
Research

INTERPRETATION OF ELEMENTS UPSETTING EXPORT GROWTH IN PAKISTAN

Muhammad Azhar Khalil¹, Khawaja Asif Mehmood²
and Sallahuddin Hassan³

Abstract

Exports are the important instrument of economic growth. Instabilities in export earnings present uncertainties in an economy. These uncertainties bring significant impact over the economic behavior by poorly upsetting the proficiency of investment and in turn have an adverse effect on economic growth. The core objective of this study is to find the impact of some of the key macroeconomic variables that affect exports growth of Pakistan. The data is from the year 1972-2012. Johansen Juselius (1990) test is implemented for getting the desired results. The results show that all of the variables sustain a positive relation to Export. Conclusion drawn is the need of obligatory steps required to be taken by the Government so as to build a nation on the footings of strong export receipts.

Keywords: Export; Foreign Direct Investment; Real Exchange Rate; Private Investment; Unemployment; Political Stability; Research and Development Expenditures.

JEL Classification: B170

1-Department of Commerce, Bahauddin Zakariya University, Multan, Pakistan

2-School of Economics, Finance, and Banking, University Utara Malaysia

3-School of Economics, Finance, and Banking, University Utara Malaysia

Introduction

Significance & Importance of study

The impact of exports for economic enlargement is obvious from the works of classical as well as many modern economists. According to Marshall (1890), a nation's economic evolution belongs to the study of international trade. Nurkse (1961) called international trade as an engine of growth. For efficient utilization of available scarce resources and for expanding global trade volume, free trade in goods and services is commendable (Bhagwati, 1973). It is perceived that there is a positive association among enlargement in exports of a country and economic growth. The fast growing economies are commonly characterized by rapid expansion in exports (Azam, 2009). Export sector can produce optimistic externalities on non-export sections by using more effective management styles and better production techniques (Feder, 1982). A second argument is that export development increases efficiency through pomposity potential for scale economies (Helpman & Kruman, 1985). Thirdly, exports are looked to lessen foreign exchange limitations and can thus offer larger admittance to international market.

Pakistan like several other countries is facing the problem of balance of payments shortfall, from the time of independence. Variety of strategies has been familiarized in various eras for fast and nonstop growth in Pakistan's exports. These actions includes tax concessions, import substitution, export finance patterns, delinking of the rupee from the U.S. Dollar in 1982, devaluation of the rupee in 1972, etc., have facilitated in improving the exports to a certain extent but are not enough to alleviate her low export receipts. The instabilities in export are recognized to have severe complications. Particularly, unbalanced exports disturb the investment decisions by not suspending the incessant import of manufacturing raw materials. Thus affect the progress of the manufacturing sector. Furthermore,

depressed exports become the cause of variations in GNP and encourage insecurity in the economy. This improbability plays a critical role in the private sector's unwillingness to invest in the large scale engineering industries, thus impeding the country's overall development.

Background in context of the Economy of Pakistan

The base of exports of Pakistan has improved greatly from \$7.7 billion in 1999 to \$17.9 billion in 2008 and \$22 billion in 2010. Exports at \$ 24.8 billion were planned to achieve or 4.2% higher than last year for 2012-13. The reasonable progress milestone was set on the footings of energy crises and slow economic progress in advanced world economies. During the first 9 months (July-March, 2012-13) exports of the present fiscal year touched a \$ 21,143 million, rose by 4.4% — increasing from \$18,998 million in the similar period previous year (Pakistan Economic Survey, 2012-13).

Statement of Problem

The current situation of the Pakistan's economy is upset by rise of war on terror, years of internal political clashes and extension of the global financial disaster that entered into home economy over the direction of considerable drop in Pakistan's exports. A noticeable breakdown in foreign direct inflows caused underdevelopment in Pakistan which has led to raise the balance of payment deficit. Pakistan's economy can achieve its exports targets beyond its current level, however certain obstacles are there that may restrict the export growth process i.e. difference in exchange rate, interest & policy rate fluctuations and higher rate of inflation. Further decrease in Foreign Direct Investment (FDI) and Private Investments, trade barriers, higher rate of unemployment and poverty, lower growth rate also affect the general export level. Moreover swift changes in monetary and fiscal policies due to political instability, rise in demand of imported goods,

fall in local product demand due to quality standards, poor literacy rate and use of obsolete technology etc. are the factors that severally or jointly can bind the economy to deviate from achieving the export objectives.

Objective and motivational aspect of the study

The core objective of this research is to find out the impact of key macroeconomic variables that affect the exports growth of Pakistan. Presently, being diversified in scope, the study has an edge in introducing the core determinants of export in a single framework. Secondly, there's captured latest time frame to get results on different time horizon. And lastly, the combination of analytical tools on current framework and policy implications given are the motivational factors for this research. After Section 1, Section 2 reflects the cruxes of the empirical literature. However, section 3 details source(s) of the data collection, methodological issues and specification of the model. Section 4 is for interpretation of results. Last section offers concluding remarks and recommendation of appropriate policy.

Empirical Review of Literature

The impact of FDI on exports is mixed, number of cross country evidences show that global trade and FDI are adversely interrelated if market pursuing FDI is prevailing (Horst, 1972; Jeon, 1992). Whereas others discover that there is a positive association between FDI and exports if resource seeking FDI is dominant in the host countries (Ajami & Barniv, 1984; Grosse & Trevino, 1996). FDI shows a vital part in economic growth (Mehmood & Hassan, 2015) and export performance of host states as it is investigated in the UK (Blake & Pain, 1994). The fundamental prominence of FDI, concentrating only on trade as a substitution for openness may be ambiguous (Goldberg & Klien, 1999).

In China, as export promoted FDI is vigorously encouraged, FDI is probable to encourage exports therefore a positive relation among these two is anticipated (Liu & Shu, 2003). Moreover, inward FDI can upsurge the host country's export volume causing the developing nation to boost its foreign exchange earnings (Ahmad & Butt, 2004). Inducements to invite FDI must target the "competing to the highest", instead of "competing to the lowest", as well as confirming a feasible advancement of export-oriented undertakings and help verbose abilities, awareness, information, expertise and technical know-how to the local organizations (UNCTAD, 2005). FDI has, to a large extent, exchanged foreign assistance as a source of investment for emerging nations to bridge the predictable twin gaps i.e. savings investment and export import gap (Haq, 2013).

The same fact has been strained by Katz & Murphy (1991). Involving in Global trade needs following international principles, values and familiarity of overseas markets which only cultured labor can enjoy. Trade promotes conversation of thoughts and technologies which indicates that evolving countries like India and Pakistan can have access to advanced technologies (Dastidar, 2013). Investments in education lead to human capital accretion which, in turn, enhances the through put of the labor force. This promotes more exports and economic development (Chaudhry, Malik, & Faridi, 2010). Practical workouts for different countries recommend that trade encourage human capital accretion and vice versa (Dastidar, 2013). Concerning its impact on exports, it is beneficial to look at education in an utter rather than comparative sense – as giving serious edge capability for nations to successfully introduce to international markets at global prices however similarly in a dynamic sense (Kucera & Sarna, 2004). Consistent through the dynamic interpretation are the discoveries of Levin and Raut (1997) in the cross country study of semi developed countries concerning the elements of their economic development. Belser (2011) provided a trade model, concluded, adversely, an affirmative relationship among ages of education and the proportion of proficiency intensive to untrained rigorous industrial exports.

Mohanani (2007) conducted three stage least square (3SLS) to evaluate the demand and supply side exports balances in an immediate equation frame-work for India over the era of 1980-2005. The coefficients on real exchange rate and global demand seemed with their predictable sign and substantial magnitudes. REER, as a degree of competitiveness, concludes and affects the performance of the export sector (Caballero & Corbo, 1989). Prices of exchange rates and exports in various countries showed an important part in the evaluation of the export demonstration of any country (Warner & Kreinin, 1983). Goldstein & Khan (1978) predict adverse association among export demand and export price variable.

Hasan & Khan (1994) describe that there is positively important affiliation among exchange rate and exports demands. Atique & Ahmad, (2003), Implementing Ordinary Least Square (OLS) approach, state with reference to export demand function, that Pakistan's exports enhanced, when effective exchange rate of Pakistan declined. Majeed and Ahmed (2006) gave emphasis on the determinants of exports, using panel data ranging from the period 1970 to 2004 on more than 75 developing countries. The exports equation was stated by labor force as exogenous variables, GDP growth rate, communication facilities, indirect taxes, GDP, real effective exchange rate, and FDI. Ahmad (2003) has revealed the fact that productivity cost of capital and the Public Sector Development Plan (PSDP) measure the performance of investment. In the same way, improved exterior demand derived by exports can surge the investment arrangements (Hyder & Ahmad, 2003). The issues of private investment in Pakistan are discovered by Sakr (1993) and determined that GDP growth, progress in credit protracted to the private zone and government investment are significant variables.

Source of the Data, Model Specification and Research Methodology

Data Source

The study constituted in this research paper is to rely upon the secondary source of the data for the period from 1972 to 2012. The data is collected from multisource domain i.e. Hand book of statistics on Pakistan's economy (2010), various issues of Economic Surveys of Pakistan and The World Bank (World Economic Outlook) data on Pakistan.

Model Specification

Given the state of macroeconomic factors that affect export, the research model is specified as follows:

$$EXP = \beta_1 + \beta_2 ER + \beta_3 FDI + \beta_4 RD + \beta_5 UNEMP + \beta_6 PS + \mu_t \dots \dots \dots \text{Eq (1)}$$

Where β_t are the long run coefficients and μ_t is the error term. EXP is total volume of exports; ER: Real Exchange Rate; FDI: Foreign Direct Investment; PI: Private Investment; RD: Research and Development (expenditures which government of Pakistan spent on public education); UNEMP: Unemployment; PS: Political Stability (Mehmood & Faridi, 2013). Because of the unavailability/unreliability of the data, political stability is taken as dummy variable (that uses the value 0 or 1 to reflect the presence or absence of particular categorical consequence that may be probable to alter the outcome). In this respect hypothesis constructed contains values vary from 0 to 1. Value of 0 is assigned to the year(s) when the Govt. (either democratic or care-taker) is dissolved/adjourned. Value of 1 is assigned to the year(s) with the settled Govt.

Methodology

Test for Stationarity

In time series analysis, it is considered mandatory to inspect the stationary of the time series data. It is known by Augmented Dickey Fuller (ADF) test, as Dickey and Fuller. (1979), who promoted the framework for working out test of non-stationary. The most appreciable part of this procedure is the testing of unit root.

Where $\Delta y_t = \beta_1 + \beta_2 t + \phi_{y_{t-1}} + \chi_i \sum_{t=1}^m \Delta y_{t-1} + \varepsilon_t$ Eq (2)

ε_t is White Noise however, ϕ and y_t show state of stationarity and the regressors and Δy_{t-1} equals

$(y_{t-1} - y_{t-2}), \Delta y_{t-2} = (y_{t-2} - y_{t-3})$, etc. If computed statistic turns to be less than critical value, Y , is considered stationary.

Test for Cointegration

If series are stationary at first difference, Johansen Juselius (1990) co-integration test is used to execute the results in which VAR of order n :

$Y_t = A_1 Y_{t-1} + \dots + A_n Y_{t-n} + B X_t + \varepsilon_t$ Eq(3)

Where Y_t is k -vector that is I(1) of time series variables, X_t is q -vector of the deterministic variable and ε_t is the innovation vector.

In that case, VAR is written as:

$\Delta Y_t = \delta Y_{t-1} + \sum_{i=1}^{m-1} T_i \Delta Y_{t-i} + \phi X_t + \varepsilon_t$ Eq(4)

Here, $\delta = \sum_{i=1}^n A_i - I$ and $T_i = - \sum_{j=i+1}^n A_j$

If matrix δ contains reduced rank of ($r < k$), then it would be $k \times r$ matrices of (α and β) with rank of r i.e. $\delta = \alpha\beta$ and β_{γ} is integrated order of zero. In that case, matrix is tested by the mean of reduced rank of from that of unrestricted VAR.

Further, Error Correction Model (ECM) is a category of multiple time series models that directly estimate the speed at which a dependent variable returns to equilibrium after a change in an independent variable. Noticed for long run relationship, question retained is whether short run effects are permitted on the dependent variable. It is found by following specification:

$$\Delta EXP = \gamma + \alpha \eta_{t-1} + \sum_{i=1}^{EXP} \beta_{EXP} \Delta EXP_{t-i} + \sum_{i=1}^{EXP} \beta_{ER} \Delta ER_{t-i} + \sum_{i=1}^{EXP} \beta_{FDI} \Delta FDI_{t-i} + \sum_{i=1}^{EXP} \beta_{RD} \Delta RD_{t-i} + \sum_{i=1}^{EXP} \beta_{UNEMP} \Delta UNEMP_{t-i} + \sum_{i=1}^{EXP} \beta_{PS} \Delta PS_{t-i} + \varepsilon_t \dots \dots \dots \text{Eq(5)}$$

where α is speed of adjustment of short run disequilibrium with γ and ε_t as coefficient and an error term.

Granger Causality

Since the evidences on cointegration are found, hereafter in this respect, Granger (1969) developed causality test which is a statistical hypothesis test for determining whether one time series is useful in forecasting another. It is represented as:

$$y_t = \alpha_1 + \sum_{i=1}^n \beta_i x_{t-1} + \sum_{i=1}^n \alpha_i y_{t-1} + \varepsilon_{1t} \dots \dots \dots \text{Eq(6)}$$

$$x_t = \alpha_2 + \sum_{i=1}^n \chi_i x_{t-1} + \sum_{i=1}^n \alpha_i y_{t-1} + \varepsilon_{2t} \dots \dots \dots \text{Eq(7)}$$

Where ε_{1t} & ε_{2t} are error terms that are assumed uncorrelated. If lag term X is different from zero (statistically), Y is caused by X and opposite is true. If both lag terms are indicated to be different from zero, it indicates for bidirectional causality and elsewhere.

Results and Discussions

Empirical Results

Empirical results from statistical analysis can be further clarified into test of stationarity, short run and long run coefficient estimations respectively.

Unit Root Test

Table 1 clarifies that when the ADF test is applied at first difference, the null hypothesis of non-stationary is simply rejected at 1% significance level.

Table 1:

Results of Augmented Dickey-Fuller Test (ADF)

Variables	<i>t</i> -Statistics	Probability	Conclusion
EXP	-3.30*	0.08	I (1)
ER	-3.52*	0.01	I (1)
FDI	-5.31**	0.00	I (1)
PI	-3.72*	0.03	I (1)
RD	-7.05**	0.00	I (1)
UNEMP	-5.80**	0.00	I (1)
PS	-6.08**	0.00	I (1)

* & ** reflects 5% & 1% level of significance at AIC criteria.

Unrestricted Co-integration Rank Test

It is one of main tests that we extract from Johansen Juselius (1990) co-integrating test which is used for the determination of the greatness and symbol of long run prospects of relationship and marginal values of the equation, Eqn (2), the co-integration vector has been normalized at EXP. Test of co-integration showed in Table 2. The observations presented in the Table show three co-integrating equations at 0.05 levels.

*Table 2:***Unrestricted Co-integration Rank Test (Maximum Eigenvalue)**

Hypothesized		Max- Eigenvalue	0.05	
No. of CE(s)	Eigenvalue	Statistics	Critical Value	Prob.**
None *	0.962	128.029	46.231	0.000
At most 1 *	0.856	75.470	40.078	0.000
At most 2 *	0.792	61.263	33.877	0.000
At most 3	0.368	17.914	27.584	0.502
At most 4	0.233	10.355	21.132	0.711
Hypothesized		Max- Eigenvalue	0.05	
No. of CE(s)	Eigenvalue	Statistics	Critical Value	Prob.**
At most 6	0.012	0.452	3.841	0.502

Max-eigenvalue test indicates 3 cointegrating eqn(s) at the 0.05 level
 * denotes rejection of the hypothesis at the 0.05 level
 **MacKinnon-Haug-Michelis (1999) p-values

Normalized co-integrating coefficients: 1 co-integrating Equation(s)

In respect of normalized co-integrating coefficients, the coefficients of β are represented in Table 3 in the line.

Table 3:
Normalized co-integrating coefficients: 1 co-integrating Equation(s)

EXP	1.00		
	Coefficients Standard	Standard Error	t-statistics
ER	6386.01	820.54	7.78
FDI	0.80	0.29	2.76
PI	0.69	0.16	4.31
RD	0.16	0.50	0.32
UNEMP	11925.80	4638.06	2.57
PS	12592.30	8998.10	1.40

The results show in Table 3, indicate that all of the variables have positive relation to EXP. The results of current research clearly show that 1 unit increase in exchange rate brings 6386.01 units increase in the exports. It is because of the fact that a rise in the exchange rate (taking Pak Rupee as denominator) indicates that the rupee has been devalued against major currencies of the world (Mehmood & Faridi, 2013). As we talk about the private investment (PI), results show that Private Investment has a positive relationship with export. As shown in Table 3, 1 unit increase in PI brings 0.69 units increase in export. It is so because increased PI is a sign of an economic strength (Ron Wirtz, 2008). As the strength is good, the chances are there that foreign investors would feel ease to bring up their investments to the same country. The same results have also been found by Tsai, (1994). FDI also have direct and positive impact on exports of Pakistan said Haq, (2013). Our findings suggest that Rs. 1 unit of increase in FDI increases volume of exports by Rs. 0.80 units.

Current research work also validates that RD (expenditures on public education) stands on being positive relationship with exports. An increase of 1 unit in RD increases exports by 0.16 units. It is due to the fact that investments in education lead to human capital accretion which, in return, upsurges the efficiency of the labor force which upturns further exports and economic development (Chaudhry *et al.*, 2010).

An effect of UNEMP is seemed positive on Export; as found by perception behind the Heckscher-Ohlin (2009) alternate estimate, due to consider one of the significant factor influencing the trade is devastation of jobs, leading to momentous unemployment while using capital intensive goods by the state. When country engages in capital intensive product's trade, it will indicate an upsurge in the relative price of the capital-intensive goods. Therefore the demand for capital relative to labor goes up. According to amended Stolper-Samuelson result, the wage decreases, the rental on capital increases and the unemployment rate increases that will lead towards the rises in the export of capital-intensive goods. The same results are found in our research. 1 unit increase in unemployment increases export by 11925.75 units. Now a days the global trends being followed by the businesses to use up modern techniques of production that are capital intensive.

PS and improved state of socio-economic indicators of an economy are always required for inviting foreign importers to import domestically produced goods. The results of study show that 1 unit rise in political stability increases Exports by 12592.33 units.

Analysis of Short-Run Dynamics

Error Correction Model (ECM) is a classification of multiple time series models that directly assess the speed at which a dependent variable returns back to equilibrium after a variation in an independent variable. ECM is an efficient way of describing the dynamic multivariate relations characteristic of economic data.

Table 4:

Results of an Error Correction Model for Short-Run Dynamics

<i>Dependent Variable = Export</i>		
<i>Independent Variable</i>	<i>Coefficients</i>	<i>t-Statistics</i>
Constant	105266.4	4.5
D(EXP(-1))	-0.47	-3.70
D(EXP(-2))	-0.10	-0.82
D(ER(-1))	3631.67	1.53
D(ER(-2))	-7662.42	-2.64
D(FDI(-1))	-0.06	-0.26
D(FDI(-2))	0.82	4.21
D(PI(-1))	-0.14	-0.82
D(PI(-2))	-0.58	-4.20
D(RD(-1))	-0.92	-1.93
D(RD(-2))	1.27	1.72
D(UNEMP(-1))	-801.33	-0.16
D(UNEMP(-2))	100.68	0.02
D(PS(-1))	-18306.45	-1.99
D(PS(-2))	2751.34	0.25
EC (CointEq1)	-0.52	-4.28
R-Squared = 0.97		
F-Statistics = 41.03 Adjusted R-Squared = 0.94		

The ECM traces the possibility of short-run relationship. As is evident in Table 4, the coefficient of Error Correction Co-integration equation value is 0.52. It shows that 52% of disequilibrium is corrected each year. All the variables are not positively correlated to export. The one that negatively correlated with export except exchange rate (at one year lag) are, FDI, PI, RD, UNEMP and PS. However, negatively correlated variables (at two year lag) are ER, and PI. On the other hand, FDI, RD, UNEMP and PS (at two year lag) are positively correlated with export.

Granger Causality Test

Granger (1969), constructed a test that describes the causality. The results of granger causality test are disclosed in Table 5. The results show that null hypothesis of (there does not granger cause) is accepted for 1. Exchange rate and Export, 2. Unemployment and Export, 3. Political stability and Export. There is found unidirectional causality among FDI and Export. In case of Private Investment and Export, Research & Development and Export there is a rejection of null hypothesis.

Table 5:

Granger Causality Tests

Null Hypothesis:	<i>F-Statistic</i>	Prob.
ER does not Granger Cause EXP	0.427	0.655
EXP does not Granger Cause ER	0.551	0.581
FDI does not Granger Cause EXP	9.944	0.000
EXP does not Granger Cause FDI	19.439	2.00E-06
PI does not Granger Cause EXP	6.688	0.003
EXP does not Granger Cause PI	3.052	0.060
RD does not Granger Cause EXP	8.018	0.001
EXP does not Granger Cause RD	7.045	0.002
UNEMP does not Granger Cause EXP	0.803	0.456
EXP does not Granger Cause UNEMP	0.665	0.520
PS does not Granger Cause EXP	0.222	0.801
EXP does not Granger Cause PS	0.771	0.470

Conclusion and Recommendations

The main aim of this study has been to identify the key factors that are affecting the export growth of Pakistan. This study has attempted to provide empirical evidence regarding how these selected variables affects the Export performance of our country. The empirical analysis based on a technique of Johansen Juselius, Error Correction Model and Granger Causality. Normalized Co-Integration Coefficient: 1 Co-integrating equation confirms that all of the variables selected in this research, sustain a positive relation to Export.

What is found essential are the obligations that rest upon the Government of Pakistan to inaugurate trade free zones and expand its exports. Considerable attention of exports in limited commodities and few markets can leads to export instability. Further all variables discussed in the study as well as other micro and macro issues should be kept by the government stabled in all respect not only for the betterment of export sector but also for productivity of other sectors of the economy. Necessary steps are required to be taken by the Government so as to build a nation on the footings of strong export receipts.

References

- Ahmad, M. H., Alam, S., Butt, M. S., & Haroon, Y. (2004). Foreign Direct Investment, Exports, and Domestic Output in Pakistan [with Comments]. *The Pakistan Development Review*, 715-723.
- Ajami, R. A., & BarNiv, R. (1984). Utilizing economic indicators in explaining foreign direct investment in the US. *Management International Review*, 16-26.
- Atique, Z., Ahmad, M. H., & Zaman, A. (2003). The Supply and Demand for Exports of Pakistan: The Polynomial Distributed Lag Model (PDL) Approach [with Comments]. *The Pakistan Development Review*, 961-972.
- Azam, M. (2009). Comparative Analysis of the Impacts of Exports on Economic Growth of Selected Countries in Central Asia: A Quantitative Approach. *Central Asia*.
- Belser, P., & Rani, U. (2011). Extending the coverage of minimum wages in India: Simulations from household data. *Economic & Political Weekly*, *Forthcoming*.
- Bhagwati, J. N., & Krueger, A. O. (1973). Exchange control, liberalization, and economic development. *The American Economic Review*, 419-427.
- Blake, A. P., & Pain, N. (1994). *Investigating structural changes in UK export performance: the role of innovation and direct investment*. National Institute of Economic and Social Research.
- Caballero, R. J., & Corbo, V. (1989). The effect of real exchange rate uncertainty on exports: empirical evidence. *The World Bank Economic Review*, 3(2), 263-278.
- Chaudhry, I. S., Malik, A., & Faridi, M. Z. (2010). Exploring the causality relationship between trade liberalization, human capital and economic growth: Empirical evidence from Pakistan. *Journal of Economics and International Finance*, 2(9), 175-182.
- Dastidar, S. G., Mohan, S., & Chatterji, M. (2013). The relationship between public education expenditure and economic growth: The case of India.

- Edwards, S. (1992). Trade orientation, distortions and growth in developing countries. *Journal of development economics*, 39(1), 31-57.
- Goldberg, L. S., & Klein, M. W. (1999). *International trade and factor mobility: an empirical investigation* (No. w7196). National Bureau of Economic Research.
- Goldstein, M., & Khan, M. S. (1978). The supply and demand for exports: a simultaneous approach. *The Review of Economics and Statistics*, 275-286.
- Haq, G. (2013). Impact of Foreign Direct Investment on Exports-A Case Study of Pakistan.
- Hasan, M. A., & Khan, A. H. (1994). Impact of devaluation on Pakistan's external trade: An econometric approach. *The Pakistan Development Review*, 1205-1215.
- Helpman, E., Melitz, M. J., & Yeaple, S. R. (2003). *Export versus FDI* (No. w9439). National Bureau of Economic Research.
- Horst, T. (1972). The industrial composition of US exports and subsidiary sales to the Canadian market. *The American Economic Review*, 37-45.
- Hyder, K., & Ahmed, Q. M. (2003). Why Private Investment In Pakistan Has Collapsed And How It Can Be Restored.
- Hyder, Z., & Mahboob, A. (2006). Equilibrium real effective exchange rate and exchange rate misalignment in Pakistan. *SBP Research Bulletin*, 2(1).
- Jeon, Y. D. (1992). The determinants of Korean foreign direct investment in manufacturing industries. *Weltwirtschaftliches Archiv*, 128(3), 527-542.
- Katz, L. F., & Murphy, K. M. (1991). *Changes in relative wages, 1963-1987: Supply and demand factors* (No. w3927). National Bureau of Economic Research.
- Kucera, D., & Sarna, R. (2004). Child labour, education and export performance. *ILO Policy Integration Department, Working Paper*, (52).
- Levin, A., & Raut, L. K. (1997). Complementarities between exports and human capital in economic growth: Evidence from the

- semi industrialized countries. *Economic development and cultural change*, 46(1), 155-174.
- Liu, X., & Shu, C. (2003). Determinants of export performance: evidence from Chinese industries. *Economics of Planning*, 36(1), 45-67.
- Lorie, H. (2005). Pakistan's Macroeconomic Adjustment and Resumption of Growth, 1999-2004.
- Lucas, R. E. (1988). On the mechanics of economic development. *Journal of monetary economics*, 22(1), 3-42.
- Majeed, M. T., Ahmad, E., & Khawaja, M. I. (2006). Determinants of Exports in Developing Countries [with Comments]. *The Pakistan Development Review*, 1265-1276.
- Marshall, A. (1890). Principles of Economics: *Preliminary Survey*.
- Mehmood, K. A., & Faridi, M. Z. (2013). Factors of Garnishing Across the Border Investments. *Pakistan Journal of Commerce and Social Sciences*, 7(3), 588-602.
- Mehmood, K. A., & Hassan, S. (2015). A study on mapping out alliance between economic growth and foreign direct investment in Pakistan. *Asian Social Science*, 11(15), 113-123.
- Mehmood, K. A., & Hassan, S. (2015). Analysis of socioeconomic factors that dampen the flow of foreign direct investment. *Mediterranean Journal of Social Science*, 6(4S3), 578-589.
- Nurkse, R. (1947). Domestic and international equilibrium. Reprinted in Nurkse (1961), 41-71.
- Sakr, M. K. (1993). *Determinants of private investment in Pakistan*. International Monetary Fund.
- State Bank of Pakistan. Economic Data, External Sector, Exports and Imports Statistics. (2012)
- Tariq, A., & Najeeb, Q. (1995). Export earnings instability in Pakistan. *The Pakistan Development Review*, 1181-1189.
- The International Labor Organization. (2000). Link available: <http://www.ilo.org/global/statistics-and-databases/research-and-databases/lang—en/index.htm>
- The International Monetary Fund. (1985). Foreign Private Investment in Developing Countries. Washington, D.C.

- The Ministry of Finance. Economic Survey. (2010) Online available (<http://www.finance.gov.pk/>)
- The World Bank. (2004-06). The World Development Indicators. [Online] available: <http://devdata.worldbank.org/dataonline/>.
- Tsai, P. L. (1994). Determinants of foreign direct investment and its impact on economic growth. *Journal of economic development*, 19(1), 137-163.
- UNCTAD, 2005. Developing Countries In International Trade 2005, Trade And Development Index.
- Warner, D., & Kreinin, M. E. (1983). Determinants of international trade flows. *The Review of Economics and Statistics*, 96-104.
- Wirtz, R. A., Maas, E., Mahon, J., Clement, D., Cobb, K., Walter, D., ... & Book, B. (2008). Wanted: Entrepreneurs. *Region (10453369)*, 22(2), 13-50.