IMPACT OF EXPORTS IMPORTS ON GDP GROWTH RATE, IN PAKISTAN TIME SERIES DATA FROM 2000-2010

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ABSTRACT

Pakistan is a developing country. It can only increase its economic growth by exporting more and more goods to foreign countries in order to earn foreign exchange reserves which can than be used to import those items which are relatively scarce in Pakistan. The result indicated that both variables exports and imports have significant relationship with growth rate so government should move towards more exchange rate liberalization policy in order to increase its economic growth.

KEYWORDS: Exports, Imports, GDP Growth Rate, Exchange Rate Liberalization

INTRODUCTION

Mercantilists were pioneer to investigate the preferences of global exchange. There whole reasoning was based upon the collection of riches through the surplus of gold and different valuable metals. After them Adam Smith (1776) understood the essentialness of global exchange and presents the hypothesis of Outright Focal point. In right on time nineteenth century hypothesis of relative point of interest was created by David Ricardo, in which he clarified that exchange between two countries could be conceivable if one country can't have outright preference in both items. Adam Smith and Ricardo both were in the support of unhindered commerce. Variable Blessings and Heckscher-Ohlin hypothesis made one stride all the more by examining the impact of global exchange on variables of processing acquiring between two exchanging copartners (Salvatore, 2001)

The world is quickly changing into a worldwide town. Exchange has helped this change more essentially than whatever viable element. Truth be told, the high monetary, social, political, human and savvy incorporation saw on the planet in the later past is expected fundamentally, however not only, to exchange among its diverse nations. Further, exchange has helped a great deal more to the advancement of the world economies than whatever viable element. It is on the grounds that distinctive countries cooperate with one another through exchange that it has a tendency to realize the craved change through the trade of products, administrations, aptitudes, learning and skill. Simultaneously, exchange expands the accessibility of decisions, enhances the level and dissemination of salary, builds open doors for upgrade of specialized limits lastly persuades individuals to quicken the procedure of progress in their nations. This sought procedure of progress means improvement. Improvement, thusly, is showed in the improved work limit of the individuals, enlarged strengthening of people and subsequently, high rates of investment in beneficial exercises. Subsequently, exchange and improvement go as one and in this way the methodologies embraced on account of the previous have a solid bearing on

t number of business turned moves have surged throughout the last couple of decades on the planet. In the wake of these moves, the worldwide pattern has additionally seen the liberalization of the capital record, remote trade, credit, residential utilization and exchange diverse nations. Nonetheless, the territory which has accepted phenomenal attention in different economies is exchange liberalization. Exchange liberalization indicates the diminishment in hindrances to the development of products and administrations in universal exchange. In the expressions of Bhagwati and Krueger, "any arrangement which lessens the opposition to fare inclination will lead towards liberalization of exchange" and lessening in the import permit premium is the crucial step towards a changed exchange regime.1 another clarification by Edwards (1993) portrays a liberal exchange administration as one in which all exchange bends including import duties and fare subsidies are c the new development hypothesis contends that exchange liberalization grows the business sector, impels an expand in innovative work, reallocates job to more imaginative exercises that require more human capital and expands information stream among nations. Other than profits, a few expenses are additionally connected with exchange liberalization. A considerable issue emerging from lessening exchange obstructions in the wake of exchange liberalization is the misfortune in duty income that records for 10-20 percent of government income in creating nations. On the off chance that duties are lessened or dispensed with, these nations will need to force huge builds in different assessments so as to keep their funding in line, bringing about some financial mutilations. The move to exchange liberalization is likewise prone to prompt expansive disturbances in farming. On the off chance that

After the development of WTO and to change exchange among nations, duty cuts are, no doubt recommended by YRUGUAY ROUND which had its last demonstration MOROCCO in April 1994. Such cuts in duties won't just change the world economics however might likewise quicken the yield development. Pakistan has bit by bit changed its exchange administration after the acknowledgement of the first IMF structural change program in 1988. After 1995, by joining WTO exchange assertion, its polices instigated Pakistan to reduction distinctive quantitative measures on exchange, for example, import obligations and different subsides, Siddiqui and Iqbal (2005). The way of relationship between exchange openness and development is a generally talked about point among specialists in the later past. The experimental literature demonstrates that exchange openness influences yield development.

An extensive variety of the studies gives confirmation tha the openness of the exchange administration has a positive companionship with GDP development (Ahmed and Anoruo (2000), Edwards (1998), Edwards (1992), Harrison (1996), Iscan (1998), Wacziarg (2001), Yanikkaya (2003). However countless additionally inferred that the development GDP empowers extension of exchange Bhagwati, 1988; Findlay, 1984; and Vernon, 1996). In perspective of above conflicting discoveries, it is better to reevaluate this issue in the connection of Pakistan economy. The experimental relationship between exchange openness and investment development is a subject of respectable enthusiasm among researchers of matters of trade and profit. Studies which utilize cross segment or board information for different gathering of nations regularly help exchange liberalization for financial development

(Harrison 1996, Edward 1998, Wacziarg 2001 and Santos-Paulino 2002). On the other hand studies which utilize time arrangement information for individual nations yield blended results e.g. Ahmed also Anoruo (2000), and Ferreira and Rossi (2003) report positive effect of exchange liberalization on development inasmuch as Siddiqui and Iqbal (2005) report the negative relationship of exchange openness also development.

In this paper we break down the effect of fare, import and trade rates on GDP development rate of Pakistan for the period masterminding from 2000 to 2010.

MODEL AND DATA

- The objective of this study is to find relationship between GDP growth rate with exports and imports

- Time series data has been taken on the above three variables for Pakistan ranging from 2000 to 2010. Regression model is used which is given below.

GDP growth rate = Bo + B1 Imports + B2 exports+ u

Where u is the error term

Table 1

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Dependent Variable: GDP				
Method: Least Squares				
Date: 02/19/14 Time: 10:43				
Sample: 2001 2010				
Included observations: 10				
C	3288188.	334680.2	9.824865	0.0000
EXPORT	0.225688	0.949976	2.017572	0.08190
IMPORT	0.738256	0.384705	1.919021	0.0965
R-squared	0.948465	Mean dependent var		4670134.
Adjusted R-squared	0.933740	S.D. dependent var		759705.4
S.E. of regression	195555.7	Akaike info criterion		27.44840
Sum squared resid	2.68E+11	Schwarz criterion		27.53918
Log likelihood	-134.2420	F-statistic		64.41443
Durbin-Watson stat	1.889248	Prob(F-statistic)		0.000031

All the above three variables are taken in million Rs. we can see that import are significant while exports are also significant in case of Pakistan because its t value is 2.01 it shows that 1 unit increase in imports will increase GDP growth rate by 0.73 unit while there seem to be significant relationship between GDP growth rate and exports. A 1 unit increase in exports will increase GDP growth rate by 0.22 units.

The R square of model is 0.94 which is quiet high it shows that both these variables are explaining 94 percent of variation in GDP growth rate. Also the value of d Watson is 1.88 which is close to 2 which shows no auto correlation. Also the value of r square is high and both the variable s are significant so there is no multicollinearity.

Table 2: ADF Test Result for Stationary (Including Intercept and Trend)

Variables	I(0) (Level form)		I(1) (First Difference)		Results
	Test Statistic	Probabilities	Test Statistic	Probabilities	
GDP	- 3.4781 [0]	0.060	-5.828 [2]	0.0003	I(1)
EXPORTS	-3.026 [0]	0.142	- 4.0448 [6]	0.0224	I(1)
IMPORTS	-2.337 [0]	0.4019	-5.470 [3]	0.0009	I(1)

Values in square brackets along each statistics represent lag, length using the Schwarz info criterion using 7 as maximum lag

We can see that three of the variables become stationary at first level so they are integrated of order 1

Table 3: Johnsons Co-Integration Test Results Including Intercept and Trend

Eigen Value	Trace Statistics	5 Percent Critical Value	Prob**	Hypothesized No. of CE(s)
0.6456	65.213	63.876	0.0384	None*
0.438	36.164	42.915	0.2003	At most 1
0.347	20.018	25.812	0.225	At most 2
0.250	8.079	12.517	0.2453	At most 3

*(**) denotes rejection of the hypothesis at 5% Significance Level.

By using Johnson co integration test we found long term relation between GDP growth, EXPORTS and IMPORTS as one of the value of trace statistics is greater than its relevant critical value 65.21 is greater than 63.87. Since now we found long run relationship between the variables we now find short term equilibrium y using ECM test

Table 4

Vector Error Correction Estimates			
Date: 11/11/13 Time: 16:44			
Sample (adjusted): 2000 2010			
Included observations: 10 after adjustments			
Standard errors in ( ) & t-statistics in [ ]			
Cointegrating Eq:	CointEq1		
imports(-1)	1.000000		
exports(-1)	8.74E-05		
	(0.00034)		
	[0.26000]		
gdp(-1)	0.388432		
	(0.17752)		
	[2.18811]		
C	-425.1685		
Error Correction:	D(M)	D(X)	D(GDP)
CointEq1	-1.629936	18.94550	-0.513561	S
	(0.67211)	(83.6906)	(0.37888)	
	[-2.42511]	[0.22638]	[-1.35547]	
D(X(-1))	0.659596	-52.40988	0.625963	59.11880
	(0.71625)	(89.1870)	(0.40377)	(46.0287)
	[0.92090]	[-0.58764]	[1.55031]	[1.28439]
D(X(-2))	0.113620	32.92202	0.326785	5.597373
	(0.45688)	(56.8902)	(0.25755)	(29.3605)
	[0.24869]	[0.57869]	[1.26881]	[0.19064]
D(M(-1))	-0.003488	0.598362	-0.000239	-0.258437
	(0.00200)	(0.24918)	(0.00113)	(0.12860)
	[-1.74323]	[2.40128]	[-0.21222]	[-2.00959]
DM(-2))	0.002432	0.214725	-0.000265	0.185620
	(0.00209)	(0.26041)	(0.00118)	(0.13439)
	[1.16312]	[0.82457]	[-0.22493]	[1.38115]
D(GDP(-1))	0.623398	-116.2103	-0.145434	51.18394
	(0.42397)	(52.7927)	(0.23900)	(27.2459)
	[1.47038]	[-2.20126]	[-0.60851]	[1.87860]
D(GDP(-2))	-0.172030	-123.9454	0.011556	-42.68397
	(0.53873)	(67.0828)	(0.30370)	(34.6209)
	[-0.31932]	[-1.84765]	[0.03805]	[-1.23290]
	-0.007973	0.973465	-0.008341	-0.965277
	(0.01192)	(1.48485)	(0.00672)	(0.76632)
	[-0.66859]	[0.65560]	[-1.24079]	[-1.25963]
C	24.56734	4350.127	17.54698	2535.892

Table 4: Contd.,				
	(15.5246)	(1933.11)	(8.75152)	(997.661)
	[1.58248]	[2.25033]	[2.00502]	[2.54184]
R-squared	0.745776	0.792051	0.276871	0.713166
Adj. R-squared	0.611186	0.681960	-0.105961	0.561313
Sum sq. resids	55106.03	8.54E+08	17511.66	2.28E+08
S.E. equation	56.93445	7089.441	32.09514	3658.801
F-statistic	5.541119	7.194525	0.723218	4.696417
Log likelihood	-141.1972	-271.4577	-125.7209	-253.5980
Akaike AIC	11.19980	20.84872	10.05340	19.52578
Schwarz SC	11.67973	21.32866	10.53334	20.00572
Mean dependent	1.148148	8964.642	7.506667	623.6667
S.D. dependent	91.30705	12571.04	30.51893	5524.098
Determinant resid covariance (dof adj.)	2.81E+20			
Determinant resid covariance	4.42E+19			
Log likelihood	-763.9169			
Akaike information criterion	59.84569			
Schwarz criterion	61.95743			

From the above table it is clear that only exports has short term relationship with GDP growth rate. Its t value is insignificant.

CONCLUSIONS AND IMPLICATIONS

From the above dialog it is clear that both free variables are note worthy in GDP development rate because 94 percent of variety is clarified by fares and imports so government should move towards the approach of exchange liberalization so that its yield development will build all the more over government should import those things which helps in the monetary improvement of a nation like hardware oil and so forth so GDP could be speeden up.

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