Impact of Inflation Rate, Imports, Exports and Tax on the Economic Growth of Pakistan

Ahsan Aslam[1], Abdul Hakeem[2], Waqar Ahmed[3]

[1]*Commerce Department, The Superior College Lahore, Pakistan*
[2]*Management Sciences Department, Bahauddin Zakariya University Multan, Pakistan*
[3]*School of Commerce & Accountancy, Minhaj University Lahore, Pakistan*

Abstract:-**The main purpose of this study is to evaluate impact of inflation rate, imports, exports and taxes on the economic development of Pakistan. The study has been conducted on the four independent and one dependent variable which is economic development of Pakistan. This study includes four independent variables that areinflation rate, imports, exports and taxes. On the other hand, the dependent variable is one that is economic development of Pakistan which has been measured and expressed with the help of four variables named as inflation rate, imports, exports and taxes. Fortyyears' data for the all selected is used in this research of 1977-2016. This study analyzed the relationship between the dependent and independent variables. A number of tests were run for analysis purpose that includes descriptive statistics, unit root test, Johenson co-integration test and error correction model. The study concluded that inflation rate, imports, exports and taxes has strong associationwitheconomic development of Pakistan.**

Key words: **Economic Development, Inflation Rate, Imports, Exports and Taxes.**

I. INTRODUCTION

1.1 Introduction and Background

Economic growth of any country is determined majorly by the gross domestic product of a country. Any type of fluctuation in GDP effect the country's economic growth, if GDP increase its means country growth increase and going toward better situation, but if GDP going towards decrease, that shows country decrease its growth level instead of increase. The growth and development of Pakistan had been steady over the year's eyewitness lot of good movements and the great achievements both internally as well as externally over the decade. Firstly, if I talk about internally there are lot of things which affect the economy that are inflation rate, exports, imports and tax. The intention of this study is fundamentally to rouse economic growth through the control on inflation rate, exports, imports and tax which guarantees brains of balance between all dependent and independent variables. Moreover, in the recent time the discussion had been given a more momentum in the Pakistan. Many researchers conducted their researchers to analyze the economic growth of different countries as Gosh examined the association between social, economic, culture problems and Economic growth in Pakistan. The persistence of this research work is to examine the impact of microeconomic variables on economic growth of Pakistan. The dependent variable of this research work is economic growth of Pakistan and independent variables were social, economic, culture problems. Data was gathered from 2007 to 2016. Multiple regression method was used in this research work for analyzing the data. The conclusion of this research article is that there is a significant and strong association among the all dependent and independent variables of this research. This research has also concluded that in the long run the relationship is positive and strong but in the short run it has lesser impact on the economic growth. economic growth is observed in term of gross domestic product and per capita income of the year. Overall there exist strong relationships among the all variables either dependent or independent which are being discussed in this study. Lawrence inspected the connotation research level and Economic growth in Pakistan. The core objective of this research work was to investigate the influence of independent variable on dependent variables that are economic growth in Pakistan. The dependent variable of this research work was economic growth in Pakistan and independent variable research level. Regression method was used in this research work for testing the data. Data was gathered from 1980 to 1999. In the conclusion the aim it is clear that the aim of this research has been accomplished. The purpose for which this research was conducted is to verify the impact of macro-economic variables on the economic growth in the Pakistan which has concluded the results. There is a deep and strong relationship between the dependent and independent variables of this research. If independent variables increased the value of dependent variable will also be increased in response.

1.2 Objective of Study

How economic growth of Pakistan is effected by exports, inflation rate, imports & tax. Economic growth plays a role like blood in human body in any country. This is the essential element for the country. Control on all these independent variables is very much important in the success of any country. If all these independent variables will be higher, the country will grow more. As this economic growth has so much importance so this should have strong basis. The strong base of the economic growth primarily depends upon the exports, inflation rate, imports & tax. For the better economic growth of the country, they need to reduce the inflation rate in a country and increase the national currency rate subsequently. Higher imports disturb the economic growth of any country. If the economic growth is not good, then country will face problems. Here the problem is economic growth and this problem can be resolved by controlling company.

- To examine the impact of inflation on economic growth
- To examine the impact of imports on economic growth
- To examine the impact of exports on economic growth
- To examine the impact of tax on economic growth

1.3 Significance of the Study

The study will be the base for future research in economic viewpoint of the country. The study will be helpful for next students to gather in order. There is additional for next generation. The study shall assist the policy makers regarding policy related to the encouragement of debts; Considerable research work has used resource-based-view as a theoretical framework to discover the association between exports, inflation rate, imports & tax and economic growth of Pakistan. This study will guide the economists while making decisions that which country should be promoted and which country should be aid in the economic growth of Pakistan. This study would give new horizons to the economic development of Pakistan. This will play an important role in the growth of the country's economy. This study will be beneficial for economists in Pakistan. While examining the factors affecting the economic growth of Pakistan, the proportionate of their affection will guide the countries to take solid decisions to cope up with the deficiencies. On the other hand, the economic growth of Pakistan analysis can be used for multi purposes within the region.

II. LITERATURE REVIEW

Numerous studies have been existing on the issue of inflation, import, and export and taxes impact on economic growth. Most of this researchers work has been done internationally. We have analytically studied some of these imperative empirical studies to develop objectives in the background of Pakistan and, further, to investigate it to made some important conclusions and policy recommendations.

(Faria & Carneiro, 2001) explore the relationships between inflation and output for the economy of Brazil wherein permanent inflationary shock has been located for the remaining many years. They use a bivariate vector vehicle-regression composed of output increase and the alternate in inflation in order to check the speculation that inflation has long run effect on output. they also use the records for the same period 1980-95 to estimate the short run dating among inflation and real output. Their findings confirm Sidrauski'ssuperneutrality of money which can be described as inflation has no actual effect on output and productivity within the lengthy-run. Their effects recommend that inflation has actual outcomes on output in the brief run.

(Motley, 1994) inspects the impacts of inflation on real growth in a Solow growth model using facts from a cross phase of countries over a 30-12 months' time period. The benefit of using an summary version is that it lowers the danger that the consequences will replicate statistics-mining. The outcome suggest that the five% drop in inflation from the 1970-eighty could boost the growth stage of real GDP per head from zero.1 and 0.five%.This effect would be significance among 15% and 140% of three hundred and sixty five days' earnings. Even the lesser of those projections might be superior than the majority estimates the fees of bringing inflation downward.

(Pami, Aneesa Ismail, & Dominick, 2000) consummate that income tax had negative and significant effect on GDP. Export taxes had terrible as well as full-size impact. Income tax, government expenses and foreign places capital inflow had commonplace impact in both the nations, while currency provisions, remote places budget, interest prices and monetary liberalization did now not have commonplace affects in each the international locations.

(Taha, Nanthakumar, & Colombage, 2011) uses time series data from 1970 to 2009 with 40 observations, related to Malaysian economy to plaid the association amid government revenues and economic growth. They examine the causal dating, among these variables, both in short run and longer term. Result display that there's a unidirectional connection among monetary boom and tax revenues. Monetary increase isn't stricken by modifications in taxation, while growth in monetary growth promotes tax sales. In addition they discover 21 percentage rapidity of amendment, in brief run to reach stability stage in the long run.

Furceri and Karras (2009) studied to investigate the effects of fluctuations of taxes on economic growth by using an annual data from 1965 to 2007 for panel of twenty-six economies. The primary variable of this observe is growth and the growth rate of actual GDP in line with capita. This observes also uses other variables inclusive of tax rate and income tax. The finding show that the impact of an growing in tax on actual GDP in keeping with capita is poor and continual where an growing inside the overall tax charge which measures as the entire tax ratio to GDP through 2% of GDP has a long-run effect on real GDP in line with capita of -zero.5% to -1%. Besides, their findings additionally suggest that the boom in social protection contributions or taxes on goods and services has a large negative effect on in line with capita output than the growth within the earnings tax.

(Khan & Schimmelpfenning, 2006) paradigm a simple inflation model captivating data of economy of Pakistan for the period January 1998 to June 2005 and find that economic elements determine inflation in Pakistan. They have a look at longer term dating between the CPI and personal quarter credit score and their results display that there can be no alternate-off among inflation and growth within the brief run but it in reality exists in the medium and long term. Their anticipated results advocate five percentage inflation goals for sustained monetary increase and macroeconomic balance for the economy.

(Furceri & Karras, 2008) studied to investigate the effects of changes of taxes on economic the aid of the usage of an annual records from 1965 to 2007 for panel of twenty-six economies. the main variable of this look at is boom and the boom charge of actual GDP per capita. This have a look at also uses different variables such as tax rate and profits tax. The finding display that the effect of an growing in tax on real GDP according to capita is terrible and chronic where an growing in the overall tax price which measures as the entire tax ratio to GDP by means of 2% of GDP has an extended-run effect on real GDP in line with capita of -0.five% to -1%. Besides, their findings also mean that the increase in social protection contributions or taxes on items and offerings has a huge terrible impact on in line with capita output than the boom inside the profits tax

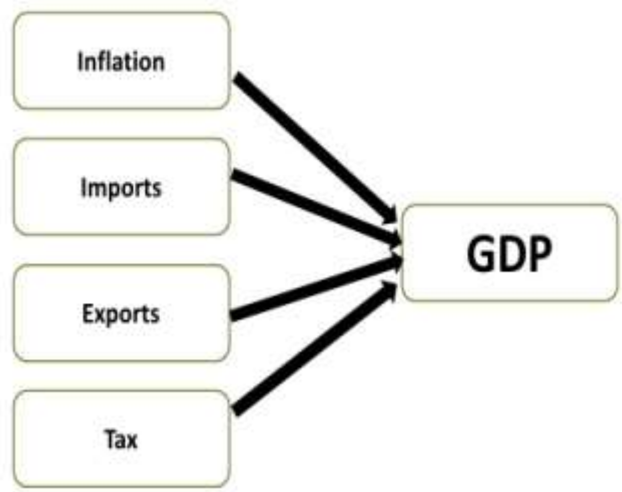
(Hossain, Ghosh, & Islam, 2012) purpose of this study is to investigate the existence of long run link between economic growth and inflation in Bangladesh. The approach engaged on this paper is the Granger causality check and co integration test from 1978 to 2010. The end result shows that there may be no co integration relation between economic boom and inflation and causality test shows that there's unidirectional causality is seen jogging from inflation to economic boom.

Some of the critical factors concerning the firm selections investments foreign places together with exchange boundaries, imperfect hard work market, intangible assets, vertical integration, products life cycle and shareholders diversification offerings. those elements are interconnected with the imports, exports and monetary boom of the u . s . a .. The change barriers are taken into consideration as the “international markets” for the products and services which can be regularly and operating below the government act. This authorities act imposes various traffics, quotas and plenty of other related operations to enhance the imports and exports of the us of a, all of these goods and services are hindering loose from the influx and outflow of these merchandise are throughout countrywide barriers. Imperfect labor marketplace is also based totally on the labor services expenses in the u . s . that have underpriced relative associated issue to its productivity. So, most of the foreign countries are seeking to freely move the hard work throughout countrywide boundaries in the direction of the looking for of higher salaries and wages. these marketplace elements are contributions inside the exertions marketplace which is maximum imperfect main to persistent wage differentials amongst international locations. companies act because the immigrations limitations that allow the mobility of the personnel within and outdoor the agency. Now days, MNC are developing new policies and procedures for implementation of the FDI in less evolved countries which include Mexico, India, Pakistan, and different southeast nations as most of the exertions’s provider charges, are underpriced relative to their level of productiveness (Liu & Diamond, 2005)

III. METHODOLOGY

3.1 Conceptual Framework

Basically the conceptual framework on these variables with economic growth in Pakistan is discussed in this research. The aim of this paper is to understand the macro economic factors of economic growth which are inflation, imports, exports and tax. My research paradigm is positivism. Basically it is the scientific and natural science. In other words it is a scientific knowledge. In research positivism these are the some important points which are related with my research. The ontology of my research is singular reality existing apart from research perception and cultural basis. The epistemology of my research is distance & impartiality. The axiology of my research is unbiased. The rhetoric of my research is formal style. The methodology of my research is deductive. The strategy of inquiry is experiments and field work. The method of my research is predetermined approach numerical data.



3.2 Data Source

In data and instrumentation I adopt the secondary method in which i collect the data through internet from WDI of the four independent and one dependent variable. In this research data has been collected from the WDI. The data was interpreted on the excel sheet and that excel file will be used for the analysis purpose while running the tests in the software. Quantitative research believe that you can achieve a full understanding is based on the testing and observation. Concepts and skills are kept simple, is the product of experience, interpretation by deduction rational. The above is the classic positivism and there are many variants. It is therefore sensible think about positivisms. Modern has led to a split between science and literature of different types of understanding of the consumption experience. The science model dominates in Social Research. But this has been the whole world knows that positivisms or positivistic. Positivistic search fonts believe to the quantification and on the idea that good techniques are the correct answer. It is also concerned up to a certain degree of prediction and control.

3.3 Variable Units and Description

Variables	Description	Units	Source
GDP	Gross Domestic Product	(Annual %)	World Development Indicator
INF	Inflation Rate	% of GDP	World Development Indicator
IMP	Imports Rate	% of GDP	World Development Indicator
EXP	Exports	% of GDP	World Development Indicator
TAX	Tax	(Annual %)	World Development Indicator

3.4 Equation

This equation shows that there is a both positive and negative relationship between dependent and independent variables that are economic development, inflation, imports, exports and tax. If inflation increases, economic development will also decrease and vice versa. If imports increase, economic development will also decrease vice versa. If exports increase, economic development will also increase and vice versa. If tax increases, economic development will also increase and vice versa. The equation is as follows:

$$\boldsymbol{d(ECO)} = \propto -\boldsymbol{\beta o}(\mathbf{INF}) - \boldsymbol{\beta 1}(\mathbf{IMP}) + \boldsymbol{\beta 2}(\mathbf{EXP}) + \boldsymbol{\beta 2}(\mathbf{TAX}) + \mathbf{e}$$

ECO = Dividend Payout Ratio

INF = Inflation

IMP = Imports

EXP = Exports

TAX = Tax

IV. DATA ANALYSIS

4.1 Descriptive Test

The term descriptive statistics in the process of collecting, summarizing, and simplify data, which is otherwise very cumbersome and extensive. It is to achieve this in a way that meaningful conclusions can easily be drawn from the data. Descriptive statistics in which I check all the variable (Dependent and Independent) Mean, Median, Maximum, Minimum, Skewness, Kurtosis and Standard Deviation values of all the variables

	GDP	Exports	Inflation	Imports	Taxes
Mean	9.864507	17.58747	6.620256	9.028064	10.545641
Median	6.541840	5.910940	5.985635	6.638813	7.105790
Maximum	66.98020	927.4000	29.75841	96.89710	89.07934
Minimum	-3.847362	-9.132494	-7.820885	-5.087936	-2.015420
Std. Dev.	13.09770	74.88115	5.027880	12.93719	11.698974
Skewness	2.956115	10.16859	1.015051	5.243539	3.002285
Probability	0.000000	0.000000	0.000000	0.000000	0.000000
Sum	1963.037	3482.318	1304.190	1796.585	1824.875
Sum Sq. Dev.	33966.84	1104616.	4954.798	33139.41	38259.12
Observations	199	198	197	199	199

Interpretation

Table presents descriptive statistics of data. This table shows that the mean of the gross domestic product, exports, inflation, imports and taxes is 9.864507, 17.58747, 6.620256, 9.028064 and 10.545641 respectively. The median of gross domestic product, exports, inflation, imports and taxes is 6.541840, 5.910940, 5.985635, 6.638813 and 7.105790. The maximum value of gross domestic product, exports, inflation, imports and taxes is 66.98020, 927.4000, 29.75841, 96.89710 and 89.07934. The minimum value of gross domestic product, exports, inflation, imports and taxes is -3.847362, -9.132494, -7.820885and -5.087936, -2.015420 respectively. The standard deviation of gross domestic product, exports, inflation, imports and taxes is 13.09770, 74.88115, 5.027880, 12.93719 and 11.698974 respectively. The Skewness value of gross domestic product, exports, inflation, imports and taxes is 2.956115, 10.16859, 1.015051, 5.243539 and 3.002285.

4.2 Unit root test

A unit root test is a test that is use to check the level of stationary and non-stationary of variables. In which we check firstly of Level then 1st difference and 2nd difference. The unit root test tells whether the data of the study is stationary or not. A number of tests were run for checking the reliability and validity of the data of Pakistan. My dependent variable is economic development of Pakistan and independent variables are imports, inflation rate, tax and exports. We are applying this test to check either our data is stationary or non-stationary. Stationary means that the variance of error in our data is constant over a period of time. If probability is less than 0.05 it means our data is stationary and we can go forward. And our data will be considered non-stationary if the probability is more than 0.05 in the unit root test. Whereas the stationary data refers to the result that means the data has constant mean and variance over the period of time. Data is considered better if it is stationary at the level rather than the first difference and second difference. Favorable probability leads to the favorable t-statistics. Unit root tests have been run for the following variables:I take one dependent variable like Gross Domestic Product and four independent variables like imports, exports, tax and Inflation. In unit root test the probability value is less than 0.05.

	LLC				im, Pearasan			
	Level		1st difference		level		1st difference	
Variables	p-value	T-value	p-value	t-value	p-value	t-value	p-value	t-value
GDP	0.7458	0.66141	0.0000	-5.53598	0.7104	0.55469	0.0000	-4.87813
Import	0.4455	-0.13705	0.0000	-5.06074	0.6583	-0.40784	0.0006	-3.25604
Inflation	0.3035	-0.51436	0.0000	-7.05566	0.2036	-0.82876	0.0000	-6.48632
Exports	0.0525	1.62105	0.0000	9.21783	0.1019	1.27060	0.0000	10.3795
Taxes	0.3027	-0.51657	0.0000	-4.95849	0.5594	0.14941	0.0000	-6.18891

In the above table, the results of Unit root test is shown. In the LLC the p-value in the Level for all variables are insignificant whereas the p-value in the 1st difference is significant for all variables as it is less than 0.05. On the other hand, im, Pearasan is giving the same results regarding p-value. All the p-values in the Level are less than 0.05 whereas the p-values in the 1st difference are all significant as they are less than 0.05. In the Level three variables are showing negative effect except exports in the Level where as in the 1st difference all variables are giving negative effect effect exports on each other. In im, Pearasan at the Level just one variable is showing positive effect whereas at the 1st difference all variables are showing negative effect except GDP and exports in the t-statistics.

4.3 Johnson Co-Integration Test

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.*
None *	0.867556	25.24541	41.54564	0.0050
At most 1	0.233165	-61.04564	20.54564	0.0024
At most 2	0.045864	- 32.45642	45.21545	0.0071
At most 3	0.853413	-8.546462	36.54527	0.0274
At most 4	0.678110	7.158522	26.545000	0.0318

After unit root test I am moving towards Johnson Co-Integration Test. This test indicates the long term association between the dependent and independent variables. The value of probability for all variables are 0.0050, 0.0024, 0.0071, 0.0274 and 0.0318 whereas t-statistics for all variables are 25.24541, 61.04564, 32.45642, 8.546462 and 7.158522. For running this tests, it necessary that all variables must be stationary at the same level in unit root test which is 1st difference. There exists negative and strong association between inflation and economic development in long run. There exists negative and strong association between imports and economic development in long run. There exists negative and strong association between taxes and economic development in long run. There exists positive and strong association between exports and economic development in long run. The probability value of all variables is less than 0.05 so all variables are showing significant impact on each other. In the same way all variable is showing negative impact except exports effect in the trace statistics.

4.4 Error Correction Model

Dependent Variable: D(GDP)
Method: Least Squares
Date: 01/25/18 Time: 05:06
Sample (adjusted): 1977 2016
Included observations: 198 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.336491	-0.075998	0.136384	0.0115
D(INF)	0.850877	0.136384	-0.007441	0.0255
D(IMP)	0.136384	-0.075998	-0.616924	0.0000
D(EXP)	-0.075998	0.136384	0.551432	0.0178
D(TAX)	0.136384	0.007441	-0.520048	0.0001
GDP(-1)	0.007441	0.037656	0.197607	0.0348
INF(-1)	-0.616924	0.520048	-0.725045	0.0048
IMP (-1)	0.551432	0.197607	-0.007441	0.0504
EXP(-1)	-0.075998	-0.725045	0.037656	0.0305
TAX(-1)	0.136384	1.638773	-0.520048	0.0050

This is a test to check the both short term and long term association between all dependent and independent variables. The association between the dependent and each independent variable has been explained as follows:

- There exists negative and strong association between inflation and economic development in short run in Pakistan.
- There exists negative and strong association between imports and economic development in short run in Pakistan.
- There exists positive and strong association between exports and economic development in short run in Pakistan.
- There exists negative and strong association between taxes and economic development in short run in Pakistan.

On the other hand:

- There exists negative and strong association between inflation and economic development in long run in Pakistan.
- There exists negative and strong association between imports and economic development in long run in Pakistan.
- There exists positive and strong association between exports and economic development in long run in Pakistan.
- There exists negative and strong association between taxes and economic development in long run in Pakistan.

V. CONCLUSION

The study is conducted on the impact of selected macroeconomic variables on economic development of Pakistan. There is instability and deviation in the economic development of Pakistan. The economic development of Pakistan is significantly affected by the independent variables which are inflation rate, imports, exports and tax. The conclusion of this research article shows that imports, inflation rate, exports and taxes have significant and negative relationship with the economic development of Pakistan but the exports has positive relationship with the economic development.

Despite many studies on testing the economic development relationship for Pakistan have been done but no one has come up with the variables that I have selected. The review in the present study makes it clear that literature in Pakistan has not converged on any specific conclusions regarding the effects of different variables on the economic development. Evidence gathered so far makes it difficult to conclude whether money responds to economic activity does not supplement the process of output growth in a significant way. It is not easy to diagnose how differences in statistical procedures affect these results. There is ample room for improvement in the existing studies as well as undertaking more coherent new studies. Some modified estimation technique should be used for examining dynamic relationship or the impact of imports, inflation, exports and taxes on the economic development of Pakistan.

5.1 Recommendations

The study is conducted on the impact of selected macroeconomic variables on economic development of Pakistan. Exports has decreased in Pakistan which is highly affecting the development of the economy which can play an important and severe role. Thus, the authorities through the reduction in tax which supports exports should formulate a policy that is the high priority. The government should keep a close eye on tax, inflation rate, imports and exports of the country. In Pakistan the imports have a negative impact on the economy, high imports lead to economy performance is less easy to say that is why investors from previous studies and my results then getting high without any risk So, is it that the country's economy is developed, the ruling states should reduce their imports so that a better economy, economy investments could be made sure. The economy, for example, which is impacting inflation rate etc., can have many other factors that have a negative impact on the economy. The stability of the tax to encourage investment in the country may create a positive atmosphere, and the improvement in the balance of payments. According to the study results, it has been established that the tax and balance of payments for each other is a significant correlation. The effective level of exports can strengthen the country’s economy. Economy behavior of the all the independent variables to identify the impact of the expected trends in the tax as measured by the cost-effective decisions facilitates by imports, exports and inflation rate. Like their resources more effectively for the future direction of economic development. Economy architect in prices in mind the impact of changes in imports on the loans should take. Economic policies should be designed in such a way that would support exports but discourage inflation, imports and taxes.

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