

**GOOD GOVERNANCE: AN APPROACH TO IMPROVE
EXTERNAL DEBT SITUATION IN PAKISTAN**



By
Asif Farid
PhD

**DEPARTMENT OF ECONOMICS
UNIVERSITY OF PESHAWAR
KPK PAKISTAN
2015**

Th. 14768

330

A832j

Ph-D

APPROVAL SHEET

Certified that the thesis entitled "GOOD GOVERNANCE: AN APPROACH TO IMPROVE EXTERNAL DEBT SITUATION IN PAKISTAN" Submitted by **Mr. Asif Farid**, Ph.D. Research as partial fulfillment of the requirements for the award of the degree of Doctor of Philosophy (Ph.D.) in Economics is hereby approved by the Supervisory Committee.

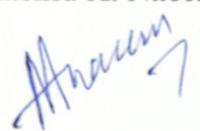
Supervisor


(Prof. Dr. Naeem ur Rehman Khattak)

External Examiner:


(Prof. Dr. Rashid A. Naeem)

Chairman


(Prof. Dr. Muhammad Naeem)

CHAIRMAN-
Department of Economics
University of Peshawar.

Date:

17-09-2015

Date 12.5.17 Cont of Exami UOP

Acknowledgements

I want to express my wholehearted gratitude to my great supervisor Prof. Dr. Naeem-ur-Rehman Khattak for his invaluable and continuous supervision in this study. Without his assistance and encouragement the thesis would not have been a reality. I also express my earnest appreciation and special thanks to my father, my wife and younger sister for their constant support and prayers to always struggle for greater achievements. I also benefited from the input of my friends and I am thankful to them.

Asif Farid
Research Scholar

Abstract

This study investigates the effectiveness of good governance and its impact on external debt in Pakistan during the period from 1973 to 2013 using time series data. The study applies a hybrid model that includes the role of good governance in production function. For analysis, Ordinary Least Square (OLS), Augmented Engel-Granger (AEG) and Granger Causality test is used. Prior the stated approaches have confirmed through Augmented Dickey Fuller (ADF) test that some of the variables are integrated at level and some at first & second order. The results from AEG test show that there is co-integration and long run bond between external debt and determinants of poor economic governance that are poverty level and income inequality. The result of the Granger causality test specifies that there exist bidirectional relationship between poverty and external debt services; income inequality and GDP; poverty and GDP; income inequality and budget deficit. There is no causal link between openness and external debt; openness and GDP.

The results provide strong evidences that poor economic governance in Pakistan have significantly aggravated economic downturn and augmented poverty level. It is found that deficit due to governance issues leads to fiscal irresponsibility and deteriorated external debt conditions in Pakistan. Growing external debt services have unfavorable impacts on poverty level and income inequality as less has been left to finance expenditures on social services and poverty reduction.

The novelty in the research is that poor governance's indicators i.e., poverty and income inequality are included as independent variables in the growth equation and its implications for external debt have been examined. The result is that good governance undertakes sustainable GDP growth and enhances socio-economic development through effective governance and its ultimate effect on external debt. Poverty level and income inequality can be useful indicators of the Highly Indebted Poor Countries (HIPCs) initiatives on debt reduction goals and debt relief.

Table of Contents

S.No	Subject	Page No
	Acknowledgements	ii
	Abstract	iii
	Table of Contents	iv-vi
	List of Tables	vii
	List of Acronyms	viii-ix
	List of Appendix	x
	Chapter-1 Introduction	1-8
1.1	Background of the Study	1-4
1.2	Problem Statement	5-7
1.3	Significance of the Study	7-8
1.4	Objectives of the Study	8
1.5	Organization of the Study	8
	Chapter-2 Literature Review	9-30
2.1	Introduction	9-15
2.2	Overview of Research on Governance Issues and External Debt in Pakistan	15-29
2.3	Conclusion	29-30
	Chapter-3 Overview of External Debt Accumulation in Pakistan	31- 40
3.1	Introduction	31
3.1.1	First Phase (1973-77)	32-33
3.1.2	Second Phase (1978-88)	33-34
3.1.3	Third Phase (1989-99)	34-36
3.1.4	Fourth Phase (2000-07)	36-37
3.1.5	Fifth phase (2008-13)	37
3.2	Fiscal Responsibility and Debt Limitation Act 2005	38-40

S. No	Subject	Page No
3.2	Conclusion	40
	Chapter 4 Research Methodology	41-58
4.1	Research Methodology	41
4.1.1	Hypothesis	41-42
4.1.2	Econometric Methods	43
4.1.3	Causality Test	43
4.1.4	Test for Cointegration	43
4.2	Theoretical Frame work	43-45
4.2.1	Traditional Threshold of Debt Relief Initiative	45-49
4.3	Econometric Modeling / Methods Used in Previous Studies on the Issues Foreign Capital	49-52
4.3.1	Model Specification	52-55
4.4	Definition of the Variables	55-58
4.4.1	Sources of Data	55-56
4.4.2	External Debt and economic Growth	56
4.4.3	Income Inequality	56-57
4.4.4	Poverty	57
4.4.5	Fiscal Deficit	57-58
4.4.6	Trade Openness	58
4.4.7	Saving-Investment Gap	58
	Chapter 5 Results and Discussion	59-78
5.1	Stationarity Test	59-61
5.2	Estimated Results for Cointegration	61-72
5.2.1	Multiple Regression Results for Economic Growth	61-62
5.2.2	Discussions	62-64
5.2.3	Multiple Regression Results for External Debt.	64-65

S. No	Subject	Page No
5.2.4	Discussions	65-67
5.2.5	Multiple Regression Results for Income Inequality.	67
5.2.6	Discussions	68
5.2.7	Multiple Regression Results for Poverty.	68-69
5.2.8	Discussions	69-70
5.2.9	Granger Causality Test	70-71
5.2.10	Engel-Granger Test Results for Cointegration	72
5.2.11	Findings and Comparison with other Studies	73-78
	Chapter 6 Conclusion and Recommendations	79-83
6.1	Conclusion	79-80
6.2	Recommendations	80-83
	Limitations	83
	References	84-95
	Appendices	96-109

List of Tables

Table No	Subject	Page No
Table 3.1	External Debt History of Pakistan	32
Table 3.2	Indicators of Fiscal Responsibility and Debt Limitation Act 2005.	39
Table 5.1	ADF Test Results at Level	59
Table 5.2	ADF Test Results at First Difference	60
Table 5.3	ADF Test Results at Second Difference	60
Table 5.4	Economic Growth Regression Results	62
Table 5.5	Regression Results for External Debt	65
Table 5.6	Regression Results for Income Inequality	68
Table 5.7	Regression Results for Poverty	69
Table 5.8	Results of Granger Causality Test	70-71
Table 5.9	Engel-Granger Test Results for Cointegration	72

Acronyms

ADB	Asian Development Bank
ADF	Augmented Dickey Fuller
AEG	Augmented Engel-Granger
BOP	Balance Of Payments
CADTM	Committee for the Cancellation of the Third World Debt
CSA	Currency Swap Agreement
CSF	Coalition Support Fund
ED	External Debt
EDS	External Debt Services
FRDL	Fiscal Responsibility and Debt Limitation
GDP	Gross Domestic Product
HDC	Human Development Centre
HIC	Highly Indebted Countries
HIPC	Heavily Indebted Poor Country
IBRD	International Bank for Reconstruction and Development
IFI	International Financial Institutions
IMF	International Monetary Fund
LDC	Least Developed Countries
LFS	Labour Force Surveys
ODA	Official Development Assistance
OECD	Organization for Economic Co-operation and Development
PDR	Pakistan development Review
PKR	Pakistani Rupee

PRGF	Poverty Reduction and Growth Facility
PRSP	Poverty Reduction Strategy Paper
PSDP	Public Sector Development Program
SBA	Standby Arrangements
SBP	State Bank of Pakistan
U.S.S.R	United Soviet Socialist Republic
U.S.	United States of America
UNDP	United Nations Development Program
USD	United States Dollar
WB	World Bank
WDI	World Development Indicators
WGI	World Governance Indicators

List of Appendices

Appendix-A	Summary of Descriptive Statistics
Appendix-B	Indicators of Fiscal Responsibility and Debt Limitation Act 2005.
Appendix-C	Sources of Data
Appendix-D	Data on Gini and Poverty
Appendix-E	Regression Results for External debt
Appendix-F	Growth Regression Results
Appendix-G	Regression Results for Poverty
Appendix-H	Regression Results for Income Inequality
Appendix-I	Results of Granger Causality Test
Appendix-J	Engel-Granger Test Results for Cointegration
Appendix-K	ADF Test of Stationarity
Appendix-L	ADF Test of Stationarity
Appendix-M	ADF Test of Stationarity

Chapter-1 Introduction

1.1. Background of the Study

Governance is an exercise of administrative powers, managing rules and policymaking by which these powers are executed. UNDP (1997) terms governance as the execution of economic, political and managerial power to exercise a state's activities at all domains. It contains systems, practices and agreements, through which people and factions synchronize their welfares, claim their privileges, undertake their obligations and resolve their disparities. The concept of authority as cited in the growth literature and the notion was initially assessed by specialists in primitive English culture that was illustrated by collaboration amongst the various fonts of supremacy i.e., cathedral, aristocracy, sellers, farmers, etc. Similarly, the word good governance has been commonly used in growth literature; here are many explanations of what the word actually depicts.

Good governance may be defined as the exercise of economic, political, social and administrative authority to improve living standard of the masses and optimal utilization of country's resources for development of the people. Good governance commonly reflects the application of socio-economic, political powers and organizational authority in the government domains to run state of affair at all levels to improve living standard of the masses in the recipient countries. Good governance has three main proportions: first, the administrative and political regime; second, the organisms and working out of the authority; and third, the capacity and efficiency of governments [World Bank (1994); OECD (1995); UNDP (1997); Commission on Global Governance (1995)].

Asian Development Bank (1995) classified four fundamental components of effective governance as accountability, power sharing, certainty and transparency. Thus good governance is measured by the welfare of the society cherished by the masses from the borrowed funds. Still the precise correlation between these two variables remains unexplored, appealing investigator's focus. A nation's external

indebtedness means its fiscal responsibility in terms of its desirable achievements from the borrowed funds. Effective governance empowers a country to realize its goals regarding social and economic development, by facilitating a favorable atmosphere for high and sustainable economic development.

Recently, governance issues and external debt have received enormous apprehensions from the researchers. Good governance and external borrowings play a central role in determining the socio-economic development of the developing and Highly Indebted Poor Countries (HIPC). Donors started to condition aid eligibility on the basis of good governance [World Bank (2006)]. Now the quality of governance deems necessary in scrutinizing eligibility for World Bank loans [International Development Association (2004)]. The World Bank Development Report on the Quality of Growth (2000) emphasizes that equal distribution of resources, sustainable policies, predictable environment, and better institutions enhance development process. Impact of various policy instruments depends on how effectively institutions perform to realize these objectives. This phenomenon is also called "Good Governance". Hence, good governance means the mechanism of effective decision-making process by which decision is executed for sustainable development. Economists agree that governance is one of the vital factors in explaining the divergence in performance across the globe.

Good governance is the most important conception and is absolutely vital in shaping economic growth and social development. Several studies have been carried out till date about economic development and good governance. Grindle (2004) observed that the idea of good governance is not so straightforward or easy to be associated with economic growth. Fundamental theory of good governance is to try for poverty reduction, offsetting corruption and work for development. Governance problem impede every effort to enhance social and economic development. Fragile institutions, unsteady economic growth, social unrest and inequality lead to low standard of life in the developing countries. The ultimate effects of these outcomes result in vicious circle of poverty, low growth and unsustainable debt. This unfavorable situation obliged nation to introduce drastic

reforms in their government institutions with the objectives of sustainable economic development and reduction in income inequality [Haq and Zia (2006)]. Carl-Johan (2004) suggests that continuous and unmanageable aid inflows are related with poor state of affairs.

The World Governance Indicators (WGI) commonly used by International Financial Institutions (IFIs) is control of corruption, rule of law, regime efficiency, regulatory quality, stable political system, and freedom of expression and answerability. The core usages of the WGI guides by the IFIs are to sensitize about the optimal utilization of the borrowed funds and improvement in governance in developing countries [Kaufmann, Kraay and Mastruzzi (2007)]. However, usefulness and biasedness of the indicators have been criticized by most of the researchers [Arndt and Oman (2006); Knack (2006); Kurtz and Shrank (2006); Thomas (2006)].

Pakistan's economy persistently dependent on external borrowings to run its development projects since 1990s. The growing resource gap is a reflection of its economic governance issues and also replicates the way macroeconomic aspects were accomplished overtime. High external debt burden inversely affect GDP growth through the effects of debt overhang hypothesis and liquidity constraints. Obviously, government expenditure on public services and settlement of debt requires to be financed by the internal sources available to the government, *i.e.*, raise capital through effective taxation [Mohey-uddin (2005)].

Since it's beginning, Pakistan being a capital scarce country has opted for external financing for filling the resource gap. The ideal utilization of the borrowed funds could have facilitated improvement in the living standards of the masses but unluckily that did not materialize due to its fiscal irresponsibility and has accumulated huge external debt [Hasan (1998)]. Borrowing demands that, at a certain point, these loans to be repaid and, hence, the nation requires generating surplus resources from the borrowed funds to retire its debt. Further, despite benefitted from debt relief initiatives in 2002-08; Pakistan has systematically faced difficulties to comply with its external debt obligations.

Actually, the aid was believed that it would be beneficial in filling the current account deficit in a capital-starved country. But the prevalent evidences showed that foreign aid persuaded government to earmark higher percentage of aid to less preferable projects. Similarly, it affected self-reliance and domestic saving adversely. Furthermore, it protracted reliance on external borrowing [Griffen (1970); Qureshi (1997); Boone (1996)]. Generally, from the policy perspective, the profit and outcome from the external assistance are believed to be foremost. Further, it affects IFIs plans in sharing of assistance among various debtors. It assumes that the efficiency of aid is significantly associated with decision of the donors regarding supply of aid to the debtors. Efficiency of foreign assistance is affected by poor economic performance of the recipient state [Burnside and Dollar (2000); Collier and Dollar (2002); Carl-Johan (2004)].

This study would examine how a growing external debt and debt services could contract GDP growth and exacerbate poverty level. The issue addressed here is whether the quality of governance influences the association between external debt and GDP growth. The main innovation of the study is the introduction of factors behind poor economic governance i.e. income inequality and poverty into the analysis. Further role of trade openness and strategic position of Pakistan in the region, which leads to increase in defence expenditure and its implications for budget deficit, is to be discussed in the present research. In other words, it is to analyze whether high external debt has a positive/negative effect on economic development in the presence of good or bad institutions and economic policies and at the same time addresses how well the indicators used to measure external debt sustainability are satisfactory for the Pakistan context?

A number of new issues pertaining to the Pakistan's external debt burden and bad economic governance have been addressed in this analysis. The role played by growing poverty level, Income inequality and trade openness in the build-up of external debt have received considerably low attention in the previous literature on debt sustainability in Pakistan.

1.2. Problem statement

Taking a chronological outlook one can observe that governance issues, economic growth and external debt were very hot issue since 1990s and recently appear to have revived in new shape “good governance”. Donor started to condition aid eligibility on the basis of good governance. Mr. James Wolfensohn, former President of the World Bank introduced the matter of corruption into the mainstream of the Bank’s negotiations with its debtors, a negotiation that was sustained by his successor, Paul Wolfowitz [World Bank (2006)]. Now the quality of governance has become necessary in scrutinizing eligibility for World Bank loans [International Development Association (2004)]. However, in its operational work the World Bank has decided not to trust on the WGIs. The WGIs have no legitimate standing; the fact that they are constructed by World Bank academics and are funded and published by the World Bank provides them the weight of that influential institute [Thomas (2009)].

Here the core focus is on the major determinants of governance issues and as well the quantifiable impact of those issues on economic development and sustainable external debt. In that logic, the author of this research has been predominantly motivated by the events of frequent government dissolution before completing its tenures in Pakistan since 1990 on the pretext of economic instability. Further, the sudden upsurge of the external debt problem and sluggish economic growth in the period of 2008-2013 particularly inspired the author to examine the root causes of this menace. Those significant events certainly motivated this study. In that reason, the major queries that are to be analyzed and hypotheses to be tested are:

Hypothesis-1:

Good governance is positively related to the country’s economic growth and sustainable external debt.

Hypothesis-2:

Governance issues are directly related to an unsustainable economic growth and results in external debt deterioration.

Hypothesis-3:

External debt services have adverse effect on poverty level and income inequality.

Those hypotheses are appealing for the reason that they would provide us the opportunity to examine more cautiously the real choices that Pakistan make in connection with governance issues and its implication for economic development. The crossing point between good governance and external debt are sustainable economic growth that leads to poverty reduction and benefits of growth are trickledown to the gross root level.

Traditionally, the matter of debt sustainability in Highly Indebted Poor Countries (HIPCs) is usually assessed through the conventional debt indicators method. The most common measures of public debt sustainability were the ratio of public debt stock to gross domestic product and ratio of public debt stock to government revenue. Further, in case of accumulated foreign debt, it is significant to express foreign exchange and export earnings in terms of foreign debt, likewise the foreign debt to gross domestic product ratio [Sun (2004); Cline (2003); Martin (2002); Gray (1998)]. European Network on Debt and Development (EURDAD) in 2001 observed that these indicators are incapable to detect the true factors that are helpful in determining the accurate level of sustainable debt. Further, these initiatives will not be adequate in poverty reduction efforts of HIPCs as it does not take into account for the funds these nations need for expenditures on poverty eradication and for sustaining GDP growth [Birdsall and Deese (2004); Sachs (2002); Thomas (2001)]. Thus poverty and income inequality have been introduced in the growth equation to overcome these shortcoming of the debt ratio analysis to determine the debt sustainability situations for Pakistan. Furthermore, trade openness is also taken in to consideration in this study instead of conventional indicators for foreign debt i.e., present value based debt ratios of foreign debt to export earnings.

In approaching the governance issues and external debt crisis, our basic investigation relies on the famous economic growth framework by Robert Solow

(1956) and on an empirical analysis of indicators of poor economic governance and external debt. In addition, the study analyzes the external debt accumulation and its implication for poverty level, the rationale behind it, and the feasible measures that Pakistan can implement to reduce its external debt burden.

1.3. Significance of the Study

The theme of study is based on the understanding that Pakistan, like other developing countries suffering from external debt burden. Pakistan's public debt which stood at Rs. 6,044 billion in 2008, increased to Rs. 14,366 billion in 2013. It shows that public debt increased by Rs. 8,322 billion in just five years. Similarly, external debt, which stood at \$40.3 billion in June 2007, rose to \$60.9 billion in 2013, an addition of \$20.6 billion in six years.

Good governance has been considered significant in determining aid eligibility and scrutinizing eligibility for World Bank loans. Several researchers support the existing WGIs, advocating that they may be the best way to measure 'governance'. However, critics assert that good governance indicators like the WGI's are less than practical in assisting economic development, particularly in guiding nations to leads for governance perfection [Kurtz and Schrank (2007); Thomas (2006); and Andrews (2008)].

Generally analysts determine that conditioning aid on governance reform and policy is mostly unsuccessful [Kapur and Webb (2000); Stiglitz (1999); Collier (1997); Dollar and Pritchett (1998)] raising reservations about the capability of donors to improve governance effectiveness in debtor nations through imposing governance-related conditions on aid. In an investigation of 29 instances where politically motivated aid sanctions were applied, Crawford (1997) determines that political conditionality is generally useless.

Democracy and rule of law were used to assess good political governance in previous studies [Barro and Lee (2005)]. However, Mosley et al (1991) observe that political instability, i.e. the occurrence of change in government in particular, may be a preferable indicator for political governance. Similarly, we attempt to

capture poor economic governance here by looking at poverty level and inequality. Poverty and inequality measured in terms of poor economic governance is well adapted to Pakistan, because there is consistent deterioration in poverty level and inequality in Pakistan, which have severe implications on sustainable economic development and external debt.

Besides, the conventional variables cited in literature such as budget deficit, saving-investment gap and trade deficit etc. this study further estimates the impact of determinants of poor economic governance such as poverty level and inequality on economic growth and external debt. Such study has not been conducted in Pakistan before.

1.4. Objectives of the Study

The main objective of the study is to assess the modification that happened in socio-economic development and external debt due to good governance. Cumulative GDP growth or improving socio-economic development achieves either this objective; so that advantage of success should be enjoyed by all section of the society. The study aims to achieve the following objectives:

- i. To explore the association among good governance, GDP growth and external debt of Pakistan.
- ii. To observe the impact of external debt obligations on Pakistan's economic development.
- iii. To examine the relationship between poverty level and sustainable level of external debt of Pakistan.

1.5. Organization of the study

Chapter-1 is outlining introduction, describes significance and aims of this analysis. Chapter-2 shows review of literature. Chapter-3 discusses overview of the external debt accumulation in Pakistan. Chapter-4 discusses the research methodology and theoretical approach. Chapter-5 discusses empirical results and findings. Conclusion and recommendations are given in Chapter-6.

Chapter-2 Literature Review

2.1. Introduction

Recently, governance issues and external debt have received an enormous attention from the scholars. Good governance and external borrowings play a central role in determining the socio-economic development of the developing and Highly Indebted Poor Countries (HIPC). Still the precise correlation between these two variables remains unexplored, stimulating investigator's concentration. A nation's external indebtedness means its fiscal responsibility in terms of its desirable achievements from the borrowed funds. Effective governance empowers a country to realize its goals regarding social and economic development, by facilitating a favorable atmosphere for high and sustainable economic development. National savings and output from the borrowed funds determine the realization of GDP growth funded by foreign borrowings. The persistent and smooth inflow of foreign capital is likely to be unfavorable to the compulsion for savings or to cut unnecessary expenditure by the government.

The concept of authority as mentioned in the growth literature and thesis was initially raised by experts in Primitive English culture that was illustrated by collaboration amongst the various fonts of supremacy i.e., cathedral, aristocracy, sellers, farmers, etc. Similarly, the word good governance has been commonly used in growth literature; here are many explanations of what the word actually depicts.

The meaning of governance is exercise of administrative powers, managing rules and policymaking by which these authorities are executed. Good governance is measured by the welfare of the society cherished by the masses. Asian Development Bank (1995) classified four fundamental components of effective governance such as accountability, power sharing, certainty and transparency.

UNDP (1997) terms governance as the execution of economic, political and managerial power to exercise a state's activities at all domains. It contains systems, practices and agreements, through which people and factions synchronize

their welfares, claim their privileges, undertake their obligations and resolve their disparities.

Good governance is the most important conception and is absolutely vital in securing economic development. Numerous studies have been accomplished till date about Economic development and Good Governance. Most of the studies have shown a positive relationship between good governance and economic growth. One such research by Kaufmann and Kraay (2002) examined that effective governance is essential for growth in per capita income. In addition, Grindle (2004) observed that the idea of governance is not so straightforward or easy to be associated with economic development. Fundamental theory of good governance is to try for poverty reduction, offsetting corruption and work for development.

Kaufmann *et al* (2005) introduced a set of six multiple aspects of governance sensitivity indicators for 105 states covering the period from 1996 to 2005. These indicators are control of corruption, rule of law, regime efficiency, regulatory quality, stable political system, and freedom of expression and answerability. The superior value relates to improved outcomes, on a scale refers to the valuations range from -2.5 to 2.5. These valuations are also classified in percentile (0-100). The inferior percentile is ranked as poor governance indicators while superior percentile is graded as better governance for any assumed nation.

These World Governance Indicators (WGI) commonly used by International Financial Institutions (IFIs). The core usages of the WGI guides by the IFIs are to sensitize about the optimal utilization of the borrowed funds and improvement in governance in developing countries. However, usefulness and biasedness of the indicators have been criticized by most of the researchers [Arndt and Oman (2006); Knack (2006); Kurtz and Shrank (2006); and Thomas (2006)]. This study would analyze poverty; superpowers interventions in affairs of Pakistan as well as economic, social and political aspects of good governance.

The idea that institutions intensely impact the wealth of nations was principally presented by Adam Smith [Snowdon *et al* (2005)]. World Bank (2002)

has also asserted that there is pervasive recognition of the notion that efficient institutions and impulsive structures are essential prerequisites for positive economic growth and development process. North (1991) claims that the main subject of economic narration and development is justification for the development of institutions that invent an economic situation that encourages competence and enhances output. Sen (1983) observed that the recognition of individual aptitudes, that widen the choice of person selections, is vital for a larger perception and extent of socio-economic development. The institutional structure is expected most fundamental for transforming development and safety into a maintainable approach.

Effective governance approach is vibrant for viable GDP growth together with other aspects of good governance like government decisions of resources allocation for poverty reduction and equal distribution of economic opportunities. The idea of obliging supplementary social and economic guides together with progress in income per capita have acquired a due notice, from the time when the United Nation (1954) endorsed that GDP was to be accompanied by an additional set of indicators, replicating different foundations and factors of cumulative growth and welfare.

In most of the studies, scholars are presenting that the discrepancy in governance level across nations is mainly because of the efficient institutions and proficient implementation aspects. The contemporary literature on good governance recommends that an effective and proficient institution is vital in inducing GDP growth and sustainable social development. The World Bank (1994) explains good governance as the 'custom in which authority is executed in the administration of state's socio-economic affairs.

The literature suggests that utilizing the borrowed resources in a productive manner through good governance and splendid economic management can enhance GDP growth and social development. Governance deficit is a common problem in almost low income and developing countries. The researchers have

tried to explore the causal elements responsible for corrosion in governance institutions that worsening socio-economic development and foreign aid. It was found that there is causal links between weak governance and foreign aid. Apart from the foreign debt effects, the low-income countries suffering from strife are also facing governance issues. The grim situation requires proper attention of the policy makers to look into the matter for possible remedy and eliminate the deficiencies due to which foreign aid and governance fail to realize effective outcome. This analysis tries to explore how governance boosts socio-economic development following growing external debt particularly after 1990s. The past experiences indicate that good governance has positive impacts on social and economic development. Furthermore, the available literature suggests that governance issues distract government attention from more preferable schemes to non-development expenditure. Internal disturbance cause increase in defence expenditure that deteriorate budget deficit, external debt and social unrest [Qayyum and Haider, 2013].

Aid effectiveness depends upon better performance of the governance. Burnside and Dollar (2000) examined that in the presence of better institutions and pursuing effective economic policies, development aid can contribute to reduction in poverty. Good governance and effective policy milieu are considered most significant determinants of aid effectiveness.

Ararel (2008) shows that foreign assistance plays significant task in economic development of the developing nations, but its role is empirically unknown how it shapes motivation of receiver bureaucracies. His results are mostly compliant with the theoretical expectations of institutional rational preference: bureaucrat's endeavors to make sure bureaucratic endurance, whereas donors guarantee growth of loan collection. Brautigam *et al* (2004) have examined the affects of foreign assistance on governance in Sub-Saharan Africa. The findings are (i) there is a robust statistical connection between soaring aid levels in Africa and governance deterioration levels, (ii) also there is a sound relationship between higher levels of aid and a small tax collection as a share of GDP; and (iii) foreign

assistance adversely affect the governance levels even when they have launched to manage for per capita income and violence. This means that easy money flowing through external debt or foreign aid may exert less pressure on the authority to strive for domestic revenue generation. Therefore the authority may have less inspiration to improve governance quality.

The International Monetary Fund and World (1996) in its Provisional board convention acknowledged sponsoring of governance effectiveness in all spheres of economy and development. Foreign assistance may also diminish tax revenue, lessening government tax receipts as projects financed by foreign assistance are generally planned to use in politically motivated projects. External aid may corrode political stability and cut down the specific time period for a government, which fails to reduce differences in income distribution. Similarly, in a resource deficient country, external borrowing can boost quality of institutions through strict guidance and inducement for beneficiary through various reforms in governance. Some studies show that reforms programs are not implemented in true letter and spirit and the debtors only tries to excite the creditors the indicators that did not reflect true picture of the scene.

The United Nation Development Program (1997) report notes that outcome of better governance is progress that give importance to deprived, women emancipation and endures equal distribution of income. Hence, good governance is multidimensional and comprises diverse components of the government and the civilization. Kaufmann *et al* (1999a, 1999b, and 2005) reveals a robust causative link running from efficient governance to expanding income per capita and different social values. Rodrik (2000) observes that effective institutions enhance macroeconomic steadiness, deliver social assurance, and control social divergences, which are one essential for viable economic evolution.

The World Bank Development Report (2003) highlighted that for viable economic growth in a vibrant world, the institutions demand to be upgraded at numerous stages, from national to worldwide. Likewise, the World Bank's on the Quality of Growth Report (2000) emphasized on four dynamics particularly

pertinent to poverty effects; allocation, sustainability, unevenness, and governance adjoining the evolution process. Influence of various policy mechanisms is based on how successfully the government executes to realize these goals. This mechanism is also termed "Good Governance". Kaufmann and Aart (2002) advocated that income per capita (PCI) and governance effectiveness throughout the countries are directly correlated in two ways i.e., in first instance, there is direct relationship between good governance and PCI. Another, a feeble and negative relationship exist running from PCI to governance.

The World Bank Development Report on the Quality of Growth (2000) emphasizes that equal distribution of resources, sustainable policies, predictable environment, and better institutions enhance development process. Impact of various policy instruments depends on how effectively institutions perform to realize these objectives. This phenomenon is also called "Good Governance". Good governance means the mechanism of effective decision-making process by which decision is executed for sustainable development. Economists agree that governance is one of the vital factors in explaining the divergence in performance across the globe.

The process of economic development from the borrowed funds depends on capacity and efficiency of the institutions of the debtor's country. Borrowed fund if utilized rationally can develop a mechanism necessary for development path and help in retirement of the outstanding debt. Developing countries needs foreign assistance to fill the resource group. It is believed that foreign aid would play a vital role in development process of the recipients. However, evidences prove that economic situations deteriorated in most of the indebted countries. Thus access to easy financing does not augment development process in the countries having weak institutions. Carl-Johan (2004) suggests that continuous and unmanageable aid inflows are related with poor state of affairs.

Most social scientists agree that the government's effectiveness depends on the extent of the welfare that has been realized. Now the question arises what should be the welfare function or criteria. We believe that issues related to poverty

reduction, land utilization, agriculture & industrial production, health care, literacy, revenue generation, income per capita, equal income distribution, creation of employment opportunities etc. are highly significant factors which can explain welfare of a nation in relative terms [UNDP, 1997; World Bank, 1994; Ismael and Sehar, 2000].

2.2. Overview of Previous Research on Governance Issues and External Debt

The review of Pakistan's external debt sustainability subject has been made by few studies in terms of conventional debt indicators. In previous external debt sustainability literature on Pakistan, the most common measures of external debt sustainability were the ratio of public debt stock to gross domestic product and ratio of public debt stock to government revenue. Further, foreign debt has been expressed in terms of budget deficit, current account, foreign exchange and export earnings. For instance, Pasha and Ghaus (2003) and Bilquees (2003) basically observe the growth of public debt and classify the collective effect of succeeding non-interest current account deficit and huge primary budget deficit are the major reasons accountable for the growing public debt.

There is infinite amount of literature that attempts to achieve the sustainable external debt. But despite the voluminous literature, there seem to be no reliable and unambiguous answer to this question. Most of the studies have considered fiscal and monetary (saving, productivity and foreign capital inflows) to reduce burden of debt [Crouch (1973); Ahmad and Ahmed (1998)].

Hassan (1999) reveals that in spite of debt relief, the growing burden of foreign debt remains tremendously intense and the burden of accumulative public debt servicing has brought the fiscal adjustment complicated. Interest disbursement is account as the major factor of public debt that has caused cut in development expenditure and led to turn down in investment rate.

Chaudhary and Anwar, (2000) by means of debt Laffer curve, stated that Pakistan's external debt is not far above the level that it possibly will be written off, in other words it only qualifies for debt rescheduling. It is also recommended

that the external debt crisis aggravated during the 1990s mostly for the reason of the concentrated reliance on short/medium-term financing to convene external debt obligations. Short and medium-term external debt accounted for Eighteen percent of Pakistan's external debt liability and Fifty Five percent of the external debt servicing expenditure. Evaluating the external debt ratios of Pakistan some other researchers recommended that external debt is not sustainable and considerably higher than the average of South Asia [Kemal (2002); Chaudhary and Anwar (2000); Siddiqui and Malik (2001)].

Jafri (2008) revealed that a slight divergence in the main factors of foreign debt including real economic growth, non-interest current account ratio to GDP, the net non debt creating capital inflows ratio to GDP and depreciation of exchange rate may increase the ratio of foreign debt to GDP but it would linger within safe limit. Still, extensive shocks to these indicators of foreign debt have the potential to cross safe limits of the debt threshold level.

Anwar (2002) observed that in case of stagnant exports, devaluation would cause increase in external debt in rupee in term and consequently increase in external debt service burden, lower GDP growth and raise poverty level. Further, it is essential to tackle fundamental basis that responsible for debt build-up and consequent unfavorable effects on GDP growth and poverty while working on debt reduction plan. Tax reforms, increasing the production capacity and diversification of exports basis can be useful in undertaking debt reduction strategy.

Abbas (2005) found relatively a complicated depiction of the link between domestic debt and economic growths. He shows that there is a substantial positive economic growth payoff to domestic debt, even at the very excessive levels of 93% of gross domestic product. His analysis not only appeared to confirm traditional opinion that the choice to shift the budgetary allocations from foreign to domestic debt would be filled with complications. The analysis also found vigorous outcomes on the economic growth payoff of domestic debt issuance in more advanced financial systems. Still the inclusive relationship persisted

negative. Abbas (2007) has continued its earlier work; and discovers the sign that over a ratio of 35% of bank sureties, domestic debt weakens economic development.

Waheed (2006) observed that primary deficit is the main cause of the domestic debt accumulation. Sustainable primary deficit and fiscal adjustment is required to prevent the process of domestic debt accumulation. Fiscal regulation should be consists of increase in tax collection and domestic resource mobilization rather than reduction in the development expenditure.

Ahmed (2001) probed the political features of governance and its role in eradication of poverty in South Asia by evolving a background for assessing governance role in socio-economic development and linking this role to poverty tendencies. He explored that good governance performs a substantial role in this region and associated with favourable implication for social uplift and reduction in poverty.

Poverty happens when people in a disintegrated society is fastened into a nexus of dominance, which denies the individuals of their genuine and possible share in resources. The deprived face markets, institutional and local power structures, which depressed against access of the poor to the resources, public services and decisions making, which impact their instant survival [Hussain, (2000)].

Governance problem impede every effort to enhance social and economic development. Fragile institutions, unsteady economic growth, social unrest and inequality lead to low standard of life in the developing countries. The ultimate effects of these outcomes result in vicious circle of poverty, low growth and unsustainable debt. This unfavorable situation obliged nation to introduce drastic reforms in their government institutions with the objectives of sustainable economic development and reduction in income inequality [Haq and Rashida (2005)].

Qayyum and Haider (2013) explain how internal and external conflicts worsen the affects of foreign aid on governess effectiveness. Conflict influence

governance effectiveness directly by building instability that negatively affects economic growth as investment atmosphere is infected and output declines leading to decrease in revenue generation. Resultant vicious cycle, government is left with scarce resources to recover institutional quality. The fallout pointed out the adverse impact from the convergence of foreign aid in conditions of conflicts that leads to decline in institutions.

Ahmad (2011) by using various debt indicators explains that public debt crisis deteriorated in Pakistan due to poor debt management along with the guidelines of International Financial Institutions. His analysis of the socio-economic impacts of debt overhang, it is observed that net external resource surges to the public and private sectors have a tendency to crowd out public and private savings respectively and the former is crowded out by sources surge from the private to the public sector. In conclusion, funds distribution between non-development and developmental outflow did not based on whether these expenditures are financed by internal or external sources. However, more funds are allocated towards development expenditure when deficit is financed by external resource rather than internal resources.

Mahmood and Rauf (2012) analyzed Pakistan's debt sustainability are not achieved and public debt have continued unsustainable from 1970s till 2011 by applying the approach of present value of budget constraint. They found that debt reduction strategy, which was successful in 2000s, appears to be short-term in nature due to persistent fiscal indiscipline.

Hasan and Butt (2008) examined correlation between foreign debt and economic performance in Pakistan for the extended time period of 1975-2005 using Auto Regressive Distributed Lag (ARDL) methodology. They observed that due to unproductive usage of foreign debt, foreign borrowings were insignificant determining factor of economic growth in Pakistan both in the short and long run. The outcomes indicated that contributing factors of Pakistan's economic growth are labor force and trade, mutually in the short and long run.

Boopen *et al* (2007) explored the association between foreign debt and the economic growth in Mauritius for the period of 1960-2004. The outcomes advocated that foreign debt have inverse relationship with the economic growth both in long and short run. He also found bi-causality between economic growth and public debt. Additionally, he also observed proofs that public debt has adverse impact on both public and private capital stock of the economy hence endorsing the debt overhang and crowding out assumptions.

International Monetary Fund's in its report emphasize exogenous shocks i.e. global events predominantly the oil price shocks, depressions in developed countries and high interest rates were considered major stimulus of debt accumulation [IMF Report (2000)]. The debt problem of other Highly Indebted Countries (HICs) contributed by first oil shock in 1970, the credit unrest of Mexico in 1982 and the sharp fall in crude oil prices in 1986 brought the debt problem to the surface.

In discussing the debt problem of Pakistan, it must be considered that the nature of the problem is quite different from other indebted countries. The debt problem of other LDCs and developing countries created by first oil shock in 1970, the credit unrest of Mexico in 1982 and the sharp fall in crude oil prices in 1986 brought the debit problem to the surface [Tokunaga and Akimune (1988)]. This study considers the debt crisis of Pakistan from a wide-ranging viewpoint and analyzed that the present crisis is consequences of the following four distinct factors related to governance deficit.

First, a serious institutional crisis and super powers interests in the region that is the outcome of a number of policy mistakes made by the leadership of the day and debt reduction has never been a foremost priority of the policy makers. Flaws in the structure of governance are the major source of persistent current account, fiscal and balance of payments deficits as well as accumulated debt burden of Pakistan. There is lack of prescribed or recognized institutional restrictions on borrowing criteria in Pakistan. Debt accumulation is less the

consequences of fundamental weaknesses in the economic state of affairs than weaknesses in the structure of the governance institutions [SBP's, 2001]. It is becoming gradually more understandable that good policies and institutions are important determinates which form the efficiency of economy in the same way as technology does.

Khan (1997) argued that borrowing only permits incompetent government to carry on. Incapable administration shifted priorities from instituting one crisis to the next one without any recourse to preferences and accepted whatever assistance in the course, no reason how detrimental they are in future. Comprehensive long-term strategies are outwitted, as they are unfavorable to the privileged.

Rodrik (2003) find that sustainable economic growth needs institutional reforms. Further, economic growth and maintaining it for extended time period are two different targets. Economic growth may take some reform initiative. However, maintenance of development process needs constant reforms in governance that enhance mechanism of recovery in recession and uphold economic productivity. The weakening of institutions, heavy dependence on primary goods exports and inelasticity of tax system intensified structural complications and external debt.

The process of economic development from the borrowed funds depends on capacity and efficiency of the institutions of the debtor's country. Borrowed fund if utilized rationally can develop a mechanism necessary for development path and help in retirement of the outstanding debt. Developing countries needs foreign assistance to fill the resource gap. It is believed that foreign aid would play a vital role in development process of the recipients. However, evidences prove that economic situations deteriorated in most of the indebted countries. Thus access to easy financing does not augment development process in the countries having weak institutions. Zambia's external debt increased during 1970s and 1990s, while its per capita GDP fell during this particular time period [World Bank (2007)]. External borrowings augment or upset economic growth, hence, depends upon the

governance and institutions of the recipient country necessary for economic development.

Domestic and international politics play a fundamental role in the distribution of funds among the debtors and in the accrual of the debt. Easterly (2002) is of the view that a politician in order to remain in power in the future would try to spend more and would run a large budget deficit. Thus political governments are more indebted by borrowing more to preserve their power for the next term. Haggard and Kaufman (1992) argue that the borrowing and investment decisions are different in various countries depending on prevalent political systems in those countries. Generally, democratic governments are answerable and transparent than the autocratic governments. Therefore, the autocratic governments opted more for borrowing and accumulate a considerable amount of debt than democratic governments. The system functioning within democracy permits the general public to act in conformity with the general policy than autocratic regimes working within a different system that restricts community sharing in the decision making. Hence, the government with low constraints from the society may borrow more and accrue more debt in the process.

Generally, policy makers in Pakistan showed their concerns to the debt menace only in times of financial and political crunches. The financial crises are always followed by alternative for more internal and external borrowing without care for resolution of the rising public debt. More pursuit for solutions confines within an aid-debt matrix that makes sure a net inflow until the next "liquidity crisis" with negative transfer belongs to this kind. Tahir (1998) argues that borrowings have been arranged as a mechanism for realizing other targets. Economic growth leading to sustainable public debt has never been a principal objective of policy makers.

The super powers' interests in this region played an important role in the accumulated debt problem of Pakistan. Pakistan played a front-line state against the USSR and the war against terrorism in Afghanistan. The inflow of smooth assistance was possible because of the strategic position of Pakistan in Asia. Thus

Pakistan had become aid-addicted. It will be difficult for Pakistan to attain the inflow of smooth assistance once US got its objectives as was after USSR defeat in Afghanistan. Zaman (2001) observed that Pakistan's state of political affairs with the Super Powers has determined the accessibility to external capital. Sharp increases in aid availability emerged in the wake of China's revolution in 1949, Iran invasion of Iraq and the Russian invasion of Afghanistan in 1980s and the US attack on Afghanistan in 2001. Similarly severe depressions followed by war with India in 1965, nuclear explosion in 1998, and the military intervention in 1999.

Economic assistance is often of ambiguous worth. It is basically designed to serve the strategic interests of donor countries and less the needs of the recipients. Tokunaga and Akimune (1988) examined that IMF credit is subject to serve economic management in the debtor country. Experiences in and after 1982 reveal that if austerity policies are forced in the highly indebted country, such as those in Latin America, over many years, political stability cannot be maintained and the resultant economic confusion and social unrest make debt repayment difficult. Government instability in Pakistan since 1990's has proved this. The availability of foreign assistance has become possible due to the strategic position of Pakistan in South Asia at the cost of political capitulation to the Super Powers and international financial institutions.

Domestic political groups are also involved in planning of foreign borrowings to safeguard their vested interests at the cost of national interests. Anwar (2006) argued that the factors of borrowings from international financial institutions (IFIs) to Pakistan, found that political economic factors, particularly bureaucratic interests and major shareholders economic interests, are assumed to be significant in international aid allocation decision. Though, recipient needs also proved to be a relevant factor of lending, bureaucratic interest outranks the former. These outcomes have long lasting effects on the economy and caught Pakistan in debt trap and government instability. Recently, it is believed that dictatorial government opts for more borrowing than its available resources comparative to the elected governments. Decision to borrow from domestic and external sources

is dependent upon government formation in developing countries. It is observed that elected government borrows more comparative to dictatorial governments. While elected government spend more on social development as they are more accountable to the people. However, this assessment proves reverse in case of Pakistan's accumulated external debt.

Khan (1997) observes the relationship between foreign aid and GDP growth. He finds that aid has negative causal effects on economic growth. The terms and conditions on which Pakistan contracted foreign assistance have been changed overtime. The total grants element in the aid decreased overtime and has serious consequences for foreign exchange reserves.

Second, income inequality and social under-development of large section of the society created severely affected economic revival. In the beginning, economic management in Pakistan have undertaken growth oriented policies and socio-economic development was completely neglected. An economic mechanism was developed which was responsive only to the production and distribution that ultimately results in the socio-economic disparities widened with the passage of time. Sen (1983) observed that the recognition of individual aptitudes, that widen the choice of person selections, is vital for a larger perception and extent of socio-economic development. The institutional structure is expected most fundamental for transforming development and safety into a maintainable approach.

Kuznet (1955) empirically proved relationship between economic growth and income inequality by using simple Ordinary Least Square (OLS) estimation method. He collected data from three developed countries (Britain, United State of America and Germany) and the results of his analysis advocated that income disparity rises in the preliminary stages of economic development and then declines in the course of further economic development.

Khan (2005) suggests that provision of better social infrastructure i.e. better education and health-care will increase the possibility of Pakistan entering a virtuous cycle of high GDP growth and will improve the living standards of the people.

Haq (2005) observes that GDP growth is a vital element for poverty reduction. High growth of GDP would create economic opportunities and would increase demand for labour force that have a positive implication for poverty reduction and social uplift. However, the magnitude of social uplift shaped by GDP growth significantly associated with income inequality. Poverty reduction and social uplift will only occur if income inequality decreases.

Resnick and Regina (2006) observed relationship among governance, economic growth and social unrest. The study appraises the indicators of governance as independent variable and emphasizes on economic growth leading to improvement in the living standard of the people. The study disclosed that variables of governance i.e. stable political system, rule of law and strong institution increase GDP but have diverse effects on social unrest.

Persson and Tabellini (1994) analyzed rational affiliation between economic growth and income disparity and found that inequality harmful for growth in the long run. The same results were observed by the Alesina and Rodrik (1994). These analyses observed that growing inequality in the short run have a positive impacts i.e. increase in the income inequality leads to rise in the economic growth. However, in the long run more inequality will affect social values of the society and will result in the fall of the economic growth in the long run.

Deininger and Squire (1998) argue that the effect of initial inequality on subsequent economic growth is adverse in most instances but not always significant. Conversely, inequality in the division of resources, as proxies by the allotment of land, has a significant and harmful effect on subsequent growth of the economy.

HDC (1999) analyzed governance deficit in South Asia and found that political instability, mismanagement and voiceless majority are the major factors for governance ineffectiveness. The study also explained that governance institutions are not working properly and have no effect on socio-economic development of the masses.

Chong and Gradstein (2004) evaluated income inequality relationship with political instability and rule of law. All reveal a positive relationship with income inequality. They observed that the effect of income disparity on governance institutions is more effective in developing nations than in developed nations.

Third, a major shift in the public expenditure priorities from development to defense and consequent high increase in fiscal and trade deficit has increased debt burden sharply. Further, due to poor economic management and macroeconomic instability, the budget deficit has remained at about 6 per cent of GDP for extended period since 1970 to 1999. The high fiscal deficit has intensified dependence on domestic and external borrowings to fill the revenue deficit. Ishfaq (1999) argues public debt has been augmented by persistent increase in the fiscal deficit overtime in Pakistan and finds that there is bidirectional relationship between debt and fiscal deficit.

Slow revenues growth augment the budget deficit to a very unsustainable level of over 8 percent of GDP in the end of 1990s. This deficit not only increased burden of debt and debt servicing but also caused devaluation of the currency that further augment inflation and money supply in Pakistan. The above prevailing situation explains why external borrowings may not be as effective as it might otherwise be. The main factors that hindered the effectiveness of external borrowings i.e., inefficiency in the government system, misuse of borrowed resources, over borrowing and hidden interests of donor's countries [Hasan (1998); Mohey-uddin (2005)].

Pasha (2000) indicated several fundamentals of good governance that include social, economic and political aspects of the governance. The analysis suggested that better governance is prerequisite of economic revival in Pakistan's.

Kraay (2004) finds that most reliable source of sustainable economic growth is exports earnings and trade openness. Further, volatile and persistent shocks on external front can reduce economic growth and may cause fall in the trade volume. Openness has a direct relationship with economic growth and positively associated with social uplift.

Neoclassical free-trade model explained that trade is an important stimulator of economic growth and development. Trade increases world output, provide access to scarce resources, efficient use of world resources, promote self-reliance and maximize national welfare in each country. However, history revealed that only few Newly Industrialized Countries (NIC) gained from the existing trade regimes while rest of the nations benefited only a little and most were kept in a state of economic dependence. Trade openness does not have a positive relationship with economic growth but have a positive relationship with external debt in the developing countries where import volume is almost greater than exports volume. Agnello and Sausa (2009) are of the view that extent of openness have a direct relationship with fiscal deficit unsteadiness and expenditure volatility i.e. in the presence of high trade deficit, openness does not have a positive relationship with economic growth.

Auboin (2004) indicated that openness lead to the optimal allocation of resources, thereby improving the resistance to external debt crisis. It also favorably affects the debt servicing capacity of the nations as foreign exchange reserves increase due to increase in net exports and foreign direct investment. Further, easy imports of capital goods lead to fast track industrialization process, which will enhance economic growth rate. However, this case is reverse in case of Pakistan, as economies with a higher degree of openness are more exposed to external shocks. In developing countries like Pakistan imports have become larger than exports after trade openness and the scope for increased exports is also limited, which has created trade deficit in these countries. Low quality and less competitiveness are the major reasons for low demand of Pakistan's exports in international market. To overcome this trade deficit, Pakistan has borrowed a huge amount from International Financial Institutions (IFIs). Further, advancing trade liberalization requires the gradual removal of exports and imports tariffs, which are important sources of revenues for developing countries. The resulting fiscal deficits in these countries may then have to be filled with increased foreign borrowing [Caliari (2005)].

Fourth, a neglect of domestic savings, low revenue collection, over reliance on external sources and borrowing for sustaining consumption rather than investment deteriorate saving-investment gap. The mobilization of domestic resources for development has never been remains the norm of policy makers in Pakistan. Tahir (1998) advocates that most of the investment and imports of essentials are finance by borrowings from domestic and foreign creditors. The growing aid reliance, the GDP growth rate fluctuated with the inflow of foreign assistance that lessens the domestic effort to resource generation.

Qureshi *et al* (1997) observed that Pakistan's saving potential is a major question at this time and growth sustainability depends on a substantial increase in the national savings rate from its present low level. The important question in this connection is whether Pakistan can position itself in a policy and institutional sense to finance the needed investment through boosting domestic savings without undue resort to borrowing, which constitutes an element of un-sustainability.

Ahmad and Ahmed (1998) argue that debt crisis would be aggravated further if the factors depicting national savings rate and productivity remain are not changed. The policy makers in 1970s were focused on industrialization, building defense capability and seeking foreign aid. Government strategy on domestic resource mobilization was moderate but heavy reliance on exports/imports duties. The effectiveness of policy coordination was very low due to declining trends in governance and serious erosion of capacity and authority of public institutions. There have been no serious attempts to resort to domestic resource mobilization i.e., diversifying tax system or to decrease unnecessary spending unless forced by IFIs. The failure to enhance national savings, tax collection and total factor productivity, explains why the need for external borrowing has continued to rise over this period.

Phillips and Sandall (2008) examine that effective governance institutions make possible the desirable revenue collection necessary for implementation of development policies. Effective development enhances socio-economic progress and more people are included in tax net. Thus efficient tax system collects ample

revenue for government needs sustainable development. It is a common perception that due to limited domestic resources, the developing countries need a substantial private and foreign direct investment for development. The traditional two-gap concept believed that foreign aid was indispensable to ease the current account deficit and to bridge trade deficit in developing countries. Foreign borrowings were deliberated to fill the resource gap necessary for investment. Further, investment will generate economic activities and will create climate for willing to pay. Good governance brings improved revenue collection system, through effective tax administration, state legitimacy and willingness to pay tax.

Weiss (1969) examine development process in a country and finds that effective tax system depends upon overall economy. An efficient tax system operates under well-organized administration, less political constrictions in fiscal policy and government expenditure on social development which ultimately pave the way for sustainable economic development. Social development increases willingness to pay.

Ajaz and Ahmad (2010) analyze the effect of institutional, corruption and governance on revenue collection. They find that governance, effective management, trust in government and political stability contributes to better revenue collection. The study suggests political stability; unity and synchronization increase the proficiency of the tax institutions.

Ahmad and Ayaz (1998) describe foreign aid is generally help in bridging resource gap and to maintain GDP growth. Conversely, national savings and output from the borrowed funds determine the realization of GDP growth funded by foreign borrowings. The persistent and smooth inflow of foreign assistance is likely to be unfavorable to the compulsion for savings or to cut unnecessary expenditure by the government if not restrict by the creditors.

Bird *et al* (2006) specifies that institutions of revenue collection are significantly receptive to effective governance. Revenue generation can be enhances through good governance in developing and developed countries.

Pakistan is facing governance problems, stagnant GDP growth, unsustainable external debt, poverty and disparities in income distribution, which not only upset well-being of the masses but also creates a vicious circle of high public debt and economic downturn. It is indirectly presumed that whenever the objective of economic development is realized, benefits of development would instinctively lead to sustainable external debt and would trickle down to the masses, which would ultimately lead to socio-economic development and vice versa.

The fluctuations in government policies are frequently motivated by low economic growth, growing public debt and rising poverty level. To subsume this low level of output, the management regularly implement policies so as to attain desirable level of output and sustainable external debt. Consistent policy mechanisms are vital to convene these policy goals. Effect of any political social and economic policy has been assessed by scrutinizing its bearing on economic development, external debt and social welfare. Recently, policies have been aimed at reducing inequality and poverty through improving standards of life in society by providing well-organized and efficient governance. This new social, political and economic idea has caused an enormous revolution in the policy alignment of nations; the primacy is now concentrated on matter of good governance. The emphasis is now transferred towards social and political aspects of its socio-economic development.

There is scarcely any empirical research of testing of relationship between governance issues and external debt sustainability on Pakistan found on a broad theoretical model. This thesis empirically examines the external debt sustainability problem established on a sound theoretical framework appropriate to the economic governance existing in Pakistan.

2.3. Conclusion

Good governance is a key link between economic growth, social development and public debt of the country. Effective governance will

significantly insert fiscal responsibility; equal distribution of income and social uplift would enhance sustainable development and external debt. Inefficient and declining institutions has been retarded economic growth and eroded government stability in Pakistan. It is anticipated that better institutions would co-ordinate sound debt management strategies that can be instrumental in ensuring economic and political stability. Otherwise, unstable macroeconomic environment may induce uncertainty; political instability and social unrest. Governance problem impede every effort to enhance social and economic development. The ultimate effects of these outcomes result in vicious circle of poverty, low growth and unsustainable debt.

This analysis would discover evidences to specify that the poor and deprived have limited access over funds availed through external sources. The existing literature suggests that poverty and inequality are interrelated and these two also shaped economic development process. It is instantaneously and broadly recognized that inequality adversely influences both the sustainability of economic growth as well as its potential for poverty diminution (World Bank, 2006). An appropriate approach would be investigated to determine how the present description illustrates the governance effectiveness in Pakistan.

Chapter-3 Overview on External Debt Accumulation in Pakistan

3.1. Introduction

The past studies advocated that autocratic regimes buildup significantly larger external debt proportional to their national income than democratic governments i.e. disparity in external indebtedness was a result of the impact of regime type on decision regarding borrowing and investment. Autocratic governments will borrow more from international financial institutions and spend less of these finances in public goods than democratic governments. As a result, autocratic regimes are more prone to accumulate huge external debt burdens than democratic regimes [Easterly (2002); Haggard and Kaufman (1992)].

IMF's official argument of the debt upsurge stressed exogenous shocks i.e., soaring interest rate, low commodity prices, depression in industrial countries and surge in the oil prices from 1970s to 1980s were the main contributors to the debt accumulation" [IMF (2000)]. The debt problem of other HICs triggered by first oil shock in 1970, the credit unrest of Mexico in 1982 and the sharp fall in crude oil prices in 1986 brought the debt problem to the surface.

However the nature of the external debt problem of Pakistan is quite different from other highly indebted developing countries. The nature of the problem is totally different in case of Pakistan i.e. endogenous shocks, which includes governance deficit, played its role in the accumulation of external debt in Pakistan. A number of new issues pertaining to the Pakistan's external debt burden would be addressed in this analysis. The role played by social unrest i.e., poverty and income inequality, national and international politics i.e. narrow interests of the politician, fiscal irresponsibility and super powers interests in the region in the build-up of external debt has received considerably low attention in the previous literature on debt accumulation of Pakistan. In this study we will make further investigation how poverty, income inequality and fiscal irresponsibility played its role in debt accumulation of Pakistan in the following phases:-

3.1.1. First Phase (1971-77)

The external debt situation during this phase was manageable despite low growth rate of the economy. The terms and conditions were favourable along with small size of the external debt. Concessional aid as a percentage of total external debt was 73 per cent, grants elements were 48 per cent and average interest rate was 4 per cent [Khan (1997); Tahir (1998)]. The external financing has adversely affected the compulsion for savings.

Table-3.1 Overview of External Debt Accumulation in Pakistan

Period	Average External Debt Growth %	Average Growth of GDP	Average Poverty as % of Total Pop	Average Fiscal Deficit as % of GDP	Average Income Inequality (Gini-coefficient)	Average National Savings as % of GDP	Average Tax to % of GDP
1 st Phase 1971-77	7.5	4.8	36	5.3	32.44	9.30	11.00
2 nd Phase 1978-88	4.0	6.6	22	7.1	36.88	14.00	13.46
3 rd Phase 1989-99	7.0	4.9	26	6.9	40.54	13.87	14.00
4 th Phase 2000-07	1.8	5.7	33	3.9	30.60	18.40	10.70
5 th Phase 2008-13	10.4	3.0	40	5.0	30.89	13.50	10.00

[Author's estimations. Data has been taken from Economic Survey (various issues); SBP reports (various issues); Jamal (2004)]

The authority of public institutions and the effectiveness of policy coordination were very low due to the declining trends in governance and serious erosion of the public sector. The policy thinking and strategy on domestic resource mobilization was moderate and there have been no serious attempts to improve tax collection or control non-development expenditure. Fiscal deficit was exceptionally large i.e., 5.3 per cent of GDP, tax revenue as percentage of GDP was 11.30% and national saving was 9.30% as percentage of GDP. The development strategy during 1971-77 was focused on seeking economic assistance, rapid industrialization of our economy and building defence capability competitive with India. Expenditure on social services to attain social uplift was

negligible and there was no sound base for sustainable economic development. The poverty level in this period was 36% as percentage of the total population. While income inequality was 32.44%. Real GDP increased at an average of 4.8 per cent while total external debt grew at an average of 7.5 per cent as evident from table-3.1.

In 1970 Euromarkets played important role in the recycling of petrodollars to non-oil producing indebted countries. There was no such institutional or constitutional mechanism in the country to bound the external borrowing and financing. Easy external financing has adversely affected the commitment for saving and domestic resource mobilization in Pakistan over this period. The failure to enhance national savings and tax collection explains why the need for external borrowing has continued to rise over this period.

3.1.2. Second Phase (1978-88)

A substantial inflow of aid and grants started in 1979 with the inception of Afghan war helped in the postponement of the debt crisis. Rising workers' remittances and huge foreign assistance helped in the revival of the economy. Real GDP grew at an average rate of 6.6 per cent while external debt increased at an average of 4 per cent.

During the second phase, the structure of foreign debt altered steadily from long-term obligations to short-term obligations with soaring rates of interest. Average grant elements and concessional aid as a percentage of total External debt decreased to 42 per cent and 69 per cent, respectively from 48 per cent to 73 per cent, respectively.

The policy makers over this period failed to take advantage of comfortable growth rate and balance of payments situation helped by workers' remittances and foreign assistance. It was the governance failure in Pakistan that missed the major economic opportunities available during Cold War. No attention was paid to the serious structural problems prevailed since independence. The weakening of institutions, stagnant export, high fiscal deficit and absence of mobilization of the

domestic resources intensified structural problems and external debt of Pakistan. The main factor that hindered the effectiveness of external borrowing i.e inefficiency in the government system, misuse of borrowed resources, over borrowing and hidden interests of donor's countries. These outcomes have long lasting effects on the economy that could have been felt during 1990s and onward.

During the period 1977-88, government of Pakistan followed such macroeconomic policies pertaining to fiscal deficit as were not consistent with sustainable fiscal deficit. An average fiscal deficit of 7.1 per cent of GDP was unsustainable to average GDP growth rate of 6.6 per cent over this period. Due to slow mobilization of domestic resources, the revenue generation was very low. Hence, the budget deficit had risen to a very unsustainable level of over 8 per cent of GDP in the late 1980s. This deficit led to increases external debt burden and debt servicing. Besides, increased in debt burden, fiscal deficit has also depreciated exchange rate, which led to monetary indiscipline and result in the further worsening of the debt situation. Poverty level decreased from 36 % to 22 % during this phase. While income inequality became worsened from 32% to 36% (Gini-coefficient).

Domestic resource mobilization such as national savings and tax revenue has been neglected and ignored its debt burden implication in the long run. Tax revenue was at an average 13.46 per cent of GDP and national savings were at an average per cent of GDP, which is 18 per cent in case of tax revenue and more than 20 per cent of GDP in case of savings in developing nations.

3.1.3. Third Phase (1989-99)

The successive government faced the consequences of serious neglected structural problems. The declining institutions of the previous regimes led to macroeconomic imbalances and deteriorate economic growth rate. The succeeding weak democratic governments were unstable and under the influence of strong military bureaucracy to deal with the structural issues that had accumulated over the time. Hence, economy has had to suffer periodic economic crisis in the 1990s.

The governance problems had become severe by the end of this particular period and four elected governments have been terminated before the completion of their full tenures. The effectiveness of policy coordination was very low due to declining trends in governance and serious erosion of capacity and authority of public institutions. The weak governments have failed to maintain a sustainable economic development and external debt in the absence of smooth foreign assistance.

Smooth foreign assistance blocked with end of Afghan War in 1990 and this aggravated further the debt problem and Pakistan continue to suffer from a syndrome of high fiscal deficit. Fiscal deficit stayed at an average of 6.9 per cent of GDP during this period that propelled borrowings from both external and internal sources. The heavy burden of public debt being driven largely by interest payments made fiscal management extremely difficult. External debt has continued to accumulate at a high rate i-e at an average of 7 per cent. The growth rate of GDP was at an average 4.9 per cent during 1988-99, as shown in the table-3.I. Poverty level during this period increased from 22% to 26%, while income inequality also increased from 36% to 40% (Gini-coefficient).

Governance deficit and decay of institutions over time hindered the domestic resource mobilization necessary for sustainable economic development. Macroeconomic management under the newly and weak democratic government was deteriorating, corruption increased enormously, and the banking system was misused through political influences. The national savings and tax revenues were stagnant. The national savings and tax revenues were at an average of 13.8 per cent and 14 per cent of GDP respectively.

The external debt crisis erupted once again with Pakistan's nuclear devices tests in 1998. The sanctions have been imposed on Pakistan. Pakistan's fragile financial and economic situations hindered to resilience to withstand the effects of sanctions imposed by US and Western Countries. The loss of confidence in Rupee and the unwise decision of the then Government to freeze the foreign currency deposits led to a technical default on external debt obligations. The excessive debt

burden and poor foreign exchange reserves placed Pakistan in a critical situation. Hence, Pakistan has become so much dependent on external borrowings that it seeks foreign loans to defer debt-service payments.

3.1.4. Fourth Phase (2000-07)

The macroeconomic performance of the national economy has remained unsatisfactory since 1999. The unsatisfactory law and order situation, weakening of institutions and energy crisis created uncertainty about the sustainability of economic growth rate in the coming years. The most reliable source of sustainable economic growth is export earnings of a country. Unfortunately, export have failed to improve since 1970, while trade and current account deficit have widened, putting tremendous pressure on the external sector. The total external debt and liabilities were at an average 17.1 per cent of the total export earnings during 1999-07.

The budget deficit as percentage of GDP was low as compared to previous phases (5.3 % in 1971-77, 7.1% in 1977-88, 6.9% in 1988-99 and 3.9% for this particular period). However, it has crossed the safe limit of 3 per cent of GDP. An average increase in external debt, which was 1.8 per cent during 1999-07, was also low as compared to other regimes (7.5% in 1971-77, 4% in 1977-88 and 7% in 1988-99).

The inflow of remittances and US assistance under military and budgetary support played a vital role in improving the performance of the external sector after 9/11. As far as the country's foreign exchange reserves were concerned, no doubt there was increase in income from workers' remittances. But this factor did not provide the required basis for sustainable development as the sustainability of these mention sources were unreliable and depends on factors, which were beyond our control. There was sharp decrease in foreign exchange reserves after the Supreme Court probe and depreciation of Rupee against major currencies in 2007.

The internal debt had increased by 45 per cent from Rs. 2389 billion in 1999 to Rs. 2512 billion in 2007, while external debt grew at an average 1.8 per cent from \$34.9 billion in 1999 to \$ 40.1 billion in 2007.

3.1.5. Fifth Phase (2008-13)

The performance of the national economy has remained highly unsatisfactory since 2008. The unsatisfactory law and order situation, weakening of institutions and energy crisis created uncertainty about the sustainability of economic growth rate in the coming years. The most reliable source of sustainable economic growth is export earnings of a country. Unfortunately, export have failed to improve since 1970, while trade and current account deficit have widened, putting tremendous pressure on the external sector.

The budget deficit as percentage of GDP was low as compared to previous phases (5.3 % in 1971-77, 7.1% in 1977-88, 6.9% in 1988-99 and 5% for this particular period). However, it has crossed the safe limit of 3 per cent of GDP. An average increase in external debt, which was 9.36 per cent during this phase, was very high as compared to other regimes (7.5% in 1971-77, 4% in 1977-88 and 7% in 1988-99).

The inflow of remittances and US assistance under military and budgetary support was moderate as compared to previous phase. As far as the country's poverty level and income inequality were concerned there was sharp increase in poverty and income inequality. Poverty level increased from 36% to 40% while income inequality was increased from 30% to 30.89% (Gini-coefficient)

Due to governance shortcomings and serious erosion of capacity, the authority of public institutions and the effectiveness of policy coordination were very low. The policy thinking and strategy on domestic resource mobilization was declining and there have been no serious attempts to improve tax collection or national savings. Tax revenues were at an average of 10 per cent of GDP during this period (almost 11% of GDP in 2000-07). National savings remained stagnant at 13.5 per cent of GDP during this period (13.87% in 2000-07).

3.2. Fiscal Responsibility and Debt Limitation (FRDL) Act 2005

Article 166 of the Pakistan Constitution of 1973 states that the decision-making authority of the Federation extend to internal and external borrowing upon the security of the Federal Consolidation Fund within such restrictions, if any, as may from time to time be preset by Act of Majlis-e-Shoora, and to the giving of assurances within such restrictions, if any, as may be so preset.

Fiscal Responsibility and Debt Limitation (FRDL) Act was promulgated in Pakistan in 2005. The purpose of the law is the putting off limits on main fiscal aggregates and legislation focuses on accountability and transparency issues in the fiscal process. The law was designed to remove the "revenue deficit" to limit the government's access to borrowing and reduce public debt to a prudent level. The main features of the law are:

- a). Eliminating revenue deficits by June 2008 and thereafter maintain a revenue surplus.
- b). Lowering total public debt to 60 percent of GDP by 2013 and thereafter maintain the total public debt below the 60 percent of GDP.
- c). Reducing public debt by will be doubled during the next ten years.
- d). Limiting the issuance of new government guarantees to 2 percent of GDP in any given year. At least 2.5 percent of GDP each year until 2010 provided that social and poverty alleviation expenditures are not reduced below 4.5 percent of GDP and education and health expenditures.

Table-3.2. Indicators of Fiscal Responsibility and Debt Limitation Act 2005.

Year	Revenue Deficit (% of GDP)	Public Debt (% of GDP)	Poverty Exp. (% of GDP)	Edu+Health Exp. (% of GDP)
2004-05	3.3	65.8	4.81	2.37
2005-06	4.3	59.9	4.93	2.31
2006-07	4.3	58.3	4.89	2.37
2007-08	7.6	60.1	9.70	2.37
2008-09	5.2	62.3	7.46	2.36
2009-13	4.9	61.7	6.01	2.34

[Author's estimations. Data has been taken from Economic Survey (various issues); SBP reports (various issues)]

Pakistan is facing severe difficulties at national and international fronts since 1990s. These difficulties are credit crisis, low tax revenue collection and higher commodity prices particularly oil in the international market caused major deviation from the prescribed limit of public debt, specified in the Fiscal Responsibility and Debt Limitation (FRDL) Act 2005 put the economy in a serious crisis. Revenue deficit has not been reduced to nil by end of fiscal year 2008 and did not reach a surplus during the subsequent years. The revenue deficit was 5.2 per cent of GDP by the end of FY08 and 4.9 per cent of GDP at the end of FY10. According to the FRDL Act the revenue deficit has to be reduced to nil not later than 30th June 2008 and thereafter maintaining a revenue surplus.

The only improved part of the implementation status of this Act is that social sector and poverty alleviation expenditure which was stood at 4.81 % of GDP in 2004-05 rose to 9.7 % of GDP in 2007-08. But once again like other declines the same expenditure has been reduced to 6.01 % of GDP. Moreover, it is still above the prescribed limit of 4.5 % of GDP. However, expenditure on health and education remains a cause of concern. According to this Act, the health and education expenditure should reach 1.18 % and 3.72 % of GDP respectively by 2013. However, the results are stridently contradictory to the outcomes as these

outlays both for health and education collectively stood at 2.34 % of GDP in 2009-13. It is predicted that it will be further aggravated after Devolution Plan, under 18th Amendment to the Constitution 1973.

The large budget deficit has caused Pakistan's public debt to rise abruptly in 2010. Since 2006-07 to 2009-10, Pakistan has added Rs. 4,099 billion in public debt, as compared to Rs. 4,814 billion in the previous 60 years. The surge in public debt caused by the large budget deficit on the one hand and 30 per cent depreciation of the exchange rate on the other, has wiped out enormous fiscal space, which could have been utilized for spending on people. Pakistan's public debt which stood at Rs. 6,044 billion in 2008, increased to Rs. 14,366 billion in 2013. It means public debt increased by Rs. 8,322 billion debts in just five years. Similarly, external debt, which stood at \$40.3 billion in June 2007, rose to \$60.9 billion in 2013, an addition of \$20.6 billion in six years. The expected increase will be a higher cost of government borrowing on the one hand and slippage on the budget-deficit target on the other. The perseverance of outsized saving investment gap almost 5 per cent of GDP for protracted period of more than 10 years, the unwise utilization of borrowed funds, the growing actual cost of borrowing, sluggish economic growth, crumbling export and a declining flow of foreign exchange have been responsible for a rapid accumulation of external debt.

3.3. Conclusion

Deliverance of good governance was and still is a persistent dilemma in Pakistan. If the government set its own house in order and endeavors to reform the economy, there would be no need for foreign assistance. Pakistan has the domestic resources and potential to raise its revenue by substantial level i.e., increase socio-economic development by reforming agriculture sector. Besides reforms in the domestic resource mobilization, the government may decrease its non-developmental expenditure i.e., defence expenditure and increase expenditure on social services to eradicate poverty and income inequality. By doing so, Pakistan can achieve self-reliance without the need to seek foreign loans.

Chapter-4 Research Methodology

4.1. Research Methodology

4.1.1. Hypothesis

Good governance empowers a country to realize its development objectives, by instituting favorable conditions for the sustainable development. Good governance founds independent, certain and consistent environment in the form of effective institutions vital for the sustained economic growth [North (1990, 1992)]. Pakistan is facing governance problems, stagnant GDP growth, unsustainable external debt, poverty and disparities in income distribution, which not only upset well-being of the masses but also creates a vicious circle of high public debt and economic downturn. Good governance keeps the political, legal and institutional framework for welfare of the society. Good governance confirms participation of the deprived people in decisions making and gives voice to them for their due rights [Adejumobi (2006)]. It is presumed that whenever the objective of economic development is realized, benefits of development would instinctively lead to sustainable external debt and would trickle down to the masses, which would ultimately lead to socio-economic development and vice versa, as concluded in our first testable hypothesis:

Hypothesis-1: *Good governance is positively related to the country's economic growth and sustainable external debt.*

We now come to the aspect of “governance ineffectiveness or poor quality of institutions”, which is typically referred to in terms of “poor economic governance”. It is to be mentioned here that poor governance is a complicated concept and external debt is a specific matter of the governance issues. Democracy and rule of law were used to assess good political governance in previous studies [Barro and Lee (2005)]. Conversely, Mosley et al (1991) observe that political instability, i.e. the occurrence of change in government in particular, may be a preferable indicator for political governance. Similarly, we attempt to capture poor

economic governance here by looking at poverty level and inequality. Poverty and inequality measured in terms of poor economic governance is well adapted to Pakistan, because there is consistent deterioration in poverty level and inequality in Pakistan, which have severe implications on sustainable economic development and external debt. Therefore, keeping in view the nature of the issue, poverty and income inequality are considered to be relevant indicators of poor economic governance in this analysis. Inequality and poverty in a society deteriorate the political system and stimulate poor governance.

Haq and Rashida (2005) observed that Governance problems impede every effort required to enhance social and economic development. Fragile institutions, unsteady economic growth, social unrest and inequality lead to decline in standard of life in the developing countries. The ultimate effects of these outcomes result in vicious circle of poverty, low growth and unsustainable debt.

Hypothesis-2: *Governance issues are directly related to an unsustainable economic growth and results in external debt deterioration.*

According to the trickle-down effect theory of development the benefits of the economic growth should be trickle down to the gross root level. This study argues that in presence of the poor economic governance the benefits of the economic growth achieved from external borrowing cannot reach to the deserved people. External debt influences performance of the government by effecting the expenditure decision regarding social development and poverty reduction. Kaufmann and Kraay (2002) examined that good governance is essential for growth in per capita income. Generally, from the policy perspective, the profit and outcome from the external assistance are believed to be foremost. Efficiency of foreign assistance is affected by poor economic performance of the recipient state [Burnside and Dollar (2000); Collier and Dollar (2002); Carl-Johan (2004)]. Hence, our third hypothesis will be as under:

Hypothesis-3: *External debt services have adverse effect on poverty level and income inequality.*

4.1.2. Econometric Methods

The current analysis has been undertaken by using time series techniques. Time series data are normally perceived as having stochastic trend that can be detached by differencing. This study applied Augmented Dickey-Fuller (ADF) methods to attest the unit root characteristics of the series and stationarity of the model. To determine relationship among the variables, Ordinary Least Square (OLS) test has been applied.

4.1.3. Causality Test

Granger causality test is applied to determine causality between the variables in the model. The F-statistics is applied to accept or reject the null hypothesis that no causation between the indicators when F-statistics is less than 2 and greater than 2 respectively.

4.1.4. Test for Cointegration

Augmented Engel-Granger is adopted to determine that regressions are cointegrating regressions and these regressions are not spurious and interpret its parameters as long run parameters.

4.2. Theoretical Frame-work

Low-income countries generally have inadequate capitals and low tax capacity. Therefore, they have to depend on the external borrowings to bridge the resource gap between the revenues and expenditures. However, the proficiency of external borrowings relies on governance and the institutional effectiveness [Agnor and Montiel (1996)]. Good governance empowers a country to realize its development objectives, by instituting favorable conditions for the sustainable development. Good governance founds independent, certain and consistent environment in the form of effective institutions vital for the sustained economic growth [North (1990 and 1992)]. Although, countless researches have been undertaken to assess the association between foreign debt and economic growth;

foreign capital and economic development; influence of foreign capital on governance and institutional effectiveness; the responsibility of institution in the economy performance; but little devotion has been given to discover the relationship among external debt, governance issues and economic development in a cohesive context.

Recently, donors started to condition aid eligibility on the basis of good governance and the quality of governance deems necessary in scrutinizing eligibility for World Bank loans [World Bank (2006); International Development Association (2004)]. Several researchers support the existing WGIs, advocating that they may be the best way to measure 'governance' [Kaufmann, Kraay and Mastruzzi (2007)]. In connection with growing demand for measuring the worth of governance, various indicators have been created, such as Worldwide Governance Indicators (WGI). The WGI give grade to countries on the basis of specified six aspects of good governance; control of corruption, voice and accountability, government effectiveness, political stability and violence, regulatory quality and rule of law.

In its operational work the World Bank has decided not to trust on the WGIs. The WGIs have no legitimate standing; the fact that they are constructed by World Bank academics and are funded and published by the World Bank provides them the weight of that influential institute [Thomas (2009)]. The WGIs are used to benchmark nations against each other, categorize improved from poor governed states, and guide the poor governed countries in finding opportunities for development. Critics assert that good governance indicators like the WGI's are less than practical in assisting these undertakings, however, particularly in guiding nations to leads to governance perfection [Kurtz and Schrank (2007); Thomas (2006) and Andrews (2008)]. Generally analysts determine that conditioning aid on governance reform and policy is mostly unsuccessful [Kapur and Webb (2000); Stiglitz (1999); Collier (1997); Dollar and Pritchett (1998)] raising reservations about the capability of donors to improve governance effectiveness in debtor nations through imposing governance-related conditions on aid. In an investigation

of 29 instances where politically motivated aid sanctions were applied, Crawford (1997) determines that political conditionality is generally useless.

DFID (2001) strategies for achieving international development targets argues that the quality of governance has been directly influenced by the development assistance approach planned by donors in developing and transitional economies. Little consideration has been conferred to the affects of development processes on governance issues in developing countries. DFID Characterized seven key governance abilities: to activate political systems which offer equal opportunities for all citizens; put macroeconomic stability to support the economic growth required to poverty reduction; execute pro-poor policy; assurance of the fair and collective provision of basic services; guarantee safety and security for all; make honest and accountable government.

Theoretically high level of foreign assistance can cause favorable as well as unfavorable effects on governance effectiveness. For instance, foreign capital assists governments to emphasis on applying rules of law, fighting against terrorism and corruption efficiently by relieving them from binding financial constraint [Nasir *et al.*, (2012); Islam (2003); Easterly (2003); and Svensson, (2000a)]. High inflows of foreign capital with well-defined development agendas can be utilized to improve civil services, rule of law, principal institutions, planning capability as the example of South Korea and Taiwan [Carlsson, et al., (1997); Rodrik, et al., (2004); and Rodrik (1996)]. But also, excessive foreign assistance can deteriorate desired reforms that can patch up governance effectiveness due to moral hazard issues, rent seeking and brain drain. [Rijckeghem and Weder (1997); and Svensson (2000b)].

4.2.1. Traditional Threshold of Debt Relief Initiatives

The matter of debt sustainability is usually assessed through the conventional debt indicators method in most of the developing countries [Sun (2004); Cline (2003); Martin (2002); Gray (1998); Cuddington (1996)]. This method of public

debt sustainability investigation expresses the debt indicators as a ratio of chosen macro-economic variables recognized by international financial institutions. Thus, level of the debt sustainability is concluded from the estimated debt ratios are matched with the standard level of public debt sustainability signs. The most common measures of public debt sustainability were the ratio of public debt stock to gross domestic product and ratio of public debt stock to government revenue. Further, in case of accumulated foreign debt, it is significant to express foreign exchange and export earnings in terms of foreign debt, likewise the foreign debt to gross domestic product ratio.

Nevertheless, the conventional debt ratios method is not free of deficiencies, for example these indicators may lead ambiguous evidence, can be easily distorted and therefore does not present the true image of the issue. European Network on Debt and Development (EURDAD, 2001) observed that these indicators are incapable to detect the true factors that are helpful in determining the accurate level of sustainable debt. Current Highly Indebted Poor Countries (HIPCs) debt reduction initiatives will not be adequate in poverty reduction efforts of HIPCs, as it does not take into account for the funds these nations need for expenditures on poverty eradication and for prompting GDP growth. For example rapid growth in export earnings may not always transform into more financial allocations for the government to use to wage its debt obligations [Birdsall and Deese (2004); Sachs (2002); Birdsall *et al* (2002); Thomas (2001)]. This is correct in case of Pakistan, as due to volatility of Pakistan's commodity markets would make the debt-to-export ratio an unreliable standard to forecast debt sustainability in the medium term. But very significantly, an exports-based method does not explain what the poverty reduction prerequisites of a nation are, and generates motivations for macroeconomic orientation, which may not always be pro-poor.

Thus poverty and income inequality have been introduced in the growth equation to overcome these shortcoming of the debt ratio analysis to determine the debt sustainability situations for Pakistan. Furthermore, trade openness is also

taken in to consideration in this study instead of conventional indicators for foreign debt i.e., present value based debt ratios of foreign debt to export earnings.

According to the Trickle-down theory, development is solely an economic phenomenon in which benefits from the overall growth of gross domestic product and income per capita would automatically trickle-down to the masses in the form of employment and economic opportunities. The major concern is therefore to acquire the growth job done while reduction in unemployment, income inequality and poverty are perceived to be realized as a result of sustainable economic growth.

However, the growth effects do not trickle down to gross root level due to market imperfection in the developing countries. Therefore the main objective of the developing country like Pakistan is to get economic growth along-with reduction in poverty, equal income distribution, employment and other economic prospects. Pakistan opted for external and internal borrowing to achieve economic growth and development. In this backdrop, it is found that Pakistan borrowed resources for economic revival were not utilized efficiently. Therefore neither economic development nor social developments i.e. economic growths leading to poverty reduction, desirable employment level and other opportunities of interest have been achieved.

This study assumes that World Governance Indicators (WGIs) may not be sufficient to justify good governance. Further, Highly Indebted Poor Countries initiatives of debt relief are fruitless to determine sustainable level of external debt in these countries. Hence examine economic aspects of governance in the accumulation of the external debt. Consequently this study introduces economic aspects of good governance i.e., income inequality and poverty; in the growth equation and its implications for external debt.

Grindle (2010) pleads that the hype of the idea of good governance as, "inflation of an idea". Further, she questions the concept, that good governance is certainly related to economic growth. The substance of the argument is the economic development in china. She asserts, "China would rank poorly on most

measures of good governance, still it has achieved economic growth and development. Accordingly if China can flourish exclusive of good governance, what does that infer for the theory of good governance in general?"In this analysis it is assumed that income inequality, poverty, weakening institutions, and uncertain political atmosphere are the key elements behind poor economic governance and will further aggravate external debt situation in Pakistan.

The poor economic governance in Pakistan proves how fiscal irresponsibility of the decision makers worsens the budget deficit and socio-economic conditions. Huge and persistent fiscal deficits represent a cause for distress, predominantly when sustainability concerns are raised and the economic prospects of a nation are at risk. Previous literature considers economic and institutional aspects that cause accumulation of the external debt and political instability. Qayyum (2013) investigated how external borrowings corrode good governance and quality of institutions in conflict situations in Asia. Internal and external conflicts, coup threats and foreign pressure adversely affect institutional performance, which leads to the government instability. The substantial shocks in the key elements of foreign debt consist of actual economic growth, the ratio of net non-debt creating capital inflows to GDP, exchange rate depreciation and non interest current account balance to GDP ratio may increase external debt to GDP ratio and have the high potential to cross the debt threshold level [Jafri (2008)].

The study assumes that better institutions would coordinate sound debt management strategies that can be instrumental in ensuring economic and political stability. Otherwise, unstable macroeconomic environment may induce uncertainty, political instability and social unrest. Growing social unrest and political instability due to debt overhang may deteriorate investment and growth. Further, uncertainty associated with changes in government monetary and fiscal policies fluctuate with changes in external debt. This badly affects the volume of investment, savings and if situation not checked it might endanger sovereignty of the country.

Mostly, as the stock of the external debt expands, the expectations begin that the government may finance its debt service obligations by imposing different type of taxes. Interest rate surge happen either because there is information that future external debt liabilities and obligations will be higher than previously supposed or because a turn down in economic growth leads to higher projected external debt to GDP. Further, unsustainable fiscal policy can force a central bank to follow inflationary policies. If the central bank does not monetize the government debt by printing money, then interest rates will rise sharply and will cause contractionary effect on the economy. In fact, exclusive of monetization, fiscal instability may result in the government default on its debt, which would lead to a severe economic disruption, producing an even more contractionary pressure on the economy. The central bank will in result have little choice and will be forced to purchase the government debt by increasing money supply by printing money, ultimately leading to a surge in inflation, uncertainty and social unrest.

It has been understood that external debt servicing affects GDP negatively, whereas developmental expenditure affects it positively. This implies that the rising debt servicing liabilities reduces the economic and social development as large portion of government revenue is used in paying interest payments and less is spent on social services i.e., health and education. On the other hand economic growth is boost by investing in human capital and enhancing productivity of labor force, necessary for sustainable socio-economic development.

4.3. Econometric Modeling / Methods Used in Previous Studies on the Issues of External Debt

There is hardly any pragmatic research on Pakistan's external debt sustainability problem founded on a sound theoretical approach. This research empirically assessed the external debt sustainability of Pakistan appropriate to the economic governance issues prevailing since 1970s. Some studies have explored the merits and demerits of foreign capital in the economic development of Pakistan and other indebted developing countries are discussed as under:-

Qayyum and Haider (2013) by using 2SLS for the period of 1984-2008, conclude that in the presence of internal and external conflicts, foreign capital influence governance effectiveness directly by building instability which negatively affects economic growth as investment atmosphere is infected and output declines leading to decrease in revenue generation.

McGillivray (2010) has used three stage least square methods to determine impacts of foreign capital on revenue collection in all developing countries and found that aid has no incremental effect on tax collection.

Iqbal (1997) by using iterative three stages least square method for the period of 1976-1995 to show the affects of foreign capital on non-development and development expenditures. He observes that foreign aid has positive effect on expenditure generally but its impact on development expenditure is minor.

On causality analysis of foreign debt and GDP growth, Chowdhury (1994) by using Granger causality tests in 7 Asian countries for the period 1970-1988 tried to adopt the Bullock and Rogoff's (1990) proposal by determining the cause and effect link between foreign debt and slowdown in economic growth. The outcomes show that the Bullock and Rogoff (1990) suggestions that foreign debt of developing countries is a sign or symptom rather than a cause of slowdown in economic growth was rejected. However, the outcomes endorse a bi-directional link between debt and economic growth for Philippines and Malaysia.

Karagol (2002) examined the short run and long run relationship between foreign debt and GDP growth for Turkey for the period of 1956-1996 by using Granger causality test. The outcomes indicate a unidirectional causation from debt to GDP growth.

Afxentiou and Serletis (1996) applied Granger causality analysis for sample of the 55 severely indebted countries and the outcomes uphold that no causation occurs between income and debt. The assessments indicate that debt is not a definite aspect of income per capita. However, foreign capital can have an encouraging influence on economic growth if scarce resources are relocated into inputs of production.

Amoateng and Amoako (1996) inspected the correlation between foreign debt and economic growth for 35 African countries by applying Granger causality analysis. The outcomes confirm that there is a positive and unidirectional causality between debt service and GDP growth.

Chishti and Hasan (1992) have carried a theoretical model for Pakistan and analyzed it through the iterative 3SLS technique, which observes that 28 percent of public sector non-development funding is met from domestic or internal borrowings. External assistance illustrates a modest effect on public investment but not foreign loans.

Islam (2005) has applied OLS and 2SLS for the period of 1968–1997 for 65 countries including Pakistan and shows that foreign aid does not have any considerable effect on GDP growth. Further, foreign aid does not depend on quality of policies assumed by the recipients but aid has a positive effect only in a stable political environment.

Feeny and McGillivray (2010) examine that aid helps in promoting the economic growth but with diminishing returns by applying OLS, Fixed effect model and GMM for the period of 1980-2004 for fragile economies (Papua New Guinea) which show that foreign aid has not been utilized in an efficiently. Foreign aid was being utilized for filling the budget deficit.

Brautigam and Knack (2004) applied OLS and 2SLS for the period of 1982-1997 and found that foreign aid has the harmful impacts on the quality of governance in most of the African countries.

Easterly (2003) by applying OLS and 2SLS and examines that in the presence of better economic policies, the foreign aid has positive effect on GDP growth. Similarly, Burnside and Dollar (2000) uses 2SLS and found that foreign aid has positive effect on GDP growth.

Knack (2001) by using OLS and 2SLS empirical approaches and observed that high surge of foreign aid worsened the quality of governance and this effect is robust for alternative conditions.

Gupta (1995) has applied Ordinary Least Squares and three-stage non-linear-least-squares estimator and explain that non-development expenditures increase due to foreign capital using data for 118 countries for the period 1980–2009. Swaroop, *et al.* (1999) have used OLS procedure to discover the role of foreign capital in the allocation of development and non-development expenditures in India and show that development expenditures increases and aid has minor impact on non-development expenditure.

Svensson (2000) used 2SLS for the period of 1980-1994 and argue that persistent surge of foreign aid does not essentially support the GDP growth as well as the general wellbeing. Massive foreign aid is linked with increase in corruption particularly in those countries which suffering from rival communal factions.

Alesina (2000) by applying OLS, 2SLS and Tobit estimates observed that economic policies, strategic position of a country and political pacts, are the determining factors to receive foreign aid.

Boone (1995) by using OLS and Fixed Effect (FE) using data on nonmilitary aid flows to 96 countries indicates that external aid it does not contribute to the economic growth and its impact on investment is insignificant. Foreign aid even does not assist the poor in the recipient countries but just swell the size of government.

4.3.1. Model Specification

In previous studies democracy and rule of law were used to assess good political governance [Barro and Lee (2005)]. However, Mosley *et al* (1991) observe that political instability, i.e. the occurrence of change in government in particular, may be a preferable indicator for political governance. This may be proper for early years in particular, in which comprehensive good governance indicators were not accessible. Thus, we attempt to capture poor economic governance here by looking at poverty level and inequality, which permits us to compute the requisite time series starting from 1973.

Poverty and inequality measured in terms of poor economic governance is well adapted to Pakistan, because there is consistent deterioration in poverty level and inequality in Pakistan. Different econometric techniques have been used to examine the external debt sustainability issue of Pakistan and impact of external debt obligations on socio-political regime and its ultimate effects on socio-economic development. Where different external debt indicators i.e., fiscal deficit, saving-investment gap, export earnings ratio to debt and foreign exchange reserves ratio to debt services etc. have been used. However, the role played by the poor economic governance in the external debt accumulation has never been analyzed in Pakistan. Here, poor economic governance is measured in terms of poverty level and income inequality is well adapted to Pakistan, because these two variables deteriorated overtime with the increase in external debt levels particularly since 1990s.

Hence this study tries to capture the impacts of governance issues here by looking at poverty level and income inequality as large portion of the population is living below the poverty line. Furthermore, trade openness is also taken in to consideration in this study instead of traditional indicators for foreign debt i.e., present value based debt ratios of foreign debt to export earnings. So the model of this study will be:

$$Y = \beta_0 + \beta_1 BD + \beta_2 TO + \beta_3 SIG + \beta_4 Pov + \beta_5 G + \varepsilon \quad \text{----- (A)}$$

Y= Gross Domestic Product (GDP)

BD= Budget Deficit

TO= Trade Openness

SIG= Saving-Investment Gap

Pov= Poverty

G= Gini-coefficient

ε = White noise error term

Growth relied on the traditional two factors of production i.e., labor and capital and a production function relied on constant return to scale. Policy action was unnecessary and most countries in steady state would converge to the same level of income and growth [Solow (1956)]. Lucas (1988) observed empirically that convergence was not taking place due to unexplained factors.

Cunningham (1993) examines the impact of public debt by using growth equation observed that persistent rise in public debt has significant consequences for the input efficiency by introducing public debt in the growth equation.

Daud *et al* (2013) incorporated gross investment, population, government revenue, trade openness, external debt and debt services payment in the growth model to investigate whether the external debt has contributed to the economic growth or not. Similarly, Akram (2011) introduced public debt in the growth equation to show the effects of public debt on economic growth and investment.

Following Akram (2011) the indicators of Poor economic governance i.e., poverty and income inequality are considered as independent factor of production to replace labour and capital used in growth equation. This is presented in Solow growth model with constant returns to scale as:

$$\text{Economic Growth} = f(\text{Good Governance})$$

By introducing determinants of poor economic governance the production function becomes:

$$\text{Economic Growth} = f(\text{Poverty} + \text{Income Inequality} + \text{Trade Openness} + \text{Saving-Investment Gap} + \text{Fiscal Deficit} + \varepsilon) \text{-----(1)}$$

Where ε is white noise error term. Saving-investment gap, openness and fiscal deficit are conventional variables while poverty and inequality are explanatory variables and are the indicators of poor economic governance.

Keeping in view the importance of external debt, it is better to separate the analysis of economic growth and external debt. First direct relation between poor economic governance and GDP growth are examined then association between poor governance issues and external debt is also observed. The same method of

two-step relationship was applied by Akram (2011) to show the effects of public debt on growth and investment. Thus the second equation becomes as follow:-

$$\text{External Debt} = f(\text{Poverty} + \text{Income Inequality} + \text{Trade Openness} + \text{Saving-Investment Gap} + \text{Fiscal Deficit} + \varepsilon) \text{-----}(2)$$

Where ε is white noise error term.

According to the Trickle-down theory, development is solely an economic phenomenon in which benefits from the overall growth of gross domestic product and income per capita would automatically trickle-down to the masses in the form of employment and economic opportunities. The major concern is therefore to acquire the growth job done while reduction in unemployment, income inequality and poverty are perceived to be realized as a result of economic growth. Thus equation for income inequality and poverty would be as follow:-

$$\text{Income Inequality} = f(\text{External Debt} + \text{GDP} + \text{Foreign Exchange Reserve} + \text{Private Savings} + \varepsilon) \text{-----}(3)$$

$$\text{Poverty} = f(\text{Agriculture Cultivated Area} + \text{External Debt Services} + \text{Gini} + \text{Unemployment Rate} + \varepsilon) \text{-----}(4)$$

Where ε is white noise error term.

4.4. Definition of the Variables

4.4.1. Sources of Data

The perceived analysis of this study uses statistics for Pakistan, which cover the period 1973 to 2013. Main data sources are Economic Survey of Pakistan (various issues), Hand Book of Statistics (SBP), Jamal (2004) and World Development Indicators published by the World Bank. All monetary units of variables are local currency unit of Rupee in million, while poverty and unemployment are expressed by number of people in millions. Agriculture cultivated area is expressed in hectares. Complete time series data on poverty and

inequality are not available or available with some gaps. Therefore, an average of the last five years has been used for the missing years.

Gross Domestic Product (GDP) and external debt are used as dependent variables, whereas, poverty, income inequality, fiscal deficit, openness and saving-investment gap are determinant factors of GDP and external debt.

4.4.2. External Debt and Economic Growth

The empirical analysis in the study looks at external debt and economic growth chosen in a way as to make the residual share well-defined and understood concept. External debt and economic growth would be used as dependent variables. External debt ratio to GDP is mostly used indicator to judge effectiveness of the stock of external debt in the literature. This study use total amount of publically guaranteed external debt and liabilities in million rupees. For converting dollars amounts to rupees amounts this study have used the relevant exchange rates for the relevant year. The data has been taken from Hand Book of Statistics (SBP) and various issues of Pakistan Economic Survey. The study focuses on the following proxies of the external debt and economic growth:

- i) Total external debt (*ED*)
- ii) External debt services (*EDS*)
- iii) Annual growth of GDP (*GDP*)

4.4.3. Income Inequality

Gini-coefficient is applied to determine income inequality, which is used in most of the studies on income inequality. It is based on Lorenz Curve, which maps the portion of population against the share of part of income expected and has a least value of zero (case of ideal equality) and highest value of one (ideal inequality). Gini index computes the level to which the allocation of resources/income or consumption outlay among people within an economy diverges from a perfectly equal distribution. Due to discrepancies in measuring the extent of income inequality, the data may not be same across the specified time

period. Here index formulated by Jamal (2004), Pakistan Integrated Household Survey, (various issues) has been used.

Regarding the effect of unemployment analysis, Labour Force Surveys (LFS) are the key data source. This study has relied on data as specified in the different World Development Report, United Nation Development Program, and South Asian Association for Regional Cooperation reports. The proxy for income inequality used is:-

- i) Inequality (*G*)
- ii) Unemployment Rate (*UR*)

4.4.4. Poverty

This investigation has applied the poverty assessment centered on the official poverty line approach. It is pertinent to mention here that the Planning, Development and Reform Division pronounced in 2003 the official poverty line constructed on the threshold level of 2,350 calories per adult per day plus a minimum expenditure required for non-food needs.

The official assessments of the poverty are available only for limited period. Further, these estimates of poverty are not rigorously similar with the earlier estimates. The data is taken from Jamal (2004); Hand Book of Statistics (SBP) and various issues of Pakistan Economic Survey. It is assumed that uncertainty associated with social unrest, inequality and political instability not only worsen macroeconomic instability but also lead to poverty. If inequality and poverty are not mitigated, will affect the sustainable development process.

4.4.5. Fiscal Deficit

If revenues generated are inadequate to finance intended expenses, the management has three choices to run the budget deficit: from internal or external borrowings, expansionary monetary policy or increase revenue through taxes. In the past, the Pakistan has opted to external borrowing backing its revenue gap.

In the context of current external debt scenario in Pakistan, primary fiscal deficit is a stimulative factor of rising public debt. Data is taken from Hand Book of Statistics (SBP) and various issues of Pakistan Economic Survey. This study would look at the following primary deficit variables:

- i). Budget Deficit (*BD*)
- ii). Primary Fiscal Deficit (*PFD*)

4.4.6. Trade Openness

The measures used in this study include the ratio of exports and imports as percentage of GDP. A reliable trade policy will be effective in reducing trade gap and lessen external debt burden. It is assumed that government can cut debt service payment by consolidating total export and finally lead to foreign reserves expansion. Data has been taken from Hand Book of Statistics (SBP) and various issues of Pakistan Economic Survey.

4.4.7. Saving-Investment Gap

National saving is a combination of private savings and domestic savings. Gross national savings is a total quantity of a nation income minus its cumulative consumption and also demonstrate the available finances for investment. The preliminary fact of the analysis is the accounting character of the saving investment gap being equal to the difference between domestic investments and saving. This study principally concerned in examining the defining dynamics of private saving, since obvious proof proposes that private saving plays a fundamental role in explaining current account developments in Pakistan.

There is a wide consensus that low national saving rate is one of the gravest obstacles to achieving desirable investment and sustainable economic growth. Data is taken from Hand Book of Statistics (SBP) and various issues of Pakistan Economic Survey. The proxies used are:-

- i). Saving-Investment Gap (*SIG*)
- ii). Private Saving (*Prsav*)

Chapter-5 Results and Discussions

5.1. Stationarity Test

The stationarity of the series is determined by applying Augmented Dickey-Fuller (ADF) test as shown in the Table-5.1. External debt services, private saving and openness are stationary at level while external debt, saving-investment gap, poverty, income inequality, budget deficit, primary deficit, defence expenditure, foreign exchange reserves, agricultural cultivated area, unemployment and exchange rate are non-stationary at level and become stationary at first difference. Economic growth is stationary at second difference.

Table-5.1: ADF Test Results at Level

Variables	Intercept		Intercept and trends		None	
	T-test	P-value	T-test	P-value	T-test	P-value
Pov	0.2901	0.9739	-1.4511	0.8254	1.8790	0.9833
ED	2.8218	1.0000	0.0506	0.9956	4.4379	1.0000
EDS	3.7303	1.0000	-3.1711	0.1047	4.6265	1.0000
GDP	3.9150	1.0000	3.4873	1.0000	4.0699	0.9999
ACA	-1.222	0.6551	-1.7699	0.7005	1.4822	0.9636
UR	-0.8078	0.8060	-2.6167	0.2754	0.6127	0.8446
G	-2.0578	0.2621	2.2407	1.0000	2.3524	0.9943
FER	-0.2250	0.9268	-1.7168	0.7251	0.5161	0.8229
PrSav	-1.4402	0.5503	-1.9664	0.5961	-1.6584	0.0912
SIG	1.1895	0.9974	-1.0559	0.9210	2.4119	0.9951
TO	-2.5785	0.1057	-3.4707*	0.0565	-0.4008	0.5328
BD	4.0300	1.0000	2.3159	1.0000	4.7789	1.0000

Note: * and ** denotes 5% and 1% level respectively

Table-5.2: ADF Test Results at First Difference

Variables	Intercept		Intercept and trends		None	
	T-test	P-value	T-test	P-value	T-test	P-value
Pov	-5.4042	0.7475	-3.8260*	0.0280	0.2502	0.7522
ED	-4.6868**	0.0005	-2.0223	0.5660	3.4380	0.9997
EDS	-5.4042**	0.0001	-6.2749**	0.0001	-7.5464**	0.0000
GDP	2.3370	0.9999	-1.6940	0.7305	2.4329	0.9962
ACA	-5.7664**	0.0000	-5.7422**	0.0002	-5.5235**	0.0000
UR	-7.4919**	0.0000	-7.4257**	0.0000	-7.2662**	0.0000
G	-5.4693**	0.0000	-5.5405**	0.0004	-1.0221	0.2689
FER	-4.9341**	0.0003	-4.9848**	0.0014	-4.9254**	0.0000
PrSav	0.1048	0.9612	-1.6080	0.7671	1.2007	0.9376
SIG	-7.0914**	0.0000	-5.9153**	0.0002	-6.2569**	0.0000
TO	-10.5013	0.0000	-10.3586**	0.0000	-10.6413**	0.0000
BD	0.7283	0.9908	-0.7260	0.9616	1.3859	0.9551

Note: * and ** denotes 5% and 1% level respectively

Table-5.3: ADF Test Results at 2nd Difference

Variables	Intercept		Intercept and trends		None	
	T-test	P-value	T-test	P-value	T-test	P-value
Pov	-3.7636**	0.0080	-3.7620*	0.0332	-3.9028**	0.0003
ED	-5.2708**	0.0002	-5.5745**	0.0004	-10.4731**	0.0000
EDS	-3.9271**	0.0055	-3.7601*	0.0339	-3.6214**	0.0008
GDP	-3.0267*	0.0391	-3.2346*	0.0458	0.6056	0.8420
ACA	-6.9459**	0.0000	-6.8345**	0.0000	-7.0474**	0.0000
UR	-9.0485**	0.0000	-8.9138**	0.0000	-9.1792**	0.0000
G	-3.8032**	0.0072	-4.0064**	0.0194	-3.6866**	0.0006
FER	-5.2489**	0.0001	-5.1930**	0.0000	-5.1930**	0.0010
PrSav	-4.9809**	0.0003	-4.9264**	0.0020	-0.6731	0.4167
SIG	-4.3601**	0.0019	-3.7790*	0.0326	-4.5840**	0.0000
TO	-9.8279**	0.0000	-9.5617**	0.0000	-9.9825**	0.0000
BD	-6.2138**	0.0000	-6.4844**	0.0000	-6.8910**	0.0000

Note: * and ** denotes 5% and 1% level respectively

For long-term association, the residual of the indicators have to be cointegrated in the one and the same order i.e., stationary at level. Though independently the variables are stationary at first order, their linear grouping is stationary at level as their linear grouping revokes the stochastic trends. In the long run, if there is no cointegration in the variables they do not have symmetry association and prediction from that model is insignificant. If residuals of the variables in the regression model are stationary at level it assures long run relationship and the regression is meaningful and significant.

5.2. Estimated Results for Cointegration

As shown in the above Table-5.1, 5.2 and 5.3, all of the variables are not going to the same order of integration, so this study applied OLS methods with the differences of the variables based in the ADF test.

5.2.1. Multiple Regression Results for Economic Growth

Table-5.4 contains multiple regression results for governance issues effects on economic growth. The results indicate that the coefficient of income inequality and poverty are significant and positively related with GDP at 5% and 1% level of significance respectively. The coefficient of income inequality and poverty statistically significant and are consistent with the theoretical expectation and found to be positive. The coefficient of saving-investment gap is significant and positively related with GDP at 1% level of significance. The coefficient of trade openness is positive sign but statistically insignificant. The results are inconsistent with the prevailing literature. The coefficient of Budget deficit is highly significant and positively related with GDP at 1%, level of significance. The results are compatible with the hypothetical probability.

The F-statistics 76.10768, which assesses the mutual significance of the independent variables, is established to be statistically significant at 1% level of significance as pointed out by the resultant probability value 0.000000.

The Durbin-Watson statistic 1.97 in the above table is observed to be greater than R^2 0.91 representing that the model is not spurious, and signifies that there is absence of serial correlation.

5.2.2. Discussion

This study suggests that good governance determines economic growth. Here the indicators of the good governance are social development, reduction in poverty, equitable distribution of income and fiscal responsibility. Table-5.4 shows coefficient of income inequality and poverty are significant and positively related with GDP at 5% and 1% level of significance respectively.

Table-5.4: Economic Growth Regression Results

Dependent Variable: GDP

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-6767166.	1805750.	-3.747565**	0.0006
SIG	5.012181	1.937029	2.587560**	0.0140
TO	753030.4	2878949.	0.261564	0.7952
BD	19.60422	4.753782	4.123921**	0.0002
POV	144825.4	47134.08	3.072626**	0.0041
G	89242.98	43779.96	2.038444*	0.0491
R^2	0.915772			
Adjusted R^2	0.903739	F-Statistics	76.10768	
D-Watson stat	1.970808	Prob (F-Stat)	0.00000	

Note: * and ** denotes 5% and 1% level respectively

In Table-5.8, Granger causality test shows that there is bidirectional relationships between the GDP and G; and GDP and poverty. The relationship between GDP growth and income distribution may be positive in the short run. In the long run growing inequality effect GDP growth negatively. Therefore, in the long run, income inequality might be lessened to have a positive effect on socio-economic development. Further, credit market imperfections in developing countries have ample reasons of inverse relationship between income distribution and GDP growth. Persistent rise in income inequality leads to increase gap

between the have and have not. Sustained GDP growth is indicated as an effective mechanism for reducing income inequality and social unrest. GDP growth will generate economic activities and will create ample employment opportunities. This will enhance demand for labor and will help in poverty reduction. Correspondingly, social development will increase efficiency in the system and will develop virtual cycle of GDP growth. It has been observed that the magnitude of social uplift as a result of GDP growth rest on how income inequality changes with GDP growth and on preliminary inequities. If there is persistent disparity, then GDP growth have no significant effect on socio-economic development. For extended period of time, Pakistan attained a considerable GDP growth but social unrest did not mitigate as was supposed because persistent disparities in income. Therefore, the struggle for poverty eradication did not bear fruit due to large disparities in income.

The coefficient of saving-investment gap is significant and positively related with GDP at 1% level of significance i.e. in Pakistan, investment activities were financed through external borrowings while improvements in private savings were neglected to utilize domestic resources. In this way Pakistan accumulated undesirable external debt, which has negatively affected the needs for domestic savings. Easy access to domestic and external financing persuaded regimes to earmark more resources for the political driven projects. Besides, such regimes neglect domestic resource mobilization, which protracted reliance on borrowing.

Trade openness is positively related with GDP but statistically insignificant. The results are inconsistent with the prevailing literature i.e., trade openness lead to the optimal allocation of resources at national and international levels, thereby improving the resilience to external debt crisis. It also favorably affects the debt servicing capacity of the countries as foreign exchange reserves increase due to increase in net exports and foreign direct investment – a cheaper source of foreign capital than foreign borrowing. Further, imported capital goods lead to fast track industrialization process in the domestic country, which will increase the domestic

growth rate. However, this case is reverse in case of Pakistan as economies with a higher degree of openness are more exposed to external shocks.

In developing countries like Pakistan imports have become larger than exports after trade openness and the scope for increased exports is also limited, which has created trade deficit in these countries. This discloses that due to less competitiveness of the Pakistan's export, the demand for it in international market is low. To overcome this trade deficit, Pakistan has borrowed a huge amount from International Financial Institutions (IFIs). Further, advancing trade liberalization requires the gradual removal of exports and imports tariffs, which are important sources of revenues for developing countries. The resulting fiscal deficits in these countries may then have to be filled with increased foreign borrowing.

The coefficient of Budget deficit is highly significant and positively related with GDP at 1%, level of significant. It indicates that there is a direct association between fiscal deficit and GDP growth. Emerging economies needs more funds for sustainable socio-economic development. Thus the governments will be able to narrow the budget deficit and will retire debt obligations after subsequent increase in GDP growth.

5.2.3. Multiple Regression Results for External Debt.

Table-5.5 contains multiple regression results for governance issues effects on external debt. The coefficient of inequality is insignificant but has a positive sign. The results indicate that the coefficient of poverty is significant and positively related with external debt at 5% and 1% level of significance respectively. The coefficient poverty is statistically significant and is consistent with the theoretical expectation and found to be positive. The coefficient of saving-investment gap is significant and positively related with external debt at 5% level of significance. The coefficient of trade openness is positively related with external debt and statistically significant at 5% level. The results are consistent with the prevailing literature. The coefficient of Budget deficit is

significant and positively related with external debt at 5%, level of significance. The results are compatible with the hypothetical probability.

The F-statistics 63.31890, which assesses the mutual significance of the independent variables, is established to be statistically significant at 1% level of significance as pointed out by the resultant probability value 0.0000.

The Durbin-Watson statistic 1.81 in the table is observed to be greater than R^2 (0.90) indicating that the model is not spurious, and implies that there is absence of serial correlation.

Table-5.5: Regression Results for External Debt

Method: Least Squares

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-2326884.	565957.3	-4.111413**	0.0002
SIG	1.309604	0.607103	2.157137*	0.0379
TO	1734451.	902318.7	1.922215*	0.0627
BD	2.852778	1.489928	1.914709*	0.0637
POV	63303.15	14772.74	4.285133**	0.0001
G	18435.56	13721.49	1.343554	0.1877
R-squared	0.900454			
Adjusted R-squared	0.886233	F-Statistics	63.31890	
Durbin-Watson stat	1.810236	Prob (F-Stat)	0.00000	

Note: * and ** denotes 5% and 1% level respectively

5.2.4. Discussion

Similarly, to assess the impact of good governance on external debt, the regression results are given in Table-5.5. The coefficient of inequality is insignificant and positively correlated with the external debt. Inequality has no direct relationship with external debt. Inequality affect external debt through budget deficit as evident from Table-5.8 i.e. income inequality is one of the significant factors of the budget deficit. The results of the Granger causality test observe bidirectional causality between budget deficit and inequality. There is unidirectional causality between inequality and external debt. This clarifies the

crucial mechanisms by which inequality not only affect fiscal deficit but also have impacts on economic growth.

The coefficient of poverty is highly significant and positively correlated with the external debt at 1% level of significance. There is a bidirectional relationship between external debt and poverty. Poverty introduces elements of uncertainty and political instability. Increasing uncertainty and instability curtail domestic and foreign investment. The government needs domestic and foreign aid/borrowing to fill the investment gap.

Table-5.5 identifies that saving-investment gap is positively correlated with external debt at 5% level of significance showing role of savings and investment in promoting economic growth. Private savings play a leading position in the economic growth and macroeconomic stability of any state. Economic development needs investment that can be financed through private savings or borrowing from international financial institutions. On the other hand, a country in the long run has to depend on national savings. Revival of the economy mainly relies on domestic investment together with national savings and capital buildup. Hence, national savings are fundamental in the process of revival of the economy. This study reveals that the saving scenario in Pakistan is not ideal indeed. The growing national savings would speed up growth, while the early Domar-Harrod models indicated investment is vital in endorsing economic expansion. Contrary to Domar-Harrod, the neoclassical Solow (1970) model opines that improvement in the savings rate enhance steady-state productivity by more than its direct impact on investment for the reason that the motivated increase in income increases savings, leading to a further rise in investment.

The coefficient of budget deficit is significant and positively correlated with the dependent variable at 5% level of significance. A serious institutional crisis, defence expenditure and Super Powers interest in the region play a vital role in worsening of the budget deficit and accumulation of external debt in Pakistan.

Further, Super Powers interests in this region played an important role in determining Pakistan access to financial support from the international financial

institutions. Pakistan played a front-line state against USSR and the war against terrorism in Afghanistan in the wake of 9/11. The inflow of smooth assistance was possible because of strategic position of Pakistan in Asia, which was a stimulative factor of sustained and high defense expenditure.

The coefficient of openness is significant and positively correlated with the external debt at 5% level of significance. Increase in the magnitude of openness results in instability in fiscal deficit. Further, unstable exports and revelation of additional external blows make the fiscal deficit and external debt more unbalanced.

5.2.5. Multiple Regression Results for Income Inequality.

Table-5.6 contains multiple regression results for determinants of inequality. The coefficient of external debt is highly significant at 1% level of significance. The results indicate that the coefficient of external debt is significant and positively related with income inequality. The coefficient GDP is statistically significant at 1% level of significance and is consistent with the theoretical expectation and found to be positive. The coefficient of foreign exchange reserves is highly significant and negatively related with income inequality at 1% level of significance. The coefficient of private savings is negatively related with income inequality and statistically significant at 1% level. The results are consistent with the prevailing literature.

The F-statistics 24.38927, which assesses the mutual significance of the independent variables, is found to be statistically significant at 1% level of significance as pointed out by the resultant probability value 0.000000.

The Durbin-Watson statistic 1.96 in the table is observed to be greater than R^2 0.73 indicating that the model is not spurious, and implies that there is absence of serial correlation.

5.2.6. Discussion

The relationship between income inequality and its determinants are indicated in Table-5.6. The coefficients of income inequality and poverty are significant and positively related with GDP at 5%. The Granger causality test shows unidirectional relationship between external debt and inequality (as shown in Table 5.8), which runs from external debt to inequality, while coefficient of growth is highly significant, and have positive relationship with inequality.

Table-5.6: Regression Results for Income Inequality

Method: Least Squares

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	34.36151	1.017088	33.78420**	0.0000
ED	5.25E-06	2.24E-06	2.342988*	0.0248
GDP	2.36E-06	5.59E-07	4.223183**	0.0002
RES	-2.36E-05	5.41E-06	-4.363661**	0.0001
PRSAV	-1.13E-05	4.89E-06	-2.320310*	0.0261
R-squared	0.730452	F-Statistics	24.38927	
Adjusted R-squared	0.700503	Prob (F-Stat)	0.00000	
Durbin-Watson stat	1.969203			

Note: * and ** denotes 5% and 1% level respectively

The Granger causality test also confirms bidirectional relationships between these two variables, shown in Table-5.8. The coefficient of foreign reserves and private savings are highly significant and negatively correlated with inequality. Foreign exchange received from the people working abroad not only raises foreign reserves but also increase the savings of the people at gross rot level and hence leads to the equal distribution of income.

5.2.7. Multiple Regression Results for Poverty.

Table 5.7 contains multiple regression results for determinants of poverty. The coefficient of external debt services is highly significant at 1% level of significance. The results indicate that the coefficient of external debt services is significant and positively related with poverty. The coefficient of unemployment

rate is statistically significant at 1% level of significance and is consistent with the theoretical expectation and found to be positive. The coefficient of agricultural cultivated area is highly significant and negatively related with poverty at 1% level of significance. The coefficient of income inequality is positively related with poverty and statistically significant at 1% level. The results are consistent with the prevailing literature.

The F-statistics 33.68460, which assesses the mutual significance of the independent variables, is found to be statistically significant at 1% level of significance as pointed out by the resultant probability value 0.000000.

The Durbin-Watson statistic 1.67 in the table is observed to be greater than R^2 (0.78) indicating that the model is not spurious, and implies that there is absence of serial correlation.

Table-5.7: Regression Results for Poverty

Method: Least Squares

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	102.2378	40.44825	2.527619*	0.0160
EDS	8.60E-05	2.54E-05	3.388590**	0.0017
ACA	-4.976295	2.076387	-2.396612*	0.0219
UR	7.665089	2.277189	3.366031**	0.0018
G	0.430226	0.157677	2.728524**	0.0098
R-squared	0.789151	F-statistics	33.68460	
Adjusted R-squared	0.765723	Prob (F-Stat)	0.00000	
Durbin-Watson stat	1.679926			

Note: * and ** denotes 5% and 1% level respectively

5.2.8. Discussion

The empirical relationship between income inequality and its determinants are shown in Table-5.7. The coefficient external debt services are highly significant and positively related with poverty at 5%. The Granger causality test also reveals bidirectional relationship between external debt services and poverty shown in Table-5.8. The coefficient of agricultural cultivated area is negatively related with

poverty and significant at 5% & 10% level of significance. Pakistan is an agricultural country and reduction in the agricultural waste and increase in the cultivated area would help in the eradication of poverty.

The coefficients of inequality and unemployment are positively correlated with poverty and highly significant at 1%, level of significance. There is also unidirectional relationship between poverty and inequality running from poverty to inequality. Sustained GDP growth increases demand for labour and wages, which would help in the poverty reduction. The fall in poverty level is determined by the impact of GDP growth on income inequality i.e., how much changes are occurred in the income distribution with variations happened in the economic growth and on original inequalities in income. If income disparities increase, then economic growth does not lead to a significant poverty reduction.

5.2.9. Granger Causality Test

In Table-5.8, result of the Granger causality test specifies that there exist bidirectional relationship between income inequality and GDP, poverty and GDP, poverty and external debt services, budget deficit and GDP, income inequality and budget deficit, while there is unidirectional relationship between external debt, budget deficit and income inequality. Income inequality does not affect external debt directly but its impact on external debt is through budget deficit.

Table-5.8: Pair-wise Granger Causality Tests

Sample: 1973 2013; Lags: 2

Null Hypothesis:	Obs	F-Statistic	Probability
POV does not Granger Cause G	39	5.97445	0.00598
G does not Granger Cause POV		0.87886	0.42448
ED does not Granger Cause G	39	4.79032	0.01469
G does not Granger Cause ED		2.07014	0.14178
ED does not Granger Cause BD	39	8.69417	0.00089
BD does not Granger Cause ED		0.01901	0.98118
ED does not Granger Cause POV	39	11.3041	0.00017
POV does not Granger Cause ED		3.92431	0.02928

ED does not Granger Cause SIG	39	2.35686	0.11001
SIG does not Granger Cause ED		26.3660	1.2E-07
ED does not Granger Cause TO	39	0.02269	0.97758
TO does not Granger Cause ED		0.39056	0.67968
POV does not Granger Cause G	39	5.97445	0.00598
G does not Granger Cause POV		0.87886	0.42448
SIG does not Granger Cause G	39	0.61349	0.54735
G does not Granger Cause SIG		7.29846	0.00231
GDP does not Granger Cause G	39	9.16531	0.00066
G does not Granger Cause GDP		6.07821	0.00554
GDP does not Granger Cause BD	39	16.3467	1.1E-05
BD does not Granger Cause GDP		10.6154	0.00026
GDP does not Granger Cause POV	39	7.66853	0.00178
POV does not Granger Cause GDP		9.25442	0.00062
GDP does not Granger Cause SIG	39	2.17464	0.12920
SIG does not Granger Cause GDP		10.8313	0.00023
GDP does not Granger Cause TO	39	0.05173	0.94966
TO does not Granger Cause GDP		0.76393	0.47366
DEF does not Granger Cause BD	39	5.15080	0.01112
BD does not Granger Cause DEF		4.33364	0.02106
ED does not Granger Cause BD	39	5.03026	0.01220
BD does not Granger Cause ED		1.94664	0.15834
ACA does not Granger Cause POV	39	4.21472	0.02316
POV does not Granger Cause ACA		0.09494	0.90967
UR does not Granger Cause POV	39	1.01558	0.37292
POV does not Granger Cause UR		1.18239	0.31884
RES does not Granger Cause G	39	8.39824	0.00109
G does not Granger Cause RES		0.06382	0.93828
PRSAV does not Granger Cause G	39	11.0777	0.00020
G does not Granger Cause PRSAV		4.16781	0.02405
GDP does not Granger Cause ED	39	1.91190	0.16336
ED does not Granger Cause GDP		3.01283	0.06243
G does not Granger Cause BD	39	17.6532	5.5E-06
BD does not Granger Cause G		10.5311	0.00028

5.2.10. Engel-Granger Test Results for Cointegration

Engle and Granger (1987) examined that a linear combination of two or more non-stationary series may be stationary i.e., they are not spurious. If such a stationary linear combination exists, the non-stationary time series are said to be cointegrated and there is long-term association amongst the indicators. Therefore, the stationary linear combination is called the cointegrating equation and may be inferred as a long-term symmetry association amongst the variables.

Table-5.9: Engel-Granger Test Results for Cointegration

Equation	τ - value	Critical value (1%)	Durbin-W	Prob	R2	Results	
						Cointegration	No Cointegration
External Debt	-6.17	-2.5899	1.99	0000	.43	Exist	
GDP	-6.12	-2.5899	1.94	0000	.51	Exist	
Poverty	-5.50	-2.5899	1.94	0000	.48	Exist	
Inequality	-6.33	-2.5899	2.00	0000	.44	Exist	

In Table-5.9, since the computed τ - value ($=t$) for all regression equation is much more negative than the Engle-Granger one percent critical τ value, the conclusion is that the residuals from the regression of good governance variables on external debt is are I (0); that is, they are stationary. Hence, equations 1, 2, 3 and 4, are cointegrating regressions and these regressions are not spurious and interpret its parameters as long run parameters.

5.2.11. Findings and Comparison with other Studies

This study observes that issues related to poverty reduction, optimal utilization of agriculture land and equal income distribution etc. are highly significant factors, which can explain welfare of a nation in relative terms. Most of the social scientists agree that the government's effectiveness depends on the extent of the welfare that has been realized. Good governance as the exercise of economic, political, social and administrative authority to improve living standard or welfare of the masses and optimal utilization of country's resources for development of the people [UNDP (1997); World Bank (1994)].

Now the question arises what should be the welfare function or criteria. This study concludes that nation's external indebtedness means its fiscal responsibility in terms of its desirable achievements of socio-economic development from the borrowed funds. The same findings has been observed by Kasidi and Said, (2013) that effective governance empowers a country to realize its goals regarding social and economic development, by facilitating a favorable atmosphere for high and sustainable economic development.

The major finding of the study is that governance ineffectiveness or poor economic performance, in the presence of which the benefits from GDP growth cannot be transformed in to sustainable development and external debt. The result shows that there is a continuous increase in external debt and sluggish economic growth since 1970s. At the same time persistent escalation in poverty level and income inequality have also been observed during this particular time period. This clearly indicates that external borrowing has not been utilized optimally. Therefore sustainable economic growth and debt reduction could not have been achieved. Grindle (2004) observed that fundamental theory of good governance is to struggle for poverty reduction, offsetting corruption and work for development.

The results indicate positive relationship between income inequality and GDP growth. The existent literature on inequality and growth suggests that inequality increases with growth in the GDP at the initial level of the development.

However, this relationship would be negative in the long run i.e., stable growth of the GDP will bring fairness in the income distribution. Deininger and Squire (1998) argue that the impact of initial inequality on subsequent economic growth is adverse in most instances but not always significant. Further, it has been observed that there is positive relationship between poverty level and inequality. This means that persistent increase in inequality has been the root cause of the rising poverty level.

According to the trickle-down effect theory of development the benefits of the economic growth should be trickle down to the gross root level. This study argues that in presence of the poor economic governance the benefits of the growth cannot reach to the deserved people. Fragile institutions, unsteady economic growth, social unrest and inequality lead to low standard of life in the developing countries. This unfavorable situation obliged nation to introduce drastic reforms in their government institutions with the objectives of sustainable economic development and reduction in income inequality [Haq *et al* (2006)]. Kuznet (1955) empirically proved relationship between economic growth and income inequality. The results of his analysis advocated that income disparity rises in the preliminary stages of economic development and then declines in the course of further economic development.

Chong and Gradstein (2004) assessed positive relationship between income inequality, political instability and rule of law. Persson and Tabellini (1994) analyzed rational affiliation between economic growth and income disparity and found that inequality harmful for growth in the long run. The same results were observed by the Alesina and Rodrik (1994).

The study observed that there is positive relationship between External debt services and poverty level or poor economic performance. Positive relationship has also been examined between external debt and inequality. Hence, external debts have an adverse impact on poverty level and inequality. Countries that hold a considerable debt burden allocate little funds for social development and have to spend more against their debt obligations. External debt influences performance of

the government by effecting the expenditure decision regarding social development and poverty reduction. Kaufmann and Kraay (2002) examined that good governance is essential for growth in per capita income. Generally, from the policy perspective, the profit and outcome from the external assistance are believed to be foremost. Efficiency of foreign assistance is affected by poor economic performance of the recipient state [Burnside and Dollar (2000); Collier and Dollar (2002); Carl-Johan (2004)].

Due to lack of accountability in developing countries, the policy makers often undertake political driven project and less attention has been given to the vulnerable segments of the society that may result in social unrest and poverty level. Projects financed by foreign assistance are generally planned and utilized in politically motivated projects. Growing debt burden and IFIs strict conditions motivates the government to increase taxes. Thus, the masses may be overtaxed and be deprived of even the basic necessities of life. The government will finally opt for debt relief if an exceedingly painful course of adjustment is to be avoided with severely negative impact on living standards of the poor that ultimately result in social unrest and political instability. In 1990s, four elected governments have been dissolved in Pakistan on the pretext of poor economic performance and social unrest.

Normally, the aid was believed that it would be beneficial in filling the current account deficit in a capital-starved country. But the prevalent evidences showed that foreign aid persuaded government to earmark higher percentage of aid to less preferable projects. Similarly, it affected self-reliance and domestic saving adversely. Furthermore, it protracted reliance on external borrowing [Griffen (1970); Qureshi (1968); Boone (1996)].

Trade openness shows positive sign but the result is insignificant. The study suggests that openness is not favorable in Pakistan context. Major exports of Pakistan consist of the commodities for which demand in the international market is elastic. Further, since 1975, the Pakistan's imports are higher than its exports; more openness means a considerable increase in the trade deficit and supplements

external debt. Kraay (2004) finds that most reliable source of sustainable economic growth is exports earnings and trade openness. Further, volatile and persistent shocks on external front can reduce economic growth and may cause fall in the trade volume. Agnello and Sausa (2009) are of the view that extent of openness have a direct relationship with fiscal deficit unsteadiness and expenditure volatility i.e. in the presence of high trade deficit, openness does not have a positive relationship with economic growth. Further, Anwar (2002) observed that in case of stagnant exports, devaluation would cause increase in external debt in rupee in term and consequently increase in external debt service burden, lower GDP growth and raise poverty level. Further, it is essential to tackle fundamental basis that responsible for debt build-up and consequent unfavorable effects on GDP growth and poverty while working on debt reduction plan. Tax reforms, increasing the production capacity and diversification of exports basis can be useful in undertaking debt reduction strategy.

Negative relationship has been observed between agriculture cultivated area and poverty level i.e. revival of the agriculture sector can feed the most vulnerable segment of the society. In fact more than half of the population of Pakistan is associated with the agriculture sector. Agriculture sector is an important contributor to the GDP in Pakistan. It engaged almost 50 per cent of the labor forces in rural areas and backings nearly 66% of merchandise exports. However, it is exceedingly reliant on major crops and weather conditions. Additional exploration and funds are required to expand the cultivated area, improve the irrigation system and crops yield. Pakistan's current estimated population is 182 million with an annual growth rate of almost 2.05 percent and is the sixth most populous state in the world. Pakistan is the tenth largest state in the world according to the dimensions of the labour force. The Labour Force Survey of Pakistan (2008/09) indicates that the total labour force volume is 53.72 million with an annual growth rate of 3.7 percent. The share of the rural areas in the employment generation has almost more than double, which is predominantly due to the absorption capacity of the agriculture sector [Govt. of Pakistan (2009)].

The main issue of Pakistan is poor governance, which affect its welfare aspects. It is accepted that whenever the target of higher GDP growth rate is realized, the benefit of growth would spontaneously trickle down to the grassroots through good governance. Pakistan's history shows that the rich benefited more than the poor as proved by rising poverty and income inequality since 1970s. Carl-Johan (2004) suggests that continuous and unmanageable aid inflows are related with poor state of affairs. The ideal utilization of the borrowed funds could have facilitated improvement in the living standards of the masses but unluckily that did not materialize due to fiscal irresponsibility of the authorities and Pakistan has accumulated huge external debt [Hasan (1998)].

The available literature suggests that IFIs lending decisions are more responsive to political influences of the donors and domestic political groups in power. Sometimes, credit and aid are so easy to get and IFIs are considered to be partially responsible for the mismanagement of the borrowed funds in developing countries. Further, the creditors seek to meet lending targets rather than achieving long term agendas and satisfy basic needs of the developing countries like Pakistan. Tokunage and Akimune (1988) examined that IMF credit is subject to serve economic management in the debtor country.

The funds provides by IFIs are limited and with relatively strict conditionality. It is difficult for developing countries to gain long run benefits from external debt, considering the fund supply-to-conditionality mix. The conditionalities, ultimately limit sovereignty and aggravate macroeconomic instability. Pakistan has been asked to do more in the wake of 9/11. In consequences of the military operation in FATA has increased terrorism in Pakistan and have severe implications for economic stability. Zaman (2001) observed that Pakistan's state of political affairs with the Super Powers has determined the accessibility to external capital. Sharp increases in aid availability emerged in the wake of China's revolution in 1949, Iran invasion of Iraq and the Russian invasion of Afghanistan in 1980s and the US attack on Afghanistan in 2001. Similarly severe depressions followed by war with India in 1965, nuclear explosion in 1998, and the military intervention in 1999.

Further, the strings include curtailing development budget, increasing interest rates, and utility rates; this is precisely contrary to the development policies and lead to macroeconomic and political instability. Macroeconomic instability and low development may cause poverty, social unrest and exacerbate vicious circle of poverty. The efficiency of aid is significantly associated with decision of the donors regarding supply of aid to the debtors. Efficiency of foreign assistance is also affected by poor economic performance of the recipient state [Burnside and Dollar (2000); Collier and Dollar (2002); Carl-Johan (2004)].

Chapter-6 Conclusion and Recommendations

6.1 Conclusion

This study advocates better selectivity by donors, focusing aid to nations that take well-defined steps to poverty reduction, equal distribution of income and improve fiscal responsibility.

Pakistan is facing governance issues since 1970s. Poor economic governance is a key factor of economic crisis as it directly affects economic development in Pakistan. The present study examines the governance issues in Pakistan and its implications for economic growth and external debt. Two dimensions i.e., poverty and inequality of poor economic governance and their relation with GDP growth and external debt have been examined. Following the detailed analysis, hypotheses framed about poor economic governance and external debts have been accepted as per debate in the literature.

The results of the research shows that poor governance issues i.e., poverty and inequality are the main factors behind the prevalent external debt and unstable economic growth in Pakistan. The study observes that unequal distribution of income and poverty create unfavorable environment for sustainable growth and external debt. Good governance stimulates the economic growth positively, but the foreign debt has unfavorable impact on economic development. A range of diverse specification has been used in the analysis and it verifies the robustness of the results. It is observed that Pakistan is not only suffering from resource deficiency, but also at the same time poor economic governance is another issue that is triggering economic slowdown.

External debt services have adverse effects on poverty level and income inequality and have severe implications for economic growth sustainability. It is suggested that budget deficit should be financed by domestic resource mobilization. Most vulnerable segments of the society are associated with agriculture sector. Pakistan should increase agriculture-cultivated area where it has clear comparative advantage. Revival of the agriculture sector would boost

economic growth and would help in lessening depravity of the vulnerable segments of the society.

A nation's external indebtedness means its fiscal responsibility in terms of its desirable achievements from the borrowed funds. Effective governance empowers a country to realize its goals regarding social and economic development, by facilitating a favorable atmosphere for high and sustainable economic development.

This analysis advocates that external debt servicing exacerbate poverty level and income distribution negatively. This implies that the rising debt servicing liabilities reduces the economic and social development as large portion of government revenue is used in paying interest payments and less is spent on social services i.e. health and education. On the other hand economic growth is boost by investing in human capital and enhancing productivity. In return these social and economic elements would enhance socio-economic development.

The realization of GDP growth funded by foreign borrowings is determined by national savings and output from the borrowed funds. The persistent and smooth inflow of foreign capital is likely to be unfavorable to the compulsion for savings or to cut unnecessary expenditure by the government.

6.2 Recommendations

It is crucial to find out the basic reasons that cause external debt accumulation, and the consequent unfavorable effects on GDP growth, poverty, and income inequality. External debt strategy requires an integrated policy that focuses on the revival of GDP growth, equivalent income distribution, poverty eradication, and sustainable external debt. For efficient debt management, attention must be given to the most susceptible areas of the economy i.e., constricted or low production and narrow export base. In this connection export diversification and revival of the agriculture sector are the key areas that can ensure sustainable economic growth.

Pakistan's debt service crisis is persistently worsening since 2008 as

compared to other countries of the region, including highly indebted poor countries of the world, so reflecting the severity of country's public debt crisis. Therefore, with feasible poverty reduction plan, Pakistan should be permitted to debt relief. The eligibility conditions for debt relief may be revised from the traditional approach i.e., balance of payments indicators and other economic criteria towards higher emphasis on the measures of poverty level and income inequality. It is recommended that a sizeable portion of borrowed resources may be utilized for the development projects related to poverty reduction and agriculture sector.

Pakistan should give more attention to the governance issues. Pakistan should indulge in those activities that boost economic growth and poverty reduction. Expenditure on un-privileged sections of the society and social services may be increased.

One of the major reasons of growing external debt is the lack of fiscal responsibility of the authorities. An effective monitoring and appraisal mechanism is prerequisite to undertake fiscal policy and guard the rule of law so that the government should efficiently spend its scarce resources. Further, the government should assume more prudent policies in opting for loans from internal and external sources. The choice of lowermost cost of borrowing may be considered when the authorities decide for borrowing in order to abate the repayment of debt in the long run.

GDP growth is crucial for sustenance of the socio-economic development. Moreover creating economic prospects, all-encompassing growth confirms equal admittance of chances amongst the numerous sections of a society. Consequently, a development plan founded on the all-encompassing growth notion has two key parts: one is to produce sustainable growth; and the second is to augment economic prospects and extend equal access to opportunities in the society.

The following steps are indispensable to control the restrictions associated to social unrest:

1. The prime suggestion of the study is that poverty and income inequality may be included in the HIPC's initiatives of debt reductions goals. Both of the indicators have direct impact on governance effectiveness and socio-economic development.
2. Agriculture sector is an important contributor to the GDP in Pakistan. It engaged almost 50 per cent of the labor forces in rural areas and backings nearly 66% of merchandise exports. However, it is exceedingly reliant on major crops and weather conditions. Additional exploration and funds are required to expand the cultivated area, improve the irrigation system and crops yield.
3. The large number of the rural poor are in the farm sector that needs various targeted programs to reinstate this sector's efficiency. An extraordinary physical and social infrastructure development is required in remote areas that are relatively deprived and neglected.
4. A main obstruction to diminish poverty and disparity is the absence of tangible share of the masses in public development agendas. Therefore, the participation of the poor is necessary in all the development schemes by social mobilization and public developments. This would not only stabilize the power structure particularly in the rural regions but also would guarantee the empowerment at the grassroots.
5. The study observes that openness is not favorable in Pakistan context. Major exports of Pakistan consist of the commodities for which demand in the international market is elastic. In this connection exports diversification can play its role in balance of trade
6. Fiscal responsibilities, IFIs check on debt targets and good governance are the foremost factors for effectiveness of debt plan

7. Policy makers may guarantee the trickle-down of the benefits of borrowed funds to the masses in the pursuit or reduction in poverty and social development. New external borrowing schemes should be related with plans as per policy, which give power to the deprived and extending proper allocation to poor segments of the society.

8. In view of the Pakistan's narrow tax base, a durable poverty reduction agenda will be desirable to identify the population living below the poverty line so that they may be included in the tax base and development process.

9. Super powers interventions in the region can be reduced by making the economy self-reliant and ensuring sustainable development through good governance.

6.3 Limitations

This study intended at understanding the association between some of the indicators of poor governance and its implications for external debt in Pakistan. First constraint is incomplete time series data for income inequality. The data is available in gaps; therefore an average of the last five years has been taken for the missing years.

In addition, it is suggested that there is room available for further research on reliability of the indicators of poor economic governance and its role in deterioration of economic growth and debt sustainability in developing and low income countries.

For future analysis of public debt, it is appealing to investigate the role of poverty level and inequality in economic slowdown and debt crisis. Optimal outcomes / results may only take place in a system where good governance prevails.

References

Abbas, S., M., Ali, (2007), "Public Domestic Debt and Economic Growth in Lower Income Countries", *D-Phil Working Paper, Department of Economics, University of Oxford, United Kingdom.*

Abbas, S., M., Ali, and Jakob E. Christensen, (2007), "The Role of Domestic Debt Markets in Economic Growth: An Empirical Investigation for Low-income Countries and Emerging Markets", *IMF Working Paper, No. 07/127, June 2007.*

Abdejumobi, S. (2006), "Governance and Poverty Reduction in Africa: A Critique of the Poverty Reduction Strategy Papers (PRSPs)". *Inter-Regional Conference on Social Policy and Welfare Regimes in Comparative Perspectives. Austin.*

Agénor, P. and P. Montiel (1996), "Development Macroeconomics", *Princeton: Princeton University Press.*

Addison, T., H., Hansen, and Finn T. (2000), "Debt Relief for Poor Countries". (New York: Palgrave MacMillan).

Afxentiou, P.C. and A. Serletis, (1996), "Foreign indebtedness in low and middle-income developing countries". *Soc. Econ. Stud.*, 45(1): 131-159.

Alesina, A. (2000), "Who gives foreign aid to whom and why"? *Journal of Economic Growth*, 5 (1), 33-63.

Amoateng, K. and A.B. Amoaku, (1996), "Economic Growth, Export and External Debt Causality" The case of African countries. *Appl. Econ.*, 28: 21-27.

Anwar T (2002), "Unsustainable Debt Burden and Poverty in Pakistan". A Case for Enhanced HIPC Initiative. Discussion Paper No. 2002/53. *Pakistan Institute of Development Economics, Islamabad.*

Ahmad E (2011), "A Qualitative Analysis of Pakistan's External and Internal Debt". 16 : SE (September 2011): pp. 123-157. *The Lahore Journal of Economics.*

Ararel E (2008), "The strategic games that donors and bureaucrats play: an institutional rational choices", *JPART* 19:853-871.

Agnello, L and R. M. Sousa (2009), "The determinants of public deficit volatility". *European Central Bank, Working Paper Series, No 1042.*

Ahmad E (2011), "A Qualitative Analysis of Pakistan's External and Internal Debt". *The Lahore Journal of Economics* 16: SE (September 2011): pp. 123-157

- Ahmed, S. (2001), "Poverty Reduction and Governance in South Asia" *Mahbubul Haq Human Development Review*.vol.1 (1)
- Ahmad, E., & Ahmed, A. (1998), "A simulation analysis of debt problem in Pakistan". *Pakistan Development Review*, 37(4), 355–376.
- Ajaz, T. and Ahmed, E. (2010), "The Effect of Corruption and Governance on Tax Revenues". *The 26th AGM of PSDE 28th-30th December, 2010, Islamabad.*
- Alesina, A., Rodrik, D., (1994), "Distributive politics and economic growth". *Quarterly Journal of Economics* 109, 465–490.
- Amjad R., Kemal A. R. (1997) "Macroeconomic Policies and their Impact on Poverty Alleviation in Pakistan", *Pakistan Development Review*. 36(1): 39-68.
- Arndt, C and Charles O (2006), "Uses and Abuses of Governance Indicators". *OECD Development Center Study*.
- Anwar, T. (2006), "Poverty and Governance in Pakistan, Paper presented at the 22nd Annual General Meeting of PSDE, held in Lahore December 19-21, 2006, *Pakistan Institute of Development Economics, Islamabad.*
- Asian Development Bank (Various Years), *Annual Report*.
- Auboin M. (2004), "The Trade, Debt and Finance Nexus: at Cross-roads of Micro- and Macroeconomics. *WTO Discussion Paper No.6.*
- Barro, Robert J. and Jong-Wha Lee (2005), IMF programmes: Who is chosen and what are the effects? *Journal of Monetary Economics*, Volume 52, pp. 1245-1269.
- Burnside, C. A., and Dollar, D. (2000), "Aid, Policies and Growth". *American Economic Review*, 90: 847-868.
- Brautigam, D. A., and Knack, S. (2004), "Foreign aid, institutions and governance in Sub-Saharan Africa". *Economic Development and Cultural Change*, 52: 255-285.
- Boone, P. (1995), "Politics and the Effectiveness of Foreign Aid". *European Economic Review* 40, 289–329.
- Bilquees, F. (2003), "Analysis of budget deficits, debt accumulation, and debt instability". *The Pakistan Development Review*, Volume 42, No. 3 (Autumn), pp. 177-195.

Birdsall, N., John W. and Brian Deese (2002), "Delivering on Debt Relief: From IMF Gold to a New Aid Architecture". *Washington, DC Center for Global Development and the Institute for International Economics*.

Bullow, J. and R. Kenneth, (1990), "Cleaning up third world debt without getting to the cleaners". *J. Econ. Perspect.*, 4(1): 31-42.

Bird R, J. Martinez-Vasquez, and B. Torgler (2006), "Societal institutions and tax effort in developing countries, in the Challenge of Tax Reform in the Global Economy", edited by J Alm and J Martinez-Vazquez. Germany: Springer-Verlag.

Boone, P. (1996), "Politics and the Effectiveness of Foreign Aid". *European Economic Review* 40:2, 289-329.

Boopen, S., Kesseven, P. and Ramesh, D., (2007), "External Debt and Economic Growth: A Vector Error Correction Approach". *International Journal of Business Research*, pp 211-233.

Burnside, C., and D. Dollar (2000), "Aid, Policies and Growth," *American Economic Review*, 90(4), 847-868.

Butt, R and Javid A. Y (2013), Foreign Aid and the Fiscal Behavior of Government of Pakistan, *PIDE Working Papers* 2013: 96

Caliari, A. (2005), "The debt-trade connection in debt management initiatives: need for paradigm change in Debt and Trade: Time to Make the Connections". *Dublin, Ireland: Veritas Publication*, pp.101-122.

Carl-Johan Dalgaard, H. H. (2004), "On the Empirics of Foreign Aid and Growth". *The Economic Journal, Royal Economic Society* 114.

Carlsson, J., Smolokae, G., and van de Walle, N. (1997), "Foreign Aid in Africa; Learning from Country Experiences". *Nordiska Afrika Institutet*, Sweden.

Chong, A and M., Gradstien (2004), "Inequality and Institutions", Research Department working Paper No. 506, *Inter- American Development Bank: New York*.

Chaudhary, M. A. and Anwar S. (2000), "Foreign Debt, Dependency and Economic Growth in South Asia". *The Pakistan Development Review*, Volume 39(4), pp. 551-572.

Cline, W. (2003), "HIPC Debt Sustainability and Post-relief Lending Policy", (unpublished; *Center for Global Development and Institute for International Economics*).

Collier, P. and D. Dollar (2002), "Aid Allocation and Poverty Reduction". *European Economic Review* 46:8, 1475–1500.

Commission on Global Governance (1995), "Our Global Neighborhood". *Oxford University Press*, New York.

Crouch, R. L. (1973), "Economic Development, Foreign Aid, and Neo-classical Growth". *Journal of Development Studies* 9: 353–364.

Cuddington, John T., (1997), "Analyzing the Sustainability of Fiscal Deficits in Developing Countries", Working Paper No. 97-01, *Georgetown University, Economic Department*.

Cunningham, R.T. (1993), "The Effects of Debt Burden on Economic Growth in Heavily Indebted Nations", *Journal of Economic Development*, pp 115-126.

Chishti. S, and M. Aynul Hasan (1992), "Foreign Aid, Defense Expenditure and Public Investment in Pakistan". *The Pakistan Development Review* 31, 895–902.

Chowdhury, K., (1994), "A structural analysis of external debt and economic growth: Some evidence from selected countries in Asia and the Pacific". *Appl. Econ.*, 26: 1121-1131.

Collier, P. (1997), "The failure of conditionality. In Perspectives on aid and development, edited by C. Gwin and J. M. Nelson. Washington, DC: Overseas Development Council.

Crawford, G. (1997), "Foreign aid and political conditionality: Issues of effectiveness and consistency". *Democratization* 4:69-108.

Dalgaard, C. H. (2004), "On the Empirics of Foreign Aid and Growth". *The Economic Journal* 114:496, 191–216.

Daud S. N. M., Ahmed A. H., and Saini W. N. W., (2013), "Does External Debt Contribute to Malaysia Economic Growth? *Ekonomiska Istrazivanja Economic Research*. ISSN 1331-677X Print. Volume 26(2): 51-68.

Deininger K. and Squire L. (1998), "New Ways of Looking at Old Issues: Inequality and Growth", *Journal of Development Economics*, Vol: 57, pages 259-87.

DFID (2001), "Making Government Work for Poor People". London: Department for International Development.

Dollar D. and L. Pritchett (1998), "Assessing aid: What works, what doesn't, and why", New York: Oxford University Press.

Easterly, W (2002), "The cartel of good intentions: Problem of bureaucracy in foreign aid". *Policy Reform*, Volume 5, pp. 223-250.

Easterly, W (2003), "The political economy of growth without development: A case study of Pakistan: In Search of Prosperity: Analytic Narratives on Economic Growth edited by Dani Rodrick. Princeton: *Princeton University Press*.

Easterly, W (2002), "How Did Heavily Indebted Poor Countries Become Heavily Indebted? Reviewing Two Decades of Debt Relief," *World Development* 30 (October): 1677-1696.

Easterly, W. (2003), "Can foreign aid buy growth". *Journal of Economic Perspectives*, 17: 23-48.

Easterly, W. R. (2004), "Aid, policies and growth: Comment". *American Economic Review*, 94:774-780.

Eurodad, (2001), "Putting Poverty Reduction First". (Brussels).

Feeny, S., and M. McGillivray (2010) Aid and Public Sector Fiscal Behaviour in Failing States. *Economic Modelling* 27:5, 1006-1016.

GOP. *Economic Survey*, various issues, Finance Division, Islamabad.

Government of Pakistan (2001), "A Debt Reduction and Management Strategy, Summary Report of the Debt Reduction and Management Committee". Islamabad: Finance Division.

Gray, S. (1998), "Debt Sustainability and Developing Economies". Available via Internet.

Grindle, M. S. (2004), "Good Enough Governance: Poverty Reduction and Reform in Developing Countries". *An International Journal of Policy, Administration, and Institutions*, 17(4), 525-548.

Grindle, M.S. (2010). Good Governance: The Inflation of an Idea. *HKS Faculty Research Working Paper Series*, RWP10-023, John F. Kennedy School of Government, Harvard University.

Granger, C. W. J. (1969), "Investigating Causal Relations by Econometric Methods and Cross-sectoral Methods". *Econometrica* 37: 424-438.

Granger, C.W. and P. Newbold, (1974), "Spurious Regression in Econometrics". *Journal of Econometrics*.

Griffin, K. (1970), "Foreign Capital, Domestic Savings and Economic Development". *Bulletin of the Oxford University Institute of Economics and Statistics* 32:2, 99-112.

Haggard, S. and Kaufman R. R., (1992), "The Politics of Economic Adjustment: International Constraints, Distributive Conflicts, and the State": *Princeton University Press*.

Haq, R (2005), "Transition of Poverty in Pakistan: Evidence from the Longitudinal Data". Paper presented at the 20th Annual General Meeting and Conference of Pakistan Society of Development Economists, PIDE, Islamabad, 10-12 January.

Haq, R. and U. Zia (2006), "Governance and pro-poor growth: Evidence from Pakistan". *The Pakistan Development Review*, Volume 45(4), Part II, pp. 761-776.

Haq, R. Ahmed A., and Shafiq, S. (2010), "Variation in Quality of Life within Punjab: Evidence from MICS, 2007-08, Paper Presented at 26th AGM & Conference of PSDE, December 28-30, 2010, Islamabad.

Hasan, A. and Butt, S., (2008), "Role of Trade, External Debt, Labor Force and Education in Economic Growth Empirical Evidence from Pakistan by using ARDL Approach", *European Journal of Scientific Research*, Vol. 20 No. 4, pp 852-862.

Hasan, P. (1998), "Pakistan's Economy at the Crossroads: Past Policies and Present Imperatives". *Oxford University Press*, Karachi:

Hassan, P. (1999), "Pakistan's debt problem: Its changing nature and growing gravity". *The Pakistan Development Review*, Volume 38(4), Part I, pp.435-470.

HDR (2010), "Human Development Report, 2010". *United Nations Development Programme (UNDP)*.

Human Development Centre.(1999), "Human Development in South Asia 1999, The Crisis of Governance". *Oxford University Press*, Karachi.

Hussain, A (2000), "Poverty, Growth and Governance, chapter in, V.A. Pai Panandiker (ed.): Problems of Governance in South Asia". *Centre for Policy Research*, New Delhi.

IBRD (1992), "Governance and Development". *The World Bank*, Washington, D.C.

International Development Association. (2004) IDA's performance-based allocation system: IDA rating disclosure and fine-tuning the governance factor. Washington DC: International Development Association.

IMF-IDA (2004), "Debt Sustainability in Low Income Countries – Proposal for an Operational Framework and Policy Implications". Washington, DC.

IMF and World Bank (1996), "Debt Sustainability Analysis for the Heavily Indebted Poor Countries," Technical Report, Washington, D.C.

International Monetary Fund (2003), "Debt Sustainability in Low Income countries- Toward a Forward looking Strategy". *Prepared by the Policy Development and Review Department, SM/03/18, Washington, D.C.*

International Monetary Fund (2000), "External Debt Management in Low Income countries". *Prepared by the Policy Development and Review Department, Washington, D.C.*

Islam, M. (2005), "Regime changes, economic policies and the effect of aid on growth". *Journal of Development Studies*, 41: 1467-1492.

Iqbal, Z. (1997), " Foreign Aid and Public Sector: A Model of Fiscal Behavior in Pakistan". *The PDR*; 26:2, pp.115-129.

Ishfaq, M. (2009), "Aid Effectiveness, Debt Capacity and Debt Management in the Economy of Pakistan". *VDM*.

Ishfaq, Muhammad, and M. a. Chaudhry (1999), "Fiscal Deficits and Debt Dimensions of Pakistan". *Pakistan Development Review*, 38 (4): 1067-80.

Ismael Z. H. and Sehar R. (2011), "Governance, Decentralization and Poverty: The Case of Pakistan". *The Pakistan Development Review* 39: 4 Part II (Winter 2000) pp. 1013–1030.

Jafri, S. (2008), "External debt sustainability analysis for Pakistan: Outlook for the medium term". *SBP Working Paper Series No. 27*.

Jamal, H., (2004), "Does Inequality Matter for Poverty Reduction? Pakistan Poverty Trends". Research Report No. 58.

Kapur, D., and R. Webb (2000), "Governance-related conditionalities of the IFIs. Prepared for the XII Technical Group meeting of the Inter-governmental Group of 24 for International Monetary Affairs, Lima, Peru, March 1-3.

Kasidi F and Said A.M (2013), "Impact of External Debt on Economic Growth: A Case Study of Tanzania". *Advances in Management & Applied Economics*, vol. 3, no.4, 2013, 59-82 ISSN: 1792-7544 (print version), 1792-7552 (online) Scien press Ltd, 2013.

- Knack, S. (2001), "Aid dependence and the quality of governance: Cross-country empirical tests". *Southern Economic Journal*, 310-329.
- Karagol, E., (2002), "The causality analysis of external debt service and GNP: The case of Turkey". *Central Bank Rev.*, 2(1): 39-64.
- Khan, H., and E. Hoshino (1999), "Impact of Foreign Aid on the Fiscal Behaviour of LDC Governments". *World Development* 20: 1481-1488.
- Kaufmann, D., A. Kraay, and M. Mastruzzi (2005), "Governance Matters IV: Governance Indicators for 1996-2004". *World Bank Policy Research Working Paper* 3630.
- Kaufmann, D., Kraay A, and Zoido-Lobaton, A (1999), "Governance Matters," *World Bank Policy Research Working Paper, 2196, World Bank, Washington D.C.*
- Kaufmann, D., Kraay, A., and Mastruzzi, M. (2007). 'The Worldwide Governance Indicators Project: Answering the Critics.' *World Bank Policy Research Working Paper* 4149.
- Kaufmann, D. and A. Kraay (2002), "Growth without Governance." *World Bank Policy Research Working Paper* No. 2928. World Bank: Washington, DC.
- Kemal, A. R. (2002), "Macro Economic Policies and Poverty in Pakistan". *Pakistan Institute of Development Economics*.
- Khan, S. R. (1997), "Has aid helped in Pakistan? *Pakistan Development Review*, 36(4), 853-883.
- Khan, M. S. (2005), "Human Capital and Economic Growth in Pakistan". *The Pakistan Development Review* 44:4 Part I (Winter 2005). 455-478.
- Knack, S (2006), "Measuring Corruption in Eastern Europe and Central Asia: A Critique of the Cross-Country Indicators". *World Bank Policy Research Department Working Paper* 3968.
- Kraay, A. (2004), "When is Growth Pro-Poor? Cross-Country Evidence." *World Bank Policy Research Working Paper* 3225, World Bank: Washington, DC.
- Kraay A and Vikram N (2004), "When is External Debt Sustainable"? *World Bank Policy Research Working Paper*, No.3200, Washington, DC.
- Krugman, Paul (1988), "Financing Vs Forgiving a Debt Overhang". *Journal of Development Economics*, 29, pp. 253-268. North Holland.

- Kurtz, M. and A. Schrank. (2006), "Growth and Governance: Models, Measures and Mechanisms". *The Journal of Politics*, Vol. 69, 2, 538-554.
- Kuznets, Simon. (1955), "Economic Growth and Income Inequality". *American Economic Review* 45: 1-28.
- Lucas Robert, E., (1988), "On the Mechanics of Economic Development". *Journal of Monetary Economics*, 22: 3-42.
- Lucas, R. W. (1988), "On the Mechanics of Economic Development". *Journal of Monetary Economics*, 22:1 July.
- Mahmood T and Rauf S (2008), "The Profile of Debt Structure: Monetary and Fiscal Policies, A Case of Pakistan (1971 – 2007)". *Pakistan Economic and Social Review*. Volume 46, No. 2 (Winter 2008), pp. 201-234
- Mahmood T, Rauf S and Ahmad H.K (2008), "Public and External Debt Sustainability in Pakistan (1970s - 2000s)". *Pakistan Economic and Social Review*. Volume 47, No. 2 (Winter 2009), pp. 243-267
- Mahmood and, R. (2012), "Public Debt Sustainability; Evidence from Developing Country Volume 50, No. 1, pp. 23-40. *Pakistan Economic and Social Review*.
- Martin, M. (2002), "Debt Relief and Poverty Reduction: Do We Need a HIPC III?" Paper presented at North-South Institute Global Finance Governance Initiative Workshop, 1-2 May 2002. Montreal.
- McGillivray, M. F. (2010), "Aid and growth in small island developing states". *Journal of Development Studies*, 46: 897-917.
- McGillivray, M. F. (2006), "Controversies of the development impact of aid: it works; it doesn't; it can, but that depends". *Journal of International Development*, 18: 1031-1050.
- Mohey-ud-Din, G. (2005), "Impact of Foreign Aid on Economic Development in Pakistan [1960-2002]". *Munich Personal RePEc Archive*.
Online at <http://mpira.ub.uni-muenchen.de/1211/MPRA> Paper No. 1211, posted 19. December 2006
- Mosely, Paul, Jane Harrigan and John Toye (1991), *Aid and Power: The World Bank and Policy-Based Lending*, Volume 1. London, Routledge.
- Nasir, M., Rehman, F., and Orakzai, M. (2012), "Exploring the nexus: Foreign aid, war on terror, and conflict in Pakistan". *Economic Modelling*, 29: 1137-1145.

- North, D. C. (1990), "Institutions, Institutional Change and Economic Performance". *Cambridge: Cambridge University Press*.
- North, D. C. (1992), "Institutions, Ideology and Economic performance". *Cato Journal*, 11: 477-488. *Journal of Development Studies*, 46: 897-917.
- Pakistan, Government of (Various Issues) *Economic Survey. Finance Division, Economic Advisor's Wing, Islamabad*.
- Pasha, H. A. and A. Ghaus (2003), "Sustainability of Public Debt in Pakistan". *A Conference Paper No. 21*. Available via Internet.
- Pasha, Hafiz A.: (2000), "Elements of Good Economic Governance". *Social Policy Development Centre, Research Report No. 30*.
- Persson, T and G. Tabellini. (1994), "Is Inequality Harmful to Growth?" *American Economic Review* 84 (June): 600-21.
- Phillips, M. and Sandall, R. (2008), "Linking Business Tax Reform with Governance: How to Measure Success". *A Working Paper produced in conjunction with FIAS of the World Bank Group*.
- Qayyum U (2013), "Institutional Quality, Conflict and Aid Dependency". *PIDE Working Papers* 2013: 94.
- Qureshi *et al* (1997), "Domestic Resource Mobilization for Development in Pakistan". *The PDR*.36:4 Part II (Winter 1997) pp.891-912.
- Resnick and Regina Birner (2006), "Does Good Governance Contribute to Pro-Poor Growth? A Review of the Evidence from Cross-Country Studies". *International Food Policy Research Institute*.
- Rodrik, D. (2000), "Institutions for high-quality growth: What they are and how to acquire them", *WP#7540*, NBER.
- Rodrik, Dani (2003), "In Search of Prosperity: Analytic Narratives on Economic Growth". *Dani Rodrik. Princeton: Princeton University Press*.
- Rijckeghem, C. V., and Weder, B. (1997), "Corruption and the Rate of Temptation: Do Low Wages in the Civil Service Cause Corruption?" *IMF Working Paper 73, International Monetary Fund*.
- Rodrik, D. (1996), "Understanding Economic Policy Reform". *Journal of Economic Literature*, 34: 9-41.

Rodrik, D., Subramanian, A., and Trebbi, F. (2004), "Institutions rule: The Primacy of Institution over Geography and Integration in Economic Development". *Journal of Economic Growth*, 9 (2), 131 – 150.

Sachs, J. (2002), "Resolving the Debt Crisis of Low-Income Countries", *Brookings Papers on Economic Activity* I., pp. 257-286.

State Bank of Pakistan (2012), "Handbook of Statistics 30(2): 373-387.on Pakistan Economy2010: SBP". Retrieved 02 16, 29.

State Bank of Pakistan. *Annual Report* (Various issues). Karachi.

Sen, A.K. (1983), "On Economic Inequality". Oxford University Press.

Sen, A.K. (1983), "Development: Which way now". *Economic Journal*, 83, December.

Siddiqui, R. & Malik, A. (2001), "Debt and economic growth in South Asia". *The Pakistan Development Review*, pp 677-688.

Solow, R. W. (1970), "Growth Theory: An Exposition". *New York: Oxford University Press*.

Solow, R.M., (1956), "A contribution to the theory of economic growth". *Quarterly Journal of Economics*, 70: 65-94.

Snowdon, B and Vane, H.R (2005), "Modern Macro Economics: its origin, development and current state". *Edward Elgar Publishing Limited, UK*

Stiglitz, J. (1999), "The World Bank at the Millennium". *Economic Journal* 109:577-97.

Sun, Y. (2004), "External Debt Sustainability in HIPC Completion Point Countries", IMF Working Paper, No. 04/160.

Svensson, J. (2000a), "When is Foreign aid policy credible? Aid dependence and conditionality". *Journal of Development Economics*, 61: 61-84.

Svensson, J. (2000b), "Foreign aid and rent seeking". *Journal of International Economics*, 51: 437-461.

Tahir P (1998), "The Debt of the Nation". *The Pakistan Development Review*.37: 4 Part II (Winter 1998) pp. 37:4, 331–353

Thomas, M. A. (2006), "What Do the Worldwide Governance Indicators Measure?" *Manuscript, Johns Hopkins University*.

- Thomas M.A. (2009), "What Do the Worldwide Governance Indicators Measure?" *European Journal of Development Research* (2010) 22, 31-54. doi:10.1057/ejdr.2009.32, published online 16 July 2009
- Tokunaga, Y. Ichiro Akimune (1988), "Diagnosis and Prescription for Debt Problem: Partial Debt Relief Indispensable". *Japan Economic Research Center*.
- UNDP (1997), "Governance for Sustainable Human Development; Management and Governance". Division, Bureau for policy and program Support; New York.
- World Bank (various years). *World Development Report*. Oxford University Press.
- World Bank (2005), "Governance Indicators: 1996-2004". *Washington DC: World Bank*. Available HTTP: <http://info.worldbank.org/governance/kkz2004/tables.asp>
- World Bank. (2006a) Strengthening Bank Group engagement on governance and anti-corruption. Washington DC: World Bank.
- Waheed, A., (2006), "Sustainability and Determinants of 2: 111-120. Domestic Public Debt of Pakistan". *Discussion Paper, 22*. Ng, S. and P. Perron, 2001. *Lag Length Selection and* 137: 1-17.
- Weiss P. (1969), "The Living System: Determination Stratified". In A. Koestler & J.R. Smythies (Eds), *beyond reduction*. Pp. 3-42. Boston: Beacon.
- World Development Report (2006), "On Equity and Development". *World Bank and OUP*, New York, 2005.
- Zaman A. (2001), "The Economics of Stateless Nation: Sovereign Debt and Popular Well-being in Pakistan". *The PDR*. 40:4 Part-II. pp. 1121 - 1134.

Appendix-A

Summary of Descriptive Statistics

Variables	N	Mean	SD	Min	Max
GDP	41	3827039	5651904	61414	21616043
External Debt (ED)	41	1404296	1629432	45125	5629050
ED Services	41	72908.44	78696.29	1928	2810001
Current Account Deficit	41	119813.7	191059.1	1434	885896
Private Savings	41	484310.8	597015.8	6310	1880596
Openness	41	0.287317	0.104595	0.02	0.42
Budget Deficit	41	236230.9	346268.9	6327	1369704
Primary Deficit	41	74114.56	125752.9	2200	496300
Gini Coefficient	41	37.62	7.96	30.2	69
Poverty	41	34.29	14.48	22	74
Defence Expenditure	41	126623.2	132640.2	4440	507159
Foreign Reserve	41	324052.9	470084.6	3990	1703575
Agri Cultivated Area	41	21.01	0.99	19.5	22.65
Unemployment	41	1.85	1.13	0.6	3.65
Exchange Rate	41	37.64	27.7	9.9	105

Appendix-B

Indicators of Fiscal Responsibility and Debt Limitation Act 2005.

Year	Revenue Deficit (% of GDP)	Public Debt (% of GDP)	Poverty Exp. (% of GDP)	Edu+Health Exp. (% of GDP)
2004-05	3.3	65.8	4.81	2.37
2005-06	4.3	59.9	4.93	2.31
2006-07	4.3	58.3	4.89	2.37
2007-08	7.6	60.1	9.70	2.37
2008-09	5.2	62.3	7.46	2.36
2009-13	4.9	61.7	6.01	2.34

Appendix-C

Variable

Sources of Data

GDP growth	Economic Survey, Hand Book of Statistics
Budget Deficit	Economic Survey, Hand Book of Statistics
Primary Deficit	Economic Survey, Hand Book of Statistics
External debt	Economic Survey, Hand Book of Statistics
External debt services	Economic Survey, Hand Book of Statistics
Current Account Deficit	Economic Survey, Hand Book of Statistics
Private Savings	Economic Survey, Hand Book of Statistics
Openness	Economic Survey, Hand Book of Statistics
Income Inequality	Economic Survey, Jamal (2004) Pakistan Integrated Household Survey
Poverty	Economic Survey, Hand Book of Statistics Jamal (2004)
Defence Expenditure	Economic Survey, Hand Book of Statistics
Foreign Exchange Reserve	Economic Survey, Hand Book of Statistics
Agriculture Cultivated Area	Economic Survey, Hand Book of Statistics
Unemployment	Economic Survey, Hand Book of Statistics
Exchange Rate	Economic Survey, Hand Book of Statistics

Hedis
Urban

Appendix-D

Year	Gini-Coefficient [%]	Poverty [in million]
1973	30.64	31
1974	31.1	30
1975	31.55	29
1976	32	28
1977	32.44	27
1978	32.88	26
1979	33.31	25
1980	33.73	24
1981	34.14	24
1982	34.55	23
1983	34.96	23
1984	35.36	22
1985	35.75	22
1986	36.13	22
1987	36.5	22
1988	36.88	22
1989	37.24	22
1990	37.6	22
1991	37.95	23
1992	38.3	24
1993	38.64	25
1994	38.97	26
1995	39.29	27
1996	39.61	29
1997	39.93	31
1998	40.23	33
1999	40.54	35
2000	40.83	38
2001	41.12	41
2002	41.4	44
2003	41.7	48
2004	41	35
2005	29	34
2006	30	46
2007	36.62	53
2008	29	58
2009	33.12	40
2010	29.6	65
2011	29.6	61
2012	31.58	72
2013	30.58	74

Appendix-E

Dependent Variable: ED
 Method: Least Squares
 Date: 10/21/14 Time: 22:59
 Sample: 1973 2013
 Included observations: 41

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-2326884.	565957.3	-4.111413	0.0002
SIG	1.309604	0.607103	2.157137	0.0379
TO	1734451.	902318.7	1.922215	0.0627
PD	2.852778	1.489928	1.914709	0.0637
POV	63303.15	14772.74	4.285133	0.0001
G	18435.56	13721.49	1.343554	0.1877
R-squared	0.900454	Mean dependent var		1404296.
Adjusted R-squared	0.886233	S.D. dependent var		1629432.
S.E. of regression	549598.1	Akaike info criterion		29.40622
Sum squared resid	1.06E+13	Schwarz criterion		29.65699
Log likelihood	-596.8275	F-statistic		63.31890
Durbin-Watson stat	1.810236	Prob(F-statistic)		0.000000

Appendix-F

Dependent Variable: GDP
 Method: Least Squares
 Date: 10/21/14 Time: 23:00
 Sample: 1973 2013
 Included observations: 41

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-6767166.	1805750.	-3.747565	0.0006
SIG	5.012181	1.937029	2.587560	0.0140
TO	753030.4	2878949.	0.261564	0.7952
BD	19.60422	4.753782	4.123921	0.0002
POV	144825.4	47134.08	3.072626	0.0041
G	89242.98	43779.96	2.038444	0.0491
R-squared	0.915772	Mean dependent var		3827039.
Adjusted R-squared	0.903739	S.D. dependent var		5651904.
S.E. of regression	1753554.	Akaike info criterion		31.72665
Sum squared resid	1.08E+14	Schwarz criterion		31.97741
Log likelihood	-644.3963	F-statistic		76.10768
Durbin-Watson stat	1.970808	Prob(F-statistic)		0.000000

Hedley
Chan

Appendix-F

Dependent Variable: GDP
Method: Least Squares
Date: 10/21/14 Time: 23:00
Sample: 1973 2013
Included observations: 41

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-6767166.	1805750.	-3.747565	0.0006
SIG	5.012181	1.937029	2.587560	0.0140
TO	753030.4	2878949.	0.261564	0.7952
BD	19.60422	4.753782	4.123921	0.0002
POV	144825.4	47134.08	3.072626	0.0041
G	89242.98	43779.96	2.038444	0.0491

R-squared	0.915772	Mean dependent var	3827039.
Adjusted R-squared	0.903739	S.D. dependent var	5651904.
S.E. of regression	1753554.	Akaike info criterion	31.72665
Sum squared resid	1.08E+14	Schwarz criterion	31.97741
Log likelihood	-644.3963	F-statistic	76.10768
Durbin-Watson stat	1.970808	Prob(F-statistic)	0.000000

Appendix-G

Dependent Variable: POVERTY
 Method: Least Squares
 Date: 03/29/14 Time: 14:53
 Sample: 1973 2013
 Included observations: 41

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	102.2378	40.44825	2.527619	0.0160
EDS	8.60E-05	2.54E-05	3.388590	0.0017
ACA	-4.976295	2.076387	-2.396612	0.0219
UR	7.665089	2.277189	3.366031	0.0018
G	0.430226	0.157677	2.728524	0.0098
R-squared	0.789151	Mean dependent var		34.29268
Adjusted R-squared	0.765723	S.D. dependent var		14.48317
S.E. of regression	7.010161	Akaike info criterion		6.846448
Sum squared resid	1769.125	Schwarz criterion		7.055420
Log likelihood	-135.3522	F-statistic		33.68460
Durbin-Watson stat	1.679926	Prob(F-statistic)		0.000000

Appendix-G

Dependent Variable: POVERTY

Method: Least Squares

Date: 03/29/14 Time: 14:53

Sample: 1973 2013

Included observations: 41

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	102.2378	40.44825	2.527619	0.0160
EDS	8.60E-05	2.54E-05	3.388590	0.0017
ACA	-4.976295	2.076387	-2.396612	0.0219
UR	7.665089	2.277189	3.366031	0.0018
G	0.430226	0.157677	2.728524	0.0098
R-squared	0.789151	Mean dependent var		34.29268
Adjusted R-squared	0.765723	S.D. dependent var		14.48317
S.E. of regression	7.010161	Akaike info criterion		6.846448
Sum squared resid	1769.125	Schwarz criterion		7.055420
Log likelihood	-135.3522	F-statistic		33.68460
Durbin-Watson stat	1.679926	Prob(F-statistic)		0.000000

Appendix-H

Dependent Variable: G
Method: Least Squares
Date: 09/25/14 Time: 23:29
Sample: 1973 2013
Included observations: 41

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	34.36151	1.017088	33.78420	0.0000
ED	5.25E-06	2.24E-06	2.342988	0.0248
GDP	2.36E-06	5.59E-07	4.223183	0.0002
RES	-2.36E-05	5.41E-06	-4.363661	0.0001
PRSAV	-1.13E-05	4.89E-06	-2.320310	0.0261
R-squared	0.730452	Mean dependent var		37.62659
Adjusted R-squared	0.700503	S.D. dependent var		7.966965
S.E. of regression	4.360030	Akaike info criterion		5.896684
Sum squared resid	684.3550	Schwarz criterion		6.105656
Log likelihood	-115.8820	F-statistic		24.38927
Durbin-Watson stat	1.969203	Prob (F-statistic)		0.000000

Appendix-H

Dependent Variable: G
Method: Least Squares
Date: 09/25/14 Time: 23:29
Sample: 1973 2013
Included observations: 41

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	34.36151	1.017088	33.78420	0.0000
ED	5.25E-06	2.24E-06	2.342988	0.0248
GDP	2.36E-06	5.59E-07	4.223183	0.0002
RES	-2.36E-05	5.41E-06	-4.363661	0.0001
PRSAV	-1.13E-05	4.89E-06	-2.320310	0.0261

R-squared	0.730452	Mean dependent var	37.62659
Adjusted R-squared	0.700503	S.D. dependent var	7.966965
S.E. of regression	4.360030	Akaike info criterion	5.896684
Sum squared resid	684.3550	Schwarz criterion	6.105656
Log likelihood	-115.8820	F-statistic	24.38927
Durbin-Watson stat	1.969203	Prob (F-statistic)	0.000000

Handwritten notes:
Models
 (check)

Appendix-I

Pair wise Granger Causality Tests

Sample: 1973 2013

Lags: 2

Null Hypothesis:	Obs	F-Statistic	Probability
POV does not Granger Cause G	39	5.97445	0.00598
G does not Granger Cause POV		0.87886	0.42448
ED does not Granger Cause G	39	4.79032	0.01469
G does not Granger Cause ED		2.07014	0.14178
POV does not Granger Cause PD	39	2.69262	0.08212
PD does not Granger Cause POV		2.58994	0.08976
ED does not Granger Cause PD	39	8.69417	0.00089
PD does not Granger Cause ED		0.01901	0.98118
ED does not Granger Cause POV	39	11.3041	0.00017
POV does not Granger Cause ED		3.92431	0.02928
ED does not Granger Cause SIG	39	2.35686	0.11001
SIG does not Granger Cause ED		26.3660	1.2E-07
ED does not Granger Cause TO	39	0.02269	0.97758
TO does not Granger Cause ED		0.39056	0.67968
POV does not Granger Cause G	39	5.97445	0.00598
G does not Granger Cause POV		0.87886	0.42448
SIG does not Granger Cause G	39	0.61349	0.54735
G does not Granger Cause SIG		7.29846	0.00231
GDP does not Granger Cause G	39	9.16531	0.00066
G does not Granger Cause GDP		6.07821	0.00554
GDP does not Granger Cause PD	39	16.3467	1.1E-05
PD does not Granger Cause GDP		10.6154	0.00026
GDP does not Granger Cause POV	39	7.66853	0.00178
POV does not Granger Cause GDP		9.25442	0.00062
GDP does not Granger Cause SIG	39	2.17464	0.12920
SIG does not Granger Cause GDP		10.8313	0.00023
GDP does not Granger Cause TO	39	0.05173	0.94966

Appendix-I

Pair wise Granger Causality Tests

Sample: 1973 2013

Lags: 2

Null Hypothesis:	Obs	F-Statistic	Probability
POV does not Granger Cause G	39	5.97445	0.00598
G does not Granger Cause POV		0.87886	0.42448
ED does not Granger Cause G	39	4.79032	0.01469
G does not Granger Cause ED		2.07014	0.14178
POV does not Granger Cause PD	39	2.69262	0.08212
PD does not Granger Cause POV		2.58994	0.08976
ED does not Granger Cause PD	39	8.69417	0.00089
PD does not Granger Cause ED		0.01901	0.98118
ED does not Granger Cause POV	39	11.3041	0.00017
POV does not Granger Cause ED		3.92431	0.02928
ED does not Granger Cause SIG	39	2.35686	0.11001
SIG does not Granger Cause ED		26.3660	1.2E-07
ED does not Granger Cause TO	39	0.02269	0.97758
TO does not Granger Cause ED		0.39056	0.67968
POV does not Granger Cause G	39	5.97445	0.00598
G does not Granger Cause POV		0.87886	0.42448
SIG does not Granger Cause G	39	0.61349	0.54735
G does not Granger Cause SIG		7.29846	0.00231
GDP does not Granger Cause G	39	9.16531	0.00066
G does not Granger Cause GDP		6.07821	0.00554
GDP does not Granger Cause PD	39	16.3467	1.1E-05
PD does not Granger Cause GDP		10.6154	0.00026
GDP does not Granger Cause POV	39	7.66853	0.00178
POV does not Granger Cause GDP		9.25442	0.00062
GDP does not Granger Cause SIG	39	2.17464	0.12920
SIG does not Granger Cause GDP		10.8313	0.00023
GDP does not Granger Cause TO	39	0.05173	0.94966

Head's
 (chan)

TO does not Granger Cause GDP		0.76393	0.47366
DEF does not Granger Cause BD	39	5.15080	0.01112
BD does not Granger Cause DEF		4.33364	0.02106
ED does not Granger Cause BD	39	5.03026	0.01220
BD does not Granger Cause ED		1.94664	0.15834
ER does not Granger Cause BD	39	2.48408	0.09842
BD does not Granger Cause ER		6.04252	0.00568
RES does not Granger Cause BD	39	18.0746	4.5E-06
BD does not Granger Cause RES		0.55894	0.57698
EDS does not Granger Cause POV	39	9.38731	0.00057
POV does not Granger Cause EDS		4.27307	0.02211
ACA does not Granger Cause POV	39	4.21472	0.02316
POV does not Granger Cause ACA		0.09494	0.90967
UR does not Granger Cause POV	39	1.01558	0.37292
POV does not Granger Cause UR		1.18239	0.31884
RES does not Granger Cause G	39	8.39824	0.00109
G does not Granger Cause RES		0.06382	0.93828
PRSAV does not Granger Cause G	39	11.0777	0.00020
G does not Granger Cause PRSAV		4.16781	0.02405
GDP does not Granger Cause ED	39	1.91190	0.16336
ED does not Granger Cause GDP		3.01283	0.06243
GDP does not Granger Cause PRSAV	39	2.56779	0.09150
PRSAV does not Granger Cause GDP		15.1018	2.0E-05
DEF does not Granger Cause BD	39	5.15080	0.01112
BD does not Granger Cause DEF		4.33364	0.02106
G does not Granger Cause BD	39	17.6532	5.5E-06
BD does not Granger Cause G		10.5311	0.00028
ER does not Granger Cause BD	39	2.48408	0.09842
BD does not Granger Cause ER		6.04252	0.00568

Appendix-J

Engel-Granger Test Results for Cointegration

Equation	τ - value	Critical value (1%)	Durbin-W	Prob	R2	Results	
						Cointegration	No Cointegration
External Debt	-6.17	-2.5899	1.99	0000	.43	√	
GDP	-6.12	-2.5899	1.94	0000	.51	√	
Budget Deficit	-5.29	-2.5899	1.92	0000	.42	√	
Poverty	-5.50	-2.5899	1.94	0000	.48	√	
Inequality	-6.33	-2.5899	2.00	0000	.44	√	
Primary Deficit	-6.03	-2.5899	1.98	0000	.48	√	

Appendix-K

Table-5.1: ADF Test Results at Level

Variables	Intercept		Intercept and trends		None	
	T-test	P-value	T-test	P-value	T-test	P-value
Pov	0.2901	0.9739	-1.4511	0.8254	1.8790	0.9833
ED	2.8218	1.0000	0.0506	0.9956	4.4379	1.0000
EDS	3.7303	1.0000	-3.1711	0.1047	4.6265	1.0000
GDP	3.9150	1.0000	3.4873	1.0000	4.0699	0.9999
ACA	-1.222	0.6551	-1.7699	0.7005	1.4822	0.9636
UR	-0.8078	0.8060	-2.6167	0.2754	0.6127	0.8446
G	-2.0578	0.2621	2.2407	1.0000	2.3524	0.9943
FER	-0.2250	0.9268	-1.7168	0.7251	0.5161	0.8229
PrSav	-1.4402	0.5503	-1.9664	0.5961	-1.6584	0.0912
SIG	1.1895	0.9974	-1.0559	0.9210	2.4119	0.9951
TO	-2.5785	0.1057	-3.4707*	0.0565	-0.4008	0.5328
BD	4.0300	1.0000	2.3159	1.0000	4.7789	1.0000

Note: * and ** denotes 5% and 1% level respectively

Appendix-L

Table-5.2: ADF Test Results at First Difference

Variables	Intercept		Intercept and trends		None	
	T-test	P -value	T-test	P-value	T-test	P -value
Pov	-5.4042	0.7475	-3.8260*	0.0280	0.2502	0.7522
ED	-4.6868**	0.0005	-2.0223	0.5660	3.4380	0.9997
EDS	-5.4042**	0.0001	-6.2749**	0.0001	-7.5464**	0.0000
GDP	2.3370	0.9999	-1.6940	0.7305	2.4329	0.9962
ACA	-5.7664**	0.0000	-5.7422**	0.0002	-5.5235**	0.0000
UR	-7.4919**	0.0000	-7.4257**	0.0000	-7.2662**	0.0000
G	-5.4693**	0.0000	-5.5405**	0.0004	-1.0221	0.2689
FER	-4.9341**	0.0003	-4.9848**	0.0014	-4.9254**	0.0000
PrSav	0.1048	0.9612	-1.6080	0.7671	1.2007	0.9376
SIG	-7.0914**	0.0000	-5.9153**	0.0002	-6.2569**	0.0000
TO	-10.5013	0.0000	-10.3586**	0.0000	-10.6413**	0.0000
BD	0.7283	0.9908	-0.7260	0.9616	1.3859	0.9551

Note: * and ** denotes 5% and 1% level respectively

Head's
(char)

Appendix-M

Table-5.3: ADF Test Results at 2nd Difference

Variables	Intercept		Intercept and trends		None	
	T-test	P -value	T-test	P-value	T-test	P -value
Pov	-3.7636**	0.0080	-3.7620*	0.0332	-3.9028**	0.0003
ED	-5.2708**	0.0002	-5.5745**	0.0004	-10.4731**	0.0000
EDS	-3.9271**	0.0055	-3.7601*	0.0339	-3.6214**	0.0008
GDP	-3.0267*	0.0391	-3.2346	0.0458	0.6056	0.8420
ACA	-6.9459**	0.0000	-6.8345**	0.0000	-7.0474**	0.0000
UR	-9.0485**	0.0000	-8.9138**	0.0000	-9.1792**	0.0000
G	-3.8032**	0.0072	-4.0064**	0.0194	-3.6866**	0.0006
FER	-5.2489**	0.0001	-5.1930**	0.0000	-5.1930**	0.0010
PrSav	-4.9809**	0.0003	-4.9264**	0.0020	-0.6731	0.4167
SIG	-4.3601**	0.0019	-3.7790*	0.0326	-4.5840**	0.0000
TO	-9.8279**	0.0000	-9.5617**	0.0000	-9.9825**	0.0000
BD	-6.2138**	0.0000	-6.4844**	0.0000	-6.8910**	0.0000

Note: * and ** denotes 5% and 1% level respectively