

ICTEDPS:

**International
Conference on
Transforming
Economic
Development:**

***Policies and
Strategies***

FDI-Export Nexus in Manufacturing Sector of Pakistan

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FDI – Export Nexus

- **Almost every developing country of the world aims to frame policies;**
 - **to promote its manufacturing sectors' productivity and**
 - **so-on its export.**
- **There has always been a debate among economist about the possible relationship between international trade and economic growth;**
- **However, due to shortage of resources they face hurdles in the way to achieve their target;**

FDI – Export Nexus

- **The foreign direct investment (FDI) is considered as an effective tool for capital inflow and growth.**
- **Hence such resource gap is filled through encouraging FDI in the country.**
- **In recent decades, foreign direct investment has received great attention as a growth enhancing component of the developed countries, and less developed countries in particular. Over the last two decades foreign direct investment have grown at least twice as rapidly as trade.**

Conceptual Framework

- **Foreign Direct Investment (FDI) is defined as an overseas investment which involves a full or partial control of a residing entity in one economy by enterprise resident in another economy;**
- **FDI Involves a long-term relationship reflecting an investor's lasting in a foreign entity;**
- **Many empirical studies have shown significant role of foreign direct investment in economic growth of host developing countries, through its contribution in human resource development, technological transfer, capital formation, official assistance and international trade.**

Conceptual Framework

- **This is quite clear from the literature review, that to find out the linkage between the FDI and trade is very difficult and complex to justify;**
- **It depends largely on the types of trade and FDI being considered are basically country-, industry-, and even firm-specific;**

Empirical Thoughts

- **Mostly the step-in approach is used as suggested in different literatures that firms in manufacturing,**
 - **In the first instance trade in the foreign market as it is easier and less risky than FDI.**
 - **After learning more about the economic, political and social conditions, firms may establish producing subsidiaries in the foreign market, and may eventually begin to export.**
 - **This shows that the trade first cause the FDI and FDI may eventually cause trade**

(Johanson & Wiedersheim, 1993; Nicholas, 1982; UNCTD, 1996).

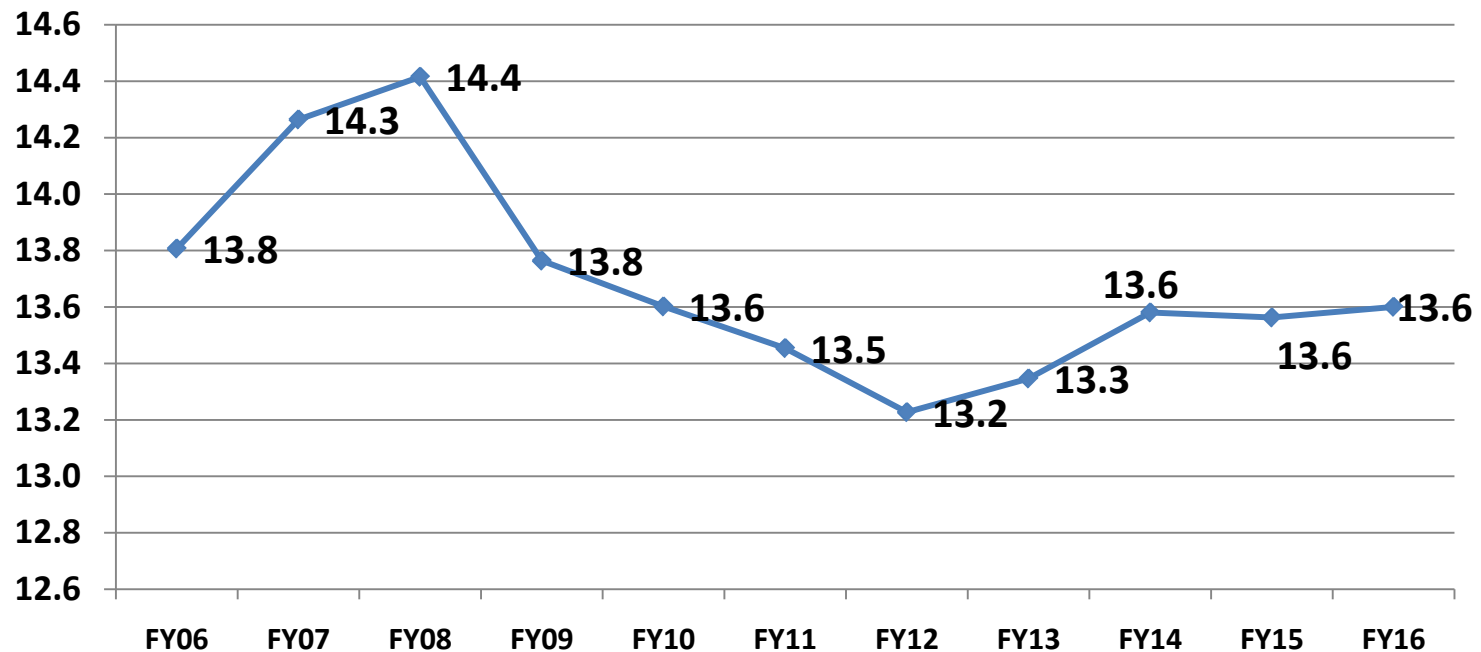
- **This is consistent with Vernon's (1966) product cycle hypothesis.**

Economic Development, Exports & FDI in Pakistan

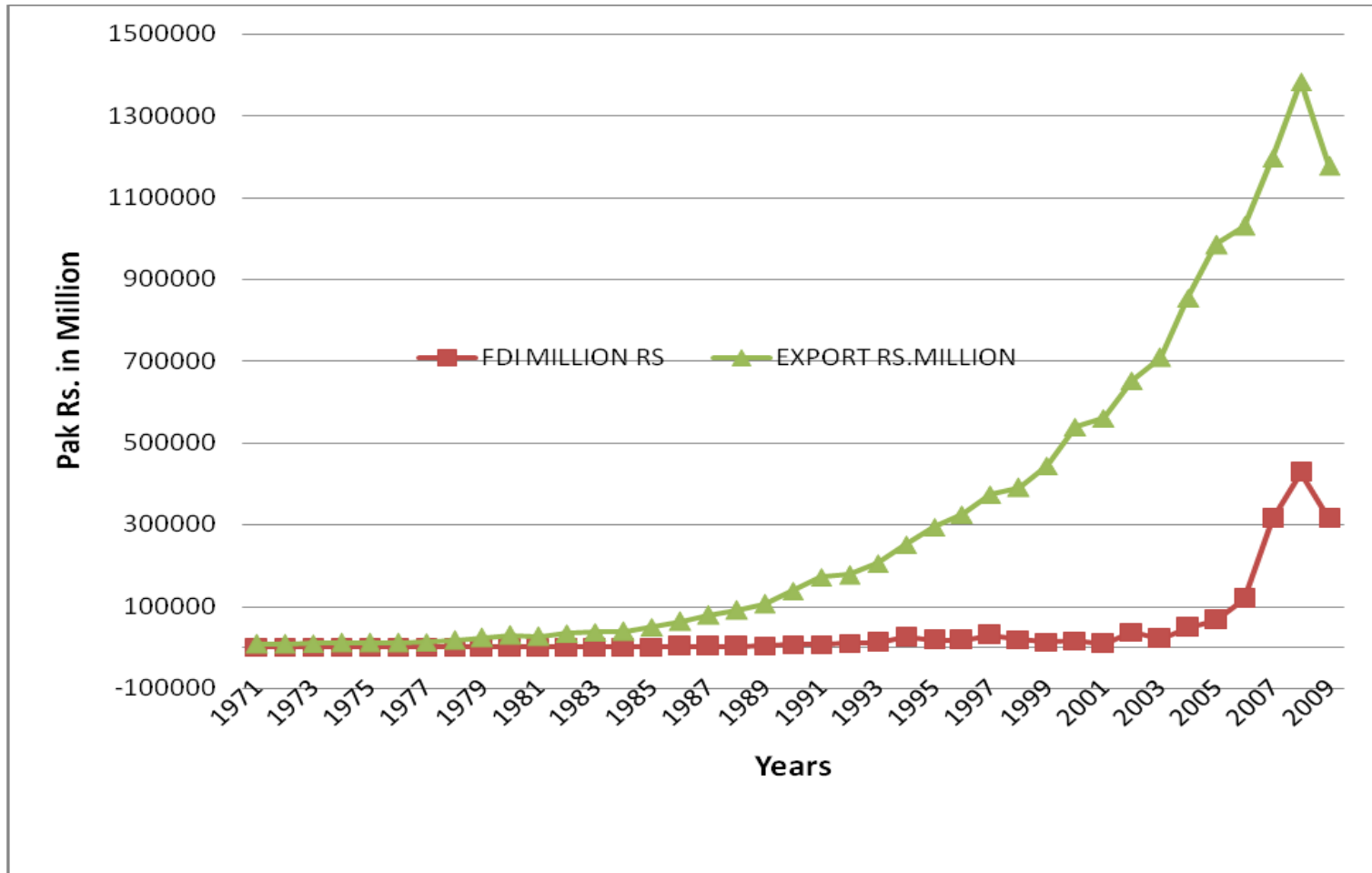
- **Since independence, the economy of Pakistan had transformed itself;**
 - **From agrarian i.e. 53.2 percent in 50s to around 21 percent share in 2015;**
- **Despite this, many other economic activities including the manufacturing sector revolves around agriculture produce;**
- **Thus there are direct and indirect consequences of any external negative shock on agriculture sector;**
- **The share of manufacturing sector in GDP is stagnant over the last so many decades, and remained below at around 13 percent.**

Economic Development, Exports & FDI in Pakistan

- **Pakistan's manufacturing sector is not much diversified, and has limited role in exports due large concentration in low value-added products.**

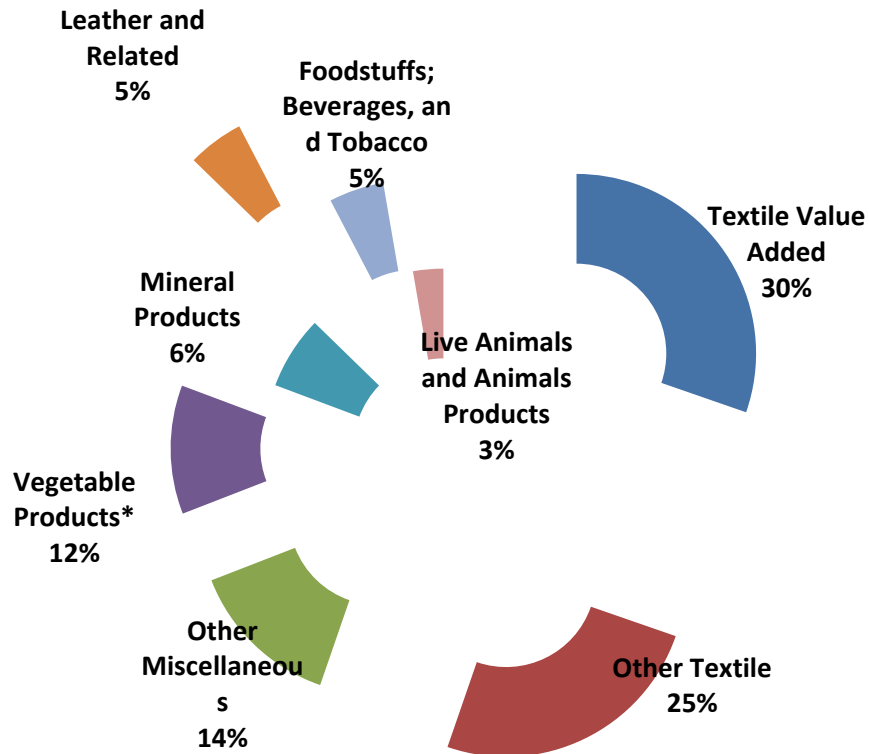


Economic Development, Exports & FDI in Pakistan

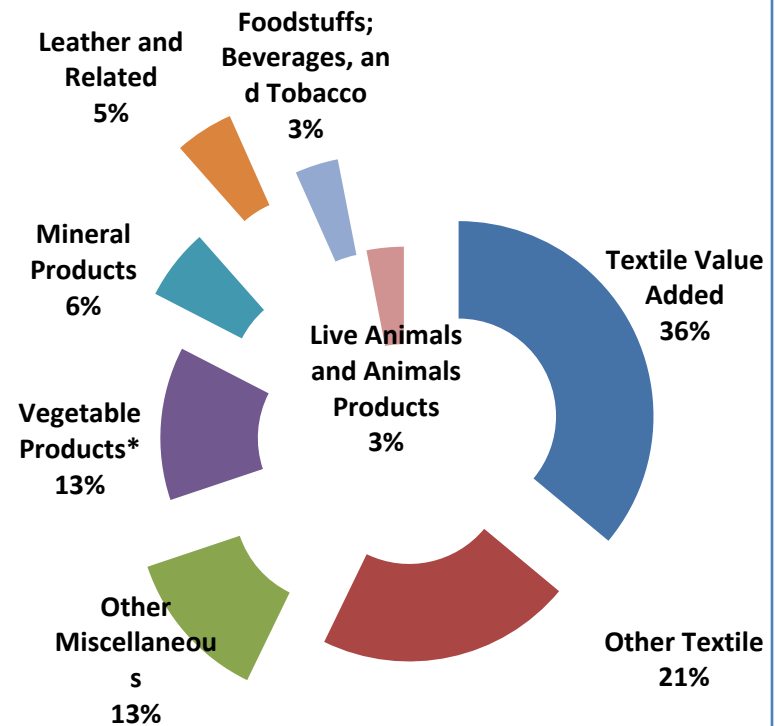


Economic Development, Exports & FDI in Pakistan

2013



2015



Methodological Framework & Modelling

- The variable used in the following model such as FDI, RP and GDP WOR are taken from Sharma (2000), while FDI, GROW and ER were used by Tariq (2006); and RP and GDP_{WOR} were used by Chowdry (2001) as major determinants of exports. Using the variables, the model can be illustrated as:
- $MEXP = f (MFDI, GDPG, GDP_{WOR}, REER RP), \text{-----} \quad (1)$

Where,

MEXP = Total manufacturing exports of the host country

MFDI = Total inflows of FDI in the manufacturing sector.

GDP_{WOR} = Gross Domestic Product of the World

GDPG = Annual percentage growth rate of GDP

REER = Real Effective Exchange Rate

RP = Relative Prices

Methodological Framework & Modelling

$$\begin{aligned}
 \Delta \ln(\text{MEXP})_t = & \alpha_1 + \beta_1 \sum_{i=1}^n \Delta \ln(\text{MEXP})_{t-i} + \beta_2 \sum_{i=1}^n \Delta \ln(\text{MFDI})_{t-i} + \beta_3 \sum_{i=1}^n \Delta \ln(\text{REER})_{t-i} \\
 & + \beta_4 \sum_{i=1}^n \Delta(\text{GDPG})_{t-i} + \beta_5 \sum_{i=1}^n \Delta \ln(\text{GDPW})_{t-i} + \beta_6 \sum_{i=1}^n \Delta(\text{RP})_{t-i} \\
 & + \gamma_1 \ln(\text{MEXP}) + \gamma_2 \ln(\text{MFDI}) + \gamma_3 \ln(\text{REER})_{t-i} + \gamma_4 (\text{GDPG})_{t-i} \\
 & + \gamma_5 \ln(\text{GDPW})_{t-i} + \gamma_6 (\text{RP})_{t-i} + \varepsilon_t \dots \dots \dots (2)
 \end{aligned}$$

- $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ and β_6 represents the short-run dynamics;
- $\gamma_1, \gamma_2, \gamma_3, \gamma_4, \gamma_5$ and γ_6 represents the long-run relationship;

Methodological Framework & Modelling

- **Distributed lags model (ARDL) has become more popular and preferred to other conventional co-integration approaches.**
- **ARDL is a two step procedure for investigating long run relationship;**
- **In the first step, long run relationship of the variables are checked;**
- **The second step is for long run as well as short run co-efficient of the variables are estimated**
- **The calculated F-statistic is compared with the two sets of critical values i.e. lower bound values and upper bound values; tabulated by Pesaran (1997) and Pesaran et.al.(2001).**

Results & Discussion

Test for long run relationship		
Critical value	F statistic	4.307107
	Lower bound I(0)	Upper bound I(1)
1%	3.60	4.90
5%	2.87	4.00
10%	2.53	3.59

*Table CI(V) unrestricted intercept & unrestricted trend,
(Pesaran.2001)*

Results & Discussion

Long run coefficients			
<i>Dependent variable: $\text{Ln}(\text{Expo})_{\text{manu}}$</i>			
Regressors	Coefficient	t-Statistic	Prob.
$\text{LnFDI}_{\text{manu}}$	0.217830	2.175244	0.0379
LnREER	0.003746	0.890004	0.3808
GDPG	0.070567	1.552711	0.1313
LnGDPW	0.000140	1.801947	0.0820
RP	-0.716309	-0.559654	0.5803
C	19.78786	1.128424	0.2684
R-squared	0.876877		
Adjusted R - squared	0.842912		
F-statistic	25.81703(0.000000)		
Durbin-Watson	2.172243		

Results & Discussion

- **As indicated in the pervious slide;**
 - **manufacturing FDI is positively linked with manufacturing exports;**
 - **Annual percentage growth rate of GDP (GDPG) and Relative Price (RP) do not affect manufacturing exports, though the coefficients have their expected signs;**
 - **The affect of Real Effective Exchange Rate (REER) is also insignificant;**

Results & Discussion

Short Run Coefficients

Dependent variable: Ln(MEXP)

Regressors	Coefficient	t-Statistic	Prob.
D(LnMFDI)	0.665906	0.494953	0.6250
D(LnREER)	-0.000932	-0.109412	0.9137
D(GDPG)	0.067524	1.795108	0.0843
D(LnGDPW)	3.345001	0.469046	0.6429
D(RP)	0.236765	2.554650	0.0168
C	-0.140777	-0.552892	0.5851
ECM(-1)	-0.391519	-3.350888	0.0025
R-squared	0.565790		
Adjusted R-squared	0.398786		
Durbin-Watson stat	2.023040		
F-statistic	3.387881(0.0059)		

Epilogue: The Policy Implication

- **Discussion implies the need of outward export oriented policy for the country;**
- **In the past, the policies mainly attract the service sector;**
- **concentration in a specific area have the consequences on stagnant performance of the manufacturing sector and exports;**
- **Thus, a balanced approach or weighted scenario should be applied to attract the FDI in the country;**

Epilogue: The Policy Implication

- **Results suggest that infrastructure based services sector is likely to boost the manufacturing sector performance;**
- **Also would have positive and significant impact on the manufacturing sector exports;**
- **The policy makers should review the existing policies and understand the importance of FDI inflow as a source of economic growth and stability;**
- **There is also a need to identify the sectors with in the manufacturing sector which have direct impact on exports sector of Pakistan.**

Thank You