

PalArch's Journal of Archaeology  
of Egypt / Egyptology

## BASIC PARAMETERS OF TRADE DEFICIT IN PAKISTAN

Dr. Allah Bux Lakhan<sup>1</sup>, Dr. Zulfiqar Ali Keeryo<sup>2</sup>, Jazib Mumtaz<sup>3</sup>

<sup>1</sup>Lecturer, Govt. Degree College Ghotki, Sindh-Pakistan.

<sup>2</sup>Ex. Economic Growth Advisor, Research and Training Wing, Planning and Development Department, Government of Sindh – Karachi.

<sup>3</sup>Ph.D Scholar, Department of Social Sciences – Economics, Shaheed Zulfikar Ali Bhutto Institute of Science and Technology, Karachi.

Dr. Allah Bux Lakhan , Dr. Zulfiqar Ali Keeryo , Jazib Mumtaz , Basic Parameters Of Trade Deficit In Pakistan , Palarch's Journal Of Archaeology Of Egypt/Egyptology 18(10), 1129-1138. ISSN 1567-214x.

**Key words:** International trade, Pakistan, co-integration and error correction mechanism granger-causality.

### Abstract

In this study the co-integration and error correction mechanism (ECM) are used along with granger-causality for Pakistan. In this analysis, the environment of export and import is examined for to trace the level of trade deficit in Pakistan. As suggested from data the share of imports is higher than the share of exports which resulted in the persistent trade deficit in Pakistan. This research tells the basic parameters which affected the balance of trade directly or indirectly. The results of study suggest that Pakistan has many opportunities to work for international competitiveness and to come out from the problem of trade deficit. The study also relates that Pakistan can control or lessen the trade deficit by focusing on some specific areas.

### 1. Introductions:

The trade theorists try to study on the performance of trade. The trade of any country can be determined on the level of exchange rate, the average tariff rate, the market size as gross domestic product (GDP), infrastructure, trade openness and trade policy. The trade performance

of any country can be categorized as: a) how much a country trades? b) What goods and services the country trades? and c) where a country can the trade performance strategies may be different across the world depending upon the policy objectives on which the international trade is analyzed. There are different views for trade over globalization and trade openness which are considered as essential need for policy making and quantitative research. No one can deny from the benefits of trade as compare to its costs. The trade has also given benefits on the basis of results of distribution and reforms of trade. For the proper formulation of trade policy, the policy makers are needed to focus on the valid information and result oriented trade policies. In developing countries there are various factors which determine the trade deficit. In addition to this, the nature of government matters for the trade activities and the changes if required for the improvement of balance of trade. Historically, in Pakistan there are different trade regimes as democratic and sometimes other interventions. Some economists have noted that there is no formal, organized and reliable trade policies are not practiced in Pakistan.

The trade openness policy has worsened the economy of Pakistan because of the high ratio of imports (Choudhary and Babar). The trade liberalization policies are not favourable for the developing countries like Pakistan. The exchange rate determines the dimension of trade internationally which may encourage the exports or discourage the imports for the benefit of balance of trade for any country. The international competitiveness is also valued on the basis of real effective exchange rate for the rest of the world. Pakistan possesses many opportunities and corners to access in the leading global market to get maximum benefit for the welfare of economy by investing exports competitiveness in world market (Ishrat Hussain). The developing world cannot rely on the market forces of demand and supply but they have to work with strategy. Many economists as Smith, Ricardo, Mill and others favor the trade liberalization as they recommend that world gross domestic product (GDP) would be improved and world will work on the theory of globalization. After that the same phenomenon was also favored by neoclassical school of thought on the basis of theory of factor proportion. The world trade organization intervened in the wake of globalization to restrict the over protection in the shape of different duties by different countries.

The industrially advanced countries supported the jobs and high technology products (Irvine 2002). The developing countries which came late in the race of development needed more active trade policies for the improvement of balance of trade. On other side, the external shocks are considered as challenge for developing world which is borne by countries for the development of balance of payments as to get rid of negative shocks. This is not only challenge to be resolved by the countries but also they need a proper formulation of trade policy to minimize these explicit economic issues.

The trade performance strategies may be different across the countries depending upon the policy objectives on which the international trade is analyzed. There are different views for trade over globalization and trade openness which is considered as important need for policy making and quantitative research base. No one can deny from the benefits of trade as compare to its costs. The trade has also given benefits on the basis of consequences of distribution and reforms of trade. For proper formulation of trade policy the policy makers are required valid information and result oriented trade policy.

A country's balance of trade plays very crucial role for better opportunities in the process of easy economic activities. The countries which are trapped in the problem of trade deficit are needed to

get loans from international financial institutions to fulfill their needs to minimize trade deficit (Ahad, 2017). In this way the countries are needed high credit which may create external pressure on developmental projects of country (Samirkas, 2014).

Pakistan is developing country having continuous trade deficit problem. In the analysis of World Bank's report "Pakistan experienced the deficit in trade from 1975 to 2005 is equals to 1.20 billion to 1.10 billion dollars and after 2005 the economy faced serious problem of trade deficit till 2018". Pakistan's trade deficit reached to 1.50 billion dollars in first quarter of 2020 (SBP, 2020). This continuous deficit decreased the opportunities of investors' investments which may remove the investment from the country (Panizza et al. 2009).

The trade deficit also devaluates the currency as compare to other international stable currencies which may decrease overall income of the country over the period of time (Nazir shafi et al.2015). In addition to this, trade deficit problem is caused by current account deficit, a country should not totally spend upon the consumer spending (Mann, 2002). The low standard of competitiveness of goods and services will destroy the industrial export growth of country which will be cause of trade deficit (Maskel and Malmberg, 1999). The deficit in trade should be decreased by focusing upon quality exports of goods and services (Aurangzab and Asif. 2012).

The deficit in trade is very serious problem for economy of Pakistan, the policy makers are direly needed to take some valid steps to tackle the issue (Muhammad, 2010).this research's objective is to analyze the impact on balance on trade by policy variables and some controlled variables as trade policy, trade openness, real effective exchange rate, infrastructure, average terrify rate and market size. This study can be an important focus on some crucial variables impacting upon balance of trade directly or indirectly.

As you knew that trade balance is compared as the weightage of imports and exports in the form of surplus or deficit. The trade deficit is not favorable while trade surplus is desire of every country. Different countries of the world consider trade as the backbone for their economy as the trade more the country will be happier, if less or no trade the country will not develop at all. The trade any country can be improved by increasing GDP level, infrastructure and rational terrify rate structure( Abbass, 2011).

## 2. Research Questions

Is there positive impact of trade openness on balance of trade?

Is there any impact of export competitiveness on balance of trade?

Is there any impact of trade policy on export competitiveness?

## 3. Trade performance over the time: (Current prices in Million US dollar)

Year	Exports	Imports	Trade balance
1975-76	1100	2191	(-1091)
1980-81	2958	5409	(-2451)
1985-86	3070	5634	(-2564)
1990-91	6131	7619	(-1488)
1995-96	8707	11805	(-3098)

2000-2001	9135	10340	(-1205)
2005-06	16469	28581	(-12112)
2010-11	19470	38152	(-18682)
2015-16	24596	44566	(-19970)
2019-20	21394	44574	(-23180)

**Source:** Pakistan Economic Survey

Historically, there is continuous trade deficit observed incited table for the Pakistan's economy. Exports and imports are at too much difference which is generating many issues for Pakistan. It is policy failure at end of policy makers and trade strategists who could not cope with the emerged problems of trade deficit. The problem of trade is one of the core issues for trade theorists in formulating appropriate trade policy to resolve this problem. The main issue of trade deficit in Pakistan's economy is current account imbalance which ultimately impacts on the economy. Under trade policy analysis we can say that the export promotion policies and import substitutions policies are not remained priority of policy makers in third world countries like Pakistan.

#### 4. Literature Review

Uzma (2007) assessed the trade performance by comparing trading and non-trading partners of Pakistan with rest of the world. It can be generally perceived that export competitiveness depends upon export performance. The sample size used in this study is 1960 to 2005. The overall performance to tackle the problem depends upon all the stake holders of economy as Govt., general public, business class, to improve the products which are technologically advanced. The suggestions given for the economy of Pakistan are that it should focus on larger market to improve competitiveness and consequently the performance of exports will be improved.

Jamil et al. (2013) worked on the trade and exchange rate. The working was on openness of trade and real effective exchange rate. The data of this research was used from 1972 to 2011. The main factors were taken capital and development expenditures. The ways which were utilized for this study are ARDL and ECM. The outcomes suggested that physical capital, trade openness and expenditure of development or always positively correlated. The real effective exchange rate impacted positively and significantly in long run on balance of trade. In addition to this, the important outcome is that infrastructure in the context of human capital and transportation performed positively for economic development. The study strongly recommended that until we work on agricultural and industrial sector we cannot perform good to remove the problem of trade deficit.

Boston. I et al. (2018) analyzed that the international competitiveness is observed on the basis of exchange rate. This study is carried out on exports and imports performance of Romanian economy. It is concluded that exchange rate is the better measure of patterns of trade and policy making to overcome the trade deficit. It is analyzed that for different economies the exchange rates are the source of currencies' stability. It can be said that if we want to improve the balance of trade then we have to focus on exports promotion and imports rationality for the economy.

Balavac and Pugh(2016) studied the growth of different sectors of economy on basis of proper policy making. Time series data of this study covers the time period from 1996 to 2010. This

research added that the different sectors as Agricultural sector, Industrial sector and service sector are needed to focus in order to promote the exports and imports behavior of economy.

Ishrat Hussain (2003) collected evidences that Pakistan should compete in the markets of global economy and expected very much benefit by these corners. The sample size of this study remained from the year 1990 to 200. He worked on the export competitiveness in global markets. On the basis of competitive world China can be the best advantage for Pakistan. The Pakistani economy should not rely on the forces of demand and supply but it requires a good strategy to manage the economy. It seems that we can obtain benefits from public private partnership. The major focus of Pakistani economy is to change behavior, directions and working environment of government officials.

Alassane and Aimen (2019) studied on agreements of free trade by distributing the four classes of specific groups for trade strategies. They elaborated that the policies of trade having a close touch with trade balance. For this analysis, gravity model has been utilized which also incorporates the political phenomenon can not be sidelined from trade policy. It shows that all segments of the economy play very significant role in the policy formulating for the promotion of trade.

Saqib and Qi xin (2017) concluded that Pakistan has ignored the quality standards in the development of industrial sector. Now Pakistani economy depends only on few bases of imports and exports internationally. Exports performance is an important side which should be focused for the development of international competitiveness and to valuate real effective exchange rate.

Lewitt (2018) examined the liberal trade policy making for the economy of China in relation to WTO countries. He emphasized on the situation of various trade policies from which he opted the liberal trade policy for development of economy of china.

Campi and Duenas (2019) assessed the debates and deliberations of trade with other countries of world for good environment of international competitiveness. He concluded that exports and imports are need of hour in this current competitive situation.

Santos-Palino (20020) evaluated that function of demand has 22 countries of developing world in the context of trade liberalization and trade policy formulation. He used panel data on the basis of generalized and fixed effect method. The main objective of this research remained the observation that either liberalization of trade impacted trade deficit or not. In this study, the "Heritage Foundation Index of Economic Freedom" was used as the division of multiple tradable goods. The important conclusion was that price and income elasticities were same. In the liberal trade policies the level of import goods diminished. The main outcome of this study was proper formulation of export strategies to promote the balance of trade on the basis of liberalization of trade.

## **5. Theoretical Framework**

Many policy makers have tried to remove the problem of trade deficit by using different bases but this study specifically tries to touch basic parameters which include real effective exchange rate, foreign direct investment, average tariff rate, infrastructure and gross domestic product. In previous time, we have analyzed that Pakistan is facing serious issue of trade deficit which depends upon basic goods and services which are not properly incorporated to tackle the issue.

### **5.1 Consequence**

The basic parameters of trade are differently changed in aspect of Pakistan. In proper analysis of basic parameters of trade are differentiated on two grounds as, the pricing and non-pricing factors. The trade deficit may be defined as when imports are greater than exports in the context of visible goods. On the other hand, it can be calculated as the difference of exports and imports. The trade deficit if resolved it can be very beneficial for the growth of economy in specific.

### **5.2 Composition**

Different products of the economy can resolve the issue of trade deficit. Many policy makers strived to sort out the above said problem by focusing various ways. If trade deficit is created by trading partners then we should specify the share of trade for economies in the world on the basis of competitiveness accordingly. The trade deficit issue can be fixed on the basis on rational policy making and its proper implementation. We should focus on numerous sectors of the economy to rectify the problem of trade deficit. It is need of the hour to formulate appropriate agricultural and industrial policy to support the trade behavior for development of economy.

### **5.3 Direction**

The direction of basic parameters of trade can be traced by analyzing the factors which may impact upon exports and imports directly or indirectly. The pricing indicators and non-pricing indicators are very significant contributors in the policy making for growth of economy in term of trade. The demand and supply of international market is good source of policy making for trade deficit. In global market if prices of exports decreased it should have good impact on trade deficit because it will attract foreigners to purchase more. The policy makers should focus on the international trade agreements and to rationalize the status of favorite nations in different trade deals of good and services. The international deal and dialogue regards trade plays very supportive role in the development of overall world economy.

### **5.4 Impact of other variable**

The trade deficit is very important component of economy on the basis of gross national product (GNP). If trade deficit is worsening it would impact multiple times on the economy. The influence of trade is directly upon capital account, financial account and current account of country. The trade deficit is clearly determined on the basis of debt burden which is shifted more if balance of trade deteriorates.

### **5.5 Long terms trends**

The better balance of trade is need for developing economies. The developing world can get more benefits if they work more in the competitive world. The trade partnership should be very cooperative for poor countries. In the long term, the balance of trade is base for economic development, economic growth and global positivity. In the positive balance of trade there are different issues which should be addressed rationally in the short run and long run.

### **5.6 Trade cycle behavior**

The positive cycles of trade should be priority for developing economies. Unfortunately, there seems anti-cyclical trend in under developed economies. When economy is in up-trend and in down trend there is always deficit in the trade. In good times, the macro-economic indicators like, rational expectations, political stability, GNP, social barriers are always favorable and

economies should attain benefit from it. On other side, in bad times the economic factors worked negatively for the developing world.

## 6. Data And Methodology

In this study the secondary data is used, covering the sample size 1975 to 2018. The data is used in natural log form for all the variables under analysis in the study. The technique utilized for the connection of variables is Johansen co-integration. The short term analysis is traced by Vector Error Correction Model (VECM).

### 6.1 Data and Sources

- Trade deficit: Economic Survey of Pakistan
- REER: (IFS-IMF) various issues
- FDI: (IFS-IMF) various issues
- GDP: Economic Survey of Pakistan
- ATR: State Bank of Pakistan
- INFRA: (Authors calculations by using Principle component method)

### 6.2 Model Specification

$$BOT = \alpha_1 + \beta_1 REER + \beta_2 FDI + \beta_3 GDP + \beta_4 ATR + \beta_5 INFRA + \sum t$$

BOT= Balance of Trade

REER= Real Effective Exchange Rate

FDI= Foreign Direct Investment

GDP= Gross Domestic Product

ATR= Average Tariff Rate

INFRA= Infrastructure

## 7. Results

All the variables are found non stationary if regression is done it will be overestimated. Therefore, it is very necessary to make data stationary for the meaningful and rational results.

**Table 2 Augmented Dicky Fuller/ Unit Root (All variables in natural Log)**

Variables	Level (with intercepts & Trend)	First Difference (with intercepts & Trend)
REER ( Real Effective Exchange Rate)	-3.256(0)	-4.63425* (2)
GDP (Gross Domestic Product)	-2.361(1)	-4.27541* (1)
ATR (Average Tariff Rate)	-4.468 (0)	-4.72084* (4)
INFRA (Infrastructure)	-6.69 (2)	-3.24498* (1)

FDI (Foreign Direct Investment)	-0.356 (3)	-7.0918* (2)
---------------------------------	------------	--------------

\*Significant at 5% Level

Above table shows that the ADF/ Unit Root results are non-stationary at level but first differencing made them stationary in the analysis. Here, when we use H<sub>0</sub> that means non-stationary and if H<sub>A</sub> is used that shows data is stationary. Here, the parenthesis shows the lag length of variables and all the variables are integrated at order 1.

**Table 3 Johansen Co-integration Test (Maximum trace value)**

Null Hypothesis	Alternative Hypothesis	Maximum trace Statistics	Critical value at 5%
r = 0	r = 1	71.162	46.231
r = 1	r = 2	52.26	40.077
r = 2	r = 3	35.039	33.87
r = 3	r = 4	25.0304	27.584
r = 4	r = 5	14.92	21.13
r = 5	r = 6	10.66	14.26

\*Significant at 5% level

The Johansen co-integration tests results are shown in six vectors Model according to maximum trace value. On the criteria of akike criterion optimal too lack length parameter is used on the basis of short listing approach which clearly indicates that there is strong association of variables used in the study.

**Table 4 first Vector of Normalized equation**

Variables	REER	GDP	ATR	INFRA	FDI
Co-efficient	-3.875*	16.535*	4.46*	8.670*	3.38*
t-value	2.50	10.531	11.58	10.45	3.69

\*Significant at 5% level

The co-efficient of the variables clearly shows that there is positive impact of GDP, ATR, INFRA and FDI, while there is negative impact of REER on the trade deficit of Pakistan.

**Table 5 Error Correction Model**

Variables	REER	GDP	ATR	INFRA	FDI	C	ECM
Co-efficient	-2.322	1.306	1.601	0.952	0.566	-41.58	-0.394
S.E	1.33	0.591	0.4681	1.36	2.91	0.1570	-0.085
T. Statistics	1.75	2.20	3.4	0.99	0.261	0.22	-4.22
Probab.	0.0393	0.0367	0.0019	0.031	0.0462	0.829	0.0004

\*Significant at 5% level

The ECM results are clearly showing that the results given in above table are desirable as suggested by co-efficient of error correction model.



## 8. Conclusion And Policy Recommendations

The results of this study recommend that the variables included in this study are the basic parameters of trade deficit. The list of variables real effective exchange rate, GDP, average tariff rate, foreign direct investment are the very important corners to touch for the development of trade. The effective level of trade is very beneficial for developing as well as developed countries.

In case of Pakistan the overestimated level of exchange rate have negative impact on balance of trade. The market size impacts positively on balance of trade and minimized the trade gap. The level of infrastructure impacted positively on the trade deficit in the Pakistan. In addition to this, when average tariff rate was applied on the imports it also resulted in the effective way to minimize trade deficit gap. If we consider real effective exchange rate, it has not impacted positively due to numerous issues in general and overestimation behavior in specific. Globally economic theory suggested that trade is favorable for countries but in case of Pakistan it is failed due to major share of imports. The ECM results show that there is convergence in the economy. The trade deficit in the country can be rationalized by proper policy making by focusing upon core variables which are discussed in the model. The infrastructure must be promoted to groom the economic, political and social activities for the development of economy. This will be very supportive for local as well as international market. In order to meet with international competitiveness standards there is urgent need of public private partnership for boosting economy. There is requirement of proper rationalization of tariff rate to protect the domestic industry for the production of local good and services for promoting exports. The real effective exchange rate should be considered as powerful tool of economy rather than nominal exchange rate which is not a better scale than real analysis that can be done on real effective exchange rate. Moreover, specific focus on the production of goods and services should be needed which generate suitable opportunities for the larger market size. The trade deficit can be controlled by stimulus trade policy. In this connection the trade development authority of Pakistan (TDAP) must address and solve the issue related to it on priority basis. The economy of Pakistan is not performing well however, it can get lesson from the emerging economies of the world which performing better.

## REFERENCES

- (1) Alasane.D.andAimen . D (2009) The trade policy effect in international trade;Case of Pakistan,Yeo and Deng Economic Structure ,8;45
- (2) Adnan, A. and Zafar, M. (2012). Determinants of Intra industry Trade between Pakistan and selected countries of SAARC.
- (3) Adam, J. and Iqbal, S. (1987). Exports, Politics and Economic Development in Pakistan, Van Guard, Lahore, 91.
- (4) Ashfaq, H, k. and Shaukat, Ali. (1998). the Experience of Trade Liberlization in Pakistan, Pakistan Development Review, 37, 661-685.
- (5) Balavac. M and &Pugh.G. (2016). the link between trade openness, export diversification, institutions and output volatility in transaction countries. Economic systems.40 (2).273-287.

- (6) Bostan, J., Toderaseu, S., Firtescu, B. (2018). Exchange Rate Effects on International Commercial Trade Competitiveness, *Journal of Risk and Financial Management*. Page 11-19.
- (7) Chaudhary, M. and Amin, M. (2012). The Impact of Trade Openness on Exports Growth, Imports growth and Trade balance of Pakistan, *Journal of Economics studies*, 8, 63-81
- (8) Campi, M. and Deunus, M. (2019). International property rights, trade agreement and international trade policy 45 (3). 531-545.
- (9) Diamantopoulos, A. (1999). Exports Performance Measurement: Reflective VS formative indicators, *International Marketing Review*, 16, 6, 444-456.
- (10) Fatima, N. (2010). Analyzing the terms of trade effect for Pakistan, PIDE working papers, 59.
- (11) Ishrat (2003), Pakistan's Export Competitiveness in global Markets. Paper presented at seminar on Export led Growth Strategy organized by the Export promotion Bureau held at Lahore on 27<sup>th</sup> may, 2013.
- (12) Jamil et al, (2013). International and External determinants of economic growth; A closer look at Pakistan's Economy, *the Romanian Economic Journal*, xiv, no, 49
- (13) Lewit et al. (2019). The impact of China's trade liberalization on greenhouse gas emission of WTO countries, *China Economic Review*, 54:113-134.
- (14) Pacheco-Lopez, P. (2005). The impact of trade liberalization on exports, imports, the balance of payment and growth: the case of Mexico, *Journal of Post Keynesian Economics*, 595-619.
- (15) Saqib, S. and Zin, Q. (2017). Determinants of exports competitiveness; An empirical analysis through revealed advantages Of external sector of Pakistan. *Asian Economic and financial review*, Vol.no.6, no, 3, 623-633
- (16) Santos-Paulino, A., & Thirlwall, A., P. (2004). The impact of trade liberalization on exports, imports and balance of Payment of developing countries. *The Economics Journal*, 114(493), page 50-72.