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Research Article

Determinants of Exports from Pakistan: A Time Series Analysis

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Abstract

This research study is conducted to find the major determinants of exports and to recommend the proper policies. In this study, six independent variables are used which are Foreign Direct Investment (FDI), Gross Domestic Product (GDP), Gross Domestic Savings (GDS), Nominal Exchange Rate (NER), Gross Capital Formation (GCF), and Labor Force Participating Rate (LFPR). FDI, GDP, and GCF were found significant while GDS, NER, and LFPR were found insignificant. In previous studies the role of FDI remained unclear, some researchers found it positive but insignificant. However, in the present study, it is found positive and significant. Based on the present study, it is recommended that the government should take steps to invite foreign private investors so that FDI can be increased which will increase exports, and due to increased exports foreign reserves will increase, and the balance of payments will be improved.

Keywords: Exports, Determinants, Policy, Balance of Payments, Pakistan.

Introduction

Pakistan is facing a 27.279 billion US$ deficit in its balance of payments in the year 2017-18 (GoP, 2018), To fulfill this gap Pakistan has to heavily depend on loans from different world institutions with tight terms and conditions which has led to another core problem of debt servicing. It is obvious that these problems can be eradicated only by developing the export sector of the country. Classical and modern liberal economists have taken foreign trade as the engine of economic growth and development (Majeed & Ahmad, 2006). Commonly it has been admitted that the improved export sector in developing countries has a vital role in economic growth. So, it can be inferred that better performance of exports can increase the pace of economic growth in Pakistan. It can also play a dynamic role in increasing total factor productivity and can enhance the inflow of Foreign Direct Investment (FDI). The production of goods on the principle of comparative advantage along with export promotion strategic policies will improve economic growth. It will result in the availability of cheaper goods throughout the world.

The Afghan war of the 80's and political instability of the 90's along with corruption affected the growth of exports in the 80's and 90's badly, it was slower than that of the 70's. The average growth rate of exports in the 80's was 8.5 percent per annum while it was 7.6 percent in 90's while the deficit kept on increasing. During the period of 2000 to 2009, it was 9.3 percent (GoP, 2009). From 2009 to 2018 was the poorest era for the export sector resulting in a deficit of Balance of Payments of 27.279 billion US$ highest ever in the history of Pakistan (GoP, 2018). Until 2000, the earnings of exports never were more than 8 billion US $. After 2000, first time in the history of Pakistan, the country observed tremendous growth in exports. The export earnings of Pakistan crossed 14 billion US $ in 2004-05, 16 billion US $ in 2005-06, 17 billion US $ in 2006-07, and 19 billion US $ in 2007-08 (GoP, 2007). In 2017-18 it declined to only 17.1 billion US$ against the imports of 44.379 billion US$

creating a giant deficit of Balance of Payments of 27.279 billion US$ whereas trade deficit is 22.3 billion US$ (GoP, 2018). There are many causes of the weak performance of the export sector in Pakistan as the energy crisis, competitive unit prices of different exportable goods and services, war against terrorism, no proper access to the European and US markets and the commercial policy of Pakistan, corruption and money smuggling from Pakistan to other countries by elite class and Pakistani politicians which resulted in decline in investments and production. Pakistan is exporting its products, but without seriously working on diversification of markets. Due to a lack of serious work on market diversification. Pakistan is exporting its 55 percent share of total exports to ten countries only namely, USA, China, UAE, Afghanistan, UK, Germany, France, Bangladesh, Italy, and Spain (GoP, 2018). So, this study aims to find out the major determinants of exports of Pakistan so that issues regarding the export sector can be addressed accordingly and this alarming situation can be avoided. The fundamental purpose of this study is to find out those factors that are the most relevant determinants of exports of Pakistan by using the time series data of thirty-five years from 1984-2018. Since 1947, Pakistan has been struggling to get rid of the trade deficit but for a few years, it has been facing a permanent deficit in its balance of payment.

Through this study, the causes of this heavy and alarming deficit will be recognized and then some policies will be advocated to overcome this problem. Looking into the previous economic history of Pakistan few factors have been found as responsible for the bad performance of the export sector of Pakistan's economy. The previous data on these factors have been used to find their role in the export sector. In this study, the latest econometric tools will be used to evaluate the data. Different useful tests of econometrics will also be applied to estimate the role of export determinants. The role of foreign policy and economic institutions has also been taken into account with respect to export growth in Pakistan.

Statement of the Problem

There are some arguments that are enough to prove the rationality of the export-led growth hypothesis that it can boost the whole economic growth of an economy. The first one is that the non-export sector may be affected by positive externalities reaped by improved management techniques and production methods (Feder, 1983). Secondly, the expanded export growth may increase the productive capacity of the economy through economies of scale (Helpman & Krugman, 1985). The figures about deficits of a few years may present the adverse situation in a better way. The deficit of $3.98 billion in 1995-96 became double in 2004-5 to $6.2 billion. It increased to $12.3 billion in 2005-06, but an alarming situation was observed in 2007-2008 when it increased to $20 billion (GoP, 2008). In recent times Pakistan is facing 27.279 billion US$ deficit in its balance of payments in the year 2017-18 (GoP, 2018), which is the highest in its almost 72 years of history since independence in 1947. The situation has been even worse when due to this deficit, foreign exchange reverses have shrunken to a critical level creating concerns about even existence of the nation. To fulfill this gap Pakistan has to heavily depend on loans from different world institutions with tight terms and conditions which has led to another vicious problem of debt servicing. It is obvious that these problems can be eradicated only by developing the export sector of the country. For this purpose, it is very essential to find out which are the most relevant determinants of exports to Pakistan. Another problem that is result of the deficit in the Balance of Payments and Trade Deficit is Public Debt. Until December 2017, Public Debt has crossed the psychological figure of 22820 billion rupees (GoP, 2018). As a result, huge amount of foreign exchange has been used to pay foreign debt. To get rid of this deficit Pakistan adopted the policy of privatization, decentralization, liberalization and deregulation but did not focus on controlling the imports and increasing the exports which have become the cause of high trade deficit.

Significance of the Study

At present time, one of the most important and alarming problem which Pakistan is facing is decline in exports of the country. No doubt, many studies have been conducted to evaluate the performance of exports sector of the country but it does not prove that there is no need of further studies on this topic rather it validates that this is core, fundamental, important and major issue of Pakistan which despite so many research works in not

being solved. So, there is need of such a study which can address this problem with more care and attention that detailed picture can be portrayed on the canvas. During the course of time, some studies included irrelevant independent variable such as number of television sets used by Majeed and Ahmad (2006), and some studies ignored some very relevant variables such as capital, capital formation, and labor force such as Akhtar et al. (2015), which has so much influence on almost all aspects of the civic affairs commonly and economic affairs particularly has been ignored by the most of the researchers. Until the present movement studies have not included the historical background of export sectors of the Pakistan as well as the associated circular problems such as Debt crisis, debt servicing and decline in Foreign Exchange Reserves have not been presented in systematic way which arise due to the bad performance of exports sector and Balance of Payments deficit.

The role of Foreign Direct Investment remained unclear. Some studies found it significant such as Jongwanich (2010) whereas some studies found it positive but insignificant such as Majeed and Ahmad (2006). So, in this study the role of FDI will be recognized and distinguished that either FDI in Pakistan is mare to capture the domestic market or it is helping the export sector to develop. At the present time, Pakistan is facing 27.279 billion US$ deficit in its balance of payments in the year 2017-18 (GoP, 2018), which is the highest in its almost 72 years of history since independence in 1947. The situation has been even more worsen when due to this deficit, foreign exchange reverses have shrunken to critical level creating concerns about even existence of the nation. To fulfill this gap Pakistan has to heavily depend on loans from different world institutions with tight terms and conditions which has led to another core problem of debt servicing. It is obvious that these problems can be eradicated only by developing the export sector of the country. For this purpose, this study is very essential as well as important to find out those factors which are the most influential, relevant, vital and important determinants of exports in Pakistan.

Literature Review

Different research studies were conducted on Pakistan's trade with other countries to estimate the impact of different factors on trade (Javed & Ghafoor, 2013; Meijers, 2014; Javed et al., 2015; Javed et al., 2016; Ambreen et al., 2017; Javed et al., 2017; Hanif, 2018; Javed et al., 2018; Fatima et al., 2019; Nazeer et al., 2019; Javed et al., 2020; Ali et al., 2021; Nazir et al., 2022). Jongwanich (2010) investigated the exports performance for the East and Southeast Asian countries using time series data of the relevant economies and concluded that the Real Effective Exchange Rate has highest coefficient for merchandises exports while it is lowest for machinery and transports. Whereas manufacturing production is not only significant but also large in values. It also found the role MNCs important as FDI has higher and significant impact on manufacturing exports. Sharma (2001) used time series data for the period of 1970-98 to examine the export determinants in India. Study showed that fall in the export prices in India relative to world prices resulted increase in demand for Indian exports. Moreover, It was found that FDI had no significant impact on exports performance in India, while the coefficient sign of FDI was positive. In this study, it was found that infrastructure has no impact on export performance in India. Mom (2008) used the time series data from 1980 to 2003 to examine the role of Foreign Direct Investment on growth of exports in Cameroon. The study showed that the impact of FDI on exports was through spillover effect and increase in supply capacity. According to this study FDI has positive impact on exports growth in Cameroon. This study resulted that FDI had positively affected the export growth by building up supply capacity and spill over impact in Cameroon.

Todo (2011) took firm level data for the period of 1997 to 2005 to analyze the FDI decision and exports determinants in Japan. He used mixed logit model to include the unnoticed features of firms and covariates were given special attention for empirical analysis. This study shows that productivity has positive impact on exports and decision of FDI and it was statistically significant but ignorable in size economically. The demonstration effect of neighbors with respect to size and information was also positive but very limited in size. Unobserved characteristics and internationalization status of a firm were found in empirical analysis as main determinants of the FDI decision and exports. The results of this study showed that there may be inefficiency in the process of selection of FDI enterprises and exporters. Riedal et al. (1984) took time series

data of ten year from 1968 to 1978 to conduct a study for India to investigate the determinants of exports and to analyze its exports performance. This study revealed that condition of domestic market has a noticeable impact on exports performance. The significance of variables such as relative domestic demand and domestic profits proved in 23 areas out of 30 areas with respect to exports performance. Exchange Rate was significant in only 10 sectors out 30 sectors. So, the significance of relative price was found only in few sectors where comparative advantage was existing such as handicrafts, metal goods, readymade garments, carpet weaving. In this study researchers used data of only ten years due to which results might be misleading. Grenier et al. (1998) used the results of a survey of 83 firms to investigate the determinants of exports and investment made by manufacturing firms in Tanzania. The results of the study show that the share of exports from larger firms is greater than that of small firms and the investment of larger firms is sustainable than small firms. The study also reveals that the firms with sustainable investment exports more than others whether they were smaller or larger. In this study it is concluded that for investment limited availability or non-availability of credit is the major problem in the way of manufacturing exportable goods. Jung and Marshall (1985) conducted a study using time series data from 1950 to 1981 to test the export-led growth (ELG) hypothesis in 37 countries for the test of auto-correlation and causality. In many countries the hypothesis of ELG was rejected, but it was accepted in Indonesia, Costa Rica, Ecuador and Egypt. In case of Israel, Korea, South Africa, Bolivia, Peru and Pakistan this hypothesis was rejected. The hypothesis of export led growth was supported by unidirectional causation from growth to exports in Thailand, Iran and Kenya. the proof of export growth falling was observed in Greece and Israel without testing the study for co-integration and unit root test.

Hoekman and Djankov (1997) analyzed the eastern and central European countries structural changes in their exports. The major objective of this study was to examine the significance of some export performance determinants namely FDI, subcontracting trade and import of primary goods. Study showed that the major determinants of exports in most countries were their export of intermediate goods and machinery. In the European Union, local firms always utilized the foreign inputs and foreign skills to expand their share in export market. Agasha N. (2009) revealed that growth rate of exports was positively affected by TOT and FPL whereas ER, GDP and FDI had no significant impact on the growth rate of exports. Özçelik and Taymaz (2004) used the time series data for 4000 firms for the period of 1995-1997 to analyze the export performance determinants. The study shows that research and development (R&D) activities and innovations were the factors which made Turkish manufacturing firms to be able to compete at international level. In this study, innovative techniques and transfer of technology were found to be complementary. According to the findings of this study, Turkey got success in international markets through its suitable trade and commercial policies. Due to suitable trade policies, the devaluation of Lira and reduction in production cost Turkey increased its competitiveness in foreign markets. Teresa (2006) took three different sectors in Philippine to investigate some important exports performance determinants of firms. The specific firm level characteristics e.g. size of firm, age of firm and relationship with foreign markets was recognized in this study, and quasi-maximum likelihood technique was applied to asses export performance. It was found in this study that the foreign relationship was the very important and prominent factor to affect export propensity of firms.

Aysan (2007) examined the data for the period of 1996 to 2006. The aim of this was to analyze the causes of rise in exports of manufacturing sector in Turkey. The author used the dynamic panel data technique at sector level. The study resulted that after 2000 increase in Turkish exports growth was due to faster growth rate in productivity. It was also indicated in this study that increase in nominal wages left negative impact on exports. So, it was concluded that for sustainable growth of exports of manufacturing goods required increase in productive capacity of the economy. Zada et al. (2011) used simultaneous equations of, supply of exports and demand for exports to study the determinants of exports for Pakistan using time series data from 1975 to 2008. Study indicates that price elasticity of demand for exports with respect to price of exports is significant and also in high magnitude while with respect to price of substitutes it is low in magnitude. It further shows that the war on terror (2001) by USA impacted the exports negatively. Hassan and Khan (1994) analyzed the export performance of Pakistan using simultaneously supply and demand side factors. Using 3SLS technique the

effect of Exchange Rate on Balance of Payments of Pakistan was also estimated. This study revealed that world demand had positive effect on exports in case of primary and manufactured goods, whereas relative exports prices had negative effect on exports. In this study it was also found that the impact of nominal exchange rate was significantly positive on demand for exports in both cases.

Samiullah et al. (2009) investigated the Export Led Growth hypothesis for Pakistan using the time series data from 1970 to 2008. Many econometric techniques were applied in this study, such as Granger causality, vector error correction model, co-integration and unit root test. In this study it was revealed that economic growth was the result of expansion of exports. In this study, it was also found that the causality was unidirectional or bidirectional among real imports, real exports, economic growth, per capita income and real gross fixed capital formation. Majeed and Ahmad (2006) used the data from 1970 to 2004 for developing countries along with Pakistan, investigated determinants of exports. Study shows that FDI affects imports positively but was not significant. It is also concluded that GDP and Labor Force have positive and significant impact on exports. However interestingly this study also shows positive and significant impact of Television sets on exports, which was quite unnecessary. Sadia (2006) investigated the hypothesis that import of intermediate and capital goods has positive affect on the exports. In this study the researcher took the time series data for the time period of 1973 to 2005. OLS technique and semi reduced export equation had been used for calculations. Results of the study supported the hypothesis that import of capital and intermediate goods have positive impact on the export growth. Same was found in the long run.

Akhtar et al. (2015) conducted a study to evaluate exports of manufactured goods of Pakistan and used time series data from 1990 to 2010. Study shows that FDI, Real Effective Exchange Rate and agricultural production are highly significant whereas American war on terror (2001) has negatively affected the exports. Aurangzeb (2006) conducted a study to investigate the inter dependence of export growth and economic growth in Pakistan using Feder (1983) technique. Study resulted that in export sector factor's marginal productivity was high. Moreover, this study also supported the idea of export orientation and developing good relations with trade partners. After having a detailed look into the previous domestic and foreign studies, it is noticed that the main determinants of exports are Gross Domestic Product, Foreign Direct Investment, Gross Capital Formation, Labor Participating Rate, Exchange Rate, Gross Domestic Savings and others. So, these major variables which have impact on exports have been used in this study. During the course of time, some studies included irrelevant independent variable such as number of television sets used by Majeed and Ahmad (2006), and some studies ignored some very relevant variables such as capital, capital formation, and labor force such as Akhtar et al. (2015), which has so much influence on almost all aspects of the civic affairs commonly and economic affairs particularly, it has been ignored by the most of the researchers.

Research Methodology

Different subjects have different methodologies for the purpose of research on which the whole process of research is based. To conduct research in any field of Economics the statistical and mathematical techniques are essential. The statistical techniques used in Economics have been given the Name of Econometrics. So, in this section the detail of these techniques, models, and the tools of estimations, sources of data collection and analysis has been discussed. In this study Gross Capital Formation (GCF) and Labor Force Participating Rate (LFPR) have been introduced as independent variables which have not been used simultaneously in the previous studies.

Data

In this study secondary time series data of forty-five years from 1975 to 2018 of Pakistan has been used. Main sources of data and figures are World Development Indicators, Pakistan Bureau of Statistics, State Bank of Pakistan, and Economic Surveys of Pakistan.

Model Specification

Through literature review it is observed that different researchers have used different models such as Ordinary Least Square (OLS), Generalize Method of Moments (GMM), Vector Autoregressive Regression (VAR) and

Two Stage Least Square (2SLS). Majeed and Ahmad (2006) used fixed effect model, whereas Aysan (2007) and Jongwanich (2010) have applied Generalized Method of Moments (GMM) and General to Specific method (GSM) respectively. In this study Ordinary Least Squares (OLS) model has been used for estimations because it is simple and its assumptions can be easily satisfied. As in this study time series data of forty-five years of the time span of 1975 to 2018 is being used therefore the problem of non-stationarity of the data may arise, to check this Augmented Dickey Fuller Test has been applied, those variables which were not stationary at levels and are stationary at 1st difference whose values are used at 1st difference.

Since in this study time series data has been used therefore Augmented Dickey Fuller test has been applied at different levels, for this purpose computer software EViews has been used. Then co-integration test has been applied to check the long run relationship among the variables. The following model which is used in this study has also been used by Sharma (2001).

$$EXP = \beta_0 + \beta_1 FDI + \beta_2 GDP + \beta_3 GDS + \beta_4 NER + \beta_5 GCF + \beta_6 LFPR + \mu \quad (1)$$

Following is the general functional form of dependent and independent variables.

$$Y = f(x) \quad (2)$$

In equation (1) Y is dependent and X is independent variable. If the explanatory variables are more than one then the function will be as;

$$Y = f(x_1, x_2, x_3, \ldots\ldots x_6) \quad (3)$$

The specific form of above equation is as following;

$$EXP = f(FDI, GDP, GDS, NER, GCF, LFPR) \quad (4)$$

The model for present study is as following;

$$EXP = \beta_0 + \beta_1 FDI + \beta_2 GDP + \beta_3 GDS + \beta_4 NER + \beta_5 GCF + \beta_6 LFPR + \mu \quad (5)$$

Where EXP (Export of Pakistan) is the dependent variable and the explanatory variables are given as

FDI = Foreign Direct Investment.

GDP = Gross Domestic Product.

GDS = Gross Domestic Savings of Pakistan.

NER = Nominal Exchange Rate.

GCF = Gross Capital Formation

LFPR = Labor Force Participating Rate

Results and Discussion

OLS model is applied with HAC test to remove Heteroskedasticity and serial correlation. Table 1 Shows the entire results. Table 1 shows the Ordinary Least Squares estimations with HAC test, forty-four observations are included. Exports is the dependent variable. The OLS equation can be written as:

X = 1.338606*FDI + 0.154965*GDP + 0.236996*GDS + 0.114436*NER - 0.785916*GCF - 0.099035*LFP + 5.912108

This equation shows that Foreign Direct investment (FDI) has positive impact on exports, if Foreign Direct investment increases by 1 unit then other factors keeping constants exports will increase by 1.338606 units. Similarly Gross Domestic Product (GDP) has also positive impact on exports, if Gross Domestic Product increases by 1 unit then keeping others factors constant exports will increase by 0.15 units. Gross Domestic Savings (GDS) has also positive impact on exports, if Gross Domestic Savings increases by 1 unit then other factors remaining same exports will increase by 0.236996 units. The impact of Nominal Exchange Rate (NER) is also positive, if Nominal Exchange Rate increases by 1 unit, then exports will increase by 0.114436 units which shows that there is positive relationship between depreciation of exchange rate and exports, other factors remaining unchanged. However surprisingly Gross Capital Formation (GCF) has negative impact on exports if Gross Capital Formation increases by 1 unit, then other factors remaining same, exports will decrease by 0.785916 units this indicates that capital formation is being made in non-exportable sectors or is being made

in consumption goods producing sectors. Labor Force Participating Rate also has negative impact on exports, if Labor Force Participating Rate increases by 1 unit, then other factors keeping constant, exports will decrease by 0.099035 units, this also indicates that labor force is not participating in exports sector rather labor force is participating in non-exports sectors or consumption goods producing sectors, along with low productivity.

Table 1 shows that Foreign Direct Investment (FDI) coefficient is positive that is 1.338606 and its t-statistic is 3.685152 which is greater than 1.96, which indicates that Foreign Direct investment coefficient is significant. Secondly its p-value is 0.0007, which is less than 0.05 this also indicates that Foreign Direct investment coefficient is significant. Hence Foreign Direct investment is positive as well as significant, in previous studies the role of Foreign Direct investment remained ambiguous, it remained positive but was insignificant such as Majeed and Ahmad (2006). So, in present study it is established that role of Foreign Direct investment is positive and significant. Its coefficient is quite high which is 1.338606 which indicates that the role of Foreign Direct investment in exports increase is very important and vital. Therefore, for Pakistan, it is very essential for exports promotion that the main focus should be on inviting more and more Foreign Direct investment.

Table 1.OLS Estimations

Variable	Coefficient	Std. Error	t-Statistic	Prob.
FDI	1.338606	0.363243	3.685152	0.0007
GDP	0.154965	0.057337	2.702711	0.0103
GDS	0.236996	0.162935	1.454537	0.1542
NER	0.114436	0.087641	1.305738	0.1997
GCF	-0.785916	0.326073	-2.410249	0.0210
LFP	-0.099035	0.090415	-1.095344	0.2804
C	5.912108	4.413619	1.339515	0.1886
R-squared	0.964636	Mean dependent var		12.41971
Adjusted R-squared	0.958901	S.D. dependent var		9.533126
S.E. of regression	1.932641	Akaike info criterion		4.300563
Sum squared resid	138.1988	Schwarz criterion		4.584411
Log likelihood	-87.61238	Hannan-Quinn criter.		4.405827
F-statistic	168.2088	Durbin-Watson stat		0.698704
Prob(F-statistic)	0.000000	Wald F-statistic		157.8818
Prob (Wald F-statistic)	0.000000			

Dependent Variable: X; Source: Author's own estimations.

Table 1 shows that the coefficient of Gross Domestic Product (GDP) is positive that is 0.154965, and its t-statistic is 2.702711 which is greater than 1.96, hence coefficient of Gross Domestic Product (GDP) is significant. Similarly, its p-value is 0.0103 which is less than 0.05 which shows that Gross Domestic Product (GDP) is significant. So, Gross Domestic Product (GDP) in present study is positive and significant. Coefficient shows that if Gross Domestic Product (GDP) increases by 1 unit or by 1 percent then keeping others factors constant exports will increase by 0.154965 units or by 0.154965 precent. In many studies Gross Domestic Product (GDP) is found positive and significant, a very few studies concluded that Gross Domestic Product (GDP) is insignificant.

Table 1 Shows that the coefficient of Gross Domestic Savings (GDS) is positive that is 0.236996, and its test statistic is 1.454537, which is less than 1.96, which indicates that Gross Domestic Savings (GDS) is insignificant,

on the other hand the probability value of Gross Domestic Savings (GDS) is 0.1542, which is greater than 0.05, this also indicates that Gross Domestic Savings (GDS) is insignificant. However, its coefficient is positive which shows that other factors keeping constant if Gross Domestic Savings (GDS) increases by 1 unit or by 1 percent then exports will increase by 0.236996 units or by 0.236996 percent. It indicates that exports are increased by increase in Gross Domestic Savings (GDS), it is so because due to higher savings increases loan able fund due to which interest rate declines, which leads to higher loans and higher investment. If this investment takes place in production of exports goods, then surely exports increase.

Table 1 shows that the coefficient of Nominal Exchange Rate (NER) is positive that is 0.114436; however, its test statistics is 1.305738 which is less than 1.96, which indicates that Nominal Exchange Rate (NER) is insignificant. Secondly its probability value is 0.1997 which is clearly greater than 0.05, therefore it also shows that Nominal Exchange Rate (NER) is insignificant. However, its coefficient is positive which shows that Nominal Exchange Rate (NER) has a positive impact on exports, that is depreciation of currency and exports have positive relationship. When domestic currency depreciates, the exports of that particular country become cheaper in international markets, due to which demand for exports of that country increases in the international market because of which exports increase.

Table 1 shows that the coefficient of GCF is negative which is -0.785916, whereas its test statistic is -2.410249, whose absolute value is greater than 1.96, which indicates that GCF is significant. Moreover, its probability value is 0.0210 which is less than 0.05, it also indicates that GCF is significant. However, it has a negative impact which indicates that GCF is not taking place in the production of export goods, it is taking place in the production of non-exports goods or in the production of consumable goods.

Table 1 shows that the coefficient of LFPR is negative is -0.099035, and its test statistic is -1.095344 whose absolute value is less than 1.06, which indicates that it is insignificant. Moreover, its test statistic is 0.2804 which is greater than 0.05 which also indicates that LFPR is insignificant. Its negative sign indicates that labor force however may be increasing but in non-exportable sectors and may have lower productivity, and disguised unemployment in the agricultural sector.

Table 1 shows that R-Square is 0.964636 which indicates that almost 96 percent of the effect of independent variables has been covered. The probability of F-Statistic is 0.0000 which indicates that the model is the best fit. As OLS is run with HAC test hence Durbin-Watson stat does not matter.

Conclusions and Recommendations

The government should encourage FDI because FDI is the biggest significant determinant of exports in Pakistan. An increase in FDI will result in an increase in production and employment in the country, due to which production will increase exports and this will also increase GDP, and GDP will have its own positive impact on exports, secondly, FDI will also increase in foreign reserves due to which the problem of shortage of foreign reserves will also be solved. To increase and encourage FDI government should announce different schemes of lower taxes, transport, easy licensing, legitimating, and legal assistance. To increase and encourage FDI government should conduct seminars for foreign investors to listen to their problems and provide them with proper solutions, attention, and assistance. The major role in FDI is of multinational corporations, the government should invite multinational corporations in Pakistan, as in Pakistan wage rate and cost of managerial staff are lower, which decreases the cost of production at a large scale of production, which is an incentive for a multinational corporation, the government should present it in front of multinational corporations. For foreign investors, it is very important to provide them with security and proper law and order conditions in Pakistan. For this purpose, the government should eliminate terrorism, extremism, and target killings in the country. A firm legal framework and justice system are very essential.

The government should make efforts to increase the production of exportable goods by providing loans and infrastructure, and by lowering tax rates on exports and on production of exports. The government should search for new international markets where its export goods can be sold. For this purpose, the government can make trade agreements and co-operational frameworks. To increase exports the facilities of trade,

shipments, baking, and bill of exchange should be provided in the easiest way, for this purpose information technology can be used. The government should pay attention to it. The government should make policies and efforts to increase the production of goods and services in Pakistan. This will increase GDP, and due to an increase in GDP, exports will also be increased. Sustained growth in GDP will increase Personal Incomes and Disposable Personal Income, which will result in an increase in demand and savings. The increase in demand will lead to higher prices and higher prices will lead to higher profits by the entrepreneurs, which will lead to an increase in investment and employment in the country. More investment will bring more production, and more production will once again increase GDP and exports. The increase in savings will increase loanable funds which will decrease interest rates in the country which will result in more investment and finally, it will result in once again production, GDP, and exports accordingly. The quality of production of exported goods should be enhanced so that it can compete at the international level. Many export items of Pakistan have agricultural inputs, therefore government should develop the agricultural sector, to develop the agricultural sector government can provide the basic needs of farmers at lower costs and subsidies such as seed, fertilizers, pesticides, and agricultural machinery, without interest loans.

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