance is not new in development literature. Governance is defined as a mode in which power is exercised in order to manage the economic and social resources of a country for development. All people would be well off, if this power was exercised within institutions that were competent, accountable, transparent, quick to respond, fair and judicious. Good governance for IFIs like World Bank is like the term sound development administration. Economic performance of developing countries from 1965 to 1980 highlighted the issue of governance which created hurdles in the efficient use of their resources. During 1990s, agenda of governance was geared up by World Bank and since that period it has been the main pillar for economic development.

According to World Governance Indicator (2011) governance consists of traditions and institutions through which power is exercised. Power means the process by which government is selected, monitored and replaced. UNDP (1997) defines governance as exercise of economic, political and administrative authorities to manage a country's affairs at all levels. It comprises the mechanisms, processes and institutions, through which citizens and groups clear their interests, exercise their legal rights, meet their obligations and mediate their differences. According to Asian Development Bank (1995) there are four basic elements of good governance such as accountability, participation, predictability and transparency. IMF (2005) is onesided to only the economic aspects of governance: improving the management of public resources, supporting the development and maintenance of a transparent and stable economic and regulatory environment conducive to efficient private sector activities. USAID (2005) describes governance as the ability of government to develop an efficient, effective public management process that is open to citizens to participate that strengthens democratic system of government. Kaufmann (2003) says that governance has six dimensions; voice and external accountability, political stability and lack of violence, crime and terrorism, government effectiveness and regulatory quality, rule of law, and control of corruption.

Over the years, policies have been made to build structure of institutions to reduce the poverty. Majority of the poor live in developing countries of South Asia, sub- Saharan Africa and

Latin America. Although there are many other factors those cause poverty, but poor political governance is most severe one among them. The connection between political governance and poverty reduction is surely significant. On one hand, there is some empirical evidence to suggest that weak political governance reinforces poverty (Poverty Task Force, 2002, Campos and Nugent, 1999). On other hand, the link between governance and poverty is simply assumed to be true (OECD Development Centre.

Theoretically, there are different channels through which political governance makes effect on poverty. These channels include, (a) creating accountability in utilizing public revenue in the interest of the poor, (b) building national capacities for propoor policy information and implementation, (c) improving management and participation of private sector for efficient service delivery to the poor, (d) minimizing corruption through empowering the poor as it effects the poor most, (e) strengthening the rule of law to prevent property rights of poor, (f) involving all stakeholders including NGOs those are representative of poor, (g) providing security against economic shocks through better management of fiscal resources (h) free and fair process of selection and replacement of govt. in order to efficient delivery of social services .

The above discussion shows that political governance is important variable among all other macroeconomic variables in effecting poverty. So, based on this discussion, research question of this paper is that whether the quality of political governance is empirically correlated with poverty reduction in case of Pakistan or not.

Next section II presents hypothesis building on the base of literature review of previous study and statistical analysis of link between political governance and poverty for India, Pakistan and Bangladesh. Succeeding section III deals with data description, specification of econometric model, methodology and estimation of model. Final section IV covers the conclusion.

LITERATURE REVIEW

Joshi et al (2015) three indices of governance including the provision of security, the building of capacity, and the deepening of inclusion are developed for 183 countries. Positive longterm prospects for governance around the world are found. Much of this positive outlook is due to momentum created by recent progress in key dimensions of human development, education, health, and income. Increasing enrolment of young people in education, improving health and lengthening lifespans, climbing income levels, falling fertility rates, in some of the poorest countries, along with other ongoing socioeconomic changes all favour stronger governance. In conclusion, their findings have much relevance for the Sustainable Development Goals (SDGs) as improved governance is not only a desirable end, but also a necessary means to accomplish the other SDGs

Carbonnier et al (2012) made comparison of governance outcome in developed and developing countries. Industrialized countries like Australia, Canada and the United States succeeded in utilizing their natural resources into economic growth and development. Developing countries like Botswana, Chile, Malaysia or South Africa have included in upper-middle income economies by utilizing natural resources. But other resource abundant economies such as the Democratic Republic of the Congo and Niger could not compete with these achievements. They have ranked among low-income countries despite abundant natural resources due to weak governance performance as compare with that of developed economies. This study based on empirical analysis of significance of governance for better utilization of resources in order to attain development goals. The dynamic panel data analysis of this study covered 108 developing countries over 24 years, from 1984 to 2007. In model, dependent variable was log per capita genuine savings of country *i* time; while the lagged level of log per capita GDP plus population growth plus RR (export-based resource richness) plus indicators of governance were used as explanatory variables. The coefficient associated with the lagged level of log per capita (dependent variable) showed the expected sign, the governance indicator has a positive and significant impact on economic development. So, the existence of effective checks and balances appears to be critical to help in inversing the adverse development outcome of mining or natural resources. These results made demand for increased emphasis on strengthening checks-and-balance mechanisms about the capacity of legislatures to apply effective limits on the executive and on supporting the development of a reliable judiciary.

Rizk (2012) provided evidence of poverty reduction through enhancement of institutional quality. He gave two arguments about nexus between the governance indicators and development outcomes; on the one hand all governance indicators were significantly important for development outcomes while on the other hand all indicators of governance were not equally crucial for development outcomes at different stages of development. He made analysis by using panel data technique and data of 71 countries from year 1996 to 2008. He used poverty reduction as a measure of development outcome, and further he measures poverty as Human Poverty Index (HPI) by UNDP and governance was measured as government effectiveness, regulatory quality, rule of law, political stability, voice and accountability and control of corruption. The coefficients of governance indicators showed the inverse and significant Impact on poverty reduction: a rise of 1 per cent improvement in these indicators resulted in decline of 1.75 per cent in HPI. By following these governance indicator's result the study concluded that countries with weak governance not only suffer from severe poverty but also face problems in public spending on social safety nets.

Earle and Scott (2010) combined theoretical and donor research on the impact of governance works on poverty reduction and development outcomes. This study consists of several chapters that give indications of impact of democratisation, justice and rule of law, corruption, and decentralisation. They provided references for these concepts which are given as. Democracy had neither the best nor the worst effect on economic

development. Diamond (2004) presented theoretical framework that where there was high poverty rate, democracy would increase the chance of pro poor public policy.

Sen (1999: 157), democratic governments were most likely to provide social service provision and safety nets. Rule of law, cox (2008) provided a broad overview of the development returns of security and justice that includes coverage of property rights and crime, and the gendered dimensions of access to justice by quoting proof from two major econometric studies. Firstly, Acemoglu, Johnson and Robinson (2001) showed that income levels across countries were closely associated with the security of property rights, and that a crucial factor in attracting foreign direct investment. Secondly cox referred to Kaufmann and Kraay (1999) who used a combination of cross-country data on 6 governance indicators, including the rule of law and found that an increase of one point on their 6-point rule of law index was associated with 15-25% increase in literacy. Decentralization; on the one side, Vedeld (2003:169) presented some successful case studies from Uganda, Mali, Bolivia, the Philippines and India, but conceded that none of the cases were really highly successful, that none of the cases had obtained 'substantial effects on poverty reduction. On the other side, Faguet (2001) provided evidence that decentralisation in Bolivia had led to significantly increased investments in education, agriculture, urban development, water management, water and sanitation and health. Corruption, Gupta et al (1998) stated that corruption results in income inequality, affecting distribution through impacts on budgetary revenues and expenditures. They proclaimed that 1 per cent increase in corruption causes 7.8 per cent reduction in income growth of poor. Khan (2006) reviewed that corruption caused of disorder the transparency of markets, increases transaction costs and creates uncertainty. Based on above arguments, the study concluded that bad governance impacts negatively on the poor and governance matter for growth and poverty reduction.

Indeed, the literature and statistical analysis provide the strong evidences of connection between political governance and poverty. So, following those evidences the hypothesis of this study is

H_0: Governance is significantly related with poverty reduction.

H_1: Governance is not significantly related with poverty reduction. **Model Specification**

The following econometric model is used to check the effect of political governance on poverty reduction. The index of International Country Risk Guidance (which is consists of government stability, law and order, internal conflict, government effectiveness, regulatory quality, quality of bureaucracy, corruption. external conflict, investment profile, military in politics, religious tensions, and ethnic tensions) is used as proxy governance with inflation and population growth as supporting explanatory variables as inflation directly affect the poverty {Chani et all (2011), ADB (2011), Sugema et al (2010), Son and Kakawani (2006)} and population is also significantly related with the poverty {Wittemyer G et al (2008), Ahlburg D. A. (1996), Birdsall N. etc}. The equation of model is given below

Poverty = f (Governance, Population Growth, Inflation)

HC = $\beta 0 + \beta_1$ ICRG + β_2 INF + β_3 PG + μ

Where

HC = Head Count Ratio as a Proxy of Poverty

ICRG governance = index of International Country Risk Guidance a proxy of

INF = Inflation

PG = Population Growth

μ = Error term

Data Description

The data used in empirically analysis is from 1984 to 2015 It is collected from International Country Risk Guidance (ICRG) Rating System, World Value Survey, and Economic Survey of Pakistan. Proxy of governance ICRG is obtained from World value survey, while the remaining data is used from Economic Survey of Pakistan.

Econometric Methodology

When variables are specified in different form.i.e. stationary or non-stationary form, the spurious results are likely to occur. But considering the importance of variables of the model, these variables should be included in model to avoid the problem of model specification error. So, inclusion of the stationary is mandatory to prove the hypothesis of the study, but it will raise a problem of the loss of long-run information of the data. To prevent from this kind of problem there is tested to check the existence of the long-run information of data. A series is said to be stationary if it has zero mean and constant variance and on the other hand a series is non-stationary if it has random mean and variance. The following tests have been used to check the stationary of the variables.

Augmented Dickey Fuller (ADF) Test

Augmented Dickey Fuller test control the higher order serial correlation of error term by using higher order of lags. The null hypothesis of the test is that series is non-stationary.i.e. H_0: series is non-stationary. Against the alternative hypothesis that series is stationary. i.e.$H_{1:}$ series is stationary. ADF test rely on the estimation of the following equation. $\Delta Y_t = \alpha + \beta (Y)_{t-1} + \sum^{\rho}_{k=1} \varphi_k \Delta Y_{t-k} + V_t$

Y_t is generally notation for all variables and V_t is error term. Here "ρ "denotes the number of lagged change in $Y_{t,}$ whih are taken in order to make classical error term " V_t " serially uncorrelated. For the above equation t-statistic is calculated as t-statistics = $\hat{\beta} \div$ S.E ($\hat{\beta}$)

This calculated value is compared with the given critical tabulated value.If calculated value lies outside the critical region then we reject our null hypothesis and accept our alternative hypothesis .i.e. series is stationary and vice versa is also true.

Kwiatkowski-Philips-Schmiat-Shin (KPSS) Test

Kwiatkowski-Philips-Schmiat-Shin Test is also used to check the stationarity of the series and to make comparison with the result of Augmented Dickey Fuller test. It is developed by Kwiatkowski et al (1992). In this test the hypothesis is reciprocal of those of Augmented Dickey Fuller test. i.e. in this test the null hypothesis is that series is stationary with the alternative hypothesis that series has unit root. The equation of Kwiatkowski-Philips-Schmiat-Shin (KPSS) Test is given below.

$Y_t = \delta_0 + \delta_1 t + \delta_2 \sum^{\rho}_{j=1} \varphi_j + \eta_m$

Where $\eta_{m \text{ is stationary and }} \varphi_j$ is distributed independently with zero mean and constant variance. To make conclusion about hypothesis t-calculated value is compared with the tabulated value of t. If t-calculated value is less than the critical value, then we accept our null hypothesis which states that series is stationary and reject the alternative hypothesis which is for nonstationary of the series.

Auto-Regressive-Distributed-Lag Bound Testing Approach

In order to check the long-run relationship (co-integration) among variables there are many econometric techniques - Engel and Granger (1987) technique - Johnson (1988) introduced another technique – Johnson and Jusellius (1990) test. There are two major issues with these techniques. One is that all variables of model should be integrated at same order and another is that small sample size cannot be used. To tackle these issues a new technique came into research work which is developed by Pesaran and Pesaran (1997), Pesaran and Smith (1998), Pesaran and Shin (1999) and Pesaran et al (2001). Both restrictions which are applied in former tests are relaxed in this approach.

Auto-Regressive-Distributed-Lag Testing Procedure: The first step is to check the long-run relationship among variables by using bound testing technique. In this test null hypothesis which is there is no long-run relationship among variables is tested against alternative hypothesis that long-run relationship among variables is exist. If F-calculated is greater than the F-tabulated we reject H_0 and accept H_1 which shows the existence of co-integration among variables and vice versa. If Fcalculated is between the lower and upper bound of F-tabulated then results remain inconclusive. In next step the ARDL equation is estimated and lag length is chosen by using either The Akaike Information Criterion or Schwartz Bayesian Criterion. Now ARDL equations for our four models of the study are given below.

Estimated Result

Unit Root Results

There is assumption of Bound Test (which is used to measure long-run relationship among variables) that must be integrated at level or order one. If any variable is integrated at order two then results of Bound Test will not remain valid. So, first, stationary of variables is checked by using Augmented Dickey Fuller test and Kwiatkowski-Philips-Schmiat-Shin test and results are given below.

Table 1: Result of unit

Variable	Order of Integration	ADF Test's Result		KPSS Test's Result	
		With Intercept	Intercept& Trend	With Intercept	Intercept& Trend
Ln HC	1st Difference	-4.382072	-4.280798	0.076220	0.070269
Ln ICRG	Level	-3.918443	-3.729651	0.403054	0.126374
Ln INF	1st Difference	-4.843777	-4.903849	0.067388	0.062056
PGR	Level	-3.042978	-4.814451	0.672885	0.179421

Source: Author's own calculations

Table 2: Critical Value for ADF and KPSS Tests at Level

Level of Significance	Critical Value For ADF		Critical value For KPSS	
	With Intercept	Intercept& Trend	With Intercept	Intercept& Trend
1%	-3.724070	-4.356068	0.739000	0.216000
5%	-2.986225	-3.595026	0.463000	0.146000
10%	-2.632604	-3.233456	0.347000	0.119000

Source: Mackinnon (1996), Kwiatkowski et al (1992)

Table 2[*]: Critical Value for ADF and KPSS Tests At First Difference

Level of Significance	Critical Value For ADF[6]		Critical value For KPSS[7]	
	With Intercept	Intercept& Trend	With Intercept	Intercept& Trend
1%	-3.724070	-4.374307	0.739000	0.216000
5%	-2.986225	-3.603202	0.463000	0.146000
10%	-2.632604	-3.238054	0.347000	0.119000

Source: Mackinnon (1996), Kwiatkowski et al (1992)

In above table, results of stationery and order of stationary for each variables of study are given. Inflation and head count ratio are stationary at level, while political risk, and population growth are stationary at 1st difference. As all variables are integrated either at level or at first difference so now we can apply the Bound Test and ARDL approach.

Auto-Regressive-Distributed-Lag Equation for Model

$$\Delta LnHC_t = \propto_0 + \sum_{i=1}^{N} \propto_1 \Delta LnHC_{t-i} + \sum_{i=0}^{N} \propto_2 \Delta_{LnICRG_{t-i}} + \sum_{i=0}^{N} \propto_3 \Delta LnINF_{t-i} + \sum_{i=0}^{N} \propto_4 \Delta LnPG_{t-i} + \beta_1 LnICRG_{t-1} + \beta_2 LnICRG_{t-1} + \beta_3 LnINF_{t-1} + \beta_4 LnPG_{t-1} + \gamma ECT_{t-1} + \mu_t \quad \text{..... (1.1)}$$

In above equation "α" represent short-run coefficients and "β "represent long-run coefficients and "N " is the optimum lag length of ARDL Model.

Results of Model

In this study log-log model is used.

$$LnHC_t = \beta 0 + \beta_1 LnICRG_t + \beta_2 LnINF_t + \beta_3 LnPG_t + \mu_t \quad \text{..... (1.2)}$$

Bound Test Result

Table 3: Bound Test Result

F-Calculated	95% Confidence Interval		90% Confidence Interval	
	Lower Limit	Upper Limit	Lower Limit	Upper Limit
13.29624	2.72	3.77	3.23	4.35

Source: Author's own calculations

As our calculated value of F is greater from all critical values with 95% confidence interval and 90% confidence interval so we reject our null hypothesis which is H_0: There is no long-run relationship among variables and accept our alternative hypothesis which is H_1: There exist long-run relationship.

Table 4: Selected Model: ARDL (3, 1, 1, 4) based on Schwarz Bayesian Criterion Dependent Variable is LnHC

Explanatory Variables	Coefficient	Standard Error	T-statistic	P-Value
L_HC(-1)	0.501505	0.141460	3.545194	0.0029
L_HC(-2)	-0.285921	0.169945	-1.682425	0.1132
L_HC(-3)	0.190165	0.158238	1.201769	0.2481
LNICRG	0.071149	0.098336	0.723531	0.4805
LNICRG(-1)	0.229453	0.099622	2.303250	0.0360
LNINF	0.012095	0.023842	0.507279	0.6193
LNINF(-1)	0.054099	0.017682	3.059566	0.0079
LNPGR	-4.899310	2.834460	-1.728481	0.1044
LNPGR(-1)	14.08464	7.912632	1.780019	0.0953
LNPGR(-2)	-23.44670	10.22303	-2.293518	0.0367
LNPGR(-3)	22.35185	7.161580	3.121078	0.0070
Constant	1.188100	0.303600	3.913373	0.0014
R^2	0.944235			
Adjusted-R_2	0.899622			
F-Statistic	21.16530 [0.000]			

Source: Author's own calculations

The results of above table clearly indicate that all independent variables of model are significantly related with the dependent variables.R^2 has value 0.94 which means that 94 per-cent variation in depended variable of our model is due to independent variables while remaining fluctuations are due to error term.Adjusted-R^2 shows the goodness of fit of model adjusted with degree of freedom and it is equal to 0.89 in the model. Due to lagged dependent variable Durbin's h-statistic has been used to check the problem of auto-correlation with H_0 : no auto-correlation problem and H_1 : auto-correlation problem exist. In our case Durbin's h-statistic implies the rejection of our alternative hypothesis, so there is no auto-correlation problem in data.

In order to check the robustness of the results diagnostic tests are applied and results are given below in table 5

Table 5: Regression Assumptions

Problem	F-Statistics	Probability
Serial Correlation	2.023820	.1717
Functional Form	0.027247	..8713
Normality	0.97432	.614
Heteroscedasticity	0.600581	.8106

Source: Author's own calculations

By using langrangian multiplier test, it can be safely concluded that there is no serial correlation problem in data as probability is greater than 10 per-cent. Ramsey's RESET test is used to confirm the correct functional form of the model and again the value of probability indicates that there is no functional form error. The value of f-statistics and probability, given in above model also prevailed that data is also normally distributed and error term has constant variance.

Stability Tests

The results of both Cumulative Sum of Recursive Residual (CUSUM) and Cumulative Sum of Square of Recursive Residual (CUSUM Square) for model 1 are given in following figures.

Figure 7

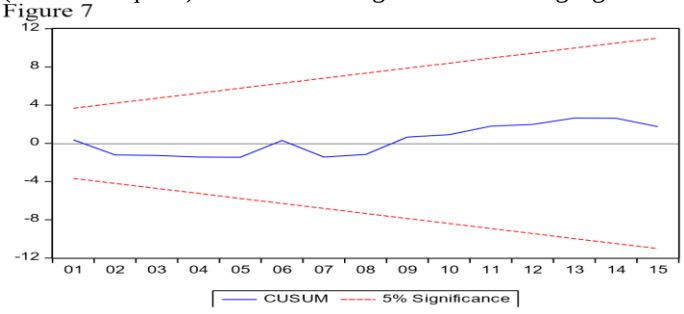
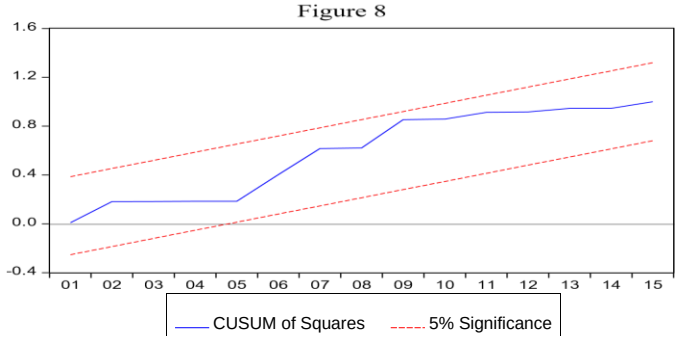


Figure 8



As shown in above figure the estimated lines of Cumulative Sum of Recursive Residual (CUSUM) and Cumulative Sum of Square of Recursive Residual (CUSUM Square) fall within the critical bound at 5% level of significance, hence our model is stable and it also suggests that model is properly specified.

Long-Run Estimates

Table 6: Selected Model: ARDL (3, 1, 1, 4) based on Schwarz Bayesian Criterion LnHC is Dependent Variable

Variable	Coefficient	S.E	T-Ratio	Probability
LnICRG	0.505851	0.164972	3.066287	0.0078
LnINF	0.111391	0.062187	1.791217	0.0935
LnPG	1.999324	0.106589	18.757312	0.0000
C	1.99932	0.106589	18.757312	0.0000

Source: Author's own calculations

The log-log model has been used in studies, so the estimated coefficients will measure the percentage change in our dependent variable i.e. Poverty. The most important finding in above results is that coefficient of ICRG shows that higher the risk of governance, there will be higher rate of percentage increase in poverty. These results confirm the early findings of Schneider, H. (1999). Fung A. & Wright E. O. (2001), Craig D. & Porter, D. (2006). And population growth is effect the poverty inversely, this is very rare case and logic behind it is that it has been seen, during last decades, that the number of highly educated and skilled labour in developing countries like Pakistan, India, and China etc. increased which result in rise in income level of families and help to decrease poverty. But Coefficient of Inflation is not significant.

Error Correction illustration for the Selected ARDL Model

Table 7: Selected Model: ARDL (3, 1, 1, 4) based on Schwarz Bayesian Criterion Dependent variable is dLnHC

Explanatory Variables	Coefficient	Standard Error	T-statistic	P-Value
D(L_HC(-1))	0.095756	0.143141	0.668960	0.5137
D(L_HC(-2))	-0.190165	0.158238	-1.201769	0.2481
D(LNICRG)	0.071149	0.098336	0.723531	0.4805
D(LNINF)	0.012095	0.023842	0.507279	0.6193
D(LNPGR)	-4.899310	2.834460	-1.728481	0.1044
D(LNPGR(-1))	23.446696	10.223026	2.293518	0.0367
D(LNPGR(-2))	-22.351847	7.161580	-3.121078	0.0070
D(LNPGR(-3))	8.358437	2.208203	3.785176	0.0018
CointEq(-1)	-0.594251	0.155316	-3.826086	0.0017

Source: Author's own calculations

The estimate of Error Correction Model given in table 7 is significant at 1% level of significance. The negative sign of ECM shows that dependent variable will converge towards long-run equilibrium path due to change in independent variable, in this case it has value equal to -0.59 that means that deviation in L from equilibrium level during current period will be converged 59% toward equilibrium in next period.

Conclusion and Policy Recommendations

The main purpose of this research work is to elaborate first goal of Millennium Development Goals (MDGs) and Sustainable Development Goals (SDGs) as well as to find the empirically nexus between governance and poverty. As shown by estimated results it is proved that there is strong relationship between poverty reduction and governance in case of Pakistan.

We also seen by comparing the statistical graphs of selected courtiers of South Asia that Pakistan is behind from Bangladesh and India in governance, however, poverty trend is most severe in India and Bangladesh as compare with that in Pakistan. To reduce poverty in Pakistan the following policy recommendations are given based on estimated results.

- The basic indicators of Governance must be improved to eliminate poverty. These Indicators include Rule of Law, Political Stability, internal conflict, government effectiveness, regulatory quality, quality of bureaucracy, corruption. External conflict, investment profile, military in politics, religious tensions, and ethnic tensions. To achieve the goals of governance, the very simple and practical step is to bring consistency in process of general election and to make government accountable before opposition.
- The labour force must be trained to attract foreign direct investment and to increase the national production in all sectors of economy. The channel to train the labour force can be Poly Technical Institutes, which are already established across the country.

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