
TAXES AND ECONOMIC GROWTH: AN EMPIRICAL ANALYSIS OF PAKISTAN

Shahzad Ahmad

(Corresponding Author)

Lecturer, Department of Economics, Government
Postgraduate College Samanabad, Faisalabad, Pakistan
E-mail: shahzadahmaddddd4@gmail.com

Dr Maqbool H.Sial

Professor and Dean Social sciences,
University of Sargodha, Sargodha, Punjab, Pakistan
E-mail: maqsial@yahoo.com

Dr. Nisar Ahmad

Assistant Professor and Incharge
Department of Economics
University of Sargodha, Sub-Campus Bhakkar,
Bhakkar, Punjab, Pakistan
E-mail: nisarahmad_25@hotmail.com

ABSTRACT

The study empirically investigates the relationship between total tax revenues and economic growth in Pakistan. For estimation annual time series data from 1974 to 2010 is used. The main purpose of the research is to find long run and short run relationship in-between total tax revenues and economic growth. Auto Regressive Distributed Lag (ARDL) bounds testing approach for co-integration, is applied to estimate, the long run and short run relationship, among the variables. Total tax revenues have negative and significant effect, on economic growth, in long run. Due to one percent increase in total taxes, economic growth would decreased by -1.25 percent. ECM coefficient of total taxes shows 51 percent speed of adjustment in a year. According to research results, it is imperative to decrease the indirect taxes and to increase the direct taxes, if we want to augment economic growth. Currently contribution of direct taxes, out of whole tax revenues, is only 33 percent, and the share of indirect taxes is 63 percent, while it should be reversed, if economic growth has to increase.

Keywords: Taxes, ARDL, Economic Growth

JEL Classification C50, E62.E22, H20

1. Introduction

The thought that taxes change economic growth, has grown to be politically arguable and the question of much debate in the press and among advocacy groups. That is in part because there are contending theories about what motivate economic growth. Some donate to Keynesian, demand-side elements, others Neo-classical supply-side factors, while yet others donate to some combination of the two or something exclusively unique. (McBride, 2012).

In ordinary sense tax is a compulsory payment to government by the public, in exchange for the services indirectly to public by the government. Basic objective of tax systems is to finance public expenditures. Tax system also plays a vital role in achieving the other targets like equity, social and economic improvement in any economy. A well organized, efficient and effective tax system is a necessary requirement for economic growth. Taxes determine the level and speed of economic growth in countries of the globe (Omojemite and Godwin 2012). Countries with organized and stable taxation system grow rapidly, over the period compared, with those countries, not have such good individualities.

Taxation system plays a very important role, to meet developmental and non-developmental expenditures, and ultimately to augment economic growth. Taxation, effects production and growth. It is analyses by Oduola (2006), that government revenue, at some time is motivated by the changes in tax base, tax policies and tax rates. Taxes impedes, household's ability to work, will to work, decisions to save, consumption, labor supply and investment. Tax system of any country also interfere the allocation of resources.

Historically, for the initial few decades the tax system of Pakistan remained constant because Pakistan inherited its taxation system from British in the form of government of India act 1935. Since from the inception of Pakistan, country had been relying on foreign resources like IMF, WB, International donors etc. as well as on domestic resources like state bank of Pakistan (in form of deficit financing) and other financial institutions located in Pakistan and from public, due to shortage of funds to run the economy of Pakistan. The tax to GDP ratio of Pakistan in 1950's was 5 percent then in 1960's it rose to 9 percent. Government took action to broaden the tax base, to improve the tax laws, to eliminate corruption, and to bring improvement in tax administration. Pakistan's tax system was facing structural problems like much reliance on indirect taxes and taxes on international trade. Since 1947 Pakistan's tax system needed tax reforms seriously to improve its economic status. Serious efforts regarding taxation reforms were started in 1990's and initially the introduction of withholding tax. (Dr Ishrat Hussein, 2009)

Tax to GDP ratio is a best and comprehensive indicator to check the tax revenue status in any country. Tax to GDP ratio in Pakistan is 9.75 percent. Tax to GDP ratio in Finland is 57 %, in Denmark and Norway is 55.6 %, 55.4% succeedingly.

In Pakistan, situation is very bad even in comparison to Asian economies, like in Nepal it is 19.9 percent, in Taiwan 15.1 percent, in Singapore 15 percent and in Sri Lanka, it is 12.3 percent, while tax to GDP ratio in Sudan, Burma, Cuba, and in Nigeria, it is less than Pakistan's tax to GDP ratio. Tax to GDP ratio, in Pakistan is similar to sub-Saharan African countries. So ultimately, the situation of Pakistan, in this scenario is worse as compared to other countries.

Pakistan's tax system has many drawbacks. Tax system is rarely based on Cannons of taxation, like Principle of equality, certainty, convenience, economy, productivity, elasticity, simplicity and cannon of co-ordination. Income tax has limited base. Only less than 2.5 million people pay income tax out of 190 millions populations. Corruption and tax evasion is common. Tax officials has unlimited discretionary powers, which is a source of corruption. There are many exemptions and rebates for rich people. Income tax system has complicated formulas, which are unable to understand by the more than 40 percent illiterate public of Pakistan. In order to tax evasion people keep their money in the form of jewelry, dollars and in form of commodities. Bureaucratic hurdles, official formalities, red tapism are reasons of low tax collection and tax evasion.

Objectives of this study are to (i) investigate the impact of total taxes taxes on economic growth (ii) verify how much economic growth is influenced by total taxes taxes, in the long period and in short period

The structure of the paper is as follows. Section 2 provides an overview of the literature on taxation and growth relationship. Section 3 describes the dataset and methodology. Our empirical results are presented in Section 4, at the end, conclusion and policy recommendations, are mentioned in Section 5.

2. Review of Literature

In taxes and growth relationship, mostly studies were available, from USA, European countries and OECD countries. If we compare Pakistan, with all those countries, the share of research work on the topic of taxation, related to Pakistan, is very less. So, there is much space, to fill with productive research, related to this topic, in Pakistan.

Solow (1956) presents, an open up study, about taxes and growth association. It is inspected in his new classical growth model, that taxes have no effect on steady state growth, while income tax has negative impact, on economic allocation.

Romer (1986) precise, in his manifestation, that government expenditures and policy of taxes have a stable long period growth effect. In tax and growth relationship, meeting point is on the past facts of United States tax variation, from 1945–2007. Study results illustrates, that exogenously augmentation of taxes, reduces deficit in budgets and diminishes growth, and high income tax turn down, enduring rate of economic growth.

Dua.et al. (2000) uses the macroeconomic model of green and murinde (1993) to India and Korea, using fiscal and financial variables to check the effect of diverse monetary variables on growth. They conclude that income tax has negative and significant effect on GDP, while Export taxes have negative and significant effect. Income taxes, government expenditures and overseas capital inflow has the common impacts in both countries, while currency provisions, overseas funds, interest rates and monetary liberalization have not common impacts in both countries.

Koch et al. (2005) examine the taxes and economic growth relationship by applying two stage modeling approach, by using time series data from 1960 to 2002. GDP growth rate (real), GDP (nominal), nominal taxes size (partition of direct taxes and indirect taxes) are major variables of the study. Outcomes

demonstrate that affect of taxes on growth is different than developed countries. In South Africa, negative tax mix elasticity is calculated, which is a point of difference than developed countries. Empirical evidence shows, that tax distortions are severe in South Africa. Decrease in indirect taxes relative to direct taxes, is a reason of increasing economic growth.

Lea and Gordon (2005) conceive, how tax strategies affect the growth of country, by means of both cross sectional and time series information between 1970-1997. They observe, that the company tax rate is negatively connected, with growth in a cross section fact of seventeen nations, managing for other economic growth stimulators and tax variables. According to estimates, by reducing commercial tax by ten percent, increase yearly growth rate by approximately 1.1 percent, while in permanent effect regressions, increase in corporate tax rates gives the low growth rate, in future, within countries.

Arnold (2008) elaborates the association amid tax structure and Growth for 21 OECD countries, foundation on, yearly facts for 1971-2004, using an Error-Correction model (ECM) to know the results of diminutive term. Outcomes of the study demonstrate that income tax has a harmful affect on growth, as compared to the consumption and property taxes. Property taxes have an optimistic impact on economic growth, and especially recurrent taxes on immovable property have good positive impact on economic growth. Consumption taxes and personal income taxes have also positive impact on growth.

Brasovenu and Brasovenu (2008) check the existence of relationship, between financial policy and economic growth, in Romania, by using time series data starting 1990 to 2007. When they tested the effect of fiscal policy on economic growth, they found that distortionary and non-distortionary fiscal revenues, give a harmful association to real GDP growth rate.

Johanson et al. (2008) investigate that, what kind of tax package could be helpful to augment economic growth, focusing on tax structure instead of tax levels in 21 OECD countries, based on annual data for 1971-2004. Bottom-up approach is used. Results illustrate, that commercial taxes have a harmful effect on economic growth. Personal income taxes and consumption taxes have also harmful effect on economic growth. Recurrent taxes on immovable property have least impact on economic growth.

Arisoy and Unlukaplan (2010) examine the effect of direct-indirect tax composition on economic growth. For this purpose, they take time series data, from 1968-2006 for Turkish economy, by applying Feeder Model. To check the importance, in-between direct and indirect taxes they find that indirect taxes are significantly positively correlated, with economic growth. They finally conclude, that share of indirect taxes should be more than that of direct taxes, if there is planning to augment economic growth.

Mashkoar et al. (2010) examine the association among tax revenues and the speed of economic growth, for Pakistan by taking annual data, from 1973 to 2008 and applying ARDL approach. They further analyze the connection among total tax revenues, direct taxes, gross home savings and pace of economic growth. The direct tax to gdp ratio, significantly reasoned the real gdp growth. Findings show, that high stage of direct taxes would augment the real economic growth. Further coefficient of error correction term, indicates low speed of convergence, in long run.

Taha et al. (2011) use time series data from 1970 to 2009 with 40 observations, related to Malaysian economy to check the association amid government revenues and economic growth. They examine the causal relationship, between these two variables, both in short run and long run. Result show that there is a unidirectional connection between economic growth and tax revenues. Economic growth is not affected by changes in taxation, while increase in economic growth promotes tax revenues. They also find, 21 percent rapidity of modification, in short run to reach stability level in the long run.

Keho (2011) analyzes the relationship, between different taxes and output in Cote d'Ivoire by applying ARDL approach, during the period 1960-2006. Outcomes of the research demonstrate that all variables are co integrated in the long run, except real gdp and direct taxes. All taxes except direct taxes have a positive link with economic growth. As a policy recommendation study suggests, the transformation of direct taxes into indirect taxes, to augment economic growth.

3. Data and Methodology

The annual time series data for 37 years (1974-2010) were used. The data were obtained from Economic Surveys of Pakistan and handbook of Statistics on Pakistan's economy (SBP). Computer programs like E-views and Micro fit were used, for all kind of model's Estimations, and for diagnostic tests and graphs.

3.1. Depiction of the Variables

Four variables used in the study including Gross Domestic Product, they are as:-

1. LnGDP (Real GDP per capita) is a dependent variable, real GDP growth per capita was bring into play as a substitute (proxy) for economic growth. To convert the nominal GDP into real GDP, nominal GDP was divided with CPI (consumer price index), and then real GDP was divided on total population of Pakistan to get real GDP per capita.
2. LnTTR (Total Tax Revenue) Total tax revenues is a combination of direct and indirect taxes. Total tax revenues were divided into nominal GDP (at market price); to convert it into total tax revenues to GDP ratio form. Total taxes to GDP ratio form was converted into percentage form by multiplying by 100. Then it was transformed into natural log form.
3. LnHCP (Human Capital) Primary school enrollment ratio was employed as a proxy (substitute) for human capital (PSER). No's of primary school enrollment was divided into total population of Pakistan, as $HCP = PSER / POP$. Human capital formation to population ratio form, was converted into percentage form, by multiplying by 100 and then it was converted into natural log form.
4. LnIMP (Imports) Total imports of Pakistan's were divided by nominal GDP (at market price); as IMP / GDP to get the imports to GDP ratio form. Imports to GDP ratio form was converted into percentage form by multiplying by 100 and then it was converted into natural log form.

3.2 Stationarity Check

Initially the order of integration and stationary of the variables is tautened by means of the Augmented Dickey-Fuller (ADF) test and Philips Peron (PP) test. If the variables are integrated at (0) or (1) or the combination of both, then the ARDL (Autoregressive distributed lag model) industrialized by Pesaran, et al. (2001) can be applied to determine co-integration for analyzing the long run association among variables. If the variables show the co integration association, in the long run, then next step is to apply the error correction mechanism (ECM) for analyzing the short run dynamics of the variables.

In case the time series data is not stationary, afterward the OLS technique can not be appropriate to investigate the data (Thomas, 1997). In the same way, In case the data are not stationary then it would create faults, like autocorrelation, spurious regression (Gujarati, 2005). So to apply OLS technique it is imperative, for the time series, to be stationary. Stationary series is that, whose variable has same mean and variance, across time.

Dickey and Fuller (DF) (1979, 1981) developed a practice to test for non-stationarity. The key insight of their test is that checking for non-stationarity that is equivalent to testing for the existence of a unit root. Augmented Dickey-Fuller (ADF) is an extension of Dickey-Fuller. In augmented Dickey-Fuller version, extra lagged terms of the dependent variable are included, to eliminate autocorrelation.

Phillips and Perron discovered a latest and comprehensive test, of unit root non-stationarity. These tests are like to ADF tests, but they incorporate an automatic correction, to the DF test to allow for auto linked residuals. Infact it is nonparametric analysis, as a substitute to ADF test.

3.3 Cointegration

Co integration means the survival of a long run equilibrium association amid time series variables. The idea of co integration was commenced by Granger (1981) and Engle and Granger (1987). The basic idea underlying the concept of co-integration is to identify the equilibrium in the long run, or a long run association amid the variables.

If the linear combination of two non- stationary I(1) series, Y and X, are such that the residuals of the regression are stationary, errors have tendency to disappear and return to zero i.e. are I(0), then the variables are co integrated.

$$Y_t = \beta_0 + \beta_1 X_t + u_t \quad (1)$$

$$u_t = Y_t - \beta_0 - \beta_1 X_t \quad (2)$$

$$u_t = I(0) \quad (3)$$

3.4 Specification of the Model

A model has been managed on which ARDL bounds testing technique, improved by Pesaran et al. (2001) is used. A mathematical equation for the models is as:-

$$GDP = \beta_0 + \beta_1 TTR + \beta_2 HCP + \beta_3 IMP + \varepsilon_t \dots \dots \dots (1)$$

Above mentioned equation was converted into natural Log form as:

$$\ln GDP = \beta_0 + \beta_1 \ln TTR + \beta_2 \ln HCP + \beta_3 \ln IMP + \varepsilon_t \dots \dots \dots (2)$$

It's a kind of Log, Log model. Where β_0 is intercept, $\beta_1, \beta_2, \beta_3$ are coefficients, on the other hand GDP, TTR, HCP and IMP are variables and ε_t is error term.

3.5 Estimation Procedure

To determine the relationship between economic growth and taxes, there would need to apply a reasonable technique for empirical analysis. So the study used, Auto Regressive Distributed Lag (ARDL) bound testing approach to cointegration, developed by Pesaran (2001). ARDL has many advantages over Johansen cointegration approach

Majority of the research work exercised by the Johansen-Juselius (1992) and Engle Granger (1987) cointegration techniques for checking the co-integration between variables in the long run. Johansen-Juselius technique is applied in order to test for the co integration, for this all variables should be incorporated at same array.

Therefore, to solve this issue, one can employ bounds testing technique to co integration contained by the skeleton of Autoregressive Distributed Lag model (ARDL) industrialized by Pesaran et, al. (2001). This is a relatively new econometric technique used to estimate the long run association among variables used in the study. This technique tests the co integration association devoid of considering the same order of integration of all variables, either they are integrated of $I(0)$, $I(1)$ or mutually integrated.

ARDL has many advantages over Johansen cointegration approach.

Popularized by Pesaran and Pesaran (1997), Pesaran and Smith (1998), Pesaran and shin (1995, 1998, 1999) and Pesaran et al. (1996, 2001). This technique has the subsequent econometric advantages as compared to further co-integration approaches.

- 1-The long run and short run parameters of the concerned model can be anticipated concurrently.
- 2-Testing the survival of long run association by this approach is easy without considering the concerned regressors are stationary at $I(0)$ or $I(1)$ or the combination of both, means $I(0)$ and $I(1)$.
- 3-In case of small sample sizes the bounds testing technique of Pesaran et al. (2001) is preferable.
- 4-This modified bounds testing approach is free from any kind of problem as compared to the previous traditional approaches for co-integration as mentioned above and in literature review.

The ARDL bound test is based on the F-statistic, this has a non-standard distribution. Thus, two critical values are given by Pesaran, *et al.* (2001) for the co-integration test. The lower critical bound understood all the variables are $I(0)$, show that there is no co integration among the variables, Whilst the upper bound assumed that all the variables are $I(1)$. There is co integration amongst the variables.

If the calculated F-statistics fell on top of the higher limit (bound) critical value of F-tabulated, initiated by Pesaran, afterward the null of no co integration is discarded and there would be co integration existed in the variables in the long run. If it fell below the lesser limit (bound), then the null is not discarded. Lastly, if it lie within the critical value bound, the outcomes would be inconclusive.

3.6. Co integration Test

The null hypothesis for the above mentioned log form equation 2 was formulated as below showed no long run relationship

The null hypothesis was as, showed no long run association

$$H_0 : \lambda_1 = \lambda_2 = \lambda_3 = \lambda_4 = 0 \dots\dots\dots(3)$$

The alternative hypothesis was as, shows LR affiliation

$$H_1 : \lambda_1 \neq \lambda_2 \neq \lambda_3 \neq \lambda_4 \neq 0 \dots\dots\dots(4)$$

To find co integration relationship among variables the following ARDL equation was formulated as following:

$$\begin{aligned} D \ln GDP_t &= \beta_0 + \sum_{i=1}^5 \beta_{1i} D \ln GDP_{t-i} + \sum_{i=1}^5 \beta_{2i} D \ln TTR_{t-i} + \sum_{i=1}^5 \beta_{3i} D \ln HCP_{t-i} \\ &+ \sum_{i=1}^5 \beta_{4i} D \ln IMP_{t-i} + \lambda_1 \ln GDP_{t-i} + \lambda_2 \ln TTR_{t-i} + \lambda_3 \ln HCP_{t-i} + \lambda_4 \ln IMP_{t-i} \\ &+ \mu_t \dots\dots\dots(5) \end{aligned}$$

3.7. Error Correction Mechanism

If two variables were co integrated in the long run, then as a next step the error correction apparatus could be implemented to examine the short run dynamics among variables. Error correction model was initially employed by Sargan (1964) and after this popularized by Engle and Granger (1987). ECM reconciles the static long run balance association of co integrated time series by its vibrant short run imbalance.

When co integration is found and inveterate, then as a second phase, the lag order of the variables is chosen by means of Akaike information criteria or Schwarz Bayesian criteria or Hanan Quinn criteria .After the lag order is confirmed, the long run coefficients of the model would be anticipated and then the error correction model (ECM) would also be anticipated. In this study the ARDL technique was used for checking the long run association of the variables and after that the error correction model (ECM) is estimated.

The expressions with summation symbols shows, the error rectification dynamics, whilst lambda sign indicated long run association.

The following ECM model in ARDL formulation was used to guesstimate the short run association among dependent and independent variables.

General equation in Error Correction form is specified as

$$D Ln GDP_t = \beta_0 + \sum_{i=1}^4 \beta_{1i} D Ln GDP_{t-i} + \sum_{i=1}^4 \beta_{2i} D Ln TTR_{t-i} + \sum_{i=1}^4 \beta_{3i} D Ln HCP_{t-i} + \sum_{i=1}^4 \beta_{4i} D Ln IMP_{t-i} + \alpha ECM_{t-i} + \mu_t \dots \dots \dots (6)$$

The error correction model results indicate the speed of adjustment back to long run disequilibria after a short run shocks. The ECM integrates the short-run coefficient with the long-run coefficient without losing long-run information. Further stability check was applied.

4. Empirical Results and Discussion

The time series facts are used, in this study, to estimate the taxes and economic growth relationship. Table 1, shows results, with intercept and trend, while table 2, shows results including intercept but no trend.

Table 1: Outcomes of ADF and PP including intercept and trend

variables	ADFLLevel	ADF Diff	PP Level	PP Diff	OI	Result
LnGDP	- 2.183	- 5.307*	- 2.687	- 6.692 *	1(1)	stationary
LnTTR	0.768	- 4.172 **	0.377	- 5.917 *	1(1)	stationary
LnHCP	- 2.947	- 4.588*	- 2.553	- 5.189 *	1(1)	stationary
LnIMP	- 2.282	- 3.980 **	- 2.764	- 6.912*	1(1)	stationary

1 percent critical value -4.2505* 1 percent critical value -4.2412*
 5 percent critical value -3.5442** 5 percent critical value -3.5426**
 10 percent critical value -3.2032** 10 percent critical value -3.2032***

Table 2: Outcomes of ADF and PP including intercept but no trend

variables	ADF Level	ADF Diff	PP Level	PP Diff	OI	Result
LnGDP	0.050	- 5.188*	- 1.942	- 6.636*	1(1)	stationary
LnTTR	- 1.398	- 4.117*	- 1.542	- 5.887*	1(1)	stationary
LnHCP	- 0.922	- 4.614*	- 0.799	- 5.280*	1(1)	stationary
LnIMP	- 2.208	- 4.130*	- 2.708	- 6.981*	1(1)	stationary

1 percent critical value -3.6353* 1percent critical value -3.6228*
 5 percent critical value -2.9499** 5 percent critical value -2.9446**
 10 percent critical value -2.6133*** 10 percent critical value -2.6105***

Note: Results of ADF with intercept and trend were considered, in this Research

Table 3: ARDL (1, 1, 5, 3) model based on Akaike Information Criterion

Regressors	Coefficients	Stand Errors	T-Ratios	Probability
LnTTR	-1.259*	0.273	- 4.609	0.000
LnHCP	0.930*	0.122	7.620	0.000
LnIMP	0.948*	0.167	5.679	0.000
C	3.691*	1.134	3.254	0.006

Note:*Highlight one percent level of significance

Note;-Researcher used Micorifit 4.1 Student Version for Estimations

Above mentioned anticipated results of the table 3 depicts, that all variables are highly significant. Total tax revenues, human capital, imports and constant term have high t-ratios and low standard errors. Total tax revenues have negative relationship with economic growth, while human capital and imports have positive link with economic growth. Due to one percent increase in total tax revenues, economic growth would reduce by 1.25 percent, in the long run.

Such changes in economic growth due to total taxes are in line, with the previous research studies, especially Romer and Romer (2007), where, increase in one percent of total taxes of gdp had - 0.5 percent to -1 percent effect, on real gdp, in the long run.

Single percent increase in human capital would be a reason of augmenting economic growth by 0.93 percent; on the other hand one percent change in imports of Pakistan would increase economic growth by 0.94 percent. Coefficient of constant term is also highly significant with positive sign. Value of its coefficient is 3.691 with T-ratio of 3.254. T-ratios of total tax revenues, human capital, and imports are - 4.609, 7.620 and 5.679 respectively in the model.

Table 4: Results of ARDL (1, 1, 5, 3) Error Correction Model based on AIC

Regressors	Coefficients	Stan-Errors	T-Ratios	Probability
dLnTTR	- 0.220	0.133	- 1.652	0.117
dLnHCP	0.259**	0.122	2.126	0.048
dLnIMP	0.086	0.071	1.221	0.239
dLnIMP1	- 0.267*	0.101	-2.638	0.017
dC	1.902	0.761	2.496	0.023
ECM(-1)	- 0.5153	0.124	- 4.136	0.001

Note:*Highlight one percent level of significance

Table 5: Results of ARDL (1, 1, 5, 3) Error Correction Model based on AIC

R ²	0.73	AdjR ²	0.41
S.E of Reg	0.028	F-Statistics	2.78P(0.024)
RSS	0.011	Eq Log-likelihood	81.35
AIC	63.35	SBC	50.15
DW-Statistics	2.27	Durbin's h Test	- 0.80

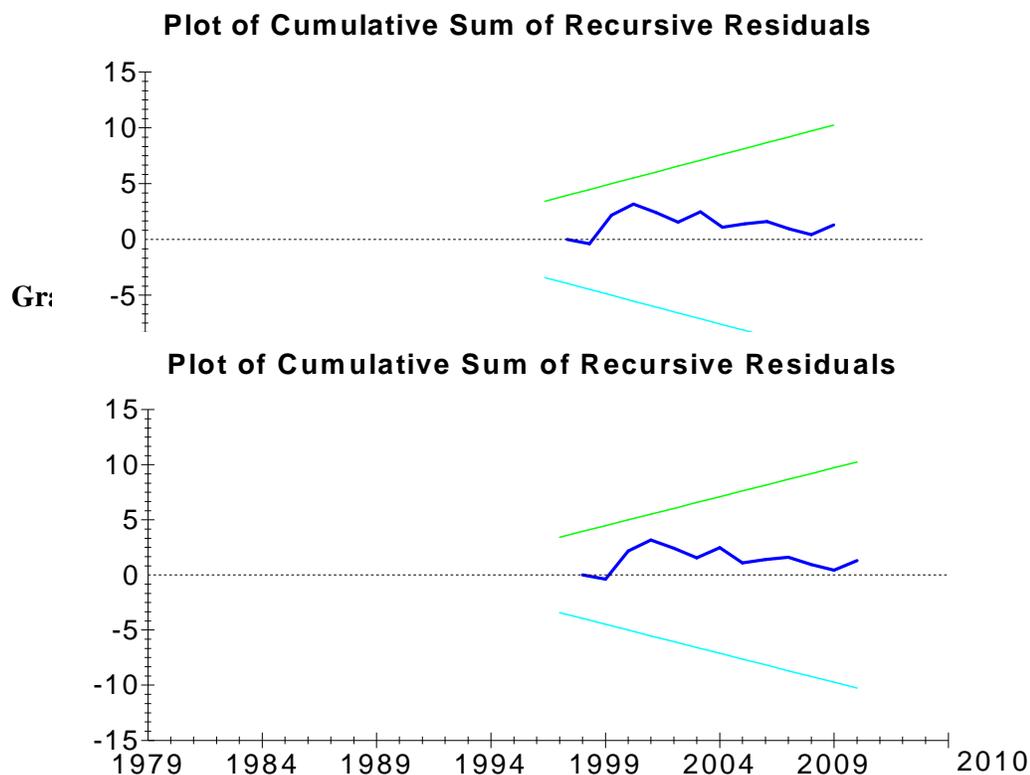
Note: Value of Durbin's h test should lie between +1.96 to -1.96

In table 5 the value of R^2 is 0.73, Value of adjusted R^2 is 0.41. Value of F-statistics is 2.78 and is significant at level of 5 percent; it Shows joint significance of the model. Durbin Watson's (DW) value is 2.2. Durbin's h-statistics is also used to check autocorrelation when we applied ARDL approach, to estimate any model. For the absence of autocorrelation this test's value should lay between +1.96 to -1.96. In this research model its value is - 0.8 which shows no autocorrelation among the variables.

4.1. Stability Test

Figure of CUSUM shows that its plot remained within the critical 5 percent limit and CUSUMSQ statistics did not surpass the critical borders. These graphs showed the solidity of long run coefficients and stability of long run relationship between total tax revenues and economic growth.

Graph 1: Graphs of CUSUM and CUSUMSQ, Shows Stability



The straight lines represent critical bounds at 5% significance level

5. Conclusion and Policy Recommendations

The major intention of this research is to investigate the association, involving total taxes and economic growth, over the period 1974-2010, in long run and short run. Total taxes have negative and significant effect on economic growth in long run. ECM coefficient of total taxes shows 51 percent speed of adjustment in a year. Total tax revenues have negative and significant effect on economic growth in long run. Due to one percent increase in total taxes, economic growth would decreased by -1.25 percent. In short run, impact of total taxes on economic growth is insignificant. According to research results, it is imperative to decrease the indirect taxes, and to increase the direct taxes, if we want to augment economic growth. Currently,

contribution of direct taxes, out of whole tax revenues is only 33 percent, and the share of indirect taxes is 63 percent, while it should be reversed, if economic growth has to increase. There is also need to augmentation the tax base/network and setting the accurate precedence, with improved tax administration. In spite of increasing the total tax revenues economic growth is stagnant, because of the utilization of taxes, on non development expenditures, instead of developmental programs.

First and far most step that should be taken by the government, is that the government should urgently plan, to broaden the tax base, on an urgent basis, because, only less than 2.5 million people pay income tax, out of the total population of 195 million. It is reality that government of Pakistan is heavily depending upon foreign finance, to fulfill its running expenditures. So concerned study suggest following recommendations to increase the level of revenues through taxation.

- Research results shows, that total taxes have negative impact on economic growth, due to the huge share of indirect taxes in total taxes (with share of 63 percent in total tax revenues), So indirect taxes are responsible for negative impact of total taxes, in economic growth.
- According to research results, indirect taxes should be reduced, to increase economic growth. To impart the positive impact of total tax revenues on economic growth, the direct taxes will have to increase, or we can say ratio of direct to indirect taxes will have to improve.

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