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# **Effect of Welfare and Economic Performance on Good Governance Outcomes in Pakistan**

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Abstract:

The paper undertakes a detailed analysis of economic progress and welfare measures in determining good governance outcomes in Pakistan. There is evidence that inequality stifles the capacity of political, economic and social governance by creating an elite class that protect their economic and political interests and undertake legislation primarily to the benefit of ruling elites. Furthermore our results also suggest that economic development empower the economically and socially excluded groups of the society and give them more voice in favor of policies that are representative of the issues like accountability against corruption or favoritism.

Key words: Governance, Welfare, Economic Development

## **1.1 Introduction:**

Effective governance ensures equal participation from all the sectors. It also guarantees social justice and an orderly society (Prasad 2008). Governance really matters for prosperity, economic development and improvement in social indicators.

Governance got a lot of importance during the last 10 to 15 years both in developed and developing economics. It is one of the key element for the human development for both of the partner countries and the donor agencies and donor countries. It is an international consensus among the nations regarding the effectiveness of good governance and significance of its essential elements. Combating corruption, Effective institutions, effective political and electoral process in the presence of democratization, human rights and its protection, participation of the civil society, and the attainment of justifiable economic, political and social marks are some of the main elements of the international consensus. While according to this consensus transparency, voice and accountability, rule of law are the core components of good governance. Declarations which have been made by the international community such as the Millennium Declaration, International Conference on development and finance, World Summit which was held in Johannesburg on Sustainable growth and long term Development and some other related documents like the World Bank's Human Development Report (HDR) of 2002 or the report of 2005 presented by the UNO Secretary General "In Larger Freedom" which define governance and the human rights are necessary prerequisites for growth and development, reduction in poverty and they also confirms the interaction in between them.

Economic researchers and policy makers consider it to be a pre-requisite for sustainable development. Traditionally total factor productivity, technology, physical, and human capital development and accumulation were considered the factors required for economic growth and sustainable development. But research shows that all these factors go to waste if the policies and institutions in a country are corrupt, inefficient, incompetent and non-transparent. The concept of good governance was emerged in 1980's. Social and economic scientists stress upon the importance of governance in a country. According to them, Development economists pointed out that growth

requires government that facilitates the producers and provides them with proper information. World Bank starts structural adjustment programs in developing countries. Those developing countries are indebted and world bank wants to rehabilitate and reconstruction of the infrastructure of those countries but the question was arise that whether these nations can be easily paid their debts on time, or they have the ability of making sure that they could repay loans.

Characteristics that a good government should possess are transparency, accountability, strategic vision, rule of law and control over corruption. All these attributes work together to provide an environment that implements developmental programs efficiently, helps in taking new initiatives and boosts energy in creative minds. Governance should also accompany civil society, private sector, international investors and companies. It should be like a bridge that connects important institutions and sectors of the economy. It should provide facilities to every sector equally in order to increase the productivity. International financial institutions point out that governance is an institution that exercise authority in an economy, good governance is one that exercises authority in an efficient and transparent way.

According to international financial institutions the characteristics of efficient government vary from country to country but that attitude of the government should be positive and productive accepted that good governance can be achieved through democratic political system. Countries all over the world are analyzing the role of their government in providing basic facilities. For this reason governance indicators are introduced by World Bank. Transparency international and freedom house international for examining the working of the government in serving their people. Good indicators of governance guarantee a county's good institutions. They point out good governance ensure high quality economic conditions and sustainable development. This helps an economy to have strong credibility that attracts higher private and international investment.

Good governance is the concept used in the recent past by World Bank. It is a concept that gains importance because of the poor performance of the countries experienced in structural adjustment programs (SAPs). World Bank through SAPs provides loans to the developing world but

sometimes attached heavy conditions with it. The reasons of the failure of SAPs is realized by the developing countries and the Bank is the inefficient management of the resources. They pointed out that it is not the structural adjustment loans but their implementation that created problems. The role of the government not up to the mark in reaping gains from these loans. The donor country stress that there should be civil liberties and multi party democracy that indicate good government. In late 1980's WB feared to intervene in the member state as per its policy. But later in 1992 the policy statement on this issue came that World Bank has intention to work more and further on governance issue. It defines the governance as the manner in which a power and authority is exercised in a country. (World Bank 1992). From their onwards they forced the importance of governance to world in general and developing countries in specific.

World Bank pointed out that governance means decision making and public policy formulations that is best in public interests. In other words it states that public affairs should be managed in such a way that ensures transparency, accountability and, modernization in public administration and privatization. International Monetary Fund (IMF 1996) suggests some factors to increase the economic efficiency and prosperity which are related to good governance; such as

- 1) Rule of Law
- 2) Increasing the efficiency and improving the process of accountability
- 3) Tackling the corruption strongly.

## How to determine whether governance is good?



Use of technology and Innovation in Promoting Good Governance

26

United Nations suggested some factors related to human development and political institutions through which the reforms into the society could be made. Such as;

- 1) Consensus oriented
- 2) Participation of the society
- 3) Transparency
- 4) Equitable and inclusive kind of society

### 1.2 Objectives of the Study

Efficient governance is necessary for development, how can the governance be improved? Some of the variables other than the government who takes part to improve the governance as well as better economic society. So according to this the objectives of the study are steered.

- 1) It is to investigate that how improvement in the social variables influence governance.
- 2) To test that the economic variables have influence on good governance

### 1.3 Significance of the Study:

Universally it is recognized that the countries who indulged themselves in the process of the betterment of governance become the developed countries of the world. Governance has improved their economic performance and quality of individual's life of the

country. So governance is no doubt one of the main determinants in the process of economic development and long term prosperity of the nation. Here I want to analyze that how the improvisation in the level of good governance can achieve through the socio-economic indicators in Pakistan. Pakistan is facing critical situation from the last many years. A number of studies have pointed out the effects of poor governance on the economy. This study is an attempt to investigate those factors that are affecting governance in an adverse manner. Only few studies investigated these factors but theoretically. So in present study effects of social and economic variables on governance are estimated empirically.

#### **1.4 Organization of the Study**

The rest of the study is organized as follows. First chapter is consisting on the introduction of the study and significance of the study. The second chapter defines governance conditions in Pakistan. The third chapter represent the review of the literature related to governance and various social and economic variables. The fourth chapter presents data and methodology in order to estimate the impact of social and economic aspects of economy on governance. Fifth chapter presents the results of the study. While the sixth chapter consisting on the conclusion and policy recommendations.

## 2. Overview of Governance in Pakistan

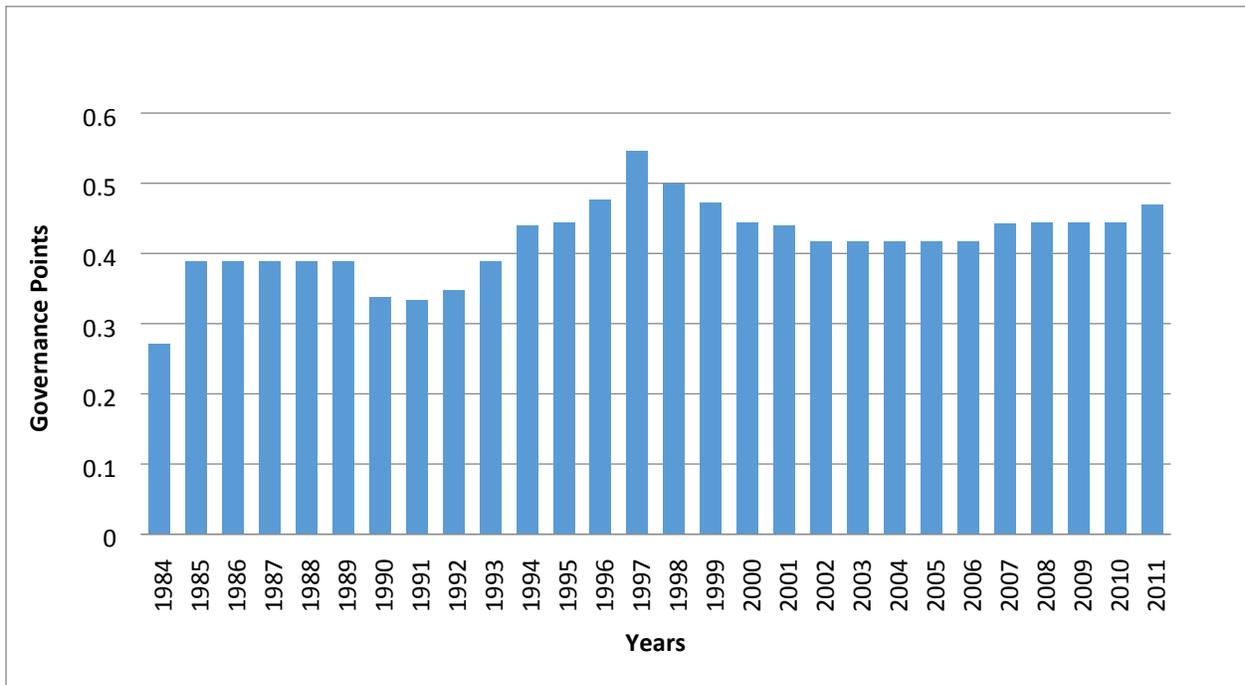
United Nations Development Program (UNDP) (1997) explained governance as the system of values, institutions and policies through which the society manages its economic, political and social affairs through the interaction within and among the state, society or for private sector. It is the practice of administrative, economic and political authority to manage country's affairs at all levels. It includes those mechanisms, institutions and processes through which citizens and groups eloquent their interest, and to exercise their legal rights meet their obligations and mediate their differences.

McCawley (2005) postulates issue of governance and categorizes it into macro and micro level. According to him macro level issues of governance include constitution, rule of law, size and resources available to the government, the relationship between legislators, power of judiciary and the military institutions. While at the micro level he includes social institutions, awareness to the civil society and their affairs, and finally the commercial firms.

International Country Risk Guide (ICRG) developed an index which is used as a measure of governance. ICRG index includes 140 countries for the period from 1984 to the present analysis and it also used to forecast the risks or the degrees of uncertainty for international investors. This index comprises of 22 variables, these variables are grouped into three categories of risks. The categories are political risk, financial risk, and the economic risk. The assessment of subjective analysis on the basis of available information is taken through political risk. While the assessment of financial and economic risk is taken solely through objective data. In shaping these components 50% weight is assigned to political risk while the remaining 50% weight is equally assigned to economic and financial risk.

The performance of governance in Pakistan is graphically illustrated in Fig. 3.1 below.

**Fig. 2.1: ICRG Index Trends in Pakistan (Data in Points)**



Source: International Country Guide (ICRG)

The performance of governance in Pakistan for the last three decades is quite persistent, but it was between 40 to 50 points, which is not very much appreciable. In the recent decade overall governance showed downward trends. As far as governance is concerned Pakistan was more stable politically during the military dictatorship periods (Qureshi 2011).

### 3. Review of Literature

Literature on good governance is building day by day. Here we will attempt to highlight some social and economic aspects of good governance in this existing literature.

**Mamoon (2011)** analyzed the impact of economic determinants on the welfare of an economy. These days countries are opening their economies to trade that thing brings high level of economic institutional development and reduction in poverty in countries like china and India but other countries have experienced adverse globalization in income inequality rises poverty also rises and they failed to accelerate economic growth. Even in china and India income inequality rises due to skilled based technological change that's why the poverty reduction was not sustainable. For getting social economic and cultural progress the most important institutional factor is democracy. This can be seen that all developed countries have efficient democratic system. He conducted a cross country study including both developed and developing countries. Different data set have been taken to capture the relationship of income inequality with openness, voice and accountability, democracy and autocracy. The results show that voice and accountability is more sensitive to income inequality whereas democracy and autocracy are less sensitive to income inequalities. It means politically stable economies face more equal societies. But the democratic government get more benefits from global markets this forces the developing countries population to ask for more democratic setups. The people of these countries want to have efficient political institutions and government management. It can be seen that some social variables are not improving like income inequality and wage inequality. The countries with autocratic setup need to bring western models of democracy to their countries in order to get good result of transforming world. Good management of the government helps in an economy in which poor are provide with their rights.

**Zhuang et al. (2010)** analyzed the impact among governance, economic growth and income inequality. They discussed the direction of causality between institutional development and economic growth. They pointed out that Asia has been growing at impressive rate especially during 1990 to 2005. The annual growth was 5.6%. This reduced the extreme poverty from 52% to 27%. But this was the case of some regions of Asia namely countries like India, China and Southeast Asia. Other Asian countries are facing extreme level of poverty and low levels of economic growth. It is pointed out that growth can help to reduce the poverty to some extent but it is still unable to reduce income inequality. Government efforts to reduce income inequality by using external assistance in form of structural adjustment programs and other donor agency programs are often fail. The reason for the failure is the inefficiencies are related to the government, and undue intervention of international financial institutions. A country could not improve by only making macroeconomic policies, but it is more dependent on implementing and improving the policies that in return can improve the condition of the poor people of the society. Corruption and inequality has also got lot of attention. They pointed out in that particular situation the causality runs in both directions. Political institutions and governance impacts the income inequality as well as income inequality can also further affect the political decision making. On the other hand corruption effects on income inequality and income inequality in return increase corruption. They concluded that governance and institutional quality on one hand and growth and income level on the other hand has positive association. A two way causal link has also been present in between these variables. Governance indicators viz. regulatory quality, rule of law and government effectiveness impact positively. Also governance got influenced by growth and income inequality.

**Khan (2006)** examined theoretically the impact of governance in economic development. There are two points of views regarding governance, one is about the state capacities that are

necessary for speeding up development process and the other is about the importance of governance factor relative to other economic factors at early stage of development. He stated those capacities that keep competent markets and limit government failure. The government failure of many emerging countries is described by efforts of their states to do too much, consequential in the relating unproductive rent-seeking activities. Khan quoted in this study that relative importance of governance movements in accelerating development is challenged by Sachs et al. (2004) who empirically analyzed that the difference in development performance among African economies is not due to the difference in quality of governance. Khan (2006) used two data sets: one was composite property rights as a proxy for market enhancing governance from 1980 to 2003 and the second was voice and accountability plus political instability from 1990 to 2003 by using World Bank data. For the data set of 1980s there was a strong positive relationship between growth and market enhancing governance. However, for the data set of 1990s, there was a weak relationship between growth and market enhancing governance. In both cases there was a positive relationship between market enhancing governance and growth due to high scores on governance indicators of rich countries that overcame those poor country, so for more comprehensive analysis there should be separate empirical check for rich and poor countries.

**Jasimuddin and Joya (2007)** studied the relationship between governance and economic development for south Asia. They provided the evidence with reference to recent literature that without improving the governance level it is not possible for developing economies to get satisfactory level of economic development. In South Asia, especially, in Bangladesh democracy, stable political regimes, accountability, control of corruption and government effectiveness are the crucial indicators required to improve social indicators. In their concluding remarks they were of the view that governance is a complex phenomenon but it is an essential element to improve economic

activity and for achieving good levels of governance there should be the long term commitment of international financial institutions like IMF, World Bank and UNDP etc. to support the efforts to improve governance.

**Elijah (2007)** studied the Nigerian economic reform program and corruption situation. He discussed the corruption of the elite and beaurocracy on the socio culture of the economy. It is said that corruption hampers the economic growth, development and reduce the economic efficiency of the country corruption in the political institutions of the country slow down the progress of the economy and productive capacity of the economy. It impacts adversely on the national image and thus reduces the foreign direct investment FDI. In Nigeria corrupt regimes which cause monopoly, lesser accountability, and poor rule of law has stolen the resources of the economy. People in Nigeria indulged in corrupt practices due to the extreme poverty, unemployment, lesser control of political and governing institutions, informal economy. They have caused higher rate of grass root corruption. To control these factors Nigeria needs to control corruption, for this reason they established anti-corruption units. The need of the hour in to control the corruption, especially the corruption which was prevail in the institutions. For this reason people should be educated which can accelerate them to play their role in the process of economic development. Also there is a need for the job creation. Which can also reduce the malpractices of the officials. Educated citizens can play effective role and thus ensures equality among different sectors and citizens of the economy.

**Prichard and Leonard (2010)** analyzed the impact of taxation in state building in African countries. It is pointed out that African countries can improve their administrative capacity through improved taxation. The data set has been taken from 1973 to 2005. A cross country empirical estimation showed that improved tax administration improves governance through accountability.

Governments those depend on taxes for revenues spend on development work well in controlling corruption. The study provides evidence that improvement in tax collection can be a source of better administration and thus improved state capacity building. The finding of the study are weak but significant. The reason behind the result is that there was structural break in the data. The improvement in tax administration does not match with those improvements. It has been said that improved taxation can affect public administration but there is no guarantee for these results. On the other hand it has been argued that improvement can be because of tax reforms.

**Chaudry et. al (2009)** analyzed various factors that impact good governance in Pakistan. They have taken the macroeconomic variables and by using time series data from 1972 to 2007 explored their relationship. Using OLS technique they investigated the relationship between various macroeconomic variables and good governance. They used crimes reported in police station as a proxy for good governance in equation 1 and private investment in equation 2. According to them despite controversies in the concept and importance of good governance the concept is getting value. Economists, Policy makers, political scientists all considering it for the effectiveness of society's institution. Good governance provides an environment favorable for investment no matter international or in local markets, people increasing their education and skill which can give them higher income and thus contribute towards better economic and social indicators. Through descriptive analysis they have given perceptible new proof to the literature on good governance and economic variables. The results of equation 1 shows that social and economic variables strongly impact the good governance variables. Democracy has positive relation with good governance. It can help in understanding the problems of the population and their point of view. Health literacy and openness all depict negative relation with good governance. It shows that higher crime is because of unhealthy and illiterate citizens. On the other hand second equation

states that democracy and openness positively.

**Bhatti(2001)** tested the relationship between poverty and economic growth in the presence of good governance in Pakistan. He tried to explore the role of good governance and economic growth for the reduction of poverty. According to his presented facts and figures that high levels of economic growth does not ensures the poverty reduction or equal distribution of income and resources due to the ineffective role of the government. In Pakistan government never give preference to the equal and justifiable distribution of resources among the individuals of the society, skill development, better education and health facilities, encouragement to the private sector, women empowerment. He was of the view that governance is an institution which handles the various sectors of the society, it gathers the moderate and working sectors of the society for the purpose of encouraging the process of sustainable development. It also ensures the active participation of the investor class and effective implementation of better investment opportunities. The term which he has used for equal participation of skilled and energetic individuals and societies this is Appropriate Governance. According to him the government must have the ability to looking inward and facilitate the domestic environment for the working class. So according to his findings not only the growth levels are but the government effectiveness or the good governance ensures the poverty reduction. There must be the equal opportunities of the individuals. Because of the equal participation in terms of gender encourages for the self-interest and ultimately they will become to engage themselves in the productive activities. This in return contributes towards better governance and for the growth of the economy.

**Torres and Anderson (2004)**declared that a state with poor governance is a fragile state. They provided a complete overview regarding the fragile states. Severe problems are attached with

the fragile states, such as, poverty, violations of human rights, conflict issues, unstable state policy and regional security threats. The situations of fragility could also be observed by considering social environment of the country as well. In such a situation the effective utilization and mobilization of domestic as well as international resources becomes difficult. Domestic resources comprise of the revenue collections of government and control of corruption which reduces the overall cost of the economy. While the international resources consist of FDI, public or private, ODA Loans, IMF Credits and other international financial institutions funding the country.

**Fayissa and Nsiah (2010)** tested the significance of governance for economic growth for African economies. They used panel data of 28 African countries from 1995 to 2005. Six proxies (voice accountability, political stability, government effectiveness, and regulatory quality, rule of law and control of corruption) were used to measure governance performance. The results showed that 10 percent improvement in voice and accountability index leads to 0.68 percent increase in real per capita income, 10 percent increase in political stability index causes 0.37 percent increase in real per capita income, 10 percent increase in govt. effectiveness index makes 0.73 percent improvement in real per capita income, 10 percent efficiency index leads to 0.61 percent increase in per capita income. The 10 percent improvement in rule of law and control of corruption indices enhance real per capita income 0.21 percent and 0.15 percent, respectively. Finally, if governance index (based on above six indices) improves by 10 percent it brings 0.91 percent increase in real per capita income. On the basis of above results, they concluded that governance has significant as well as positive impact on economic growth.

Abdellatif (2003) studied the importance of democracy and economic development for achieving the good governance. He stated that governance is the system which ensures appropriate

institutions. Only the good growth levels are not sufficient to achieve the levels of good governance but the better institutional setup free from corruption and also the democratic governance is necessary. So by governance it means that every component of good institutional setup play its part like democracy, social and cultural attitudes of the governments. All arrangements together provide economic growth. Health, education and employment facilities provided without any discrimination. An important finding of his study is thus that the value and importance of good governance is accepted universally but the characteristics of good governance may vary from country to country. So one policy may be appropriated for the particular region so the need of such policies which are made according to the requirement, environment and structure of the economy.

Khan 2009 analyzed poverty reduction as a function of economic growth, income distribution and distribution changes, and governance could enhance both growth and distribution. The countries that concentrates on governance reform are not likely to made rapid economic growth, to achieve the goals of good governance there is a need of fiscal capabilities which are limited in LDC's. In order to develop fiscal capabilities LDC's need to address problem of market failure through governance reforms. There was a significant connection in between governance and income distribution. Improved income distribution had an impact on poverty reduction through pro poor service delivery and providing protection of property rights, rule of law and control on corruption. On the one side, governance reforms enhance fiscal capabilities through elimination market failures in LDC's. On the other side, helps in efficient income distribution through pro poor spending the government accountability. The study concluded that since both growth and efficient income distribution have effect on poverty reduction, hence good governance have also significant effect on poverty reduction.

Sharif (2009) checked empirically the hurdles in achieving the goal of good governance in

Pakistan. They identified six factors which were making effect on the governance; these factors were economic openness, literacy rate, total population, life expectancy, peace year, and unemployment rate. They constructed two models, in first model rule of law was used as a proxy variable for governance and ,measured as crime reports in police stations, this variable was estimated as a dependent variable with six independent variables. In second model private investment was used as a proxy for good governance and run as regressand with identified variables with further inclusion of two variables budget deficit and exchange rate. The crime, trade openness, literacy rate, total population, life expectancy, unemployment rate, budget deficit, private investment and exchange Rate are found normally distributed. Peace years, unemployment rate, budget deficit and trade openness have small effect on crime (governance)as comparewith that of literacy rate, totalpopulation and exchange rate. These findings of empirical test suggest that economic and social indicators have significantly effect on improvement of quality pf governance in Pakistan.

Khan (2006) examined the impact of governance on economic development since 1960. There are two point of views regarding governance one is about state capacities that are necessary for spending up development process and other is about importance of governance factor relative to other economic factors at early stage of development. The state capacities are those that keep competent markets and limit government failure. The government failures of many emerging states are describe the efforts of their states to do too much, consequential in releasing of unproductive rent-seeking activities. Khan quoted in this study that the relative importance of governance improvement in accelerating development is challenged by Sachs and others (2004) who empirically analyzed that the difference in development performance among African countries isnot due to the difference in quality of governance. Khan used two data sets; one is composite propertyrightsindexes as aproxy of market enhancing governance from 1980 to 2003 by using Khan

IRIS and second is voice and accountability plus political instability from 1990 to 2003 by using World Bank data. In the data set of 1980's there strong positive relationship between growth and market enhancing governance. However in the data set of 1990's there is weak relationship between growth and market enhancing governance. In both cases there is apposite relationship between market enhancing and growth data due to high scores of governance indicators of rich countries that overcome those of poor country so for more comprehensive analysis there should be separate empirical check for rich and poor.

Kaufman and Kraay (2003) provide justification with their empirical work that governance and national income are significantly related. The governance is also associated with infant mortality rate and literacy rate. And national income, infant mortality rate and literacy rate are inversely proportional with poverty. Hence, improved quality of governance is also inversely correlated with poverty. A study by World Bank 'The Voice of the Poor (2000)' which was conducted in 66 countries which was conducted in 66 countries also confirms that the poor are affected from one common element that is lack of power and voice (governance).

Girishankar (2001) defined governance as power to run economic, social and political institutions and mention those dimensions of this power which were (a) process of selecting government, accountability, monitoring and replace of government (b) efficient management of resources, formulation and implementation of sound policies by government (c) respect of social and economic institutions. Poverty and governance were interrelated with each other, and if power was not used in right direction the poor who had least power, were most likely to be affected badly. Weak governance compromises inefficient delivery of services and the influence of powerful interest groups on policy making, less public spending on pro poor projects, lack of property rights and

disadvantages of police protection and legal services to poor. Hence poor governance caused and reinforced poverty- and also made to improve the living standard of the poor. This research paper put answer of a crucial question “who gets benefits from poor governance”. The answer was private interest groups obtain benefit from weak governance by involving public servants for their interest through corruption.

Panadiker (2000) made claim that there are two main reasons of poverty in case of South Asia which are structure of economy and framework of governance. This research work proves that the capacity of economic growth to reduce poverty is obstructed by the frame work of governance in South Asia. This kind of framework is making unequal distribution of resources, building hurdles in controlling govt. non development expenditures, and contracting the revenue base in the form of low tax to GDP ratio. And ultimately these problems are causing poverty in this region.

Knack (2002) argued that development and growth economists approve theoretical connection between good governance and sustained increase in living standards, however, the observed evidence for these connections have been stuck due to the lack of available of data and political and social institutions, and the quality of governance. Knack describe gradual build-up of indicators and evidence of governance and then made an empirical analysis of connection economic growth and governance indicators in six countries from 1980 and 1998. In the model, ICRG (quality of governance index) contract-intensive money (ratio will increase where governments better enforce and respect contracts and private property rights and vice versa), initial GDP per capita, educational attainment of over 25 population, log of inflation (average over 1980-98), variability of inflation (year to year variation in inflation), M2/GDP (proxy of financial development), exports/GDP were as independent variables on per capita income. The most significant variable

among these variables were initial GDP and ICRG, which give justification for improved governance foreconomic growth, however, problem with this quality of governance index was that it did not provide any comprehensive framework in order to formulate governance policies and to evaluate the performance of institutions in LDC's.

Kaufman et.al (2007) examined the governance mater and its indicators and in the present study. They elaborated the six different dimensions and indicators of the good governance in different countries and different time periods. The objective of the study was to measure the perception of governance at individual level. The study gathered the data from twenty five different sources which were collected by eighteen different organizations in four different periods. The four time periods were 1996, 1998, 2000, 2002 to minimize the errors in the estimation and interpretation of the empirical results and policy suggestions. The study used the estimation technique applied by KKz 1999 to analyze the model. All the indicators were normally distributed showing the variance and the standard deviation. Finally the measured the relative performance of each indicator of governance in different time [periods and observed the trends of convergence of governance indicators in 199 countries.

Altunton and thornton (2010) examined the relationship between good governance and tax revenue for the period from 1984 to 2006 for 117 developed and developing countries. By the methods of ordinary least square and instrumental variables they have tried to analyze the impact of taxes on the performance of good governance. The robust results shows that the tax collection improves the quality of good governance especially the direct taxes are highly feasible for the improvisation of good governance. Improved taxation brings more resources to the economy that makes the greater capacity of the economy. They pointed out that the countries who are facing poor

governing has non-tax revenues like aid, grants and natural resources rents rather than tax revenues. As it reduces the need for taxes and this government takes little interest in negotiating tax demands with citizens. Also this causes higher corruption as the check and balance on aid is money poor. On the other hand citizens also take less interest in taxation if the country will be getting foreign aid. The results show that the tax system is good and the country is earning a major part of its GDP from tax revenues then this will lead to improved governance as this increases the accountability of the government. This supports the argument that an improved taxation system is important for good governance.

Detthier (1999) presented a framework for making analysis of the importance of public governance for transitional countries and discussed that political rules limit and expand economic activity. In order to make easier understanding of interdependence of governance and economic activities, political and legal institutions are taken into account. Model specification in the model was as two institutional indices, (Governance 1 = political right + civil liberties, Governance 2 = rule of law + corruption + govt. effectiveness), economic variables (investment, inflation, terms of trade, trade openness) were used as explanatory variables on per capita income. The data covered 59 countries and time period of 1970 to 1980. To determine true relationship between governance and growth, two models were run one for per capita income with economic variables and the other was run with governance indices, and finally estimated linear relationship between these two models' residuals. The procedure was done to decide that how much variation in growth was due to economic variables and how much due to governance indices. The results showed the relationship between governance and growth was weak as compared with that of economic variables and growth. Malaysia was in a higher place than France in improving of governance during that time period. Finally comments were given on the basis of results that the Bank was not only provides the funds for

development but also play his role for the improvisation of poor governance in these countries.

Haq and Zia (2009) developed a link between quality of governance and pro-poor growth in Pakistan for the period from 1996 to 2005. Pro-poor growth is measured by three variables: income inequality, poverty (percentage of population below the poverty line) and growth. Two variables; voice and accountability and political instability were used to measure political governance. Government effectiveness and regulatory quality were used to measure economic governance, rule of law and control of corruption were used to measure institutional governance. The results showed that both indicators of political governance were significantly and inversely related with poverty, one economic governance indicator that is regulatory quality had negative and significant impact on poverty, finally institutional governance that is rule of law was also inversely related with poverty. So, on the basis of results it was concluded in this research work that improvement in political governance, economic governance and institutional governance was essential for pro-poor growth in Pakistan.

Jalilian et al. (2006) analyzed the era of 1960's and 1980's due to market failure direct government participation in productive activities in developing countries was seen by encouraging industrialization through import substitutions, spending directly in industry and agriculture, and by spreading public ownership of enterprises. This study discovered the role of regulation in economic development by an econometric model. Regulatory quality can also be measured in relations of principles for good governance. They provided the reference of Parker (1999; 224) that a well-functioning regulatory system, is one that equilibrates accountability, transparency and consistency. The emphasis of this study was on regulation rather than governance therefore only two variables regulatory quality and government effectiveness indices were

used as proxy of quality of regulation. The data used in the model that covers 117 countries for the cross-section regression and 96 countries for the panel version of the regression. There is positive sign of correlation coefficient of government effectiveness and regulatory qualities with GDP percapita income (proxy for economic growth), so there is significance of government regulation and economic growth. There is negative correlation between inflation and government effectiveness plus regulatory qualities, providing the evidence that those countries with better regulation governance are most likely to design sound stabilization policies to control inflation.

Turner (2011) on the other hand examined the relationship between good governance and sustainable growth of sub Saharan African countries. The data has been taken from 1996 to 2009. The panel data analysis on 8 SSA countries pointed out that sustainable development impact positively on governance of developing countries. He has selected variables in order to make account the effects on good governance of growth. Economic growth brings resources that if spend on poor ensures equality as it give importance to poorest citizens of the society. It considers them in decision making process. As a result government consumption expenditure, control of corruption and government effectiveness improves and play a major role in bringing sustainable growth and development. The results indicate that inflation, private investment and military expenditure play less part in accelerating growth. He pointed out that some of these countries have wealth of minerals but still have worst social indicators. He concluded that sustainable growth and development can be achieved through working for poor, making them self-sufficient and thus help them to participate in decision making. It will improve governance of the countries as a result.

So from the above review we can say that with increasing the standards of rule of law and good governance plays important role for economic growth and help full to bring down poverty. All these models postulate that there are direct and indirect linkages of good governance and economic

development. The above reviewed literature also indicates that there is hardly any empirically study that covered the Pakistani context with respect to linkages among good governance and socio economic variables. The present study is an attempt to fill this gap in literature.

## **4. Data and Methodology**

There is no specific definition of good governance. This is the combination of attributes that an economy possesses. These attributes varies from country to country. World Bank defined six major characteristics that are most important form an economy or in other words we can say that these are qualities which ensures good governance in an economy. Economic researchers point out that different economies have different requirements of governance. But it is evident that every country needs good governance for its successful existence. The study investigated those factors which influence the governance in Pakistan. It is necessary to improvethose variables that are adversely affecting governance. In this chapter the relationship between social and economic variables will be tested by applying suitable econometric technique.

### **4.1 Data**

In order to check relationship annual time series data for the period from 1984 to 2012 has been taken from various issues of economic survey of Pakistan international country risk guide (ICRG) and world development indicators (WDI). The study in hand has taken data of governance from international country risk guide (ICRG).

### **4.2 Model specification and estimation technique**

First we will check the stationarity of the variables. This means that the means and the variance measured over the period under consideration. If the variables are not stationary the problem of spurious regression arises. ADF test is used to check the stationarity of the variables. There are many techniques that can be used to investigate the existence of long run relationship and short run relationship between variables. Some of them are angel granger (1987) test, maximum likelihood base Johansen (1988), OLS procedure of Philips and Hansen's (1990). The major

characteristics of these techniques are that they are used when order of integration among the variable is one. Also these are good for large data sets whereas ARDL can be used for small data sets. As this data set is small so ARDL is much better to applied it. The number of observations are small due to the limitations in the availability of the data of governance. ARDL is being popularized by Pesaran and Pesaran (1997), its modified versions was introduced in (2001) by Pesaran et. al. the unique properties of ARDL technique are:

- 1) Firstly, it can be applied without considering for stationarity. This technique does not require pretesting form stationarity. So, the ARDL is used checking for order of integration of the variables.
- 2) It can be used on small data set. Number of observations can from 30 to 80. Some studies used this even on less than 30 observations. Alalaya (2010) has used it on data set of 18 observations whereas Duasa (2007) used it on 29 observations.
- 3) Estimations avoids the endogeneity problem of independent variable and provides unbiased long run estimates.
- 4) The long run and short run relationship estimated in this model simultaneously, these overcome the problem attached with omitted variables as well as with autocorrelation.
- 5) This technique allows the variables to have different optimal lags in one equation, which is not possible in any other technique.
- 6) ARDL use one long run equation whereas other cointegration techniques use a system of equations for estimating long run relationship (Pesaran and Shin 1995).
- 7) The order of integration can be different. It means order of integration can be 0.1 or a mixture of both.

### **4.3 Steps involved in Econometric Methodology:**

Stationary test is the first step in econometric analysis. We can say a series is stationary if it has constant variance and its mean value should also be zero. If our series is not stationary then analysis is not valid the results would be called spurious regression. For example, if series has only two

variables with decreasing or increasing trend over time; the regression result confirms with high value of  $R^2$  that both series are highly interconnected but actually they are totally unrelated.

#### 4.4 Unit Root Test

To check stationarity of data, we apply unit root test e.g. Augmented Dicky- Fuller (ADF), Dicky- Fuller (DF).

##### 4.4.1 Dicky- Fuller Test

Dicky- Fuller Test for Unit Root is developed by D.A. Dickey and W.A Fuller in 1979 (Dickey, 1979). In Dicky- Fuller Test, a simple AR (1) model is given as

$$y_t = \beta y_{t-1} + \mu_t$$

Where;

$y$  Shows as the variable of interest

$\beta$  Shows the coefficient of this equation

$t$  Is representing the time index

$\mu$  is the Error term

There are three main descriptions of the test:

##### Test 1 (No constant and No Trend)

With no constant and no trend here is the basic equation:

$$\begin{aligned}y_t &= \beta y_{t-1} + \mu_t \\y_t - y_{t-1} &= \beta y_{t-1} - y_{t-1} + \mu_t \\ \Delta y_t &= (\beta - 1) y_{t-1} + \mu_t\end{aligned}$$

Where as

$$\gamma = \beta - 1$$

So,

$$\Delta y_t = \beta y_{t-1} + \mu$$

Here the null hypothesis will be as:

$$H_0 : \beta = 1$$

& the Alternative hypothesis

$$H_1 : \beta < 1$$

Or

$$H_0 : \gamma = 1$$

$$H_1 : \gamma > 1$$

The null hypothesis is based on the assumption that there is a unit root of non-stationarity and the alternative hypothesis describes there is the stationarity of the variables or no unit root.

### **Test 2 (with constant but no trend)**

$$\Delta y_t = \alpha + \beta y_{t-1} + \mu_t$$

Where as

$\alpha$  Is the constant

Here again we have null and alternative hypothesis:

$$H_0 : \beta = 1$$

$$H_1 : \beta < 1$$

### **Test 3 (with constant and with trend)**

$$\Delta y_t = \alpha + \beta y_{t-1} + \beta_t + \mu_t$$

Where as  $\beta_t$  donates trend

$$H_0 : \beta = 1$$

$$H_1 : \beta < 1$$

#### 4.4.1.1 Procedure of Dicky- Fuller Test

First of all, plot the time series original observations the variables. If the series seems to be fluctuating around a sample average of zero, we use test 1 (no constant no trend) of Ducky-Fuller. If series shows to be wandering around a sample of average which is non-zero, we use test 2 (with constant but no trend) of Ducky-Fuller. On the other hand if serious does not fluctuate around a sample average of zero but it fluctuate linear trend, we use the test 3 (with constant and trend) of Ducky-Fuller.

#### 4.4.2 Augmented Ducky-Fuller (ADF) Test

Augmented Ducky-Fuller is the extension of Ducky-Fuller with extra lagged terms of dependent variables in order to remove serial co-relation. Like Ducky-Fuller test Augmented Ducky-Fuller test of unit root has three cases.

##### Test 1 (No constant and No Trend)

$$dy_t = ay_{t-1} + \beta_1 dy_{t-1} + \beta_2 dy_{t-2} \dots \dots \dots + \beta_\ell dy_{t-\ell} + \mu_t$$

Where as

$dy_t$  = difference operator

$a$  is coefficient

$t$  is the time index

$\mu_t$  = Error term

$Y_{t-1}$  and  $Y_{t-2}$  are number of lagged difference in terms of explained variable.

Null (unit root or no stationary) and alternative (no unit root or stationary) hypothesis will be the same as Dicky-Fuller test.

$$H_0 : \alpha = 1$$

$$H_1 : \alpha < 1$$

##### Test 2 (with constant but no trend)

$$\Delta y_t = \alpha + \theta y_{t-1} + \beta_1 \Delta y_{t-1} + \beta_2 \Delta y_{t-2} \dots \dots \dots + \beta_\ell \Delta y_{t-\ell} + \mu_t$$

Where as

$\alpha$  is constant

And

$$H_0 : \theta = 1$$

$$H_1 : \theta < 1$$

**Test 3 (with constant and with trend)**

$$\Delta y_t = \alpha + \theta y_{t-1} + \gamma t + \beta_1 \Delta y_{t-1} + \beta_2 \Delta y_{t-2} \dots + \beta_\ell \Delta y_{t-\ell} + \mu_t$$

$\gamma t$  denotes time trend

$$H_0 : \theta = 1$$

$$H_1 : \theta < 1$$

#### 4.5 Optimal Lag length Test

The next step which we have take after checking the unit root is to find the optimal lag length, which further can be used in the model. There are various criterions which identified the optimal lah length the criterions are Schwarz information criteria, Hannan-Quinn information criteria (HQ) and Akaike information criteria (AIC) (Frankel et al 2001). All these criterions are equally feasible and valid, give almost the same results.

The first step of applying ARDL is the bound test of co-integration. The hypothesis of this test tells us that we should proceed further or not. There are null and alternative hypothesis, where the null hypothesis is “there is no co-integration or there is no long run association among dependent and independent variables. While on the other hand, alternative hypothesis is that there exist co-integration or variables have long term association. F-Test is used for the confirmation of the relationship in between variables then the comparison will be made in between these estimated values and critical values from the table presented by the (Pesaran et al 2001). The acceptance and rejection of null hypothesis depends upon these tabulated value. We compare our estimated value of F-statistic with upper and lower bound. The null hypothesis will be accepted if the F-statistic is greater than the upper limit and the hypothesis will be reject if the estimated value of F-statistic is less then lower bound. If the value of F-statistic lies between lower and upper limit, then the results are interpret as inconclusive.

## 4.6 Diagnostic tests

After applying the ARDL bound test, to check the stability of the model that the model is stable or not we apply stability test. Three types of tests are used; to check the problem of serial correlation in the model we used Lagrange multiplier test. Ramsey's RESET and White Heteroskedasticity tests are used to check whether the functional form of model is correct or incorrect and problem of Heteroskedasticity respectively. Null hypothesis of these tests are that there is no omitted values in the series of the model, and there exist no serial correlation and problem of Heteroskedasticity in the series. While the alternative hypothesis hypothesize opposite of that.

## 5. Econometric Analysis

### 5.1 Model Specification:

The functional relationship of variables is given under;

$$ICRG_t = f(LGDP, CPI, GINI, Unemployment, Population)$$

There are some other variables that have minor influence in Governance. We cannot include all those variables in our model so, error term is used in econometric models which capture and also account for the effect of minor variables in analysis.

The econometric model is given below;

$$ICRG_t = a + \beta_1 LGDP_t + \beta_2 CPI_t + \beta_3 GINI_t + \beta_4 UNEMP_t + \beta_5 POP_t + U_t$$

Where,  $ICRG_t$  is the proxy of governance at time particular time  $t$ ) and  $a$  is intercept term  $\beta$ etas are coefficients of variables,  $LGDP$  stands for natural log of per capita GDP,  $CPI$  stands for consumer price index, it is the proxy variable of inflation,  $GINI$  refers to Gini coefficients that are used for measure poverty,  $UNEMP$  is the unemployment rate,  $POP$  is the total population growth and  $U$  for error term.

For long run results of ARDL we will use follow the given equation;

$$\begin{aligned}
dICRG_t &= b_{11} + b_{12}(ICRG)_{t-1} + b_{13}(LGDP)_{t-1} + b_{14}(CPI)_{t-1} + b_{15}(GINI)_{t-1} + b_{16}(UNEMP)_{t-1} + b_{17} \\
& (POP)_{t-1} + b_{12} \sum_{i=0}^n d(ICRG)_{t-i} + b_{13} \sum_{i=0}^n d(LGDP)_{t-i} + b_{14} \sum_{i=0}^n d(CPI)_{t-i} + b_{15} \sum_{i=0}^n d \\
& (GINI)_{t-i} + b_{16} \sum_{i=0}^n d(UNEMP)_{t-i} + b_{17} \sum_{i=0}^n d(POP)_{t-i} + \mu_{11}
\end{aligned}$$

In the above equation  $i$  ranges indicates chosen lag length

$d$  Symbolize as operator of first difference

$\alpha_{11}$  Is the drift component and  $\mu_{11}$  is random term.

ICRG = International Country Risk Guide (Proxy for Governance)

GINI = Income inequality

UNEM = Unemployment Rate

GDP = Gross Domestic Product

POP = Population

CPI = Consumer Price Index

### 5.3 Defining the Variables:

**ICRG** the International Country Risk Guide (ICRG) has ratings of 22 variables in which three subcategories of risk are included. The categories are political, financial, and economic risks. ICRG has created a separate index for these subcategories. The index of political risk is based on 100 points, financial risk is rated on 50 points, and economic risk on 50 points. The total points from three indices are divided by two to produce the weights for inclusion in the composite country risk score. The composite scores, ranging from zero to 100, are then broken into categories from

very low risk (80 to 100 points) to very high risk (zero to 49.5 points). The political risk rating includes 12 weighted variables covering both political and social attributes.

**GINI** is used for measuring income inequality in the country. It points out the income distribution in the country. Income inequality is the major cause of lower development in the country. If the distribution is not even it will increase the poverty as rich will get higher share where as poor will become poorer. The value of GINI coefficient ranges from 0 to 1. A higher values shows biased distribution whereas lower value shows even distribution. GINI is taken in order to have a view of the income distribution among citizens. Data on GINI is taken from world development indicator (WDI).

UNEM is the unemployment rate that shows the employment conditions in a country. It shows how much labor force in a country is unemployed. It does not include voluntary unemployment. It means the number of people trying to get job but are unable to find it, is included in unemployment. Higher unemployment shows instability of people to find out the jobs it depicts the lower economic activity which causes need of lesser labor force. Unemployment labor can cause serious harm to the nation by creating law and order problem and violence etc. to capture the influence of unrest citizens on governance on this variable is selected. Data for this variable has been taken from world development indicators for the time period of 1984 to 2012.

**GDP** Economic growth represents an increase in the production of goods and services or the producing capacity of an economy in a particular time period which is usually one year. Moreover, economic growth is attached with the increase in the efficiency of factors of production. Economic growth can be measured in nominal terms, in which inflation is included and it can also be measured in real terms where it is adjusted for inflation. For measuring economic growth different indicators are used, Gross Domestic Product (GDP), Gross National Income (GNI) and for comparison between different countries we use GDP per capita or GNP per capita which are obtained by dividing GDP or GNP with total population of the country.

**POP** Population is the social indicator shows the total population resides live in the country. It is one of the major indicator because labor force or the human capital is one of the major

determinant of economic prosperity. Labor force is the part of the population, if the population is at optimum level or more productive then economy will be better off. On the other hand, population will be a burden on the economic resources if there is no less productive capacity building in the population.

**CPI** consumer price index or the proxy for inflation. It shows the persistent rise in the general price level calculated by taking growth rate of general prices of consumer items. We took it in percentage for our analysis.

## **6. Results and Discussions**

In this study ARDL approach to co-integration is used to estimate the results. Empirical results involves four steps. First is testing the stationarity, unit root test will be conducted for it. Second to estimate long run relationship bounds F-test approach co-integration is conducted. In third step stability of the model is checked by using CUSUM and CUSUM square test. Finally long run and short run relationship is checked through long run coefficients and error correction models respectively. Ramsey Reset test is used to check the functional form of the model. It is very important in order to check, if relevant variable is omitted from the model or any irrelative variable included in the model. Variance decomposition is used for estimating dynamic interactions. VDC measures relative importance of the exogenous variables causing fluctuations in the endogenous variable.

But here first of all we will analyze the descriptive statistics of the model. The given data series must be normally distributed as it is the first step of our econometric analysis. In descriptive statistics, here analyze the values of Jarque Bera test; from the above table we can observe that the values of variables were found to be insignificant which implies that all the data series are normally distributed. On the other hand the values of Kurtosis and Skewness which have estimated are indicate the normality of data. The series must be stationary for valid and reliable analysis. To the unit root in the data we have four main tests used for that purpose. ADF, Phillips-Perron (PP) and KPSS these all test are equally valid for unit root. In these tests we basically analyze the order of integration of the variables. Usually augmented dicky fuller test (ADF) test is frequently used for all type of sample size and these tests give more superior results. So in our study we will use ADF test.

This test concludes that order of integration is mixed. So when we find I (0) and I (1) order of integration then we can apply Auto Regressive Distributed Lag (ARDL). Output of unit root tests is given in Table – 6.2

**Table 6.1 Descriptive Statistics**

	<b>ICRG</b>	<b>LGDP</b>	<b>CPI</b>	<b>GININ</b>	<b>POP</b>	<b>UNEMP</b>
<b>Mean</b>	0.418464	6.118749	8.633050	39.81069	2.486013	5.560103
<b>Std. Dev.</b>	0.054327	0.115834	3.976979	6.459156	0.444027	1.523801
<b>Skewness</b>	-0.369895	-0.136521	0.657559	2.697043	0.653612	0.051384
<b>Kurtosis</b>	3.996024	1.822743	3.709282	13.86657	2.046035	2.314088
<b>Jarque-Bera</b>	1.860052	1.764754	2.697745	177.8408	3.164488	0.581252
<b>Probability</b>	0.394543	0.413798	0.259533	0.056743	0.205513	0.747795
<b>Sum</b>	12.13545	177.4437	250.3584	1154.510	72.09438	161.2430
<b>Sum Sq. Dev.</b>	0.082640	0.375690	442.8582	1168.180	5.520471	65.01515
<b>Observations</b>	29	29	29	29	29	29

### 6.1 Unit Root Test:

First step in estimation is checking stationarity. For time series data the variable should be stationary. Non stationary variables produce spurious results. Means the results are unreliable. In case of ARDL, it is not essential to check stationarity but it is important in order that no variable is integrated of order two. ARDL technique required that the variable should be integrated of order 0, I(0), and order 1, I(1). A traditional test of augmented dickey fuller is used to check the order of integration. The results are present in the following table –6.2

**Table –6.2 Stationary tests by ADF**

With Intercept			With Intercept and trend	
Variable Name	T-value	P-value	T-value	P-value
<b>ICRG</b>	-3.21	0.029*	-5.37	0.0009**
<b>GDP</b>	-3.42	0.0186*	-3.64	0.044*
<b>CPI</b>	-6.48	0.000**	-6.34	0.0001**
<b>GINI</b>	-4.71	0.0008*	-4.72	0.0039
<b>UNEMP</b>	-6.43	0.0000**	-6.36	0.0001**
<b>POP</b>	-3.56	0.014*	-8.26	0.000**
<i>Where; the sign * indicates variable is stationary at level and ** shows variable stationary at 1<sup>st</sup> difference</i>				

## 6.2 Auto Regressive Distributed Lagged Model Approach (ARDL)

Outcome of unit root tests shows that all variables have different order to integration I(1) and I(0) so we will apply ARDL because of OLS is best if all variables are I(0) and Johansen can be applied in case of only I(1) (Johansen, 1988 and 1991).

## 6.3 Optimal Lag Length

After checking the stationary of series, we have to see optimal lag length. Optimal lag length indicates that how many lag should be use in model. The results of above table shows one lag should be used in model.

**Table –6.3 Optimal Lags**

<i>Lag</i>	<i>LogL</i>	<i>LR</i>	<i>FPE</i>	<i>AIC</i>	<i>SC</i>	<i>HQ</i>
0	-21.92465	NA	2.00e-08	2.137403	2.470454	2.239220
1	92.23421	163.9385*	1.88e-10*	-2.6596522*	0.005287*	-1.853086*
<p>* indicates lag order selected by the criterion</p> <p>LR: sequential modified LR test statistic (each test at 5% level)</p> <p>FPE: Final prediction error</p> <p>AIC: Akaike information criterion</p> <p>SC: Schwarz information criterion</p> <p>HQ: Hannan-Quinn information criterion</p>						

**Table –6.4 ARDL Bond Test**

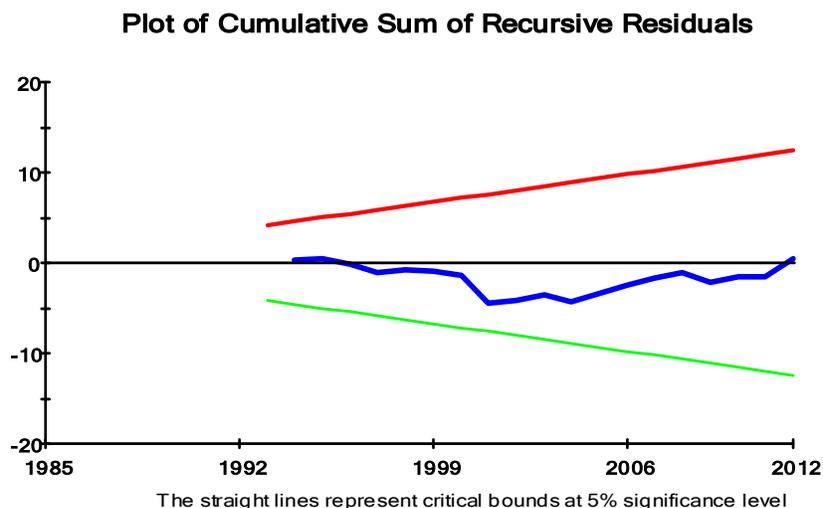
<i>Estimated Models</i>				
<i>ICRGt = f(LGDPt,CPIt,GINIt, t, UNEMPt, POPT)</i>				
<i>Optimal lags</i>			(1,1,0,1,0,1)	
<i>Statistics for W</i>			24.22 *	
<i>Statistics for F</i>			4.53 **	
<i>Significance Level</i>	<i>Critical Bounds For F– Statistics</i>		<i>Critical Bounds For W – Statistics</i>	
	<i>Lower Critical Bound</i>	<i>Upper Critical Bound</i>	<i>Lower Critical Bound</i>	<i>Upper Critical Bound</i>
	<i>5 per cent</i>	3.2065	4.6580	19.2392
<i>10 per cent</i>	2.6197	3.8912	15.7180	23.3474
<i>DIAGNOSTIC TESTS</i>				
<i>Serial Correlation</i>	0.018964[.890]		<i>R<sup>2</sup></i>	0.81

<i>Functional Form</i>	3.1896[.074]	<i>Adjusted - R<sup>2</sup></i>	0.72
<i>Normality</i>	7.8886[.019]	<i>F – Statistics</i>	8.87
<i>Heteroscedasticity</i>	.16211[.687]	<i>DW – Statistic</i>	1.74
Asterisks are the indication of significance of values, ***, **, and *, and show significance at 1%; 5% and 10% levels respectively. The Probability Values are given in [ ] brackets			

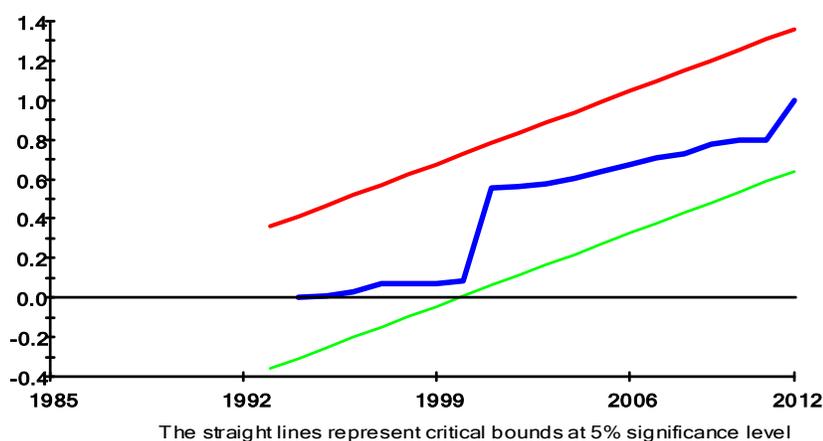
After lag length criterion, to check that whether the independent variables of the model are correlated in the long run with the dependent variables by using latest co-integration approach. The null hypothesis of this test is that there is “No co-integration” in variables and this hypothesis can only be rejected if the calculated value of F- statistics is greater than the upper critical bound value. The above Table shows that the calculated value of F-statistics is greater than its upper critical bound at 10% level of significance:  $4.53 > 3.89$  so here null hypothesis is rejected by accepting the alternative hypothesis confirmation of the long run relationship further the value of W- statistics is also more than its upper critical Bound at 10% level of significance:  $24.22 > 23.34$ . so here the governance has stable and long run relationship with the independent variables. The diagnostics shows that there is no problem found regarding Heteroscedasticity and also the error term is normally distributed. Lastly the functional form of the model is also correct.

## 6.4 Stability Test:

To test the stability of the model CUSUM and CUSUM square tests are used. It shows the stability of the model both in long run and in short run and also the significance of the model. Following are the figures:



**Plot of Cumulative Sum of Squares of Recursive Residuals**



It can be seen that CUSUM and CUSUMQ are plotted against the break point. The null hypothesis cannot be rejected if the plots remain within the bounds which are created at 5% level of significance. The above plot shows the stability of the variables throughout the period under consideration.

#### **Interpretation of the Results:**

According to the above long run and short run model of ARDL shows the results: starts with the **GDP** growth rate, it has a negative relationship with governance because for the last one decade Pakistan's performance in terms of growth remains persistent and better but governing issues are rises because of several political and regional issues. War on terror is one of the reasons behind this phenomena.

**CPI** shows negative and significant relationship because inflation shows the instability in the prices so it will affect the life of the poor and individual of the society. One of the determinants in the index of good governance is crime. So more inflation means limited the resource to the poor's so it will encourage the individual of the society to crime and getting their resources with some illegal means so ultimately governing issues becomes worsened. The result is also confirmed by the Grindle (2010).

**GINI** Income inequality also shows negative and significant relationship between the variables as it is because the income inequality is describing the disparity of the society it will worsened the

governing issues the economy and ultimately it will encourage crimes thefts and other illegal activities of the economy. The results are also consistent with Saima and Haq (2006).

**UNEM** unemployment shows insignificant results it means population ids not a significant segment of the governance.

**POP** Population shows significant and positive relationship with the level of good governance which shows that participation of the population is productive which reduces the governing issues from the economy. Although it has less magnitude but it is one of the important indicators of good governance in Pakistan.

**Table –6.5 Long Run and Short Run Results**

<i>Estimated Long Term Coefficients using the ARDL Approach</i>			<i>Error Correction Representation for the Selected ARDL Model</i>			
<i>Dependant Variable:ICRGt</i>			<i>Dependant Variable:ΔICRGt</i>			
<i>Name of Variables</i>	<i>Coefficient</i>	<i>P-value</i>	<i>Name of Variable</i>	<i>Coefficient</i>	<i>P-value</i>	
<b><i>LGDPt</i></b>	-10.7712	[.000]***	<b><i>dLGDPt</i></b>	-831.7640	[.043]**	
<b><i>CPIt</i></b>	-.0047676	[.019]***	<b><i>dCPIt</i></b>	-.0045906	[.106]	
<b><i>GINIt</i></b>	-.0029662	[.038]**	<b><i>dGINIt</i></b>	-.0015820	[.096]*	
<b><i>POPt</i></b>	.26105	[.061]*	<b><i>dPOPt</i></b>	1.1166	[.006]***	
<b><i>UNEMPt</i></b>	-.0036551	[.655]	<b><i>dUNEMPt</i></b>	-.0035196	[.649]	
<b><i>C</i></b>			77.6264	[.000]	<b><i>ECM<sub>t-1</sub></i></b>	-.96288 [004]***
<b><i>Diagnostics for ECM</i></b>						
<b><i>R-squared</i></b>	0.67		<b><i>Mean Dependent Variable</i></b>		.0053	
<b><i>Adjusted R-squared</i></b>	0.51		<b><i>S.D. Dependent Variable</i></b>		.0355	
<b><i>S.E. of Regression</i></b>	.024		<b><i>Akaike Information Criterion</i></b>		59.99	
<b><i>Sum Squared Residual</i></b>	0.011		<b><i>Schwarz Bayesian Criterion</i></b>		53.33	
<b><i>Log Likelihood</i></b>	69.99		<b><i>Durbin-Watson Stat</i></b>		1.74	
<b><i>F-statistic</i></b>	6.27		<b><i>Prob. Value (F-statistic)</i></b>		[.001]***	
*, **, and *** reveals significance level of test statistic at 10%, 5% and 1% respectively.						

## 6. Conclusion ad Policy Recommendations

This study is aimed at to estimating the influence of income inequality, unemployment, population, GDP on the level of good governance in Pakistan for the period from 1984 to 2012. ARDL approach has been applied in order to analyze the linkages both in short run as well as in long run. The results shows that the governance is significantly affected in short and long run as well. Governance is also affected significantly by these above mentioned variables in short and long run. One of the reasons of poor governance are inflation and income inequality. These reasons in cause corruption and unfair means to adopt the resources, poor performance of political, social and economic institutions. The higher corruption shows lesser control of government and ultimately leads to poor governance (Negin et. al.2006) inequality in the developing economies creates imbalances, induces illegal activities, creates biasness in the distribution of resources and [power and thus increase corruption reduces accountability and leads to poor governance (Ndikumana 2006). Another argument according to (Karstedt 2001) is that reason behind governance is the lesser cooperation between or among the sectors, especially private sector and government. That ensures less help from private sector to reduce poverty, income inequality and creating employment and development in the interest of general public.it will increase unrest in the society more crimes and violence as well. So there is a need to engage the stake holders of the society to increase the employment opportunities and reduces the disparities of the income.

It is said that governance is not a simple agenda which can be resolved overnight. It takes times for institutions to join together and ensure a strong, accountable and transparent government. From the above analysis we will make different policy recommendations in order to improve the level of good governance in Pakistan.

- All sectors of the economy should play a role together in order to increase employment opportunities which have an ability to control the income inequality and every individual can play its role into the society in a productive way.
- Also it is necessary to improve the tax base beacvuse string the tax system will burdens less on the poors of the society beacayusefaultytyax system creates income inequaliuty and uneven distribution of the income.
- From our above analysis it is seen that poor governance and political instability are playing major role in hindering the way towards development.

- One of the important indicators of governance is accountability, which is to be improved. Economic governance has two components which are government effectiveness and regulatory quality. There is a need to improve efficiency to implement economic policies by the government.
- As far the institutional governance is concerned Pakistan is also facing the problem of poor institutional setup, lack of law and order and corruption in the bureaucratic setup. There is a need to improve the bureaucratic setup. More efficient policy structure can ensure economic stability in the country. In such instances country should devise a proper political system.

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